

DOCUMENT RESUME

ED 068 010

HE 003 447

TITLE Job Opportunities for College Graduates in the 1970's.
INSTITUTION Bureau of Labor Statistics (DOL), New York, N. Y.
PUB DATE Nov 71
NOTE 28p.
AVAILABLE FROM Mr. Herbert Bienstock, Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 341 Ninth Avenue, New York, New York 10001

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *College Graduates; Employment Opportunities; Employment Patterns; Employment Trends; *Higher Education; *Job Market; Jobs; *Labor Market; *Manpower Needs; Manpower Utilization

ABSTRACT

This Department of Labor report presents tables that describe manpower needs for college graduates. Some of the areas covered are: age distribution of the labor force; employment by occupation; employment for black men; and projected job openings for college graduates and projected entrants. (CS)

ED 068010

LAB
HE

JOB OPPORTUNITIES FOR COLLEGE GRADUATES

IN THE 1970'S

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

U. S. Department of Labor.
Bureau of Labor Statistics
341 Ninth Avenue
New York, New York 10001

NOVEMBER 1971



HE 068 447

17

FOR ADDITIONAL COPIES WRITE TO

MR. HERBERT BIENSTOCK
REGIONAL DIRECTOR
U.S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
341 NINTH AVENUE
NEW YORK, NEW YORK 10001

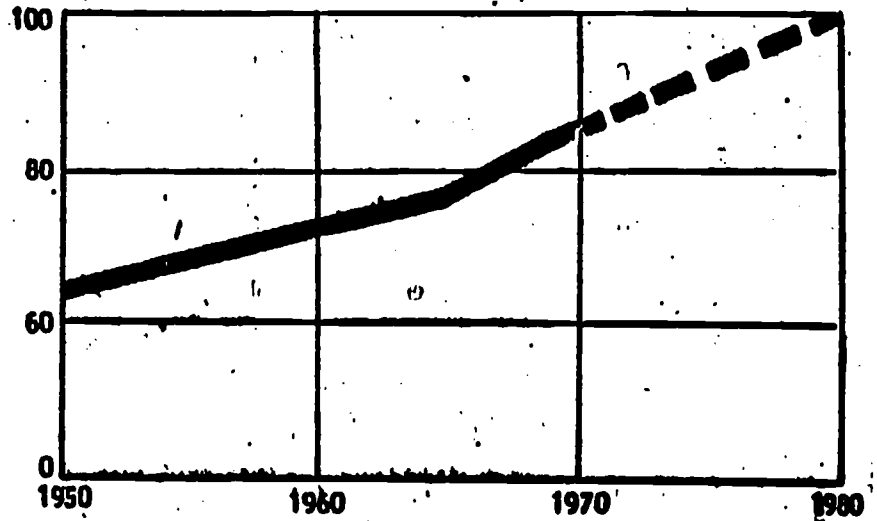
1957

2

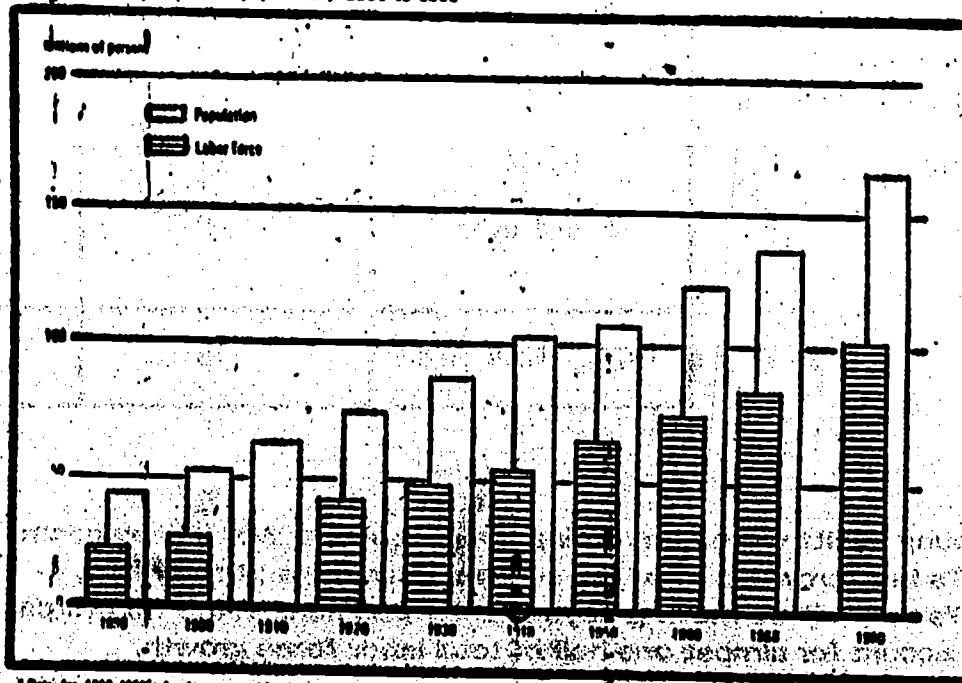
The 1970's will be a period of strong economic growth accompanied by extensive work force growth

The labor force — those who are working and those seeking work — is expected to number more than 100 million workers by 1980, growing by 15 million in the '70's.

Millions of total labor force



Labor force and population, 1890 to 1980



* Data for 1890-1960 refer to persons 16 years and over. Data for 1960 and 1970 refer to persons 15 years and over. Comparable labor force data not available for 1890.

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Department of Labor, Bureau of Labor Statistics, Bureau of Economic Analysis, Bureau of Economic Research, The American Labor Force (New York, N.Y., and Wiley, N.Y., 1968).

The number of workers in the prime 25-34 year old group will increase dramatically.

The largest labor force growth in the '60's was among those workers 16-24 years old. The dramatic increase in the '70's will be among young adults — age 25-34 — those entering their prime working years.

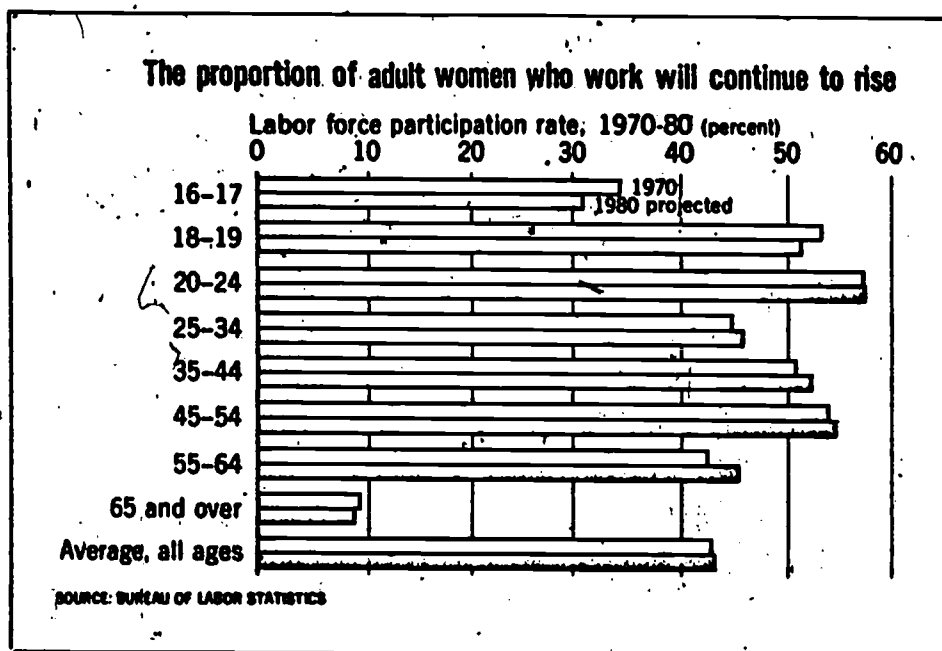
AGE GROUP	Percent change in the labor force	
	1960-1970	1970-1980
16-24	53	19
25-34	16	49
35-44	-1	13
45-54	15	-4
55-64	21	14
65 and over	-8	6
TOTAL LABOR FORCE	18	18.3

These young adults were born during the post World War II baby boom. In the '60's they crowded into high schools, colleges and entry jobs. In the '70's they will be moving beyond entry positions in the workforce, and will account for almost one-half of total labor force growth.

THE AGE DISTRIBUTION OF THE LABOR FORCE WILL CHANGE ..

