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MANPOWER PROJECTIONS AND TRAINING NEEDS FORECAST TO 1975 FOR
THE TERRE HAUTE AREA.

INDIANA STATE UNIV., TERRE HAUTE

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OCCUPATIONS, SERVICE OCCUPATIONS, FARM OCCUPATIONS, UNSKILLED
OCCUPATIONS, MANAGERIAL OCCUPATIONS, TERRE HAUTE

USING U.S. CENSUS BUREAU AND INDIANA EMPLOYMENT SECURITY
DIVISION DATA, A PREVIOUS STUDY WAS UPDATED TO INCLUDE
PROJECTIONS OF MANPOWER AND TRAINING NEEDS FOR THE TERRE
HAUTE AREA. GRAPHS SHOW TRENDS FOR EIGHT OCCUPATIONAL GROUPS
IN THE UNITED STATES, THE NATION'S URBAN AREAS, INDIANA, AND
THE TERRE HAUTE STANDARD METROPOLITAN AREA. MANPOWER NEEDS
ARE SHOWN FOR SPECIFIC OCCUPATIONS AND GRAPHICALLY DISPLAYED
FOR 1960, 1965, 1970, AND 1975 FOR THE FOLLOWING OCCUPATIONAL
GROUPS--(1) PROFESSIONAL AND TECHNICAL, (2) CLERICAL AND
SALES, (3) CRAFTSMEN AND FOREMEN, (4) OPERATIVES AND
TRAINEES, AND (5) SERVICE. REPLACEMENT, PREPARATORY,
INSERVICE, AND TOTAL TRAINING NEEDS ARE FORECAST FOR SELECTED
OCCUPATIONS. RISING MANPOWER NEEDS ARE FORECAST IN
PROFESSIONAL, TECHNICAL, AND SERVICE OCCUPATIONS. STEADILY
DECREASING NEEDS ARE FORECAST FOR PROPRIETORS, MANAGERS,
CLERKS, SALESMEN, OPERATIVE, TRAINEES, LABORERS, FARMERS, AND
FARM LABORERS. NEEDS ARE EXPECTED TO REMAIN STEADY FOR
CRAFTSMEN AND FOREMEN. (JM)

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

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Indiana Research Coordinating Unit

November, 1966

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Indiana State University

Terre Haute, Indiana

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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MANPOWER PROJECTIONS AND TRAINING NEEDS
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Indiana Research Coordinating Unit

November, 1966

This Report was Supported by a Grant
from the U. S. Department of Health, Education, and Welfare
Office of Education

The Research Coordinating Unit, working with the 1950¹ and 1960² census figures taken from the Bureau of Census Report for the Terre Haute Standard Metropolitan Statistical Area (SMSA) and information taken from Indiana Manpower Trends to 1975 prepared by the Indiana Employment Security Division, has attempted to update Part III of the Survey of Terre Haute Industries as a Basis for Vocational-Technical Education Planning in the Public Schools, which was prepared and written by Dr. L. W. Yoho.

Figure 1 shows the work force, broken into percentages by major areas, for the United States, United States Urban Areas, Indiana, and the Terre Haute Standard Metropolitan Area. The 1940, 1950, and 1960 percentages were taken from the Bureau of Census Reports for those years. Please note that no percentage is shown for the Terre Haute SMSA for 1940, since no figures were given for that year. The 1965 percentage for Indiana is an estimate taken from Indiana Manpower Trends to 1975, and the Terre Haute figure for 1965 is also an estimate, based on the information furnished by the Indiana Employment Security Division. The 1970 and 1975 figures for Indiana and Terre Haute are projections from the 1965 figures. No attempt was made to forecast or predict for the United States as a whole or for the urban areas of the United States. The forecasts for the 1970 and 1975 Indiana figures

¹U. S. Census, 1950, Vol. II, Part 14, Table 73, pp. 201-218.

²U. S. Census, 1960, Vol. I, Part 1, U. S. Summary Table 87, p. 216; and Vol. I, Part 16, Table 121, pp. 419-436.

were taken from Indiana Manpower Trends to 1975 and the forecasts for 1970 and 1975 for the Terre Haute area were made by applying the percentages of increase or decrease for each major division, as given in the Indiana Manpower Trends to 1975, to the Terre Haute area.

