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AN INVENTORY OF OCCUPATIONAL OPPORTUNITIES IN THE COLUMBUS SERVICE AREA

bу

Ralph V. Eickhoff, Sr.

A THESIS

Presented to the Faculty of
The Graduate College in the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Master of Science
Department of Agricultural Education

Under the Supervision of Professor James T. Horner

Lincoln, Nebraska

January, 1970

ABSTRACT

Ralph Eickhoff, Sr. An Inventory of Occupational Opportunities in the Columbus Service Area. Thesis, M.S., 1970, Library, University of Nebraska, Lincoln.

Advisor. Dr. James T. Horner

Purpose. To inventory the number of persons presently employed in the various occupational areas in the Columbus, Nebraska service area and to identify the projected employment needs due to turnover and expansion for the next year and the following two years in the same occupations.

Methods. The inventory was conducted in postal zip code area 686 surrounding Columbus, Nebraska. A 25 percent random sampling of business firms in the area netted 667 businesses to be inventoried. The state-wide computerized model for determining occupational opportunities in Nebraska was used as the data collection instrument and data were collected by questionnaire and personal interview from 92 percent of the businesses.

Findings. The inventory showed 38.1 percent of the people worked in agriculture; 9.8 percent in distribution; 1.9 percent in health; 1.0 percent in home economics; 7.4 percent in business occupations; 19.4 percent in trades and industry; and 22.4 percent in other occupations. The total number of persons employed in the area was found to be 27.061.

The greatest need for workers was found to be in the trades and industrial occupations area which accounted for 38.8 percent of the total needs for the next year and 35.5 percent of the needs for the following two years. Following the "other occupations" category was the business occupations area with needs of 8.5 percent in 12 months and 8.7 percent of total needs the following two years. Distribution occupations were found to be next in needs followed by agriculture, health, and home economics.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

Many changes in occupations have evolved in the past decade in Nebraska. New occupations are being created and old ones discarded.

As new areas of work become evident, so too must new educational and training programs be developed to prepare individuals as workers in these new occupations. Educational policy makers are charged with the responsibility of designing occupational programs needed to educate workers for present day jobs and jobs of the future. Therefore, it is important that the occupations in which people work presently are known as well as the expected employment in occupations several years hence.

Progressive schools of today are searching for better ways to provide adequate occupational education for their enrollees. With present and projected occupational needs of an area available to school boards, administrators, and faculties, it is logical to assume that a more adequate curricula can be developed.

The Problem

It was the purpose of this study to identify the number of persons presently employed in the various occupational areas in the Columbus. Nebraska service area and

the future needs.

The specific objectives of the study were:

- 1. To inventory the present employment in various occupations in the Columbus service area.
- 2. To inventory the projected employment needs due to turnover and expansion for the next year and the following two years in the same occupations.
- 3. To make available information which will assist educational policy makers in the Columbus service area to design effective occupational education programs.

Importance of Study

Updating and revising of curricula is a trait of progressive schools and colleges. With increased emphasis on vocational education, school curriculum planners are more dependent on occupational data available to them to provide the necessary information to build adequate occupational curricula for their schools. It is intended that this survey will be a source of data.

It is intended that all school officials charged with developing and improving curricula of schools located in the survey area will use the occupational data herein presented. When more adequate school curricula become available, students in the Columbus service area will have the opportunity to prepare for entry into their chosen occupations with less difficulty. Coordinating educational curricula with occupational opportunities within a community

is, in the writers opinion, of vital importance to all the residents. The economic and social progress of a community is determined somewhat by the efficiency and adequacy of its schools. Industrialists list schools as one of their criteria to consider when contemplating the establishing of a new plant in a community; therefore, any community having a good educational system has a better chance to get a new industry. A community with industry has more opportunities for employment for young workers and helps to reverse the age-old trend in Nebraska of out-migration.

Method of Investigation

The Nebraska Research Coordinating Unit for Vocational Education has designed a data collecting instrument used in a state-wide survey. This instrument lists the following six occupational areas: Agricultural Occupations; Distribution; Health Occupations; Home Economics; Office Occupations; and Trades and Industrial Occupations. The same instrument was used to collect data for this occupational inventory.

The Nebraska Research Coordinating Unit developed a complete list of firms within the state that employed people. The following was reported:

James T. Horner et al., State-Wide Computerized

Model for Determining Occupational Opportunities in Nebraska
(Preliminary), Research Coordinating Unit for Vocational
Education, East Campus, University of Nebraska, Lincoln,
Nebraska, 1968, p. 2.

The population of Nebraska employers was developed in cooperation with the State Tax Commission, the Internal Revenue Service (IRS), and the State Department of Labor. The population included all businesses required to file Federal Income Tax Reports in the following tax classes: (1) firms employing one or more persons on which Social Security was paid and income tax withheld, (2) domestic help, and (3) farms and ranches employing off-farm labor. In addition (4) all Federal offices in Nebraska and (5) out-of-state Nebraska employers were included.

The population of firms was 63,125. Names of all firms were transferred to magnetic tape and assigned consecutive numbers. A three per cent sample, 1894 firms, was randomly selected by computer from this population.

Names and addresses were obtained from computer printout. A questionnaire mailed to the 1,894 firms yielded a 40 per cent response. Data from the remaining firms were obtained by personal interview.

It would be obviously impractical to enumerate employment opportunities for every job title. The taxonomy of the U. S. Office of Education was used. It identifies job clusters, grouping job titles according to similar educational preparation. The two-page questionnaire consisted of 174 job clusters in seven occupational areas, (i.e., Agriculture, Distribution, Health, Wage Earning Home Economics, Office, and Trade and Industrial Occupations).

Data requested from all firms were: (1) the number of people presently employed by occupational grouping; (2) the employer's estimate of the number of employees needed in each occupational group during the next year due to turnover, promotion, expansion and retirement; and (3) the employer's estimate of employment needs for each occupational grouping in the next three years. Even though this involved estimates, it was thought to be the best source of data available.

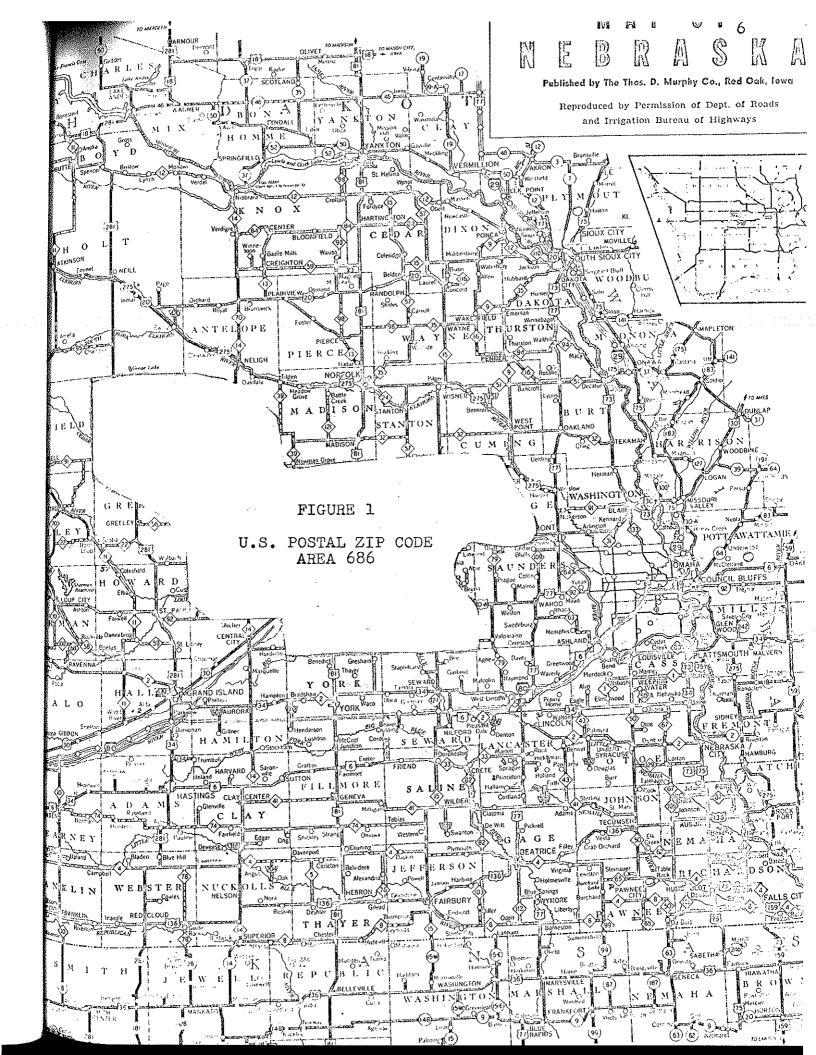
The population did not include self-employed persons who hired no employees and withheld no labor income tax or social security and consequently were not on the IRS sources used. No accurate source of this information is available.²

²<u>Ibid</u>., pp. 1-3.