Age group	Total labor force 1970		Total labor force 1980 projected	
	Number (thousands)	Percent	Number (thousands)	Percent
Total, 16 and over	85,903	100.0	100,727	100.0
16-17	3,163	8.9 { 3.7	3,289	8.3 { 3.3
18-19	4,481		5.2	
20-24	12,271	14.3	14,786	14.7
25-34	17,678	20.6	26,242	26.1
35-44	16,788	19.5	18,794	18.7
45-54	17,020	32.9 { 19.8	16,341	29.1 { 16.2
55-64	11,281		13.1	
65 and over	3,220	3.7	3,268	3.2

Note: Figures may not add to totals due to rounding



Employment by Occupation, 1970, and Net Change, 1960 to 1970

(Numbers in thousands. Annual averages)

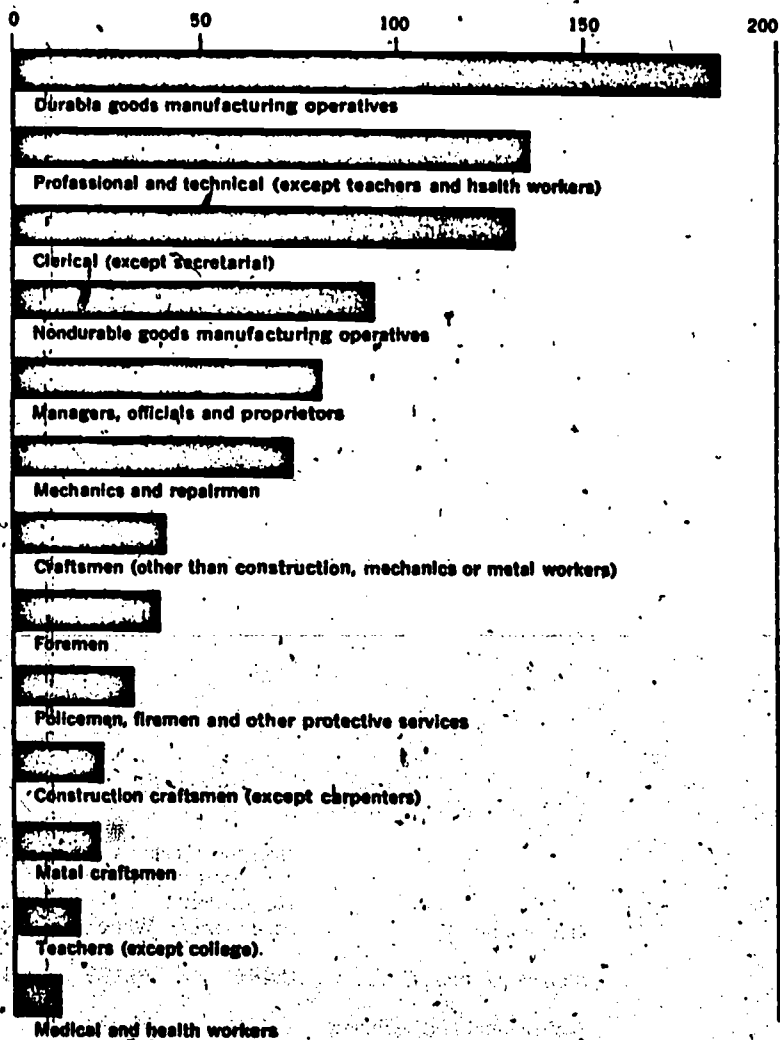
Occupation	1970 employment		Change, 1960 to 1970			
	Negro and other races	White	Number		Percent	
			Negro and other races	White	Negro and other races	White
Total.....	8,445	70,182	1,518	11,332	22	19
Professional and technical. Managers, officials, and proprietors.....	766	10,374	435	3,236	131	45
Clerical.....	298	7,991	120	1,102	67	16
Sales.....	1,113	12,601	610	3,342	121	36
Craftsmen and foremen.....	179	4,675	78	552	77	13
Operatives.....	691	9,467	276	1,328	67	16
Service workers, except private household.....	2,004	11,904	590	1,368	42	13
Private household workers..	1,547	6,608	333	1,772	27	37
Nonfarm laborers.....	653	906	-329	-85	-34	-9
Farmers and farm workers...	866	2,859	-85	257	-9	10
	328	2,797	-513	-1,538	-61	-35

Source: U.S. Department of Labor, Bureau of Labor Statistics.

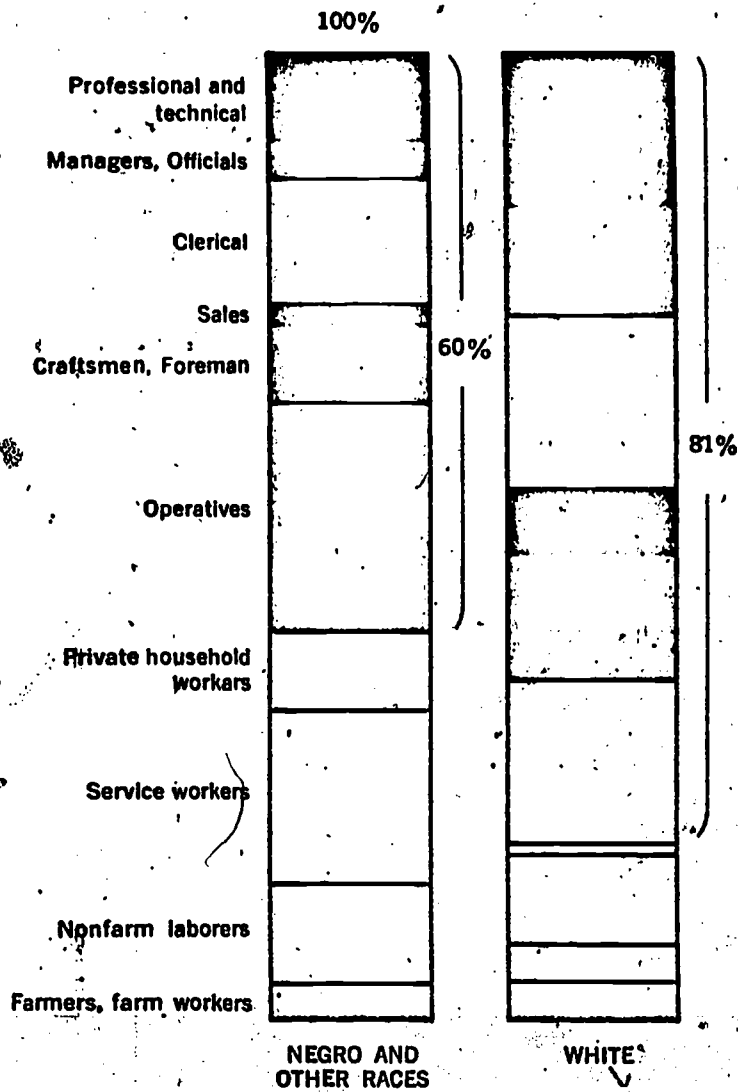
THE LARGEST JOB GAINS AMONG BLACK MEN BETWEEN 1963 AND 1970 WERE IN WELL-PAID DURABLE GOODS OPERATIVE JOBS

Largest employment gains by occupation for males of Negro and other races

Increase 1963-70 (in thousands)



IN 1970, 6 IN EVERY 10 BLACKS WERE IN WHITE-COLLAR,
CRAFTSMEN, OR OPERATIVE JOBS COMPARED WITH
8 IN EVERY 10 WHITES



EMPLOYMENT BY OCCUPATION, IN 1970 AND THE
DISTRIBUTION OF EMPLOYMENT

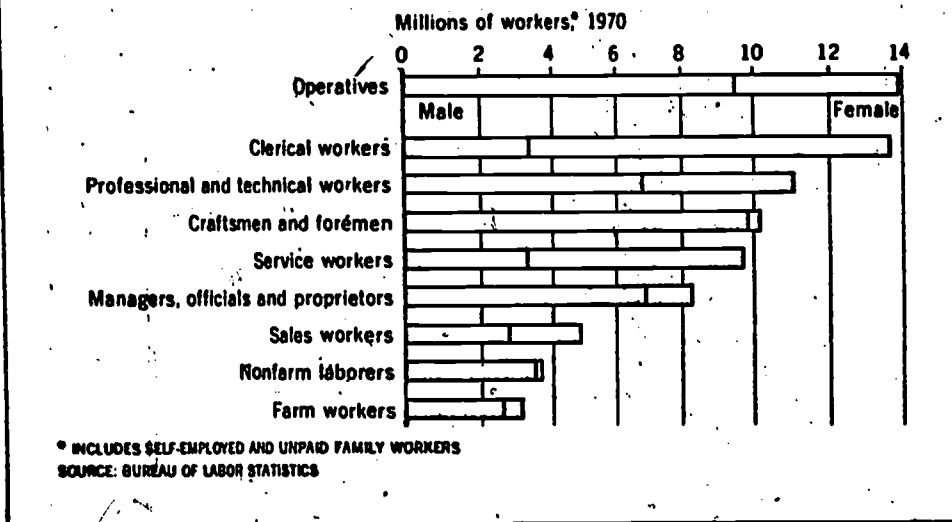
Occupation	Number (in thousands)		Percent	
	Negro and other races	White	Negro and other races	White
All occupations	8,445	70,182	100	100
Professional and technical	766	10,374	9	15
Managers, officials, and proprietors	298	7,991	4	11
Clerical	1,113	12,601	13	18
Sales	179	4,675	2	7
Craftsmen, foremen	691	9,467	8	13
Operatives	2,004	11,904	24	17
Private household workers	653	906	8	1
Service workers	1,547	6,608	18	9
Nonfarm laborers	866	2,859	10	4
Farmers, farm workers	328	2,797	4	4

Occupational distribution of employment, by color,
New York City, 1960 and 1970 ^{1/}

Occupational group	1970		1960	
	White	Negro and other races	White	Negro and other races
Percent	100.0	100.0	100.0	100.0
White-collar workers	63.2	41.8	55.3	29.3
Professional and technical ...	16.3	10.5	12.8	6.8
Managers, officials and proprietors	12.3	4.4	10.3	3.4
Clerical workers	28.3	25.0	23.9	16.2
Sales workers	6.3	2.0	8.3	2.8
Blue-collar workers	26.6	33.5	34.3	40.7
Craftsmen and foremen	9.9	7.8	11.8	7.0
Operatives	14.1	22.2	19.4	27.3
Nonfarm laborers	2.7	3.6	3.2	6.4
Service workers	10.1	24.6	10.4	29.9
Private household6	4.4	.9	9.8
Other service workers	9.5	20.2	9.5	20.1

^{1/} Based on 1960 census data (April 1960) and annual averages for 1970.