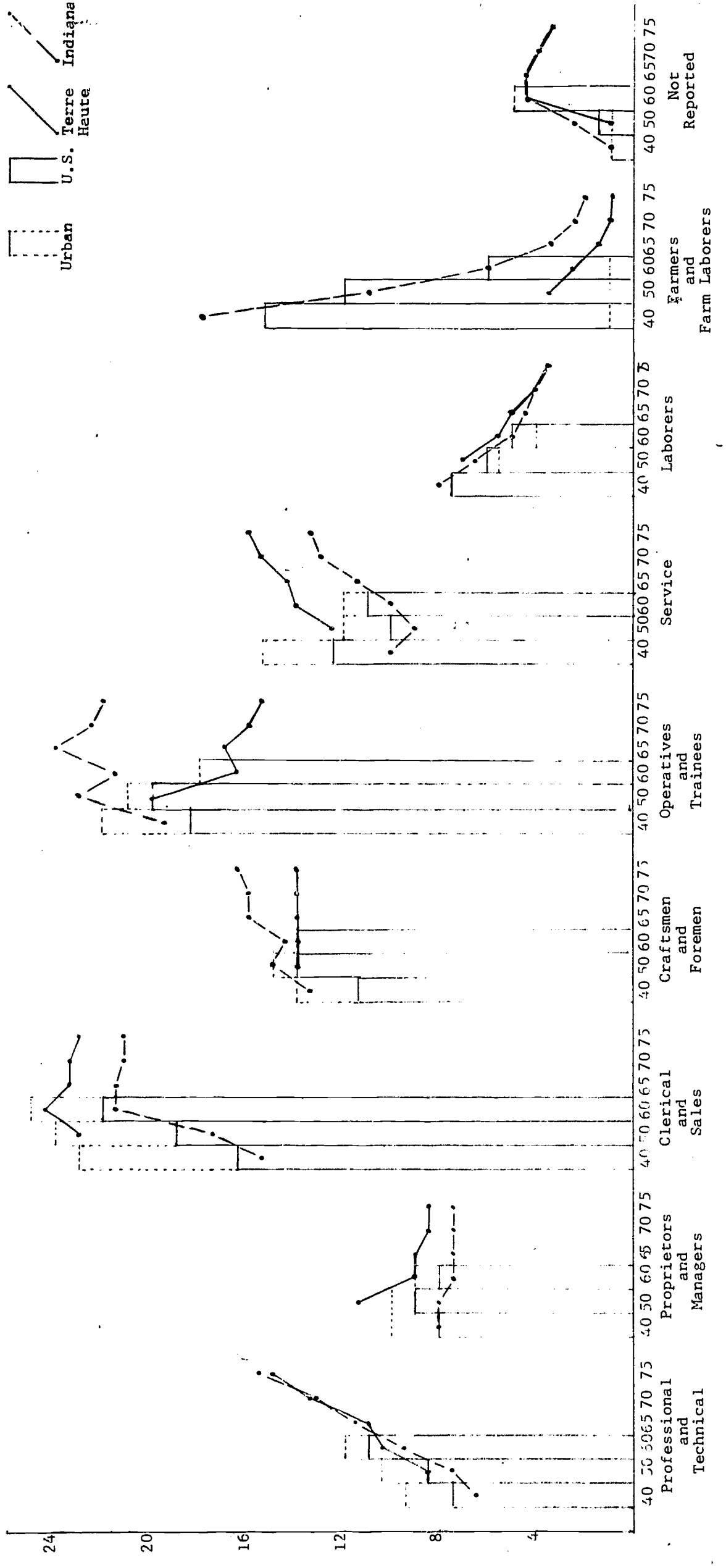


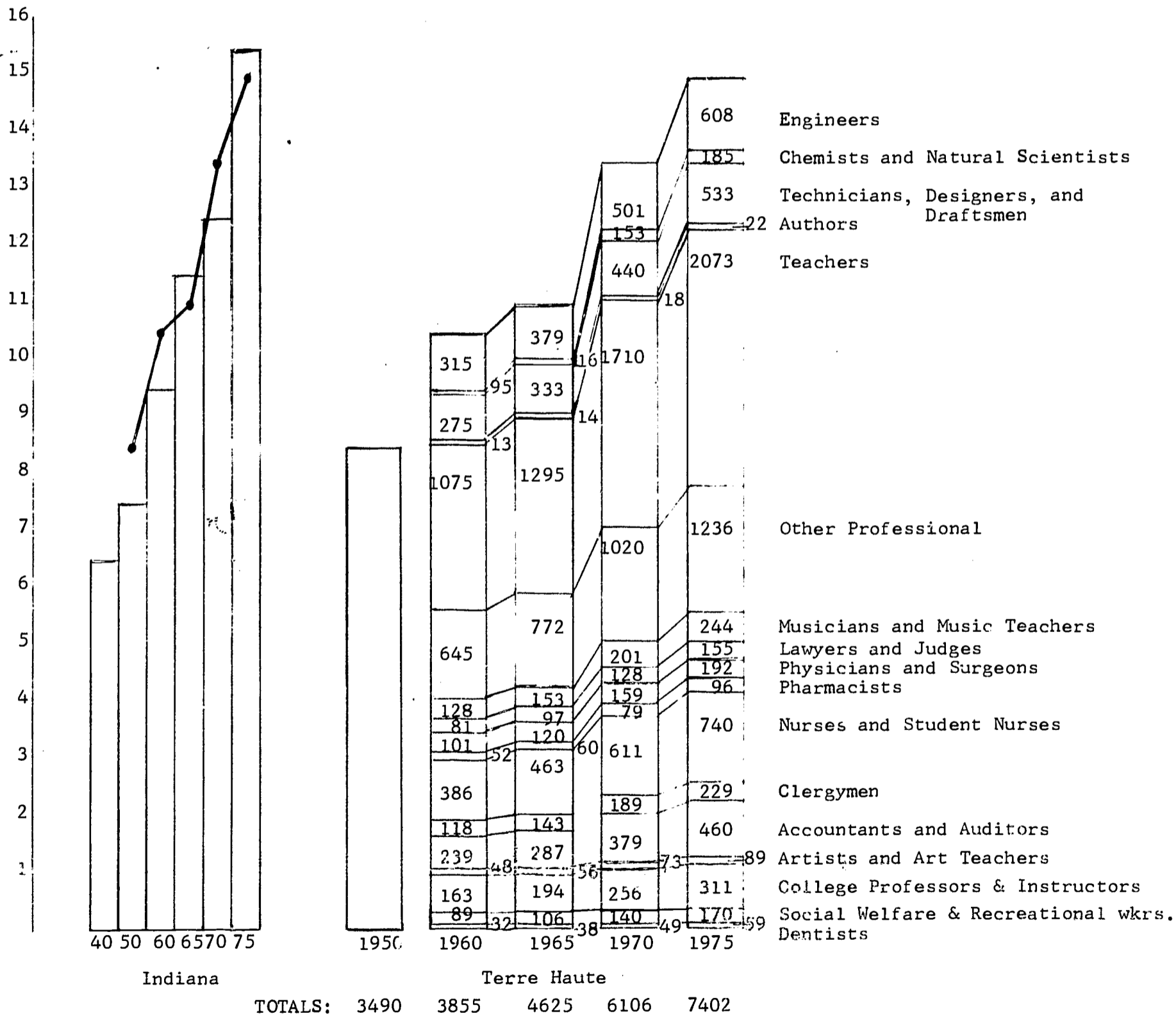
Figure 1

Figure 2 shows the graphic history and specific number in each occupation included in the Professional and Technical Division. The six narrow bars on the left represent the Indiana workforce and the line graph above them represents Terre Haute. The 1940, 1950, and 1960 figures are census figures and the 1965, 1970, and 1975 figures are estimates and projections.

The broad bar over 1960 contains the numbers in each specific occupation making up the total of 3,855 in the Professional and Technical Division in the Terre Haute area as recorded in census records. The proportions from the 1960 bar were projected to the 1965, 1970, and 1975 bars. The number for each specific occupation was then recorded as a proportion of the total estimate. The numbers assigned to specific occupations in 1965 represent estimates; the numbers assigned to 1970 and 1975 represent a forecast of the occupational needs for these years.

PROFESSIONAL AND TECHNICAL
Figure 2

Terre Haute



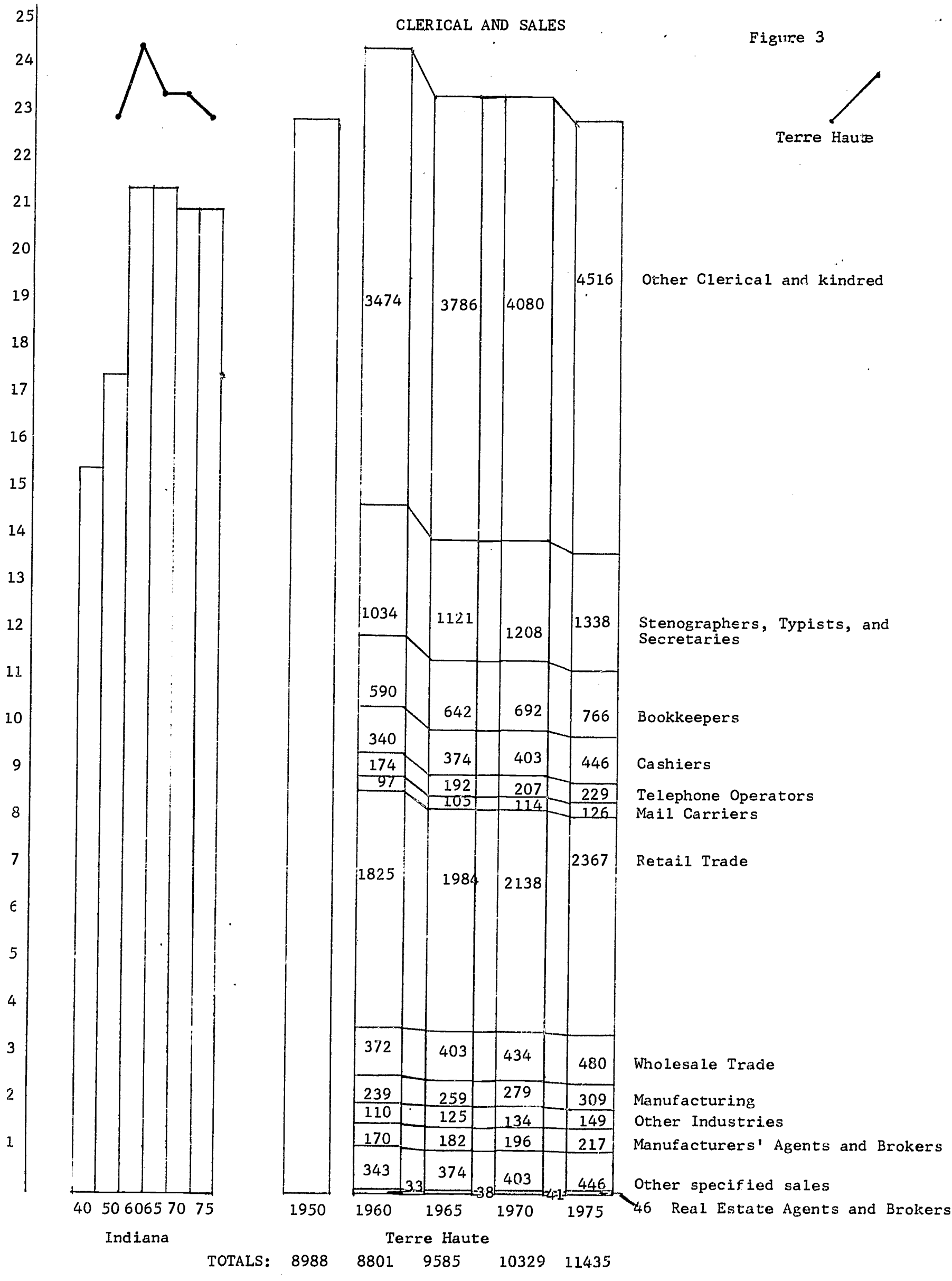
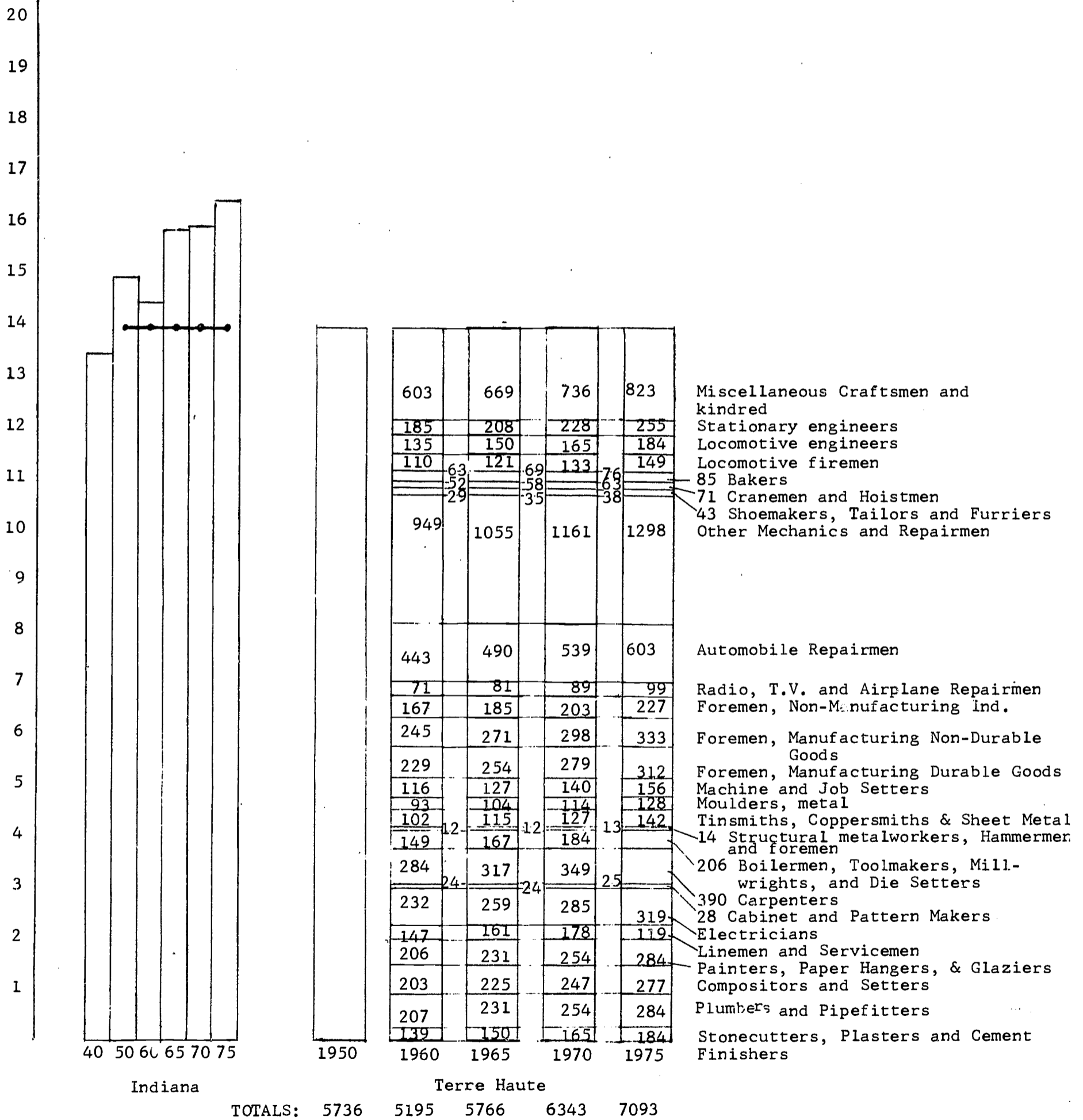