In order that findings would be supporting and comparable to those of the three percent level state-wide survey, the same method was followed in the Columbus service area survey.

to secure the list of Columbus area business firms used in this inventory. It was decided to establish Columbus service area boundaries by using the Postal Zip Code Area 686 (Figures 1 and 2) as the area for this survey. The postal zip code area 686, which marks Columbus near its center and which encompasses an area around the city, generally thought of as the Columbus trade area, was used to designate the boundaries for the survey. The area includes the entire counties of Platte, Colfax, Polk, Nance, Boone, and Wheeler and parts of the counties of Butler, Dodge, Merrick, Greeley, Antelope, and Saunders. Columbus is the largest city in the area and considered the hub of business and industry.

A 25 percent random sample of business firms of the zip code area was obtained from the 63,125 business firms that were on magnetic tape and previously used in the state-wide three percent survey. It was found the area contained 2,668 business firms, and a twenty-five percent sampling was selected by computer and a print-out of 667 consecutively numbered business firms with addresses obtained.



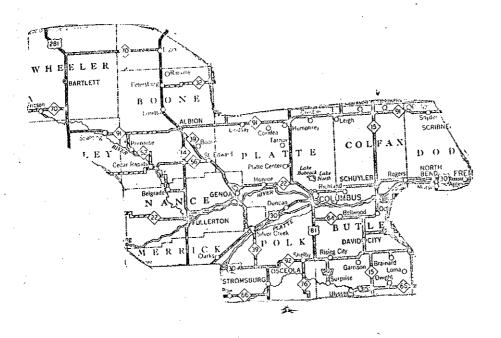


FIGURE 2

U. S. POSTAL ZIP CODE AREA 686 AND GEOGRAPHICAL AREA IN WHICH OCCUPATIONAL OPPORTUNITIES INVENTORY WAS TAKEN

The two page data collection instrument, 3 listing 174 job clusters in seven occupational areas, was used to obtain data in this inventory.

It was impractical to enumerate employment opportunities for every job title. The Standard Terminology for Instruction in Local and State School Systems was used to identify job clusters or groupings of job titles according to similar educational preparation. The two-page questionnaire consisted of 174 job clusters in seven occupational areas, (i.e., Agriculture, Distribution, Health, Wage Earning Home Economics, Business, Trade and Industrial Occupations, and Others).

Postal regulations were reviewed regarding the sending of the questionnaire and the receiving of the completed instrument by return mail. Two thousand of the data collection instruments were printed. (Sample included in Appendix)

A letter announcing the start and importance of the inventory was sent to all business firms. Simultaneously a news article and picture appeared in the Columbus Daily Telegram. Four days later the survey form with letter of instructions was sent to all the firms. A follow-up letter

^{3&}lt;sub>Ibid</sub>.

John F. Putnam and Dale W. Chismore, Standard Terminology for Instruction in Local and State School Systems, State Education Records and Reports Series: Handbook VI, Chapter 5, U. S. Department of Health, Education, and Welfare, Office of Education, May, 1967.

reached them one week after the survey. Two weeks later another survey was sent to those not responding (all mailings are included in Appendix).

Business firms not returning completed surveys were interviewed personally. Businesses returning surveys containing partial or questionable data were called upon again via telephone or by a second interview.

The data collected in this inventory were programmed into the computer and the findings projected to the 100 percent level in each of the 174 job clusters and in occupational areas. The data were analyzed and are recorded in Chapter III of this study.

Limitations of Study

This study was limited geographically to the Columbus, Nebraska service area. This area is further defined by the boundaries of the United States postal zip code area 686. Geographically, Columbus is located near the area's center.

A twenty-five percent random sample of the business firms was used which, theoretically, provided a more accurate inventory of the Columbus area occupations and their future needs as compared to a three percent state-wide survey.

The list of business firms from which the computer selected a twenty-five percent random sample does not include self-employed persons who have no employees and

withheld no income tax or social security. Accurate data on the number of self-employed in the occupational area are not available. However, Nebraska Agricultural Statistics provide information on the number of self-employed farmers in the area as shown in Chapter III.

The accuracy of this inventory is limited by the methods of obtaining surveys and to the number obtained.

Over 40 percent (41.8) were returned by mail and 50.8 percent by personal interview. Interviewers were instructed in interview methods; however, it is recognized that personality differences do exist among individuals.

The study did not identify the extent of vertical and horizontal mobility of workers within and between firms, or from promotion within firms; all actions which created employment opportunities were included. In order to determine the net number of new persons needed, such migration patterns need to be established.

Approximately eight percent of the firms on the list were not in existence at the time of interview, nor were the new and emerging firms which have been established since January, 1967. If a firm had changed owners since the list was printed, data were obtained from the new owner.

Data requested from all firms were: (1) the number of people presently employed by occupational groupings; (2) the employees needed in each occupational group during the next year due to turnover, promotion, expansion, and

(3) the employer's estimate of employment needs for each

occupational grouping for the two years following.

Human error, computer programming, data analysis, and interpretation are further limitations. Weather conditions on day of interview, mood of both interviewer and interviewee could cause a pessimistic or an optimistic response.

Definition of Terms

The term "Agricultural Occupations" includes all occupations in and directly related to farming. Indirect agricultural occupations, such as "meat cutting" are not included.

"Other Occupations" as used in this study included professional and managerial workers, such as teachers and clergymen, not already included. It also includes production and assembly line workers with no specific trade or skill.

The term "next year" refers to the twelve months following the inventory, and the term "following two years" is intended to mean the 24 months after "next year."

Most businesses have several job clusters. One of these is office jobs involving paper work, clerical work and greeting of customers. These jobs are grouped and called "Business Occupations."

CHAPTER II

REVIEW OF LITERATURE

A review of literature revealed that little work had been done to inventory the occupational opportunities involving the six occupational clusters that were included in this survey. Several studies had been made showing occupational opportunities in each of the six clusters but few studies have the scope to encompass the total. Most studies centered around the occupational needs in one area, such as: on-farm and off-farm agriculture; business and office; trades and industry; and various other occupational groupings.

Most recent studies had been made to determine vocational education needs within a geographical area or state. A New Mexico survey revealed that studies of this nature had been made in Ohio, Connecticut, Oregon, Illinois, California, Florida, North Carolina, and Utah and that numerous other states plan to conduct surveys. The New Mexico research on occupational needs was conducted to determine the need for vocational and technical education. 5

James D. McComas and Darrell S. Willey, <u>Occupational</u>
Needs for <u>Vocational and Technical Education</u>, Bureau of
Educational Research, College of Teacher Education, New
Mexico State University, University Park, New Mexico,
Pub. No. 8, pp. 5, 12, 17.

"The scope of the study included 31 population centers which were selected to provide geographical, representative sizes in population, and businesses and industrial diversification." The data presented showed present vacancies, needed in the next five years, turnover, and total needs in Distributive Occupations, Office Occupations, Trades and Industrial Occupations, Agricultural Occupations, and Home Economics Occupations. The summary of the research showed that present programs in vocational education must be expanded to meet the state's growing needs. It was also determined by the study that the present and projected employment needs of 10,000 plus firms and businesses in New Mexico were in excess of 68,000 persons.

In the occupational area of agricultural non-farm businesses, Agan of Kansas found in a sampling of 500 employers that 2,823 additional employees would be needed in a five year period due to expansion of business. An additional 1,475 employees would be needed annually to take care of growth and turnover in the Kansas agricultural non-farm business. 7

^{6&}lt;sub>Ibid., pp. 14, 33.</sub>

⁷R. J. Agan, <u>Kansas Studies Agricultural Non-Farm Occupations</u>, Agricultural Education, Vol. 37, pp. 15-16, July, 1964.

A compilation of data in the state of Ohio showed 3,058,927 in eleven major occupational classifications. 8

The greatest number of people were employed in three classifications: operatives, craftsmen and foremen, clerical and their kindred workers and account for 52.5 percent of total employment. Farmers, farm managers, and farm laborers made up only 6.7 percent of the total labor force in Ohio. The manufacturing industry accounted for 36.7 percent of the total employment in the state.