Employment in different major occupational groups varies by sex



Percent Distribution of Employment by Occupation and Sex: 1970 (Annual averages)

Occupation	Negro and other races		White	
	Male	Female	Male	Female
Total, employed (thousands).....	4,803	3,642	44,157	26,025
Percent,.....	100	100	100	100
Professional, technical, and managerial..	13	13	30	20
Clerical and sales.....	0	23	13	44
Craftsmen and foremen.....	14	1	21	1
Operatives.....	28	18	19	14
Service workers, excluding household.....	13	26	0	15
Private household workers.....	-	18	-	3
Nonfarm laborers.....	18	1	0	-
Farmers and farm workers.....	0	2	0	2

- Represents zero or rounds to zero.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Unemployment Rates of Civilian Labor Force, by Occupation: 1970
(Annual averages)

Occupation	Male		Female		Ratio: Male Negro and other races to white
	Negro and other races	White	Negro and other races	White	
Total civilian labor force	7.3	4.0	9.3	5.4	1.8
Experienced labor force..	6.6	3.6	7.7	4.0	1.8
Professional and technical...	2.0	1.8	2.2	2.3	1.1
Managers, officials, and proprietors.....	2.0	1.2	2.2	2.1	1.7
Clerical.....	5.2	3.2	8.1	3.9	1.6
Sales.....	4.0	2.7	13.3	4.9	1.5
Craftsmen and foremen.....	5.2	3.7	2.5	4.1	1.4
Operatives.....	7.5	5.7	11.6	9.1	1.3
Nonfarm laborers.....	10.5	9.1	11.6	11.8	1.2
Private household workers....	(D)	1.3	5.4	3.5	(D)
Other service workers.....	0.8	4.7	8.1	5.1	1.4
Farm workers.....	4.5	2.1	11.0	2.8	2.1

B Base too small to be shown separately.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**SELECTED UNEMPLOYMENT RATES,
1960-1961 and 1969-1971**

Seasonally adjusted

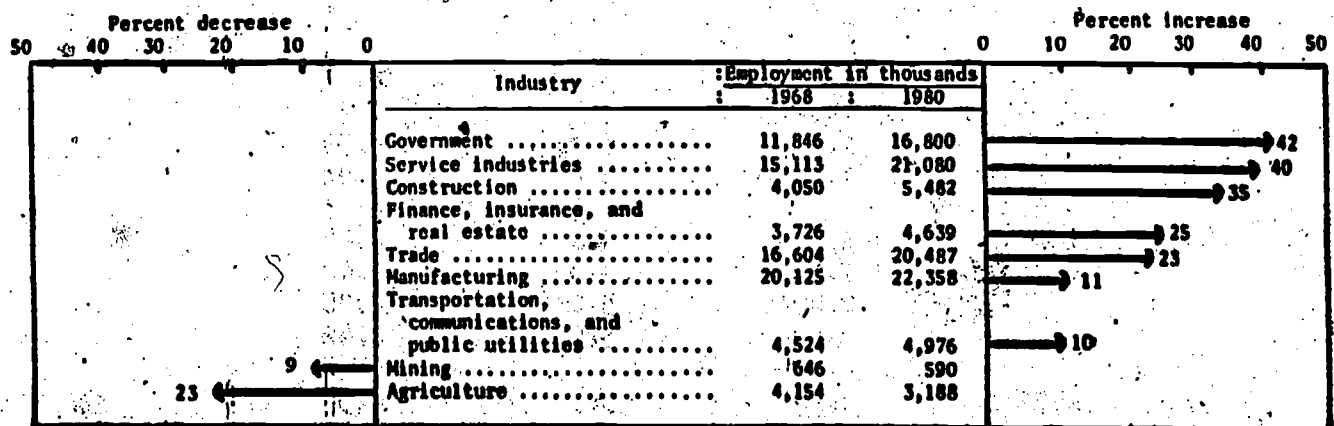
Year and quarter	Professional and technical workers	Total labor force	Ratio of professional and technical to overall rate
1960:1	1.6	5.1	0.31
2	1.6	5.2	0.31
3	1.8	5.5	0.33
4	1.8	6.3	0.29
1961:1	2.1	6.8	0.31
2	2.1	7.0	0.30
3	1.9	6.8	0.28
4	2.2	6.2	0.35
1969:1	1.1	3.4	0.32
2	1.3	3.4	0.38
3	1.4	3.6	0.39
4	1.5	3.6	0.42
1970:1	1.8	4.1	0.44
2	1.9	4.8	0.40
3	2.0	5.2	0.38
4	2.5	5.9	0.42
1971:1	3.2	5.9	0.54
2	2.9	6.0	0.48
3	2.8	6.0	0.47