Figure 4

CRAFTSMEN AND FOREMEN

Terre Haute



OPERATIVES AND TRAINEES

Figure 5

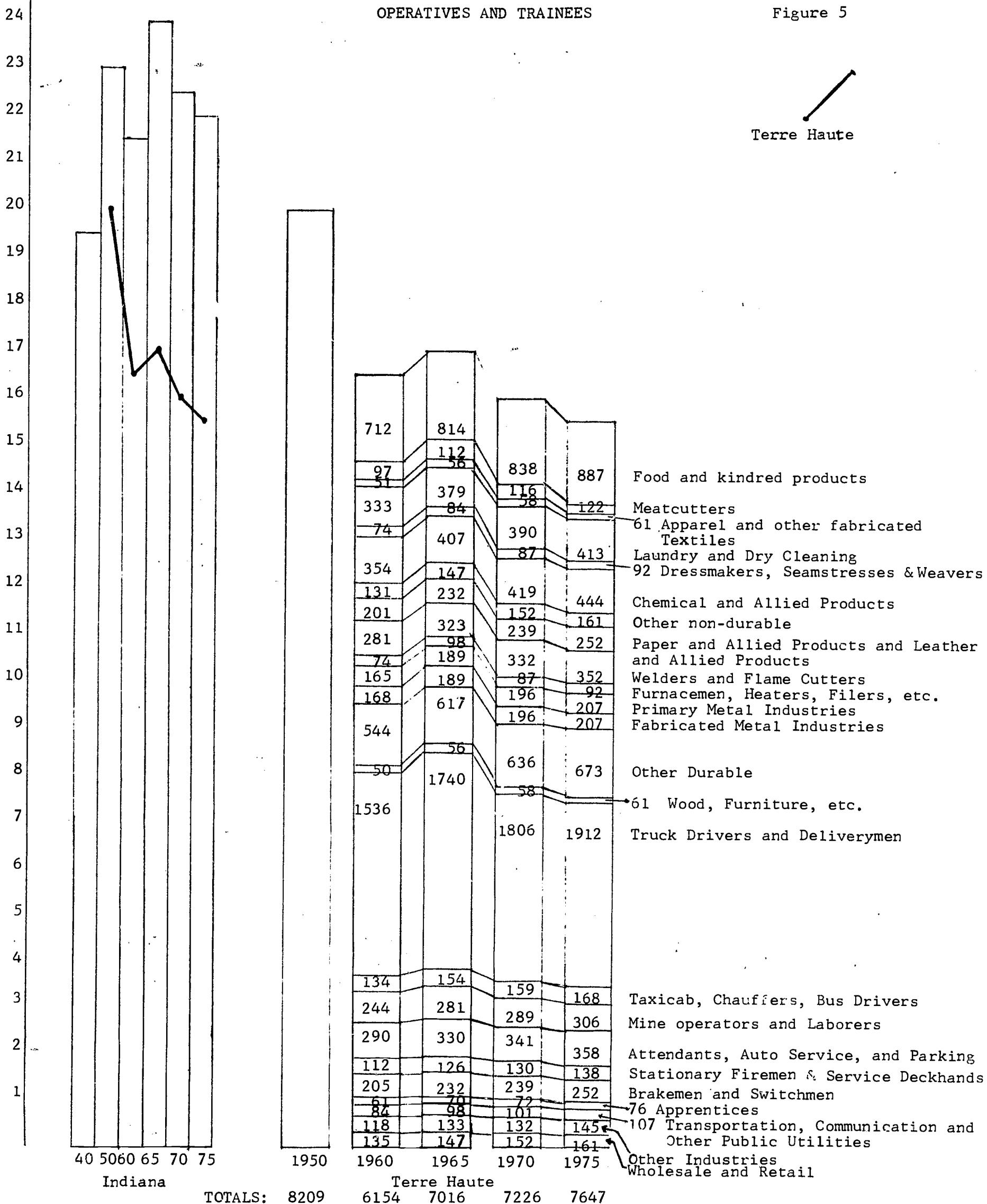
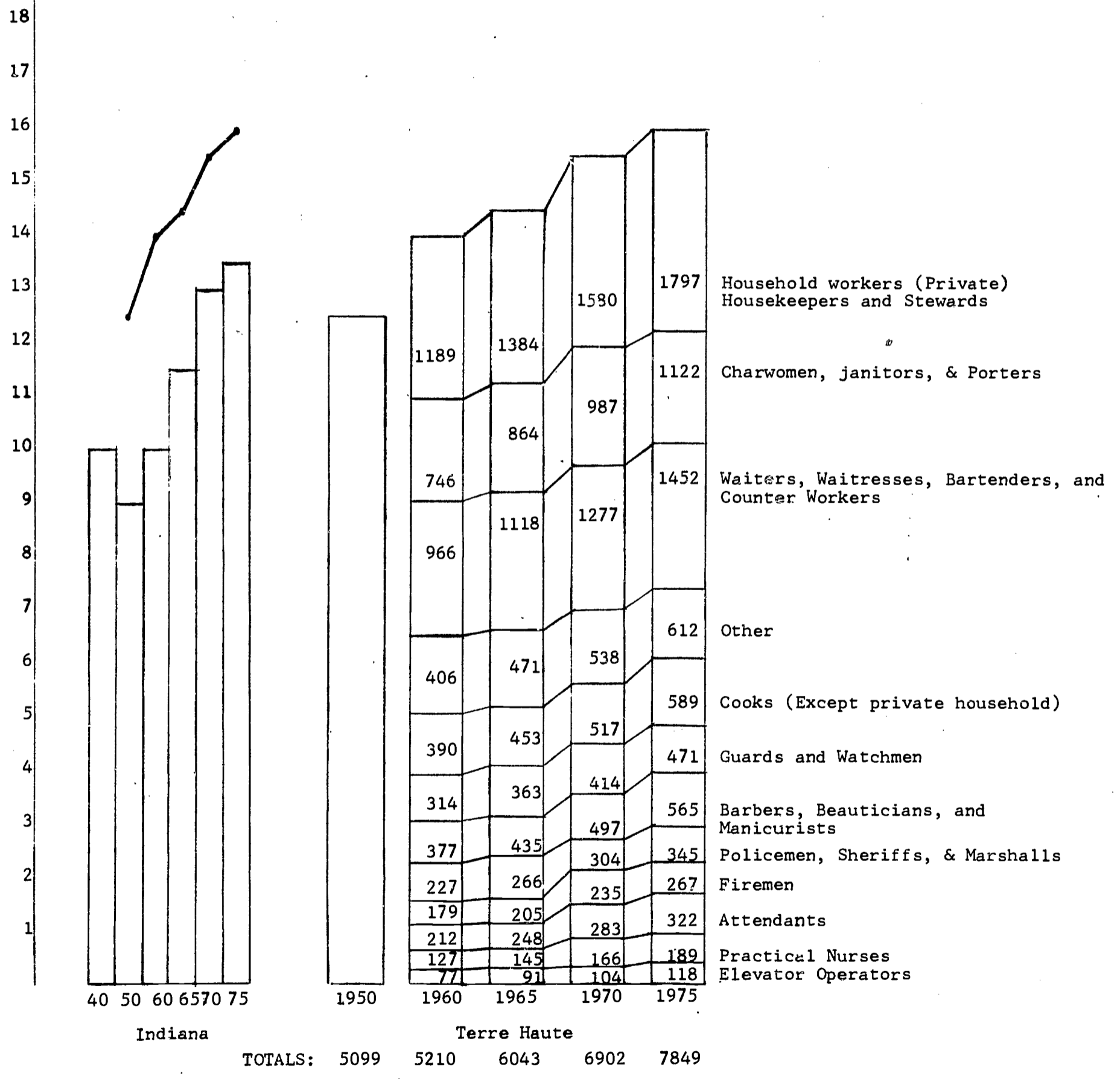