Texas occupational surveys from 1964 to 1967 used nearly the same occupational areas as the Nebraska computerized model. Cumulative results of 282 occupational surveys were included in the report. Employers were also asked to indicate present employment, present needs, and future needs for 12, 24, and 36 months, respectively.

The Texas study compared future needs with present enrollment in vocational programs and found considerable contrast in percentages. For example, the future need in agriculture was 17.2 percent and enrollment accounted for 64.9 percent. The industrial occupational area showed 14 percent enrolled with a future need of 33.8 percent. 10

⁸The Ohio Trade and Industrial Education Services,
The Instructional Materials Laboratory, Meeting Ohio's Needs
for Vocational and Technical Education, The Ohio State
University, 124 Townshend Hall, Columbus, Ohio, pp. 52, 54,
Sept., 1957.

⁹Vocational Education Department, <u>Future Trends for Vocational Education as Indicated by Occupational Surveys</u>, Texas Educational Agency, Austin, Texas, pp. 11, 14, Oct., 1967.

^{10&}lt;u>Ibid.</u>, p. 14.

This points out a need for developing new curricula in the vocational schools of Texas and educating employees in the areas in which they are likely to become employed. Nebraska occupational surveys have had similar objectives.

Parrish, in an Omaha study, attempted to identify the characteristics of an educational program which prepares youth and adults for the world of work. A comprehensive study of the system was made. Several recommendations made as a result of the survey seem noteworthy to mention in regard to the Columbus inventory. Schools "Should develop a proper balance between academic and vocational curricula" and "Should establish a continuous program of research in the area of education for work."

A 1968 occupational opportunities survey by the Nebraska Research Coordinating Unit served as a pattern for the Columbus area survey. The survey shows the occupational mix of Nebraska employment based on the educational classifications in the Standard Terminology for Instruction in Local and State School Systems. 12

A three percent sample of the 63,125 business firms in the state were randomly selected. They responded by

Edwin H. Parrish, A Look at Education for Work in the Omaha Public Schools, Omaha Board of Education, School District of Omaha, Omaha, Nebraska, pp. 141, 143, 144, Sept., 1964.

¹² James T. Horner et al., Occupational Opportunities in Nebraska, Nebraska Research Coordinating Unit for Vocational Education, 302 Ag Hall, East Campus, University of Nebraska, Lincoln, Nebraska, pp. 2-4, 1968.

returning a questionnaire or by being interviewed. Present employment in the state was found to be 653,990. Agricultural Occupations accounted for 20.4 percent of the total; Distributive Occupations 22.5 percent; Health Occupations 3.9 percent; Wage Earning Home Economics Occupations .8 percent; Business Occupations 16.3 percent; Trades and Industrial 29.6 percent; and Other Occupations 6.5 percent.

The greatest need for workers in Nebraska was shown to be in the Trades and Industry category with 42.3 percent of the state's total needs in the next 12 months found to exist in this category.

The following two year needs in Trades and Industry claimed 42.8 percent of the state's total employment needs. Distributive Occupations area ranked second as showing the greatest employment needs in both the next 12 months and following two years category. "The study revealed that employers estimate there will be 142,899 job opportunities in Nebraska in the next year, and that there will be a total of 294,768 job opportunities in Nebraska in the following two years."

The 1969 occupational opportunities survey by the Nebraska Research Coordinating Unit showed over 70 thousand business firms in the state. A random three percent sampling of these firms with data projected to the total population as was done in the 1968 survey showed 738,188

^{13&}lt;u>Ibid.</u>, 1969.

persons employed in 1969. The 1968 survey showed 653,990 employed and 142,899 needed in the next twelve months. Differences in 1968 to 1969 employed would indicate that approximately 84,000 additional persons were employed during the year. This would report needs due to expansion only and not take into consideration replacement needs.

tional areas in the 1969 survey was more conservative;
121,137 employees were needed in the next 12 months as compared to 142,889 reported needed in the 1968 survey. In the following two years, 130,401 were shown to be needed as compared to 294,768 shown in the 1968 survey. This would indicate that employees expected to hire less than 50 percent as many employees in the next two years in 1969 as they did in 1968. Explanations offered were that: employers were asked to classify new employees needed, specifying reasons the need developed and where replacements might be obtained; and the shift in the country's economy with efforts to curb inflation.

The most significant drop in employment was noted in Distributive Occupations which went from 22.4 to 9.6 percent of total employment. Trades and Industrial area showed greatest increase where 29.6 percent were employed in 1968 and 40.8 percent in 1969. A 3.7 percent increase in number of persons employed in other occupations seems worthy of mention.

The percent of employees needed in the next 12 months and following two years in Distributive Occupations also showed a decline. Need for employees the following two years in the Health Occupations area showed an increase of 6.4 percent while need the first year showed a slight decrease. A decrease in the number of employees needed in Business and Office Occupations was shown in both the one year and following two year categories. Trades and Industrial Occupations indicated fairly constant needs in the next 12 months category, but showed rather substantial needs of nearly 7 percent increase in the following two years. Forty-nine percent of employees needed in Nebraska for the following two years category were needed in Trades and Industry. A rather significant increase in employees needed in Other Occupations was noted for the next 12 months going from 4.6 percent in 1968 to 18.1 percent in 1969.

CHAPTER III

PRESENTATION OF DATA

The employment data were projected by computer to reflect the Columbus service area employment opportunities estimated for each of the 174 job clusters. Current employment in the area was estimated to be 27,061. This total includes an estimated 8,497 self-employed farmers and ranchers who did not appear on the IRS file because they did not employ hired labor. The 8,497 figure was obtained by subtracting the number of projected farmers and ranchers reporting in the study (340) from the number of farms and ranches reported for the Columbus service area in the Nebraska Agricultural Statistics 14 (see Table A in Appendix).

Table I shows the number of persons currently employed in the seven occupational areas and the percent of total Columbus service area employment in each occupational area. The percent of total Nebraska employment for 1968 and 1969 is also shown for each of the seven occupational areas. Nearly twice as many people are employed in Agricultural Occupations as are involved in Trades and Industrial jobs. Of the total workers in the Columbus service

Nebraska Department of Agriculture, Nebraska Agricultural Statistics, Annual Report, 1966, Preliminary 1967, State-Federal Division of Agricultural Statistics, Lincoln, Nebraska, pp. 82-83, May, 1968.

TABLE I

NUMBERS AND PERCENTAGES OF PERSONS PRESENTLY EMPLOYED IN COLUMBUS SERVICE AREA

AND PERCENTAGE EMPLOYED IN NEBRASKA BY OCCUPATIONAL AREA

			Nebraska present employment				
	Number	Percent of total	Percent Percent of total 1968 1969				
Agricultural Occupations	10,305	38.1	20.4 18.0				
Distributive Occupations	2,648	9.8	22.5 9.6				
Health Occupations	524	1.9	3.9 4.4				
Wage Earning Home Economics Occupations	260	1.0	.8 1.7				
Business Occupations	2,012	7.4	16.3 15.3				
Trades and Industrial Occupations	5,264	19.4	29.6 40.8				
Other Occupations	6,048	22.4	6.5 10.2				
TOTAL	27,061	100.0	100.0 100.0				

^{*}The sources of these data are:

James T. Horner et al., Occupational Opportunities in Nebraska, Nebraska Research
Coordinating Unit for Vocational Education, 302 Ag Hall, East Campus, University of
Nebraska, Lincoln, Nebraska, 1968 and 1969, respectively.

area, 38.1 percent was found to be in agriculture which is twice as high as on the state level. Distributive Occupations accounted for 9.8 percent of the total employment which is consistent with the 1969 state-wide survey.

Business Occupations account for 7.4 percent of total employed which is proportionately less than half that reported on the state level. Trades and Industrial jobs account for 19.4 percent of total employment which is considerably less than reported on the state level. The "Other Occupations" area shows 22.4 percent of total employment in the Columbus service area. Among others, this figure includes assembly line workers with no previous experience needed.