Industries Employing 250,000 or More Women, April 1970

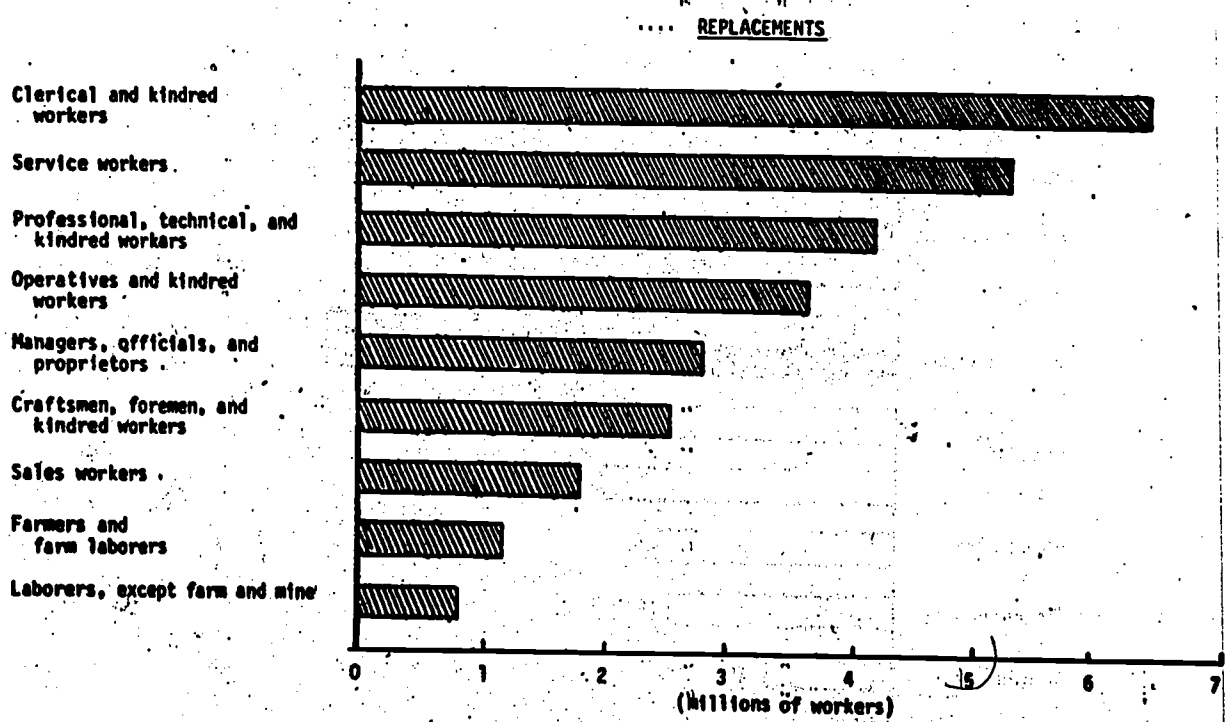
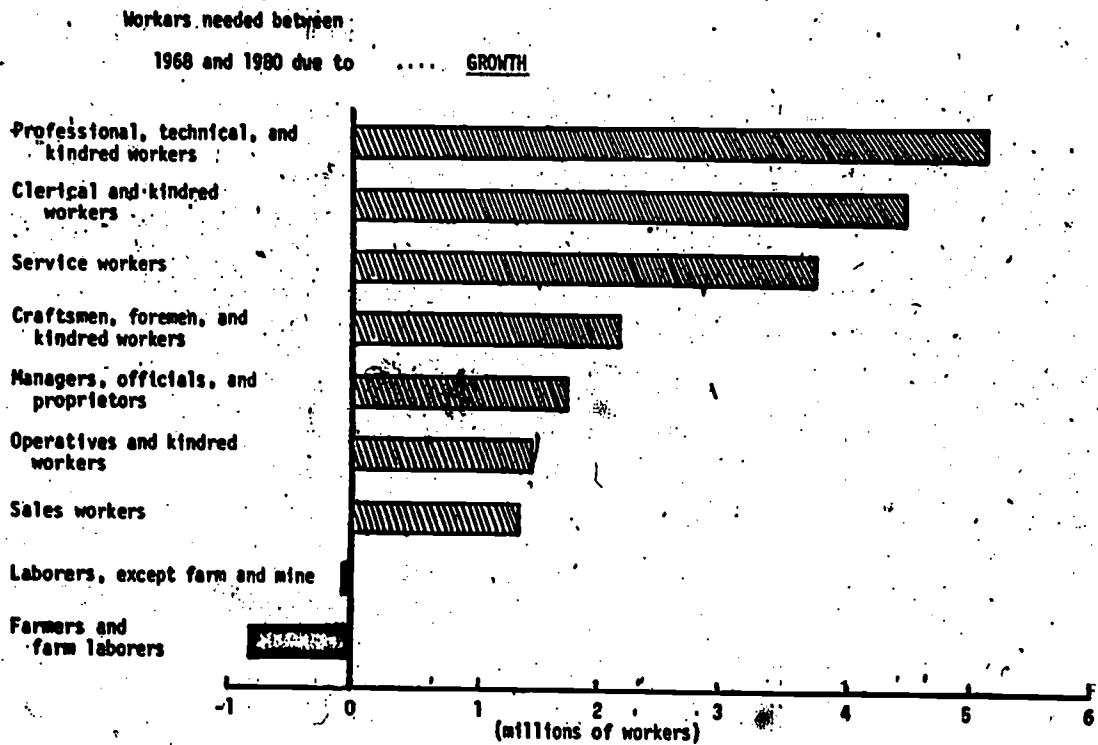
Industry	Employed women	
	Number	As percent of total employed
Finance, insurance, and real estate:		
Banking	655,700	63
Insurance carriers	541,900	52
Government:		
Local	3,622,100	50
State	1,115,500	42
Federal	767,000	27
Manufacturing:		
Apparel and other textile products	1,117,800	81
Women's and misses' outerwear	364,800	85
Men's and boys' furnishings	317,100	84
Electrical equipment and supplies	769,400	39
Fabricated metal products	256,100	18
Food and kindred products	431,000	25
Textile mill products	446,700	46
Printing and publishing	359,300	32
Machinery (except electrical)	306,300	15
Retail trade:		
General merchandise stores	1,552,300	69
Department stores	1,014,600	69
Variety stores	251,300	78
Eating and drinking places	1,411,300	57
Food stores	608,600	35
Grocery, meat, and vegetable stores	509,800	33
Apparel and accessories stores	467,500	66
Drug stores and proprietary stores	263,300	60
Services (miscellaneous):		
Medical and other health	2,456,400	81
Hospitals	1,508,900	81
Personal	620,700	62
Laundries and drycleaning plants	336,100	66
Educational	575,200	48
Colleges, universities	284,100	41
Miscellaneous business	523,200	34
Hotels, tourist courts, and motels	340,500	51
Transportation and public utilities:		
Communication	552,000	50
Telephone	505,400	55
Wholesale trade	869,000	23

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Job growth by industry sector, 1968-80
(Projections for 1980 based on a services economy, 3 percent unemployment)



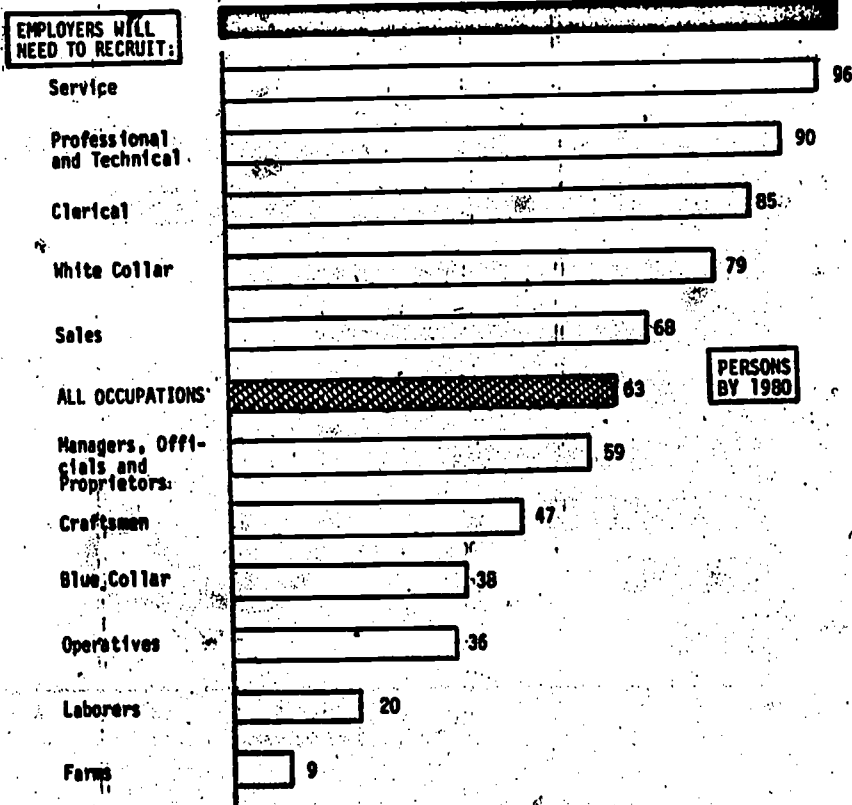
OPENINGS ARE DETERMINED BY GROWTH PLUS REPLACEMENTS



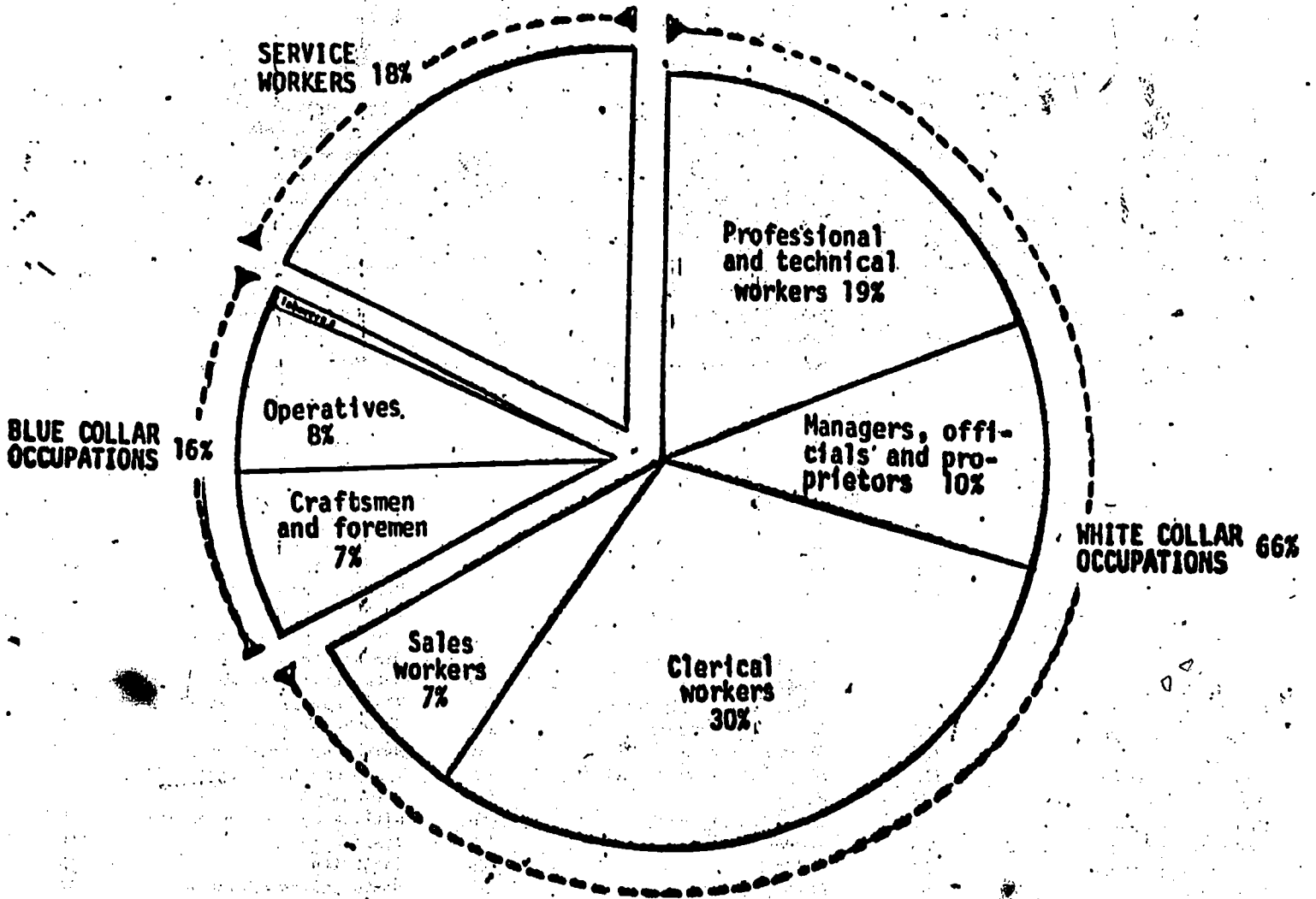
**OCCUPATIONAL DISTRIBUTION OF JOBS TO BE FILLED
IN THE UNITED STATES
1968-1980
(in thousands)**