Figure 5

SERVICE WORKERS

Terre Haute



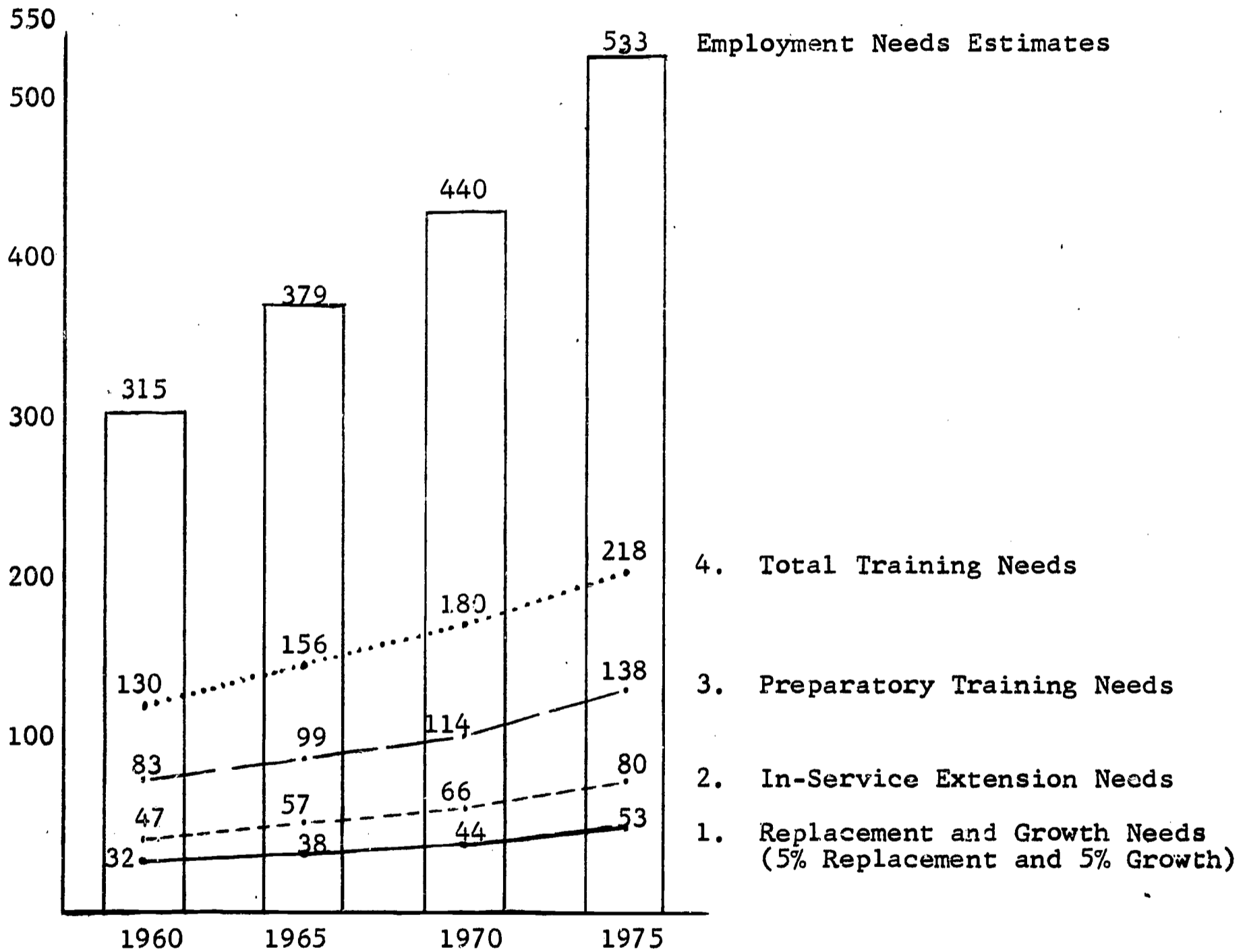
The projections for the Clerical and Sales Division (Fig. 3), Craftsmen and Foremen Division (Fig. 4), Operatives and Trainees Division (Fig. 5), and Service Division (Fig. 6) were made in the same manner as the projections for the Professional and Technical Division.

Although it was assumed that each occupation within a division would maintain the same percentage of that division for 1965, 1970, and 1975 as shown for 1960, it can be said that this probably will not be so. For example, with the increasing emphasis given to education and the existing teacher shortage, the percentage of teachers in the Professional and Technical Division will probably increase.

Projecting future manpower and training needs is a difficult task. There are many variables that must be considered. The preceding projections are offered as a guide in planning training programs and dealing with other manpower and educational problems and the training needs forecasts which follow are also offered as guides.

A graphic forecast of training needs based upon the occupational needs for technicians, designers, and craftsmen is presented in Figure 7. These specific occupations were selected from the projections developed in Figure 2. The forecast reveals a need for approximately 83 in training during 1960, 99 by 1965, 114 by 1970, and 138 by 1975. Approximately 43% of the trainees should be in drafting and design and the remaining 57% in other technical occupations.