Manpower need for one and following two years indicates the highest need for trained workers will be in the Trade and Industrial Occupations area, where 19.4 percent of the present labor force is employed. The need for new workers for the next 12 months indicates that 38.8 percent of the new workers needed will be in Trades and Industrial Occupations area. The Columbus survey also lists 22.4 percent presently employed in Other Occupations area with 34.1 percent of new workers needed in this area in the next 12 months. The high demand for production or assembly workers with no previous training needed in the Columbus area account for the high percentage needs in the Other Occupations area. The study revealed that employers estimate

TABLE II

NUMBERS AND PERCENTAGES OF OCCUPATIONAL OPPORTUNITIES IN THE
COLUMBUS SERVICE AREA BY OCCUPATIONAL AREA

		es needed months	Employees needed t following 2 years		
	Number	Percent of total	Number	Percent of total	
Agricultural Occupations	392	6.7	976	7.6	
Distributive Occupations	448	7.7	1,188	9.2	
Health Occupations	180	3.1	344	2.7	
Wage Earning Home Economics Occupations	. 64	1.1	. 156	1.2	
Business Occupations	496	8.5	1,124	8.7	
Trade and Industrial Occupations	2,259.	38.8	4,580	35•5	
Other Occupations	1,988	34.1	4,520	35.1	
TOTAL	5,827	100.0	12,888	100.0	

there will be 5,827 job opportunities in the Columbus area in the next year and 12,888 in the two following years.

Agricultural Occupations

As shown in Table III, 10,305 persons are employed in the Agricultural Occupations area involving 38.1 percent of all workers (Table I) in the Columbus service area. These figures include both on-farm and off-farm agricultural occupations. Job opportunities in the next year show 392 workers needed and 976 job opportunities the following two years. The opportunities in the next year constitute 6.7 percent and in the next two years, 7.6 percent of the area's employment opportunities by occupational area.

Farmers and ranchers account for the largest number of people employed in agriculture. Nebraska Agricultural Statistics show 8,837 farmers in the Columbus service area which account for 85.8 percent of the total agricultural employment.

Off-farm agricultural occupations were found to employ 1,468 persons and laborers in these occupations account for 376, or nearly 26 percent of the total off-farm labor force. Professional and managerial jobs showed 292 persons employed, or nearly 20 percent of the off-farm labor force. Jobs in agricultural supplies show 304 persons employed, followed by 192 in agricultural mechanics and 188 in agricultural products processing.

TABLE III

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN AGRICULTURAL OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

		-		Future	needs		
Occupational area		Now employed		months	The following 2 years		
	f*	No.	f*	No.	f*	No.	
Professional & Manageriall	51	292	4	36	16	104	
Farming & Ranching2	66	340	14	60,	19	132, _	
2a		8,497**		112 ¹⁵		22415	
Agricultural Supplies (Processing,				_			
Marketing & Services)3	30	304	12	76	19	200	
Agricultural Mechanics (Operations,							
Sales, and Services)4	18	192	7	_: 36	9	64	
Agricultural Products (Processing,					_		
Marketing, Inspection & Services)5	25	188	7	40	16	100	
Ornamental Horticulture (Production,			_ :				
Processing, Marketing & Services)6	. 3	72	1	16	2	64	
Agriculture Resources (Conservation,		1			_		
Utilization & Services)7	5	40	2	12	3	12	
Forestry (Production, Processing,		_	_		_	J.	
Marketing & Services)8	1	. 0	. 0	: 0	1	4	
Laborers9	27	376	17	112	20	296	
Veterinary Assistants		4		4		0	
TOTAL	227	10,305	65	392	105	976	

¹⁵Douglas Genereaux, Annual Estimated Replacement Farmer Opportunities in Nebraska, Departmental Report No. 3, Department of Agricultural Education, University of Nebraska, Lincoln, Nebraska, March, 1967. (Shows estimated farmer replacements needed for the next 12 months and following two years.)

^{*} Number of employers reporting employees in this category.

^{**}From 1966 Agricultural Statistics 8,837 - 340 reporting = farmers (8,497) not in sample because they do not hire help.

All part-time workers were converted to full-time equivalents. Seasonal fluctuation, common in agriculture, was not considered.

The need for replacement farmers in Nebraska was reported by Genereaux (see Table III), and when his findings were applied to the Columbus area it was found that 112 farmers were needed each year. Replacement needs of 60 in the next 12 months and 132 the following two years for farmers and ranchers were found in the Columbus inventory. This only included those that paid social security and were included in the interview.

In the off-farm occupations area, laborers were found to be in greatest demand with 112 needed in 12 months and 296 the following two years. Agricultural supplies job cluster showed next greatest needs with 76 new workers needed in the next 12 months and 20 the following two years. Professional and managerial jobs showed needs of 36 and 104, respectively. The job cluster of agricultural products showed need of 40 in 12 months and 64 the following two years. Mechanics jobs will require 36 workers in the next year and 64 the following two years.

The numbers employed in Farming and Ranching (Table III) included hired labor and replacement farmers while the project in the same table for "Laborers" included the group of untrained people in the off-farm agricultural businesses.

The writer recognizes that many farmers are selfemployed and do not hire any help; therefore, their names were not included in the sampling. An attempt was made to determine the number of self-employed farmers by referring to Nebraska Agricultural Statistics. The 1966 report was used because this was the year the state-wide list of businesses was compiled. Number of farmers reported in the Columbus service area was 8,837 (see Tables A and B, Appendix).

Genereaux reported farmer replacement needs for each county in the state 17 These replacements were projected for the Columbus service area (see Appendix Tables C and D) and are included in Table III for 12 months and the following two years.

Distributive Occupations

Distributive Occupations include people in business, advertising, sales, merchandising, and distribution. As shown in Table IV the total figure of 2,648 persons now employed constitutes 9.8 percent of the work force in the Columbus area. The 448 opportunities identified for next year account for 7.7 percent of the total anticipated need. In the following two years the 1,188 anticipated opportunities will be 9.2 percent of employment needs. About 19 percent of those currently employed in this group are listed as professional and managerial while only 6 percent of those needed next year are in this category.

¹⁶ Nebraska Department of Agriculture, loc. cit.

^{17&}lt;sub>Genereaux, loc. cit.</sub>

TABLE IV

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN DISTRIBUTIVE OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

			Future	needs		
Occupational area		nployed		The following		
			Next 12 months	2 years		
	f*	No.	f* No.	f* No.		
Professional & Manageriall	103	512	7 28	9 48		
Advertising Services2	3	20	0 1 0	2 8		
Apparel and Accessories3	7	112	3 . 36	5 64		
Automotive and Petroleum4	19	148	7 40	12 128		
Finance and Credit5	10	60	3 16	6 52		
Food Distribution6	8	60	1 4	3 12		
General Merchandise7	4	24	2 8	2 16		
Hardware, Building Materials8	16	168	2 8	6 44		
Home Furnishings9	7	28	1 : 8 ;	4 20		
Hotel and Lodging	6	36	1 16	1 32		
Insurancell	14	80	1 8	4 36		
Marketing	l '	0	1 4	1 4		
Real Estate	5	. 20	0 0	2 8		
Retailing (General/Miscellaneous)14	19	216	5 44	11 112		
Transportation	. 33	292	9 52	15 148		
Wholesaling (General/Miscellaneous)16	· 4	40	0 0	2 32		
Shipping and Stock Clerks	48	632	19 148	30 - 380		
Sales Engineers18	5	36	3 28	4 40		
Postal Workers	11	164	0 0	1 4		
TOTAL	323	2,648	65 448	120 1,188		

^{*}Number of employers reporting employees in this category.

The figure obtained for "Transportation" included all truck drivers. Part-time workers were converted to full-time equivalents. Grocery sackers and shelf stockers were included in the category of "Shipping and Stock Clerks" and involved most of the part-time workers in this area.

The largest number of persons (632) employed in a single job cluster was found to be shipping and stock clerks. Data in this job cluster showed 148 needed in the next 12 months and 380 the following two years. Jobs in transportation showed 292 presently employed with needs of 52 in the next year and 148 the following two years. General retailing accounts for 216 presently employed with future needs of 44 and 112. Another job cluster worthy of note is automotive and petroleum with current employment of 148 and needs of 40 employees in 12 months and 128 the following two years.

Health Occupations

Table V indicates that 524 are presently engaged in health occupations, with 180 occupational opportunities in the next 12 months and 344 opportunities in the following two years in the Columbus service area.

The percent breakdown of those employed in each job group was: Nurses' Aide 39.7 percent; Practical (Vocational) Nurse 17.6 percent; Professional and Managerial 13.7 percent; Nurse, Associate Degree 9.2 percent; Medical Laboratory Assistant 3.8 percent; Medical X-ray Technician 3.8 percent; Dental Assistant 2.3 percent; Surgical Technician 2.3 percent; Laboratory Technician, Inhalation Therapy Technician, Hospital Food Services Supervisor and Hospital Food Assemblers, each 1.5 percent; Occupational Therapy Assistant and Physical Therapy Assistant each .8 percent.