Occupation	Employment 1968	Jobs to be filled 1968-1980	Jobs resulting from		Employment 1980
			Industrial change (increase or decrease)	Death and Retirements	
All occupations	75,920	47,880	39,180	28,700	95,100
White collar occupations ...	35,551	27,972	12,749	15,223	48,300
Professional, technical, and kindred workers...	10,325	9,324	5,175	4,149	15,500
Managers, officials, and proprietors	7,776	4,560	1,724	2,836	9,500
Clerical and kindred workers	12,803	10,932	4,497	6,435	17,300
Sales workers	4,647	3,156	1,353	1,803	6,000
Blue collar occupations	27,525	10,584	3,575	7,009	31,100
Craftsmen, foremen, and kindred workers	10,015	4,752	2,185	2,567	12,200
Operatives and kindred workers	13,955	5,112	1,445	3,667	15,400
Laborers, except farm and mine	3,555	720	-55	775	3,500
Service workers	9,381	9,024	3,719	5,305	13,000
Farmers and farm laborers	3,464	300	-854	1,164	2,600

FOR EVERY 100 PERSONS EMPLOYED IN 1968



**DISTRIBUTION OF JOBS TO BE FILLED IN NEW YORK CITY
1965-1975**



MAJOR INDIVIDUAL OCCUPATIONS IN THE UNITED STATES LISTED IN ORDER OF EMPLOYMENT IN LATE 1960's
(in thousands)

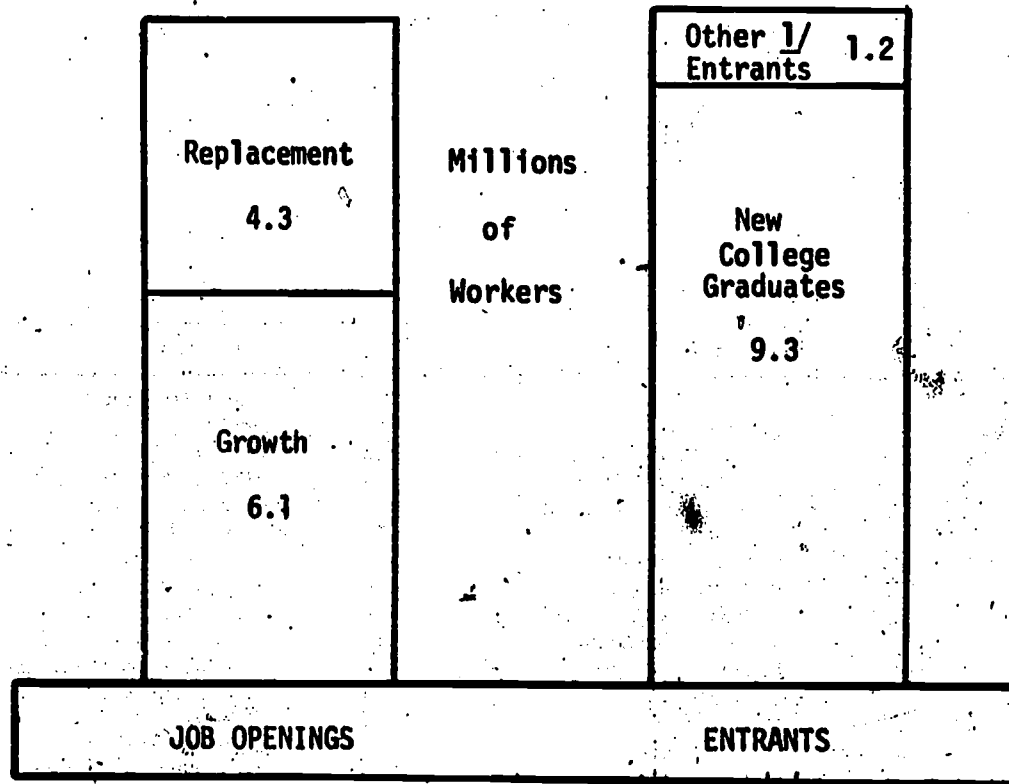
Occupation	Occupation	Occupation			
Retail salespeople	3,000	Painters	470	Barbers	210
Stenographers and secretaries	2,500	Cosmetologists	470	Appliance servicemen	205
Private household workers	2,250	Bank clerks	400	Mechanical engineers	200
Elementary school teachers	1,200	Insurance agents, brokers	400	Mail carriers	190
Bookkeeping workers	1,190	Office machine operators	400	Firefighters	190
Local truck drivers	1,175	Telephone operators	400	Bank tellers	190
Engineers	1,100	Gas station attendants	370	Civil engineers	180
Waiters and waitresses	1,000	All-around machinists	360	Electricians	180
High school teachers	900	Plumbers, pipe fitters	360	Compositors and typesetters	175
Carpenters	875	Shipping and receiving clerks	325	Musicians and music teachers	160
Assemblers	800	Licensed practical nurses	300	Production painters	155
Construction laborers	725	Physicians	285	Hotel managers and assistants	155
Typists	725	Postal clerks	280	Social workers	155
Cashiers	710	Operating engineers	280	Industrial machinery repairmen	150
Hospital attendants	710	Police	280	Purchasing agents	150
Cooks and chefs	675	Draftsmen	275	Tool and die makers	150
Technicians	650	College teachers	275	Biological scientists	145
Manufacturing salespeople	630	Lawyers	270	Bank officers	145
Over-the-road truck drivers	625	Stationary engineers	265	Advertising workers	135
Registered professional nurses	625	Routemen	255	Aircraft mechanics	135
Auto mechanics	600	Protestant clergymen	240	TV and radio service technicians	135
Factory inspectors	580	Maintenance electricians	240	Chemists	135
Wholesale trade salespeople	575	Receptionists	225		
Accountants	525	Real estate salesmen, brokers	220		
Machine tool operators	525				

Occupation	Occupation	Occupation			
Electronic computer personnel	125	Medical x-ray technicians	75	Physicists	45
Pharmacists	120	Millwrights	75	Medical technologists	45
Industrial engineers	120	Local transit bus drivers	70	Instrument workers	40
Auto salesmen	115	Setup men	65	Farm equipment mechanics	40
Truck and bus mechanics	115	Auto parts counter men	65	Conductors	38
Personnel workers	110	Systems analysts	65	Locomotive engineers	37
Programmers	110	Lithographic occupations	60	Floor covering installers	36
Securities salesmen	110	Roman Catholic priests	60	Telephone linemen	35
Dentists	100	Railroad track men	60	Newspaper reporters	35
Auto body repairmen	100	Singers and singing teachers	60	Telephone installers and repairmen	35
Railroad clerks	95	Roofers	60	Airline agents and clerks	35
Railroad shop trades	95	Aerospace engineers	60	Architects	35
Home economists	95	Cement masons	55	Distillers	32
Power truck operators	90	Molders	55	State police officers	32
Taxi drivers	85	Photographers	55	Shoe repairmen	30
Librarians	85	Sheet metal workers	55	Technical writers	30
Air conditioning, refrigerator mechanics	85	Mathematicians	55	Upholsters	30
Instrument repairmen	85	Medical lab assistants	55	Stonemasons, tilesetters	30
Pilots and copilots	80	Hotel clerks	55	Lathers	30
Business machine servicemen	80	Chemical engineers	55	Photo lab workers	30
Diesel mechanics	80	School counselors	55	Auto painters	25
Brakemen	75	Public relations workers	50	Hotel bellmen	25
Iron workers	75	Plasterers	50	Intercity bus drivers	25
Telephone office craftmen	75	Surveyors	50	Boilermakers	25
		Recreation workers	50	Dental lab technicians	25
		Stationary firemen	45		