GRAPHIC FORECAST OF TRAINING NEEDS FOR TECHNICIANS,
DESIGNERS AND DRAFTSMEN

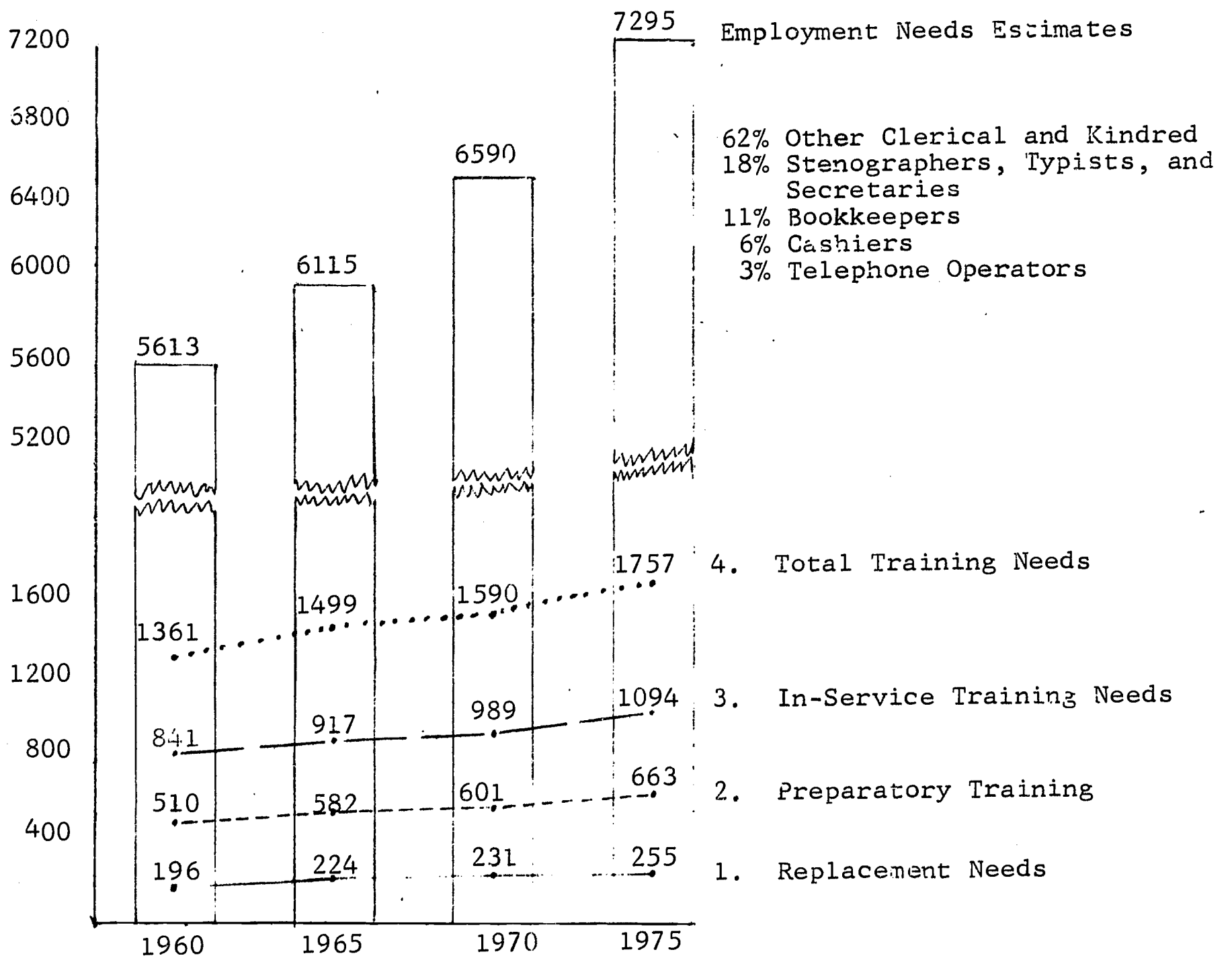


1. Estimates based on work life and rapidly increasing occupation.
2. Estimates based on realistic percentage for states having highest percentage of enrollments--15% of occupational group.
3. Assuming a 2-year training period and 30% drop out.
4. Preparatory training and in-service training estimates.

Figure 7

Figures 8, 9, 10, 11, 12, 13, 14, and 15 are training forecasts for various occupations. The charts were developed by selecting the specific occupations from the projections developed in Figures 3, 4, 5, and 6. The training forecast charts are self-explanatory. To determine the training needs for specific occupations within each training forecast chart, simply apply the percentage for that group to the total training needs forecast. For example, the total training needs forecast for Clerical occupations is 1757. Of that total, 193 should be preparing for bookkeeping work. ($1757 \times .11 = 193$)

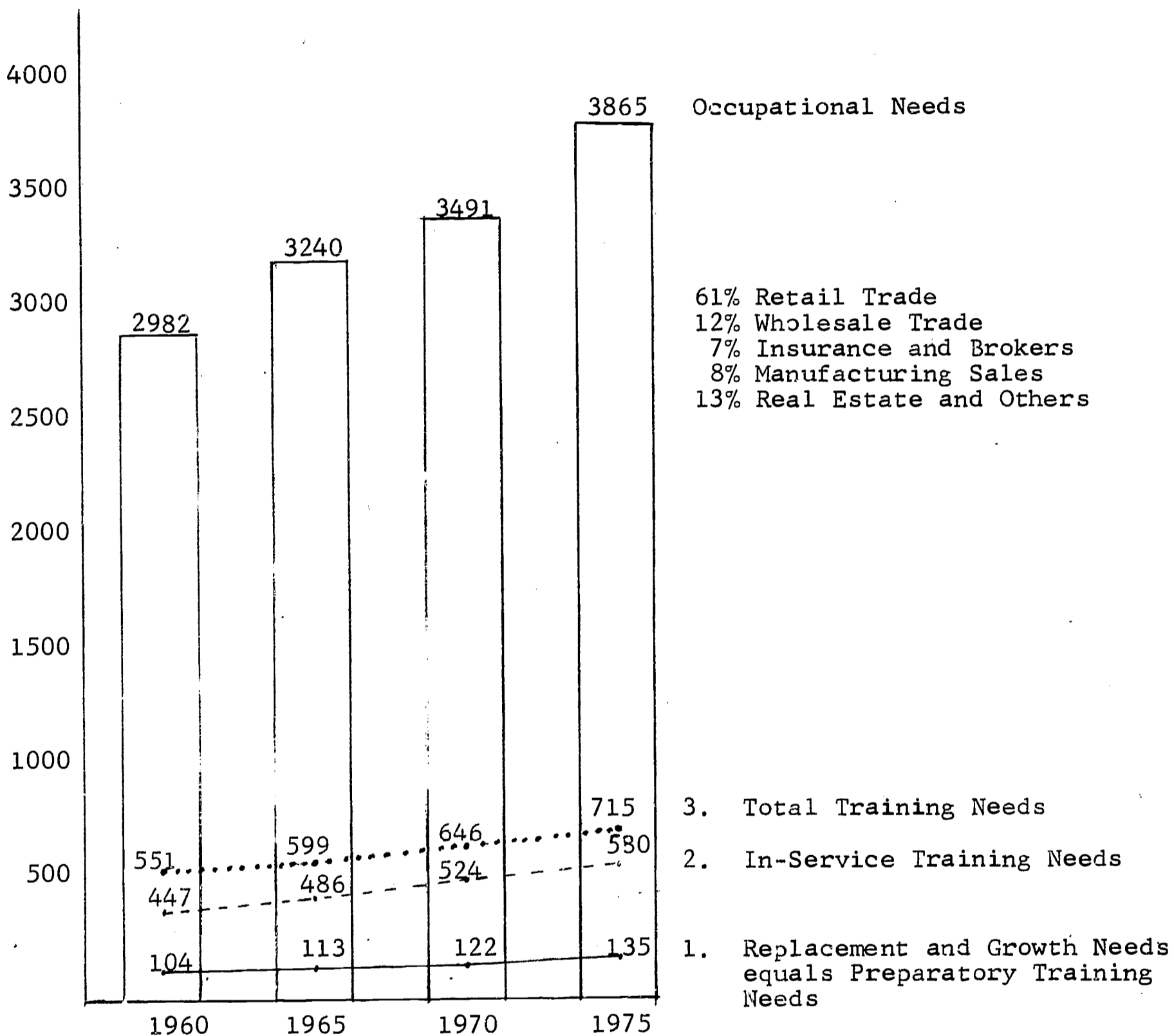
GRAPHIC FORECAST OF TRAINING NEEDS
FOR SELECTED CLERICAL OCCUPATIONS
(2 year training assumed)



1. 2% by Jaffe and Carleton and 3.4% by Moss (Av. 2.7%) Growth rate .8%
2. Assumed 2 year training period plus 30% trainee drop-out
3. 15% of total work force.
4. In-service plus Preparatory = Total Training