TABLE V

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN HEALTH OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

			Future	needs
Occupational area	Now en	nployed		The following
			Next 12 months	2 years
	f*	No.	f* No.	f* No.
Professional & Managerial	12	72	4 16	3 12
Dental Services				
Assistant (Dental)2	2	12	0 0	1 4
Laboratory Technician3	l	8	0 0	0 0
Medical Services			t	
Cytology Technician4	0	0	1 4	0 0
Histology Technician5	0	0	1 4	0 0
Medical Laboratory Assistant	2	20	2 8	2 12
Nurse, Associate Degree7	. 5	48	2 16	2 68
Practical (Vocational) Nurse8	6	92	5 72	6 52
Nurses' Aide9	ž	208	4 . 56	3 152
Hospital Food Services Supervisor10	2	200	0 0	7 ± 72 1 8
Inhalation Therapy Technicianll	2	8	ī	i)
Medical X-ray Technician	3	20	ت لد	2 12
	2	12	, o	7 8
Surgical Technician	7	عدد أا.	0	1 /r
Occupational Therapy Assistant14	٦ ٦		0	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Physical Therapy Assistant15	. <u>.</u>	4	0 0	·
Hospital Food Assemblers16	7	8	0 7 7 0	T 4
TOTAL	43	524	21 180	25 344

^{*}Number of employers reporting employees in this category.

Future needs were indicated for cytology technicians and histology technicians although none were reported as being presently employed. The greatest need for employees in this area was reported to be in the categories of Practical (Vocational) Nurse and Nurses' Aide.

Home Economics Occupations

Wage earning home economics occupations include those occupational opportunities related to: care and guidance of children; clothing management, production and services; food management, production, and services; food management, production, and services; home furnishing, equipment and services; institutional and home management and supporting services. As shown in Table VI, the total number of persons employed in home economics related occupations in the Columbus survey is an estimated 260 with 64 employment opportunities expected in the next year and 156 in the following two years.

The percent breakdown of those employed in each job group was: Institutional and Home Management and Supporting Services 40 percent; Domestic 32.3 percent; Professional and Managerial 24.6 percent; Home Furnishings, Equipment and Services approximately 1.5 percent; and Hostess approximately 1.5 percent; and Hostess approximately 1.5 percent. The greatest need for employees in this area was found to be in the job cluster of Institutional and Home Management and Supporting Services with 32 employees needed in the next 12 months and 64 the following two years.

TABLE VI

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN WAGE EARNING HOME ECONOMICS OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

				Future :	needs	
Occupational area	Now en	nployed				ollowing
			<u>Next 12</u>	months	2;	years
	f*	No.	f*	No.	f*	No.
Professional & Manageriall	12	64	2	8	8	32
Care & Guidance of Children2	. 0	0	0	0	1	4
Home Furnishings, Equipment & Services.3 Institutional & Home Management	1	4	1	4	0	0
& Supporting Services4	2	104	2	32	2	64
Oomestic**5	15	84	2	1 6	10	52
Hostess	ī_	4	1 1	4	1	
TOTAL*	** 31	260	8	<u>6</u> 4	22	156

^{*} Number of employers reporting employees in this category.

^{**} It should be noted that it was difficult to record the total number of hours of employment for each domestic, as a domestic employee may work only one day (or part of one day) per week for an employer.

^{***}The major food preparation and serving areas involving Wage Earning Home Economics knowledges and skills are shown in Table VIII Trade and Industrial lines 34-36 according to the Standard Terminology for Instruction in Local and State School Systems and should be given consideration in this area.

Employment needs in the job cluster listed as "Domestic" help showed 16 needed in the next year and 52 the following two years. Professional and managerial job opportunities showed a need for 8 in 12 months and 32 the following two years.

Business Occupations

The total number of people employed in an office or related occupation is estimated at 2,012 with 496 employment opportunities expected next year and 1,124 within the following two years. The 2,012 existing positions account for 7.4 percent of the employment in the Columbus service area.

About 17.1 percent of those employed in this group are listed as professional and managerial people. Filing, office machines, and general office clerical make up the largest percentage in the office and related occupations category confirming 31.2 percent of the total number. The area of stenographic, secretarial and related showed 13.2 percent of the total number. In addition, approximately 9.3 percent of the total number is listed in the accounting and computing areas.

The greatest need in the next three years is expected in filing, office machines, and general office clerical area with 32.4 percent expected increase in opportunities. Stenographic, secretarial, and related will constitute an increase of 14.9 percent while accounting and computing category will account for 10.7 percent of the

TABLE VII

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN BUSINESS OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

				Future needs						
Occupational area	Now e	mployed		. :	The fo	ollowing				
			Next 12	2 months	2 y	rears				
	f*	No.	f*	No.	f*	No.				
Professional & Manageriall	35	344	6	40	11	100				
Accounting & Computing2	27	188	6	40	10	120				
Business Data Processing Systems3	3	28	ĺ	8	. 2	12				
Filing, Office Machines, & General	_			• .	_					
Office Clerical4	52	628	15	168	22	364				
Information Communication5	$\tilde{2}$	12	~	4	~~~	0				
Materials Support, Transporting,	. —				ŭ	Ŭ				
Storage, & Recording6	5	112	3	44	L.	100				
Personnel Training, & Related7	5	168	. 5	32	, ·	88				
Stenographic, Secretarial, & Related8	42	268	10	76	17	168				
Typing & Related	10	132	- £	60	± (112				
General Office Training10	16	80	J.	24	.)	48				
	1.0		~	. 24	9	40				
Cashiers, Receptionist, & Switchboard.ll	0	28	. 0	Ú	2	0				
Law Clerk/Secretary12	4	24	0	0		<u> 4</u>				
TOTAL	208	2,012	<u>53</u>	496	<u>85</u>	1,124				

^{*}Number of employers reporting employees in this category.

future employment opportunities. The professional and managerial category showed a need for 9.8 percent of the total employees needed in this area in the next three years.

Trade and Industrial Occupations

As shown in Table VIII, 5,264 persons are currently employed in Trade and Industrial Occupations. This is 19.4 percent of the total projected Columbus service area employment. Professional and managerial occupations account for 7.1 percent of the Trade and Industrial group. Waiters and waitresses under the foods and related occupations category accounted for the largest percentage of employers with 11 percent, cooks and chefs under the same category ranked second with 10.8 percent of the total employees while custodians accounted for nearly 7 percent of the workers in this area.

The data indicate there will be 2,259 employment opportunities in the next year and 4,580 within the following two years. These opportunities represent 38.8 and 35.5 percent, respectively, of the total employment opportunities in the Columbus area during the next year and the following two year period. The greatest need in this area is shown to be in the category of food and related with 760 employees needed in the next year and 1,584 in the following two years, which constitutes 33.6 and 34.6 percent, respectively, of the total labor force needed in the area of Trades and Industry.

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TABLE VIII

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN TRADES AND INDUSTRY IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

				Future	needs	
Occupational area	Now en	ployed			The fo	llowing
				months_		ears
	f*	No.	f*	No.	f*	No.
Professional & Manageriall	48	372	5	56	12	136
Air Conditioning						
Cooling2	5	32	1	4	2	8
Heating3	- 6	40	2	8	. 3	12
General4	3	24	2	12	2	20
Appliance Repair5	3	12	2 2	12	4	24
Architectural Engineering Technician6	2	40	3	12	4	16
Automotive			-			
Body & Fender7	8	52	3	12	3	16
Mechanic8	23.	260	10	116	15	176
Service Stations9	23 ^	196	13	68	17	164
Automotive Specialists.				•	_,	
Air Conditioning, Brakes, Tires10	4	36	2	16	4	60
Aviation		_	: *			
Ground Operations11	1	12	0	0	1	8
Crop Dusters12	· 1	8	1	4	ī	12
Business Machine Maintenance13	2	8	1	4	ī	4
Civil Engineering Technician14	1	8	ī	4	1.	4
Commercial Art15	1	4	1	8	ī	12
Commercial Photography	3	36	0	Õ	$\tilde{2}$	12
Construction and Maintenance	. ,	,		-	~	
Carpentry17	28	280	16	108	20	192
Masonry, Cement Work & Tile18	14	128	6	36	9	80
Electricity19	9	36	3	12	5	24
Painting & Decorating20	í	8	1	16	í	16
Plumbing & Pipe Fitting21	ı	96	5	36	5	40
Laborers22	14	276	12	144	12	196
TIQUUU □ T ひ * * * * * * * * * * * * * * * * * *	7-7	270	عبد	エペー	. 12	エスロ

TABLE VIII (Continued)