Occupation	Occupation	Occupation			
Jewelry and jewelry repairmen	25	Airline traffic controllers	15	Auto upholsterers	6
Psychologists	25	Blacksmiths	15	Podiatrists	6
Watch repairmen	25	Motion picture projectionists	15	Flight engineers	7
Foresters	25	Actors and actresses	15	Electro-stereotypers	7
Dancers	25	Interior designers, decorators	15	Ceramic engineers	7
Veterinarians	25	Layout men	15	Bowling pin machine mechanics	7
Chiropractors	25	Optical mechanics	15	Dispensary opticians	7
Bookbinders	23	Radio announcers	14	FBI special agents	7
Statisticians	22	Railroad bridge and building men	14	Meteorologists	7
Economists	22	Elevator constructors	14	Occupational therapists	7
Central office equipment men	22	Telegraphers	14	Rehabilitation counselors	7
Asbestos and insulating workers	22	Electroplaters	13	Electric sign servicemen	6
Stewardesses	22	Mining engineers	13	Glaziers	6
Geologists, geophysicists	22	Paperhangers	13	Urban planners	6
Broadcast technicians	22	Railroad signal workers	13	Vocational counselors	6
Coremakers	20	Physical therapists	13	Metallurgical engineers	5
Foundry pattern makers	20	Forestry aids	13	Rabbis	5
Hotel housekeepers	20	Medical record librarians	13	Sociologists	5
Optometrists	18	Osteopathic physicians	13	Landscape architects	5
Speech pathologists	16	Station agents	12	Geographers	4
Dental hygienists	16	Agricultural engineers	10	Range managers	4
Sanitarians	16	Auto service advisors	10	Actuaries	3
Vending machine mechanics	16	Biochemists	10	Oceanographers	3
Industrial traffic managers	16	Historians	10	Anthropologists	3
Hospital administrators	15	Industrial designers	10	College placement officers	2
		Political scientists	9	Astronomers	1

Source: "Work in American Society", by Seymour Wolfbein.

PROJECTED JOB OPENINGS FOR COLLEGE GRADUATES
AND PROJECTED ENTRANTS, 1968-1980



1/ Includes reentrants, delayed entrants, and immigrants.

College graduates as a percent of employed, 1959-1980

Occupational group	1959	1969	1970	1980 1/
All occupational groups	10.0	12.9	13.2	16.1
Professional and technical	56.1	59.1	59.8	66.0
Managers, officials, proprietors.	13.1	20.1	20.1	30.0
Sales	10.1	11.0	11.8	13.3
Clerical	4.9	4.5	4.7	4.5
All other	1.3	1.3	1.3	1.5

Source: Bureau of Labor Statistics.
1/ Projected.

Occupations for which a college education is generally required (numbers in thousands)

Occupation	Employment 1960	Employment 1980	Percent Change 1960-80	Average Annual Openings 1960-80
Professional, Technical				
Accountants	500	720	43.4	33.0
Advertising Workers	140	153	9.1	3.7
Marketing Research Workers	20	42	104.8	2.7
Employment Counselors	5	11	102.3	0.7
Rehabilitation Counselors	12	21	72.8	1.1
Engineers	1,100	1,500	40.7	73.4
Physicians	295	450	53.1	20.0
Pharmacists	121	130	7.0	4.4
Mathematicians	85	110	60.4	8.4
Life Scientists	170	240	41.1	15.2
Chemists	330	200	55.7	12.9
College and University Teachers	886	595	37.8	17.0
Elementary School Teachers	1,230	1,270	3.3	99.0
Secondary School Teachers	940	1,065	13.6	101.0
Architects	34	50	47.1	2.3
Lawyers	270	335	22.7	14.5
Librarians	104	135	28.6	8.2
Psychologists	32	58	81.3	3.1
Recreation Workers	40	70	75.0	4.1
Social Workers	160	270	68.7	16.7
System Planners	150	425	183.0	27.0
Sales				
Manufacturers Salesmen	800	735	47.1	32.0
Commission Salesmen	135	170	24.0	7.4

Occupations for which some specialized training is generally required (numbers in thousands)

Occupation	Employment 1960	Employment 1980	Percent Change 1960-80	Average Annual Openings 1960-80
Professional, Technical				
Dental Hygienists	16	35	109.4	2.4
Registered Nurses	660	1,000	51.5	65.0
Medical Lab Workers	100	190	90.0	12.8
Radiological Technologists	75	120	60.0	7.3
Draftsmen	295	435	48.1	15.3
Engineering and Science Technicians	630	698	43.2	31.0
Surveyors	46	64	39.2	2.8
Skilled				
Dental Assistants	100	150	50.0	9.0
Library Technicians	70	125	77.1	9.0

Occupations for which high school graduation is generally required (numbers in thousands)

Occupation	Employment 1960	Employment 1980	Percent Change 1960-80	Average Annual Openings 1960-80
Professional, Technical				
Dental Lab Technicians	27	38	38.9	2.1
Flight Engineers	7	12	59.3	0.2
Models	58	64	15.9	1.7
Pilots and Co-pilots	92	114	116.9	1.8
Skilled				
Bank Clerks	400	512	28.8	29.3
Bank Tellers	230	337	46.2	20.0
Bookkeeping Workers	1,200	1,500	18.9	78.0
Electronic Computer Operators	175	400	179.0	20.4
Receptionists	240	400	66.6	30.0
Stenographers and Secretaries	2,650	3,650	36.8	237.0
Sales				
Automobile Salesmen	120	145	20.8	4.4
Real Estate Salesmen and Brokers	225	270	20.1	14.2
Wholesale Trade Salesworkers	530	695	29.3	25.2
Craftsmen				
Electricians	190	270	42.1	10.5
Operating Engineers	285	410	43.9	14.8
Mechanics	400	450	12.5	12.6
Tool and Die Makers	150	180	8.7	3.7
Aircraft Mechanics	135	230	70.4	9.7
Business Machine Servicepersons	115	200	73.9	8.5
Bookbinders	30	25	-16.7	0.4
Ferrous	1,444	1,720	19.8	84.2
Service				
Stenographers (civilian aviation)	25	65	160.7	--

Occupations for which high school graduation is preferred but not essential (numbers in thousands)

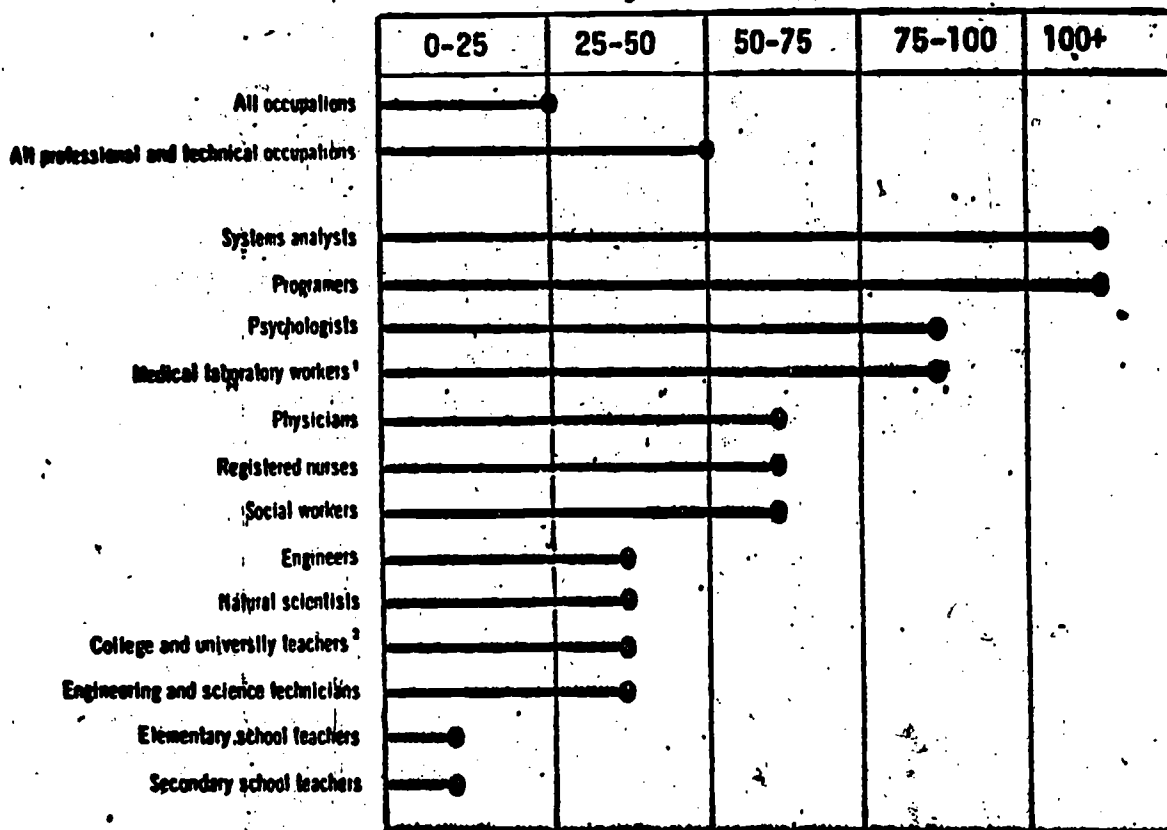
Occupation	Employment 1960	Employment 1980	Percent Change 1960-80	Average Annual Openings 1960-80
Skilled				
Cashiers	730	1,110	50.8	69.0
Mail Carriers	246	328	36.2	12.2
Postal Clerks	290	380	32.8	14.6
Shipping and Receiving Clerks	370	437	18.1	17.4
Sales				
Retail Trade Salesworkers	2,400	3,400	24.0	180.0
Auto Parts Counterperson	85	80	-5.9	2.5
Craftsmen				
Coment Persons	80	90	12.5	3.6
Roofers	85	80	-5.9	3.8
Structural Workers	75	105	40.0	3.9
Plasterers	40	40	--	0.7
Manufacturing				
Auto Tendant Operators	25	40	60.0	2.5
Welders	480	875	45.6	23.0
Drivers, Local	65	54	-13.9	0.3
Truck Drivers	85	75	-11.8	1.2
Service				
Licensed Practical Nurses	320	600	87.5	48.0
Hospital Attendants	800	1,500	87.5	100.0
Commissionaires	475	685	44.2	28.0