Figure 8

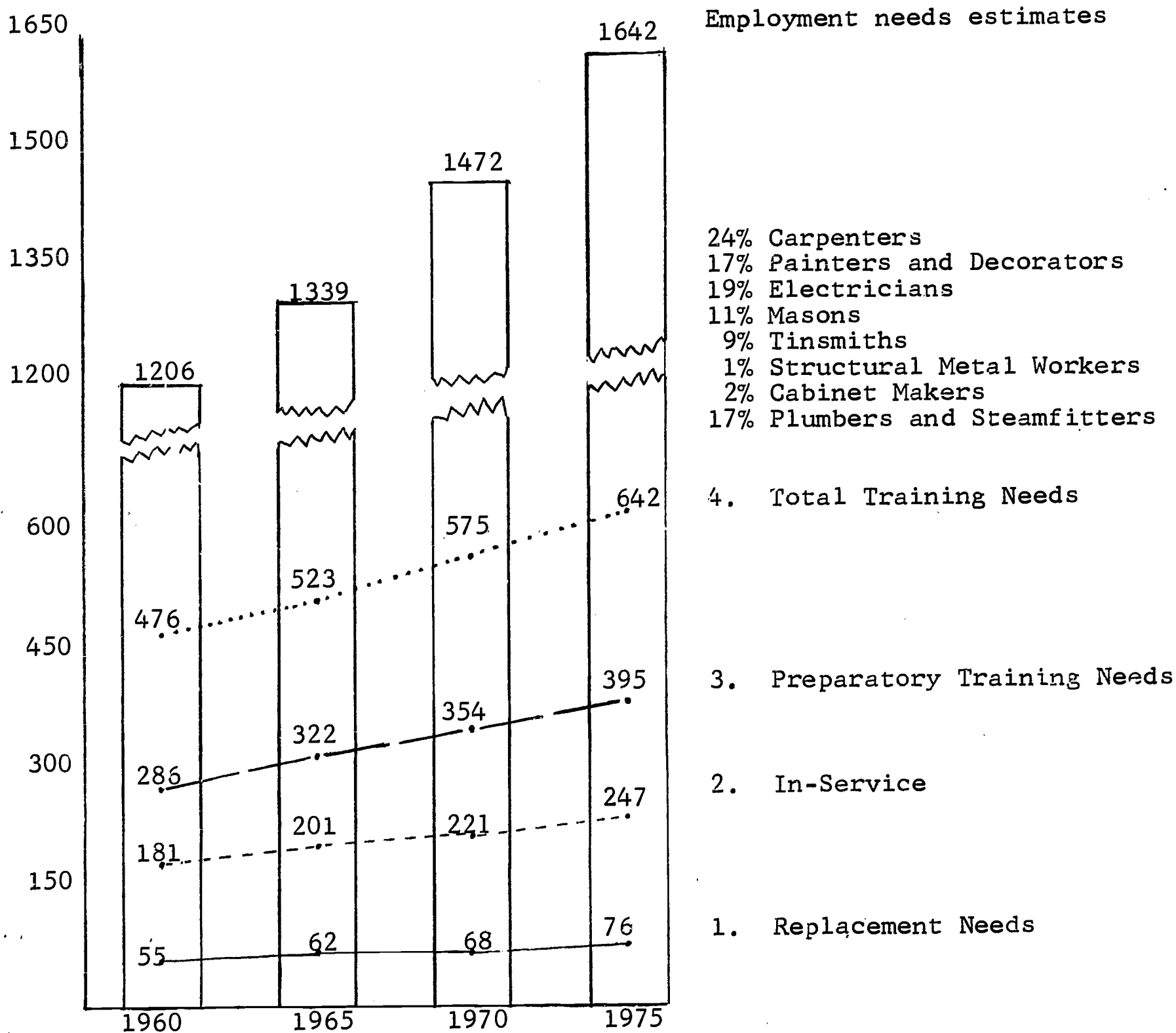
GRAPHIC FORECAST OF TRAINING NEEDS
FOR SELECTED SALES OCCUPATIONS
(1 Year Training Assumed)



- 1. 2% by Jaffe and Carleton and 3% by Moss (Av. 2.5%). Growth rate .1% (Replacement 2.5 plus 1.0 = 3.5%)
- 2. 15% of total group
- 3. Preparatory plus in-service

Figure 9

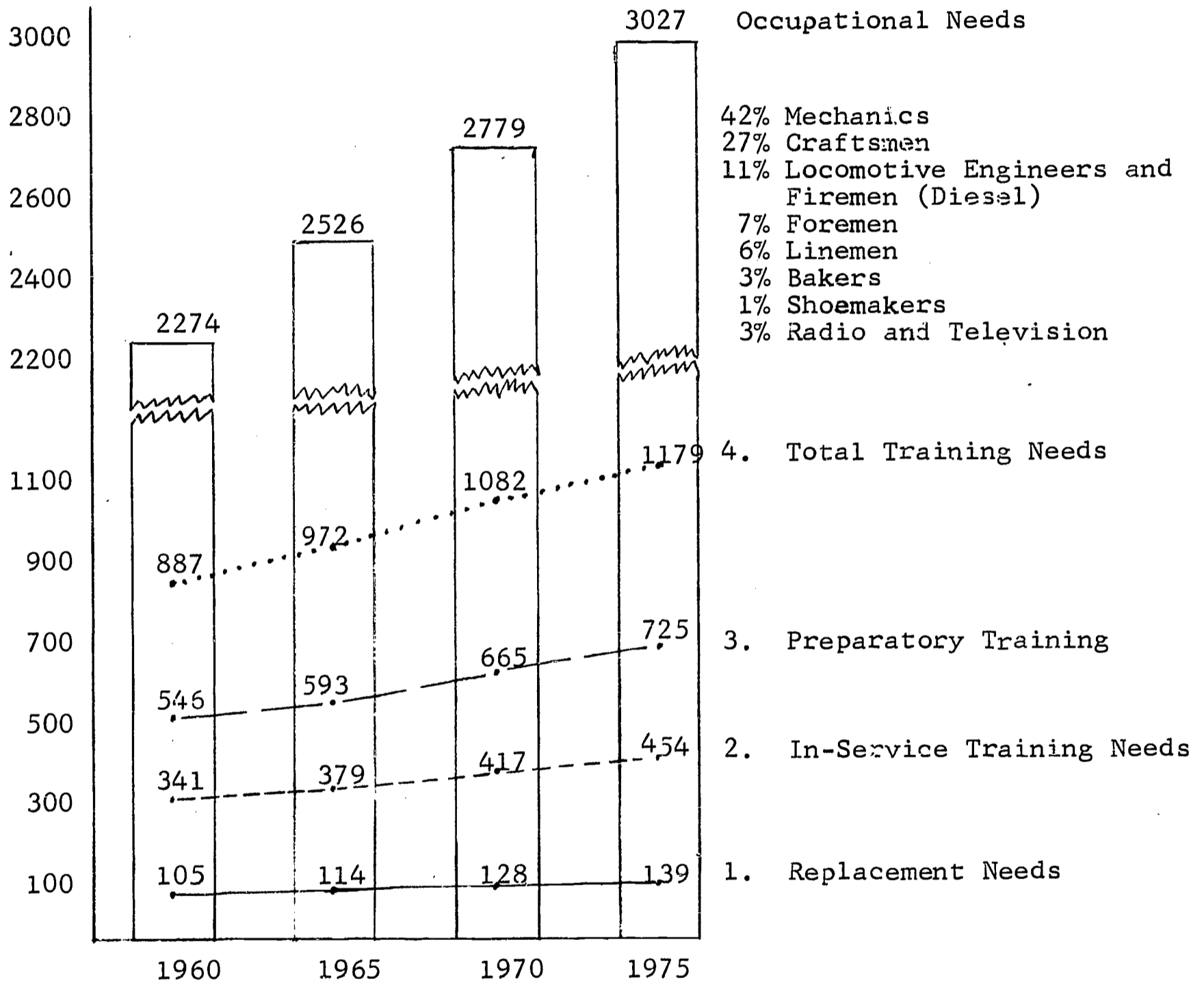
GRAPHIC FORECAST OF TRAINING NEEDS FOR
BUILDING TRADES OF TERRE HAUTE



1. 2.3% by Jaffe and Carleton and 3.3% by Moss (average 2.8%).
Growth rate 1.8% annually (replacement 1.8 plus 2.8 = 4.6%)
2. 15% of total group
3. Assumed 4-year training period plus 30% trainee drop-out
4. Preparation and in-service