				Future needs				
Occupational area	Now em	ployed				llowing		
			Next 12			ears		
	f*	No.	f*	No.	f*	No.		
Custodian Services23	41	368	10	84	15	192		
Diesel Mechanic24	7	48	, 2	28	- 4	60		
Drafting	6	20	2	20	5	44		
Electrical			:					
Industrial Electrician26	3	28	2	40	3	76		
Motor Repairman27	2	12	0	0	1	4		
Projectionists28	1	8	0	. 0	0	0		
Radio/Television29	7	32	30	20	5 1	24		
Electrical Technician30	1	92	1	92	l	128		
Electro-Mechanical Technician31	l	4	0	0	0	0		
Fabric Maintenance								
Laundry & Dry Cleaning32	5	48	3	28	2	28		
Others	ĺ	4	Ō	: 0	0	0		
Food and Related Occupations		•				•		
Baker	2	8	1	8	1	12		
Cook/Chef	39	· 568	21	208	* 27	420		
Waiter/Waitress	31	580	26	392	28	796		
Bartender	· 26	276	7	48	15	144		
Dishwasher & Bus Boys38	14	192	8	104	9	212		
Graphic Arts	8	72	ž	12	ź	40		
Industrial Engineering Technician40	. 2	(8	์ ร	4	2	8		
Instrument Maintenance & Repair41	4	32 °	Ō	0		Ô		
	6	24	ž	36	4	52		
Mechanical Engineering Technician42	9	~ ₹	·)	, , , , , , , , , , , , , , , , , , ,	т	<i>J</i> ≈		
Metalworking //3	0	152	4	92	5	216		
Machine Shop	9 8	112	2	36		116		
Sheet Metal44	_	252		216	5 5 2	504		
Welding45	9		5 1	8	9	28		
Machine Operators46	. 2	36 36	<u> </u>	24	2	76		
Tool & Die Worker47	. 2	٥ر	<u></u>	۷4	۷	70		

TABLE VIII (Continued)

				Future 1	needs	
Occupational area	Now er	nployed	Next 12	months	The fo	llowing ears
	f*	No.	f*	No.	f*	No.
Metalurgy48	1	4	1	4	1	4
Personal Services			:	•		
Barbering49	6	36	1	4	3	12
Cosmetology50	6	36	2	24	Ź.	48
Recreation & Health51	2	36 24	2	20	1 .	24
Petroleum Technician52	1	8	1	4	ī	16
Public Service	_		- :		~	
Law Enforcement53	5	20	0	0	٦	4
Guards 54	3	ĩ6	Ô	i õ.	า	16
Treatment Plant Operators55	ำ	4	Ô	: 0	ñ	0
Refrigeration	2	Ŕ	Ô	Ö	ž	Ř
Stationary Energy Sources		Ü		. •	£	Ŭ
Electric Power & Generating Plants57	0	0	0	0	Λ	
General58	7	12	Õ	0	7) . Jr.
_	. 3	12	0	: 0	7	0
Upholstering	1	4	U		2	O
Woodwork	-	, 30	0	0	0	0
Millwork & Cabinet Making60	<u> </u>	12	U	. 0	Ū	U
Other Trades & Industries	_	i. o	0	^	^	•
Well Drillers61	2	40	Û	0	O	0
Bus Drivers62	5	40	Ü	, 0	3	12
Cemetary Workers63		24	2	<u>: 8</u>		12
TOTAL	493	5,264	232	2,259	290	4,580

^{*}Number of employers reporting employees in this category.

Many of the occupations in the Trade and Industrial Occupations area are highly specialized, therefore, difficult to group successfully. Table VIII depicts only the job groups on which data were obtained.

Other Occupations

This occupational category enabled employers to report employees that did not logically fit into one of the
previous six groups. The majority of the persons reported
in the professional and managerial group were teachers,
ministers, lawyers, and other professionals not logically
fitting in the professional category of other occupational
groups.

The 1,796 persons in the Professional and Managerial group reported in Table IX, when combined with those in the Professional and Managerial from the other six groups, totaled 3,452 which is 12.8 percent of the Columbus area labor force.

The 4,252 employees reported in the Production or Assembly Worker with No Previous Training Needed category account for 15.7 percent of the total Columbus area labor force. The 1,624 employment opportunities in the next year account for 27.8 percent of the total labor needed in the Columbus area in the next year, while the 3,788 employees reported needed the following two years account for 29.4 percent of total Columbus area labor needs.

TABLE IX

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN OTHER OCCUPATIONS IN THE COLUMBUS SERVICE AREA (DUE TO TURNOVER, PROMOTION, EXPANSION, AND RETIREMENT)

		,	Future needs							
Occupational area	Now em	ployed	Next 12	2 months	The following 2 years					
	f*	No.	f*	No.	f*	No.				
Professional & Manageriall	78	1,796	18	364	31	732				
Production or Assembly Worker with No Previous Training Needed2	11	4,252	7	1,624	8	3,788				
TOTAL	89	6,048	25	1,988	39	4,520				

^{*}Number of employers reporting employees in this category.

CHAPTER IV

SUMMARY

The purpose of this study was to inventory the number of persons presently employed in the various occupational areas in the Columbus. Nebraska service area and to identify the projected employment needs due to turnover and expansion for the next year and the following two years in the same occupations.

The method of this study involved an occupational inventory in postal zip code area 686 surrounding Columbus.

Nebraska. A 25 percent random sampling of business firms in the area netted 667 businesses to be inventoried. The statewide computerized model for determining occupational opportunities in Nebraska was used as the data collection instrument and data were collected by questionnaire and personal interview from 92 percent of the businesses in the Columbus area.

Surveying of the Columbus service area to determine where people worked showed the following: 38.1 percent worked in agriculture; 9.8 percent in distribution; 1.9 percent in health occupations; 1.0 percent in home economics; 7.4 percent in business occupations; 19.4 percent in trades and industry; and 22.4 percent in other occupations. The total number of persons employed in the area was found to be 27,061 with agricultural occupations having the greatest number of employees in a single occupational area.

The greatest number of people employed in the Columbus Service area are farmers with 8,837 of the 10,305 agriculturally employed. Farm employees needed in the next 12 months were 60 and 132 the following two years. Genereaux reported in his study the replacement farmers needed for Nebraska, and when applied to the Columbus area 112 farmers were found to be needed annually. Off-farm agricultural occupations show 332 employees needed in the next year and 844 the following two years.

Farmers and ranchers in the Columbus area account for 85.8 percent of the total agricultural employment. The survey showed 1,468 persons employed in off-farm agricultural occupations. Greatest needs in the off-farm area were found to exist in the job cluster of laborers with 112 needed in the next 12 months and 296 the following two years. The job cluster of agricultural supplies showed 304 persons presently employed with needs of 76 in the next year and 200 the following two years. Agricultural products processing and agricultural mechanics job clusters showed needs of 36 and 40 in the next 12 months and 64 and 100 in the following two years, respectively.

Distributive occupations employ 2,648 persons and account for 9.8 percent of the total work force in the Columbus service area. This compares with findings of the 1969 state-wide survey which reported 9.6 percent employed

¹⁸ Genereaux, <u>loc</u>. <u>cit</u>.

in this area. Greatest needs in this area were found to exist in the following job clusters: shipping and stock clerks; transportation; automotive and petroleum; and general retailing.

Health occupations employ 524 persons in the Columbus area and show employee needs of 180 in the next 12 months and 344 the following two years. Greatest needs were in the job clusters of: nurses' aid; vocational nurse; and in professional and managerial. Those employed in health occupations in the Columbus area constitute 1.9 percent of the total work force.

Wage earning home economics occupations employees in the Columbus survey show a close correlation with the state-wide surveys. It must be remembered that most students graduating from home economics courses do not use their skills for wage earning, but rather in home and family management. One percent of total employees in the Columbus area were employed in wage earning home economics. Greatest employee needs were found to be in the job clusters of: institutional and home management and supporting services; domestic help; and professional and managerial.

Business occupations employ 2,012 persons or 7.4 percent of the total work force in the Columbus area. Employment opportunities in the next year show 496 needed and 1,124 the following two years. Job clusters showing greatest needs are: filing, office machines and general office

clerical; stenographic, secretarial and related; typing and related.

Most job opportunities were found to be in the Trades and Industrial area. There are 5,264 persons currently employed with 2,259 needed in the next 12 months and 4,580 in the following two years. These opportunities represent 38.8 and 35.5 percent, respectively, of the total employment needs in the Columbus service area. Job occupations showing greatest need were: food and related occupations; construction and maintenance; metal working; and automotive. There is a great need for waitresses with 392 needed in the next 12 months and 796 the following two years. Welders were found to be next in demand with 216 needed in 12 months and 504 the following two years. Cook or chef needs were 208 and 420 followed by construction laborers with 144 and 196 shown needed. Automotive mechanics are needed to the extent of 116 in 12 months and 176 the following two years.