Occupational employment, 1968 and projected requirements, 1980, for college graduates

Occupation	Estimated 1968 employment	Projected 1980 requirements	Percent change	Supply estimated to be
Chemists	130,000	200,000	55.7	Significantly below requirements
Counselors	71,000	107,000	49.8	
Dietitians	30,000	42,100	40.3	
Dentists	100,000	130,000	31.7	
Physicians	295,000	450,000	53.1	
Physicists	45,000	75,000	63.9	Slightly short of requirements
Engineers	1,100,000	1,500,000	40.2	
Geologists and geophysicists	30,000	36,000	20.6	
Optometrists	17,000	21,000	23.5	
Architects	34,000	50,000	47.1	In balance with requirements
Lawyers	270,000	335,000	22.7	
Pharmacists	121,000	130,000	7.0	Slightly above requirements
Mathematicians	70,000	110,000	60.5	Significantly above requirements
Life scientists	168,000	238,000	40.8	
Teachers, elementary and secondary	2,170,000	2,340,000	7.8	

Employment requirements will rise much faster in some professions than in others.

Percent growth in selected occupations 1968-80

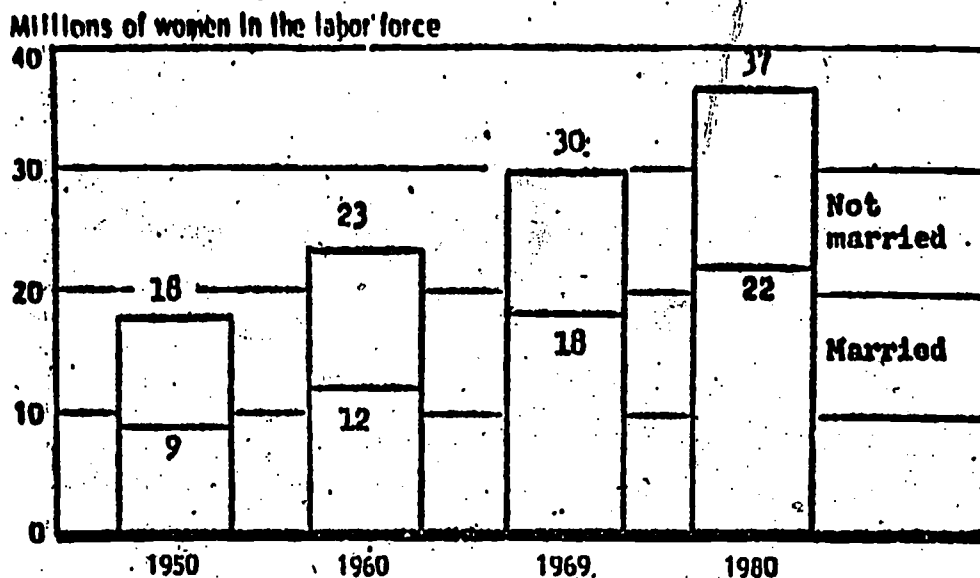


¹ Includes technologists, technicians, and aides.

² Full-time, holding rank of instructor or above.

Source: Department of Labor.

The increasing number of working women underscores the need for day care, continuing training and part-time employment



The proportion of women in the workforce will continue to rise, with married women accounting for the major share of the increase. By 1980 the number of women at work will be double the 1950 figure, reflecting a major change in American life style.

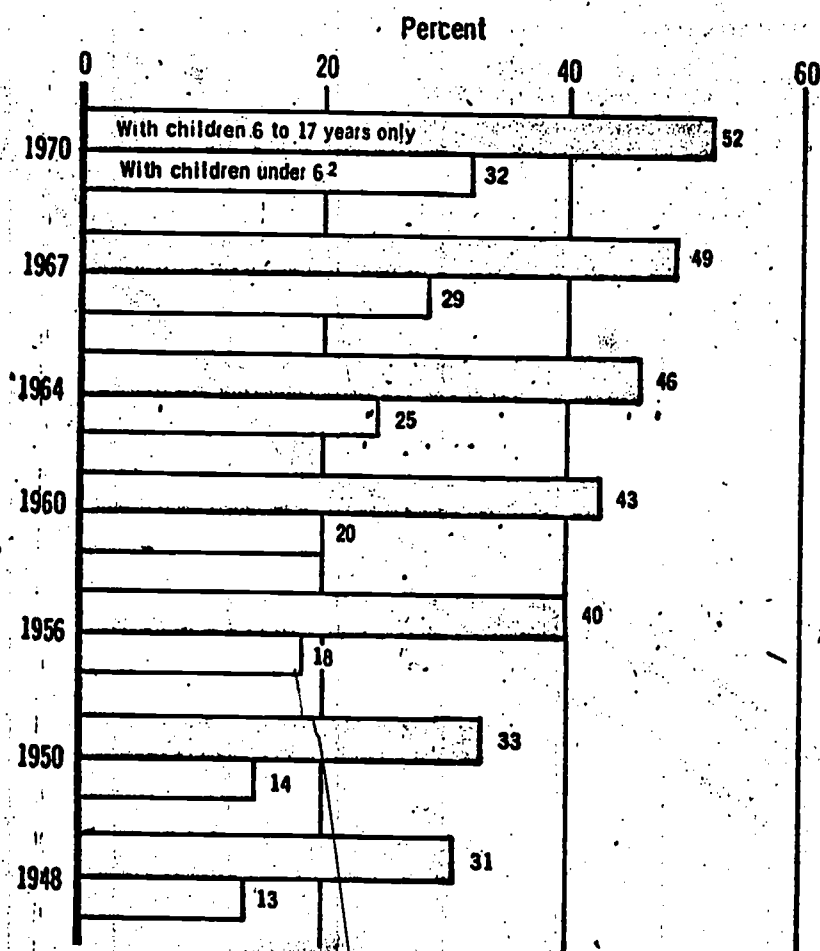
Labor force participation rates ^{1/} of married women, husband present, by presence and age of children, March 1960-1970

Year	All wives	No children under 18 years	Children 6 to 17 years only	Children under 6 years		
				Total	3 to 5 years, none under 3 years	Under 3 years
1960	30.5	34.7	39.0	18.6	25.1	15.3
1961	32.7	37.3	41.7	20.0	25.5	17.0
1962	32.7	36.1	41.8	21.3	27.2	18.2
1963	33.7	37.4	41.5	22.5	28.5	19.4
1964	34.4	37.8	43.0	22.7	26.7	20.5
1965	34.7	38.3	42.7	23.3	29.2	20.0
1966	35.4	38.4	43.7	24.2	29.1	21.2
1967	36.8	38.9	45.0	26.5	31.7	23.3
1968	38.3	40.1	46.9	27.6	34.0	23.4
1969	39.6	41.0	48.6	28.5	34.7	24.2
1970	40.8	42.2	49.2	30.3	37.0	25.8

^{1/} Labor force as percent of population.

MOTHERS ARE MORE LIKELY TO WORK TODAY THAN EVER BEFORE

Labor Force Participation Rates of Mothers, by Age of Children,
Selected Years, 1948-70¹