Figure 10

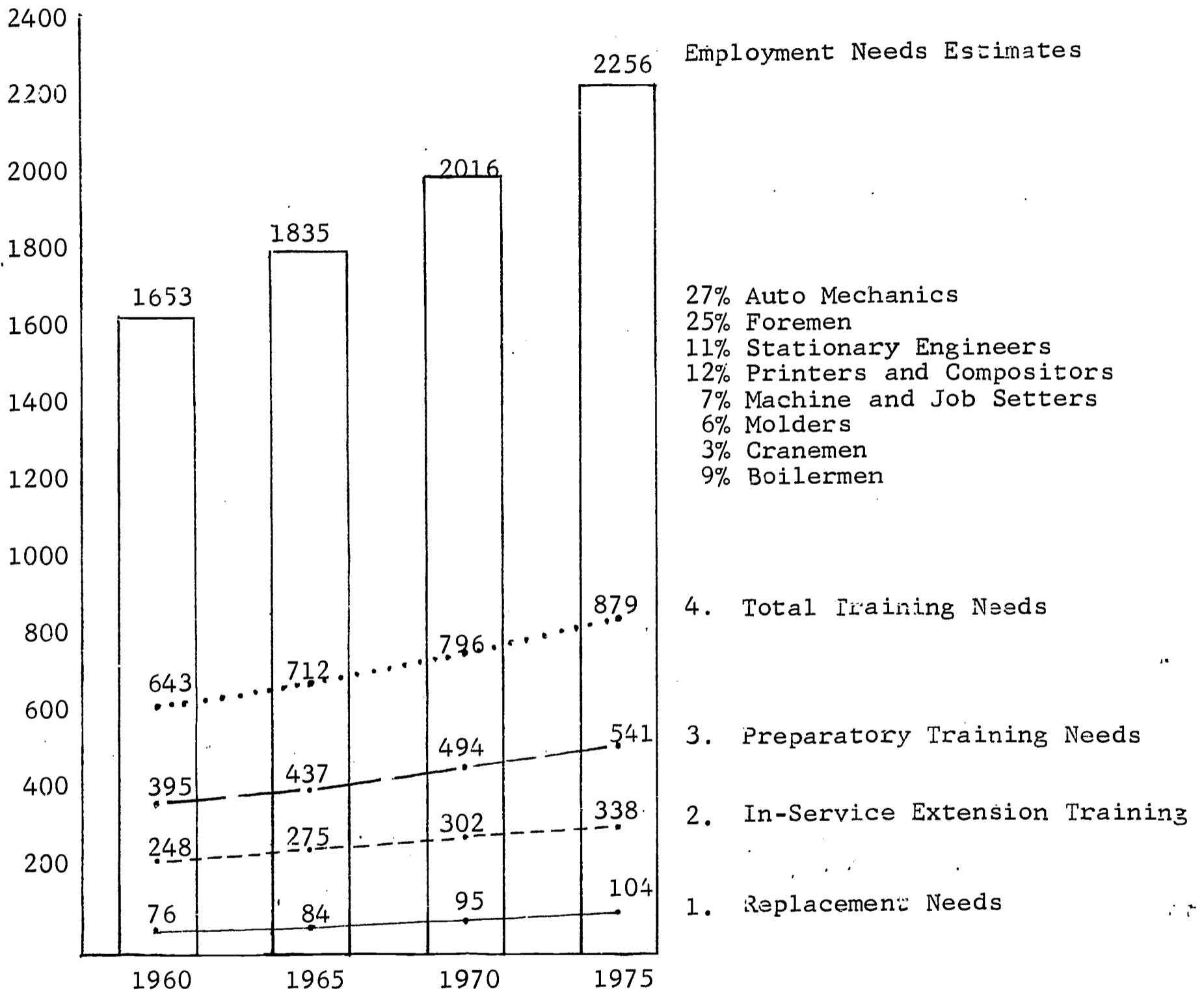
GRAPHIC FORECAST OF TRAINING NEEDS FOR
MISCELLANEOUS SKILLED TRADES



1. 2.3% by Jaffe and Carleton and 3.3% by Moss (Av. 2.8%). Growth rate 1.8% annually (Replacement 1.8 plus 2.8 = 4.6%)
2. 15% of total group
3. Assumed 4-year training period plus 30% trainee drop-out.
4. Preparatory plus in-service.

Figure 11

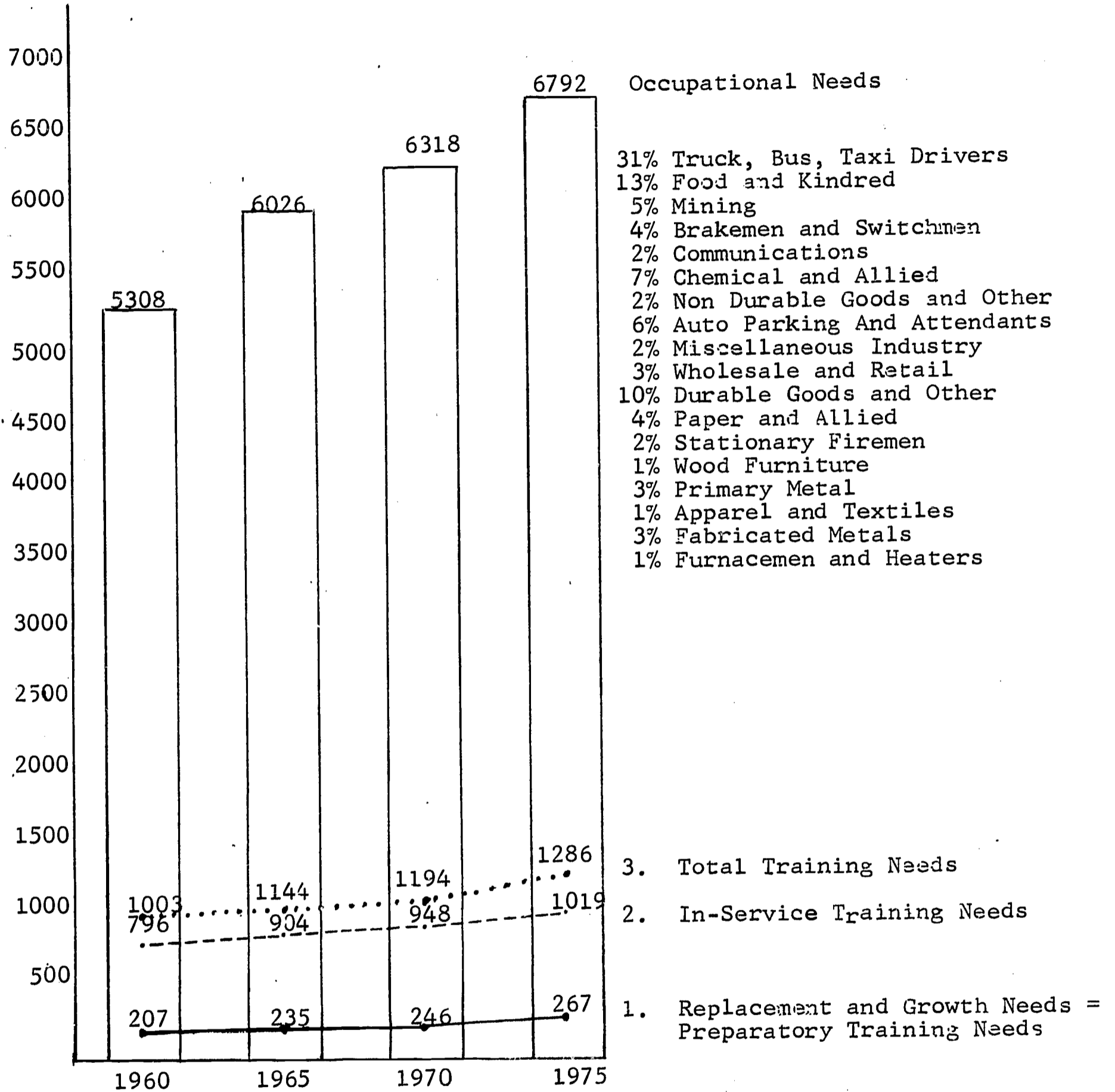
GRAPHIC FORECAST OF TRAINING NEEDS FOR INDUSTRIAL TRADES



1. 2.3% by Jaffe and Carleton and 3.3% by Moss (average 2.8%).
Growth rate 1.8% annually (replacement 1.8 plus 2.8 = 4.6%).
2. 15% of total group
3. Assumed 4-year training period plus 30% drop-out
4. Preparatory plus in-service