"Other occupations" includes employees that do not logically fit into any other area. Employed in this area were 6.048 persons, accounting for 22.4 percent of the total work force in the Columbus service area. The job of production and assembly worker, with no previous training, accounts for 4.252 persons employed and professional and managerial jobs account for 1.796. Future needs in this occupational area are: 1.624 production or assembly workers in the next 12 months and 3.788 the following two years; professional and managerial. 364 and 732, respectively.

Conclusions

Based on the findings of the study, it is logical to conclude the Columbus service area is still predominately agriculture, compared with state-wide data. Nearly twice as many people are employed in agriculture in the Columbus area percentagewise as are employed in agriculture over the state.

The high demand for workers in the Trades and Industrial area as shown in the findings indicate the presence of considerable trades and industries within the Columbus service area.

Based on the findings regarding agricultural occupations, it seems logical to conclude that the most opportunities for employment in this area are in off-farm occupations and particularly in the job clusters of: unskilled labor; agricultural supplies; professional and managerial; and agricultural products processing. Contrary to general opinion, occupational opportunities still exist in farming and ranching.

After finding that 9.8 percent of the Columbus area work force is employed in distribution and the 1969 state-wide work force in distribution is 9.6 percent, it is logical to conclude that the Columbus service area distributive business is on par with that in the state.

Based on findings, the need for production and assembly workers indicates extensive manufacturing present

in the area and many work opportunities exist.

Recommendations

The writer recommends that future surveys of this nature be conducted entirely by personal interview. It is felt that the survey could be conducted more economically and the data gathered would be more representative of the actual conditions.

In view of the data presented in this study, the writer recommends that school boards, administrators and teachers place more emphasis on enlarging and creating new vocational education offerings in the Columbus area schools. The large number of opportunities in vocational jobs seems to support this recommendation.

It is further recommended that present vocational offerings be changed to prepare students in occupational areas where opportunities exist and to strengthen present vocational education programs that may not currently supply the need for workers in that area.

The writer recommends that additional study be conducted in the Columbus area to determine the number of workers being prepared in the various occupations and compare these data with the number of opportunities existing as presented in this study.

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APPENDIX

TABLE A

NUMBER OF FARMS IN COUNTIES WHOLLY INCLUDED IN
POSTAL ZIP CODE AREA 686*

	County	Num	ber of Farms	
	Platte		1,580	
,	Colfax		1,090	
•	Polk	•	970	
	Nance		700	
	Boone		1,120	
	Wheeler		210	
		TOTAL	5,670	

TABLE B

NUMBER OF FARMS IN COUNTIES PARTIALLY INCLUDED IN POSTAL ZIP CODE AREA 686*

County	Total farms	Percent included	Number of farms in survey area
Butler	1,400	92	1,288
Dodge	1,370	52	713
Merrick	870	50	435
Greeley	570	40	228
Antelope	1,370	30	411
Saunders	1,830	5	92
TOTAL			3,167

^{*}Nebraska Department of Agriculture, Nebraska Agricultural Statistics, Annual Report, 1967, Preliminary, 1968, State-Federal Division of Agricultural Statistics, Lincoln, May, 1967, pp. 100-101.

TABLE C

FARMER REPLACEMENT NEEDS BY COUNTIES
WHOLLY INCLUDED IN
COLUMBUS SERVICE AREA*

County	Needed replacement	S
Platte	22	
Colfax	10	
Polk	12	
Nance	11	
Boone	7	
Wheeler	3	
TO	TAL 65	
	Platte Colfax Polk Nance Boone Wheeler	CountyreplacementPlatte22Colfax10Polk12Nance11Boone7Wheeler3

TABLE D

FARMER REPLACEMENT NEEDS BY COUNTIES PARTIALLY INCLUDED IN COLUMBUS SERVICE AREA*

County	Needed replacements	Percent included	Number of replacements needed in area
Butler	29	92	27
Dodge	19	. 52	10
Merrick	4	50	2
Greeley	Ц	40	2
Antelope	18	30	5
Saunders	21	5	1
тота	XI,		47

^{*}Genereaux, Douglas, Annual Estimated Replacement
Farmer Opportunities in Nebraska, Departmental Report No. 3,
Department of Agricultural Education, University of Nebraska,
Lincoln, Nebraska, March, 1967.

HONE CODE 402 6312

RNING BOARD REN ROOD, REIDENT

AM N. FLOYD,

LUEDTKE,

DLAURA MILLER,

IAM R. SIMPSON,

NETH TORCZON,

COLUMBUS, NEBRASKA 68601

ADVANCE NOTICE

MEMO TO: SELECTED EMPLOYERS

FROM: DR. DONALD NEWPORT, PRESIDENT, PLATTE COLLEGE

SUBJECT: OCCUPATIONAL OPPORTUNITY INVENTORY AND PLATTE COLLEGE MANPOWER QUESTIONNAIRE

- 1. Mr. Ralph Eickhoff of Columbus High School is surveying the present and projected occupational opportunities in this area.
- 2. We of Platte College feel that the information sought will be of great value to us in planning our college programs, therefore we highly endorse these surveys.
- 3. As a new institution dedicated to serving the needs of the people of this area, we are also interested in obtaining some additional information involving such data as: present and anticipated sources of employees; methods of upgrading them; an employer's feelings on work-study programs and your interpretation of how much emphasis should be placed upon other major study areas, by a perspective employee to be hired by your company.
- 4. In a very few days, you will receive these questions along with the occupational inventory. We ask that you take FIVE minutes of your working day to provide this information. In so doing, you will enable educators in this area to better prepare capable workers for you as an employer. We certainly thank you in advance for your cooperation.

Dr. Donald L. Newport President, Platte College



A REMINDER

September 7, 1968

MEMO TO: SELECTED EMPLOYERS

FROM: RALPH EICKHOFF

SUBJECT: SURVEY REMINDER

Two weeks ago you received my Occupational Opportunity Inventory and Platte College's Manpower Questionnaire in your mail. At that time I asked you to take five minutes of your time and complete the inventory and questionnaire. To date, I have not received a reply.

Let me reassure you that your reply is very important and necessary in completing this worthwhile survey. Information which I am attempting to gather is not presently available.

School curriculum planners and guidance personnel are aware of the fact that employers will need additional employees but how many, and in which occupational areas, is currently unknown. Your completion and return of these surveys will give our school administrators this vital information and enable them to plan better school curriculums to meet your present and anticipated needs.

Please help me to help our community by completing the surveys and returning them to me today. I will gladly send you another survey in the event the original was misplaced. If your reply crosses this letter in the mail, please disregard this reminder.

Thank you again for your cooperation.

MEMO TO: SELECTED EMPLOYERS

FROM: RALPH EICKHOFF, INSTRUCTOR, COLUMBUS SENIOR HIGH SCHOOL AND

DR. DONALD L. NEWPORT, PRESIDENT OF PLATTE COLLEGE

SUBJECT: OCCUPATIONAL OPPORTUNITIES INVENTORY AND

PLATTE COLLEGE MANPOWER QUESTIONNAIRE

The information on this inventory and questionnaire which we are asking you to complete and return is of great importance to future education in this area. First, it will help school officials to develop more adequate educational opportunities for your present and future employees and second, it will enable guidance counselors to more effectively advise students on employment opportunities.

The Occupational Inventory lists six major job groups. Your business may employ people in one, two, or more of these groupings. In completing this inventory, first, please indicate the number of employees normally employed in each job title representing their major occupational duty, and next, please project for us the number of persons you believe will be needed in each job category during the next twelve months and in three years due to your own businesses' possible employee turnover and/or job expansion. If you cannot find a job group in which to record your employees, please list their job title under "other occupations".

On the back of this letter you are now reading, you will find the <u>Manpower Questionnaire</u>. Questions one and two are designed to determine where you have procurred present employees for your organization and where you plan to obtain them in the future. Other items concern methods of improving employee proficiency, your views on possible work-study programs, desired major study areas and preparation levels needed by a perspective job applicant to be successful in your firm.

Your cooperation and assistance in completing these surveys is greatly appreciated, and your answers become especially important since these materials are only being provided to a SAMPLE of area firms. YOU ARE REPRESENTING FOUR SIMILAR BUSINESSES IN CENTRAL NEBRASKA. We assure you that through your answers to these surveys and the information we will be able to gain about your manpower requirements, we will be better able to serve you and the young people of this area.