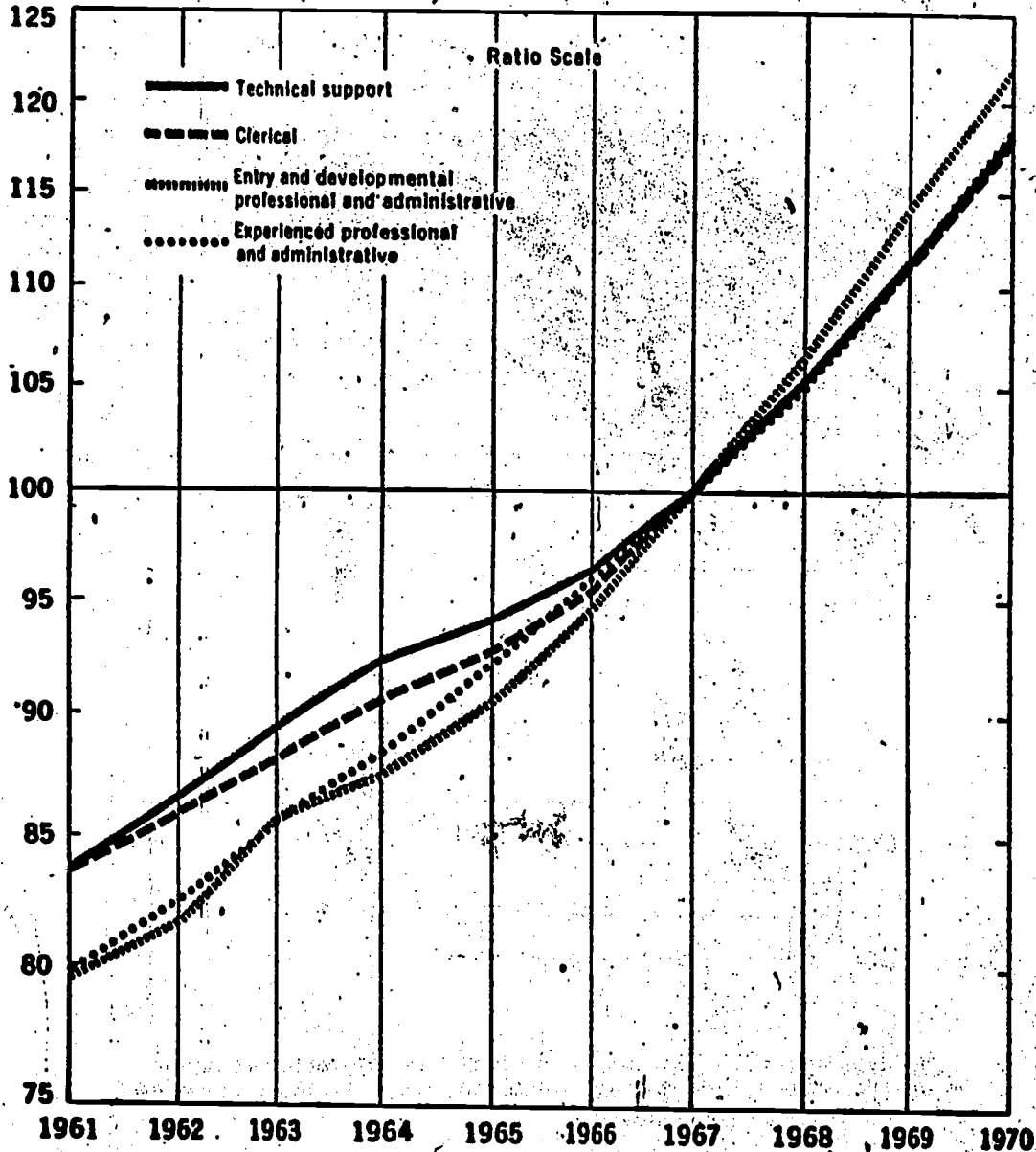
¹ Includes women 16 years of age and over in 1967 and 1970 but 14 years and over in earlier years. Data are for March of each year, except 1948 when data are for April.

² May also have older children.

Source: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of the Census.

Rates of Salary Changes for Selected Occupational Groups, 1961 to 1970

OCCUPATIONAL INDEXES (1967=100)



MALE, BACHELOR'S-DEGREE CANDIDATES

National Average Monthly Salary Offers by Curriculum

By Curriculum for All Types of Employers	No. Offers 1970-71 Total	Average \$ Offers			1970-71 Total Avg. \$ Offers	
		1970-71 Total	1969-70 Total	1968-69 Total	1969-70 Total (=100)	1968-69 Total (=100)
BUSINESS AND HUMANITIES						
Accounting.....	1,852	\$846	\$836	\$761	101.2	111.2
Business-General (inc. Mgmt.)....	1,796	716	721	687	99.3	104.2
Humanities & Social Sciences.....	624	699	700	667	99.9	104.8
Marketing & Distribution.....	624	693	702	669	98.7	103.6
ENGINEERING						
Engineering-Aeronautical.....	244	860	850	811	101.2	106.0
Engineering-Chemical.....	845	920	902	849	102.0	108.4
Engineering-Civil.....	872	850	837	797	101.6	106.6
Engineering-Electrical.....	2,085	877	869	826	100.9	106.2
Engineering-Industrial.....	426	866	849	802	102.0	108.0
Engineering-Mechanical.....	2,032	881	867	820	101.6	107.4
Engineering-Metallurgical (inc. Metallurgy & Engrg.-Ceramics).	168	888	873	811	101.7	109.5
SCIENCES						
Agricultural Sciences.....	374	700	705	686 ¹	99.3	102.0 ¹
Chemistry, Mathematics, & Physics.	354	794	809	784	98.1	101.3
Chemistry.....	97	795	825	775	96.4	102.6
Mathematics.....	213	787	794	779	99.1	101.0
Physics.....	44	826	827	803	99.9	102.9
	12,296					

¹Data taken from 1968-69 pilot study.

Source: , The College Placement Council, Inc.

MALE, GRADUATE-DEGREE CANDIDATES
National Average Monthly Salary Offers With Relative Changes

MASTER'S CANDIDATES — INEXPERIENCED¹

GRADUATE PROGRAM	No. Offers 1970-71 Total	Average \$ Offers			Change From	
		1970-71 Total	1969-70 Total	1968-69 Total	1969-70 Total (=100)	1968-69 Total (=100)
BUSINESS ADMINISTRATION, INDUSTRIAL MANAGEMENT, OR COMMERCE						
After Non-Technical Undergraduate Degree	2,590	\$1,044	\$1,044	\$962	100.0	108.5
After Technical Undergraduate Degree...	922	1,111	1,112	1,027	99.9	108.2
ENGINEERING						
Chemical.....	135	1,054	1,036	977	101.7	107.9
Civil.....	189	978	960	901	101.9	108.5
Electrical.....	288	1,018	1,015	967	100.3	105.3
Industrial.....	65	1,004	1,014	946	99.0	106.1
Mechanical.....	277	1,019	1,008	954	101.1	106.8
SCIENCES						
Agricultural Sciences.....	63	877	872 ²	836 ³	100.6 ²	104.9 ³
Chemistry.....	31	949	978	922	97.0	102.9
Mathematics.....	26	937	959	930	97.7	100.8
Metallurgy (inc. Met. Engrg., Materials Engrg. & Sc., & Ceramics).....	64	988	1,019	925	97.0	106.8
Physics.....	21	929	985	933	94.3	99.6
	4,671					

¹One year or less of full-time, non-military employment.

²Data taken from 1969-70 pilot study.

³Data taken from 1968-69 pilot study.

DOCTORAL CANDIDATES

ENGINEERING						
Chemical.....	74	\$1,395	\$1,375	\$1,319	101.5	105.8
Civil.....	13	1,102	1,236	1,234	89.2	89.3
Electrical.....	84	1,388	1,429	1,379	97.1	100.7
Mechanical.....	55	1,270	1,370	1,309	93.3	97.6
SCIENCES						
Chemistry.....	57	1,259	1,278	1,242	98.5	101.4
Mathematics.....	17	1,448	1,421	1,278	101.9	113.3
Metallurgy (inc. Met. Engrg., Materials Engrg. & Sc., & Ceramics).....	16	1,314	1,333	1,281	98.6	102.6
Physics.....	55	1,315	1,309	1,285	100.5	102.3
	371					

Source: The College Placement Council, Inc.

WOMEN, BACHELOR'S-DEGREE CANDIDATES

National Average Monthly Salary Offers With Relative Changes

	No. Offers 1970-71 Total	Average \$ Offers			1970-71 Total Avg. \$ Offers Change From	
		1970-71 Total	1969-70 Total	1968-69 Total	1969-70 Total (=100)	1968-69 Total (=100)
By Position for All Types of Employers						
Accountant/Auditor.....	139	\$812	\$820	\$725	99.0	112.0
Airline Stewardess/Reservationist.....	9	494	462	395	106.9	125.1
Business (General) Trainee.....	327	618	611	583	101.1	106.0
Community & Service Organization Worker	124	573	569	532	100.7	107.7
EDP Programmer/Systems Analyst	108	746	752	699	99.2	106.7
Engineer,	63	885	857	801	103.3	110.5
Home Economist/Dietitian/Home Serv. Rep.	33	571	556	530	102.7	107.7
Library Intern.....	16	530	474	467	111.8	113.5
Mathematician/Statistician.....	72	706	740	708	95.4	99.7
Medical Worker.....	180	681	623	587	109.3	116.0
Merchandising/Sales Promotion Trainee....	176	607	559	528	108.6	115.0
Research Assistant - Non-Scientific.....	62	570	608	572	93.7	99.7
Research & Lab. Assistant - Scientific	82	630	637	634	98.9	99.4
Secretary/Receptionist.....	149	465	478	442	97.3	105.2
Writer/Editorial/Public Rel. Trainee,	71	536	518	503	103.5	106.6
	1,611					
By Type of Employer for All Positions						
Business.....	739	\$627	\$648	\$600	96.8	104.5
Government - Federal	99	697	630	582	109.2	119.6
Government - Local & State	119	594	593	552	100.2	107.6
Manufacturing/Industrial.....	281	717	711	663	100.8	108.1
Non-Profit & Educational Organizations....	373	602	570	537	105.6	112.1
	1,611					

Source: The College Placement Council, Inc.

Estimated lifetime earnings for men tend to rise with years of school completed