Figure 12

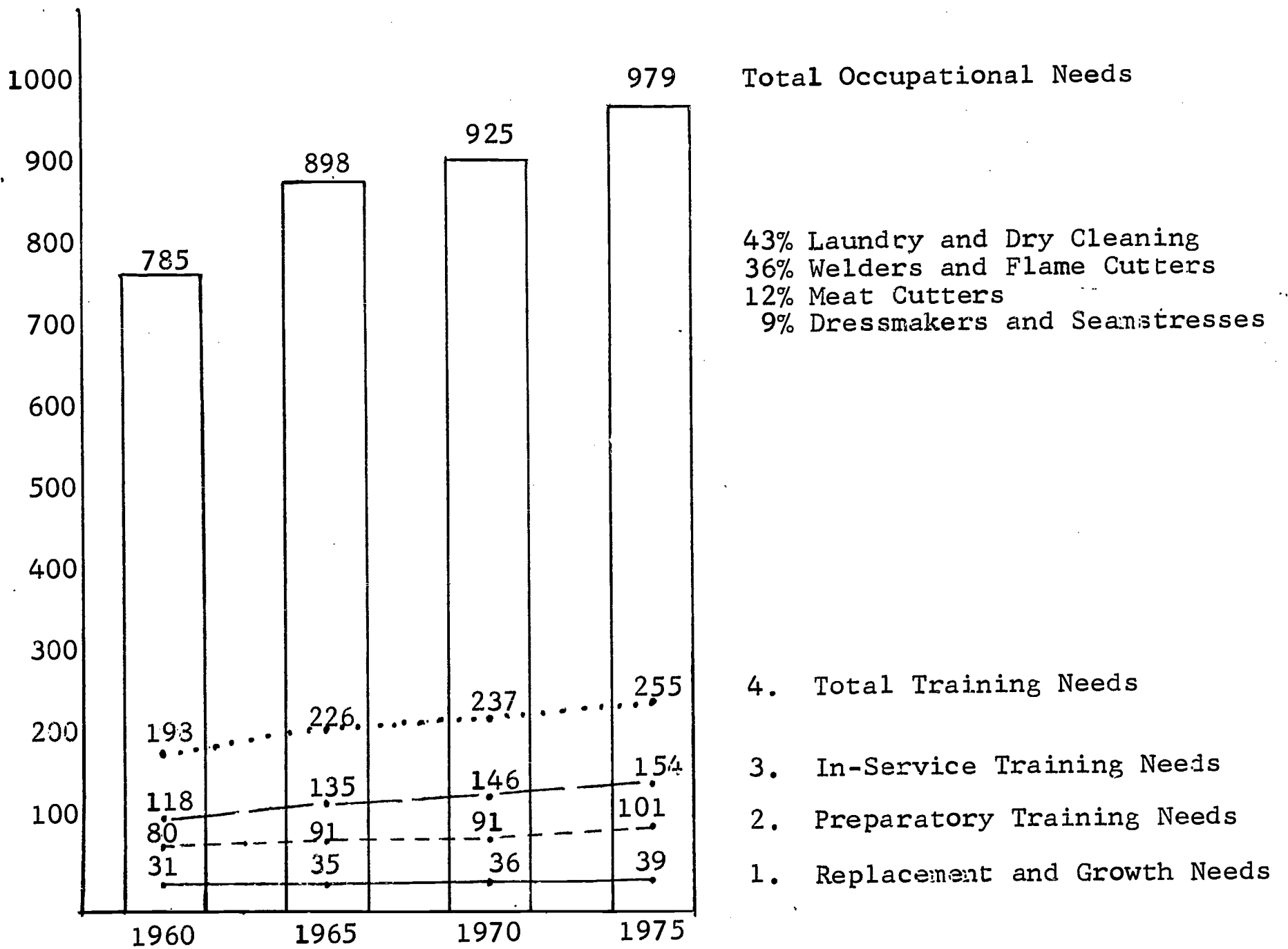
GRAPHIC FORECAST OF TRAINING NEEDS
FOR SELECTED OPERATIVE OCCUPATIONS
(1 year or less training assumed)



1. 2.2% by Jaffe and Carleton and 3% by Moss (Av. 2.6%). Growth rate 1.3% (Replacement 1.3 plus 2.6 or 3.9%)
2. 15% of total group
3. Preparatory plus In-Service

Figure 13

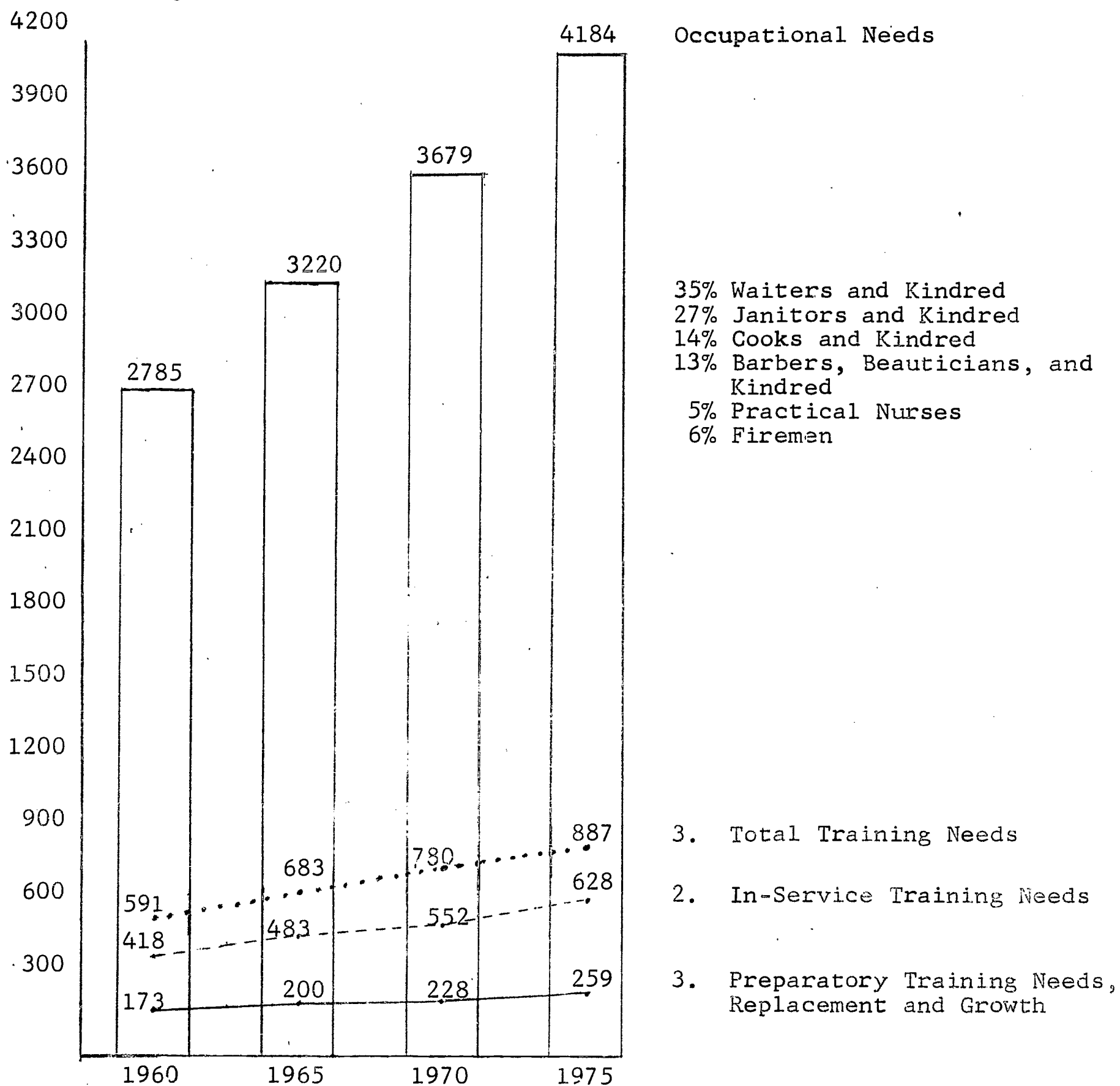
GRAPHIC FORECAST OF TRAINING NEEDS FOR
SELECTED OPERATIVE OCCUPATIONS
(2 Year Training Assumed)



1. 2.2% by Jaffe and Carleton and 3% by Moss (Av. 2.6%). Growth rate 1.3% (Replacement 1.3 plus 2.6 or 3.9%)
2. Assumed 2 year training period plus 30% drop-out
3. 15% of total group
4. Preparatory plus in-service

Figure 14

GRAPHIC FORECAST OF TRAINING NEEDS FOR WAITERS, JANITORS,
COOKS, BARBERS, PRACTICAL NURSES, FIREMEN, AND KINDRED



1. 3.5% annual growth, plus an average of 2.7% annual replacement (an average of separations found by Moss in average years in work force found by Jaffe and Carleton). The training period was assumed to be one year or less.
2. Based on a realistic goal for the state having the highest percentage of enrollment. U. S. Office of Education, Report, Table 29, 1960.
3. Preparatory, plus in-service

Figure 15

Summary: A summary of the forecasts for preparatory and in-service training needs for 5-year intervals from 1960 to 1975 is presented in Table 1.

Table 1
Summary of Training Needs Forecasts

OCCUPATIONAL DIVISION	TRAINING NEEDS FORECASTS							
	PREPARATORY				IN-SERVICE			
	1960	1965	1970	1975	1960	1965	1970	1975
PROFESSIONAL & TECHNICAL								
Technical	83	99	114	138	47	57	66	80
CLERICAL & SALES								
Clerical	510	582	601	663	841	917	989	1094
Sales	104	113	122	135	447	486	524	580
CRAFTSMEN & FOREMEN								
Building Trades	286	322	354	395	181	201	221	247
Industrial Trades	395	437	494	541	248	275	302	338
Misc. Skilled Trades	546	593	665	725	341	379	417	454
OPERATIVES & TRAINEES								
Operatives, 2-year	80	91	91	101	118	135	146	154
Operatives, 1-year	207	235	246	267	796	904	948	1019
SERVICE								
Service	173	200	228	259	418	483	552	628
TOTALS	2184	2672	2915	3224	3437	3837	4165	4594