P	L	EΑ	١S	Ε	Τ	ur	'n	-0	v	e:	r						

YOUR NAME	1
Trades, Indu MANPOWER Q	& Related Health , Buying, Selling Home Economics stries, & Related Office & Related Other (please specify) UESTIONNAIRE COLLEGE
Present source of manpower at present time (check all appropriate blanks) local high school graduates part-time farmers or ranchers spouses of farmers or ranchers high school students part-time college graduates (four-year degree) college graduates (two-year degree) college or high school drop-outs other (please specify)	II. Anticipated source of manpower (check all appropriate blanks) local high school graduates part-time farmers or ranchers spouses of farmers or ranchers high school students part-time college graduates (four-year degree) college graduates (two-year degree) college or high school drop-outs other (please specify)
III. Present method of upgrading employee proficiency at present time (check all appropriate blanks) in plant or on-the-job training general experience in position personal supervision high school and/or adult classes non-coll. credit educational courses technical school course work two-year and four-year college work none other (please specify)	IV. If available, which of the following methods of proficiency upgrading would you prefer and utilize (check all appropriate blanks) in plant or on-the-job training high school and/or adult classes non-college educational courses technical school course work two-year college course work four-year college course work other (please specify)
If a college work/study program were available, would you employ these students when feasible not employ college students part-time employ 1 to 4 students part-time employ 5 or more students part-time	VI. Indicate which major area you would prefer to have students pursue if in your employ part-time (check any appropriate blanks) a program of general studies business management and accounting secretarial agriculture engr. technology (drafting, etc.) other (please specify)
II. Indicate which major area you think college students should pursue if they plan to enter your field for a career a program of general studies business management and accounting secretarial agriculture engineering technology other (please specify)	VIII. Indicate level of educational preparation students should have to enter your occupational area two years of high school high school diploma technical or trade school training two-year college education four-year college education graduate study

OCCUPATIONAL AREA	Number Now	Future needs due to turnover & expansion	
	Employed	Next 12 Months	Next 3
GRICULTURE & RELATED OCCUPATIONS			
Professional & Managerial			
Farming and Ranching			
Agricultural Supplies (Processing,	1		
Marketing & Services)			
Agricultural Mechanics (Operations,		1	
Sales, and Services)			
Agriculture Products Processing		<u> </u>	
(Marketing, Inspection & Services) .			
Ornamental Horticulture (Production,	1		
Processing, Marketing & Services)			
Agriculture Resources (Conservation,	ļ		
Utilization and Services)			
Forestry (Production, Processing,			
Marketing and Services)	<u> </u>		
Others (list)	L	<u>.</u>	
	.		
ISTRIBUTING, BUYING, SELLING & RELATED	1		
Professional & Managerial			
Advertising Services	. L	ļ <u>-</u>	
Apparel and Accessories.			
Automotive and Petroleum.			
Finance and Credit		<u> </u>	
Food Distribution.	. [<u> </u>	
General Merchandise			
Hardware, Building Materials			<u> </u>
Home Furnishings	. L	<u> </u>	
Hotel and Lodging		<u> </u>	
Insurance		<u> </u>	<u> </u>
Marketing (General)			
Real Estate.			
Retailing (General/Miscellaneous)			ļ <u></u>
Transportation			ļ <u> </u>
Wholesaling (General/Miscellaneous).			<u> </u>
Others (list)			
	_	.	<u> </u>
	. <u> </u>		
EALTH OCCUPATIONS	1		}
Professional & Managerial	•		
Dental Services	1		1
Assistant	•		
Hygienist (Associate Degree)	• ———	-	
Laboratory technician	•		
Others (list)		 	
·	-	+	
	-	- 	
Medical Services	ĺ	1	
Cytology Technician.	•	 	
Histology Technician	• }	1	
Medical Laboratory Assistant	•		
Nurse, Associate Degree	•		4
Nurse, Associate Degree Practical (Vocational) Nurse	:	1	1

	Mon /	Hext JS	eochanaicm)
OCCUPATIONAL AREA	Embrohed	Next 12 Months	Next 3
Nurses Aide	1	Politis	- rearran
Hospital Food Services Supervisor.		1	
Inhalation therapy technician			
Medical X-ray Technician	1		
redical A-ray reduction	1	· · · · · ·	
Optician	•		
Surgical Technician	•		· · ·
Occupational Therapy Assistant	·•		
Physical Therapy Assistant			
Others (list)			
	_		
	_		
		1	1
HOME ECONOMICS & RELATED OCCUPATIONS			
Professional & Managerial	1		
Care & Guidance of Children			
Home Furnishings, Equipment & Service	ad		
Institutional and Home Management &			
Supporting Services	1	1	
Others (list)	-	1	
	-		
	-		
ATTENDED OF THE ATTENDANCE OF THE ATTENDED			
OFFICE & RELATED OCCUPATIONS			
Professional & Managerial	-		1
Accounting and Computing	•		
Business Data Processing Systems			
Filing, Office Machines, and General	.		
Office Clerical	•		
Information Communication	•		
Materials Support, Transporting,	1		
Storage and Recording	•		
Personnel, Training and Related	•		
Stenographic, Secretarial and Relate	d		
Typing and Related	•}		
General Office Training	•		
Others (list)	_		
·			
TRADES, INDUSTRIES & RELATED OCCUPATION	IS		
Professional & Managerial	• •		
Air Conditioning	İ		
Cooling			<u> </u>
Heating			
Others (list)			
Appliance Repair			
Architectural Engineering Technicia			
Automotive	-		
Body and Fender.	L.		
Mechanic			
Others (list)	-		
CHICLO (AND Carried Control of Co			
Aviation	-		i
Maintenance.			
Ground Operations.	: 1		
	• •		
Others (list)			
	<u> </u>		

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OCCUPATIONAL AREA	Now		expansion
OCCUPATIONAL AREA	Епфтоуес	Next 12 Months	Next 3 Years
Business Machine Maintenance		Tontas	Tears
Chemical Technician			
Civil Engineering Technician			
Commercial Art			
Commercial Photography		-,-	
Constitution and Management			
Construction and Maintenance			1
Carpentry	<u>i</u>		
Masonry			
Electricity			
Painting & decorating			
Plumbing and pipe fitting			
Others (list)			
Custodian Services			
Diesel Mechanic.		·	
Donft-one			
Drafting		-i	
Electrical			1
Industrial Electrician			
Lineman			
Motor Repairman.			
Others (list)			
Electronics			
Communications			ļ
Radio/Television	_		
Others (list)			`
V			
Electro-Mechanical Technician			
Fabric Maintenance			
Dry Cleaning			i
			
Laundry	·		
Others (list)			
Food and Related Occupations Baker			-
Baker			
Cook/chef			
Waiter/waitress			
Others (list)			
			,
			-1
Graphic Arts			
Industrial Engineering Technician.			
Instrument Maintenance and Repair		 	
Manatana raintenance and Repair		 	
Maritime			
Mechanical Engineering Technician		 	
Metalworking		-	
Foundry	-	<u> </u>	
Machine shop			
Sheet metal			
Welding			
Others (list)			
Metallurgy		f	
Nuclear Technician			
MACTERIAL ICCIBILITIONS		·····	ئـــــــا

OCCUPATIONAL AREA	-	Sycheq/	Control of the Control	ALCOHOL:
Occornitional races		broken	Next 12	Years \
Personal Services	1		, ,	
Barbering.	├			
Cosmetology	+			1
Others (list)	\vdash			
	1	~		
Petroleum Technician	-			- 1
Plastics Occupations	+			1
Public Service	1			1
Fireman.	ļ			
Law Enforcement	1	<u> </u>		
Others (list)	1	· · · · · · · · · · · · · · · · · · ·		
Others (IIstz	r			1
	Γ			
Refrigeration	Ĺ			
Shoe Manufacturing & Repair	.[
Small Engine Repair (internal com-	Γ			
bustion)]
Stationary Energy Sources	ſ			
Electric Power and Generating Plant	s			
Pumping Plants				
Others (list)	L			
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Upholstering	.[~		
Woodwork				
Millwork and Cabinet Making	•	~ <u>~</u>		
Others (list)	. L			
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Other Trades and Industries (list)	.			
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OTHER OCCUPATIONS			}	į į
Professional & Managerial	•		- 	
Production or assembly worker with no	۱ د			
previous training needed	- [1	-
Others (list)	-		 	
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