GEOGRAPHIC MOBILITY OF TRAINEES LEAVING VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS IN OKLAHOMA

By

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IN OKLAHOMA

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

THE PROBLEM

Introduction

Economic growth of Oklahoma is dependent upon effective utilization of its human resources. Due to continually increasing complexity of modern industrialization the demand for highly skilled and technical workers has substantially increased. Oklahoma, in order to meet the demand for skilled labor, must alter its educational emphasis accordingly.

To have an efficient training system, Oklahoma educators must establish training programs in such a way that skilled graduates will be available when and where they are needed. It would be of little benefit to train persons in skills for which no jobs were available. Similarly, it would be unwise to train persons who had little propensity to migrate, for the purpose of satisfying a need in a distant region of the state if measures were not being taken to inform them of those jobs available and to effectively increase their motivation.

Statement of the Problem

The problem with which this study was concerned was of geographic migration of Oklahoma's skilled manpower which ultimately affects the socioeconomic development of the state.

Purpose of the Study

The primary purpose of this study was to describe post-training geographic mobility of recent graduates of Oklahoma's Vocational and Technical Education Programs. A secondary purpose was to present the information developed in this study in such a form that it might be useful to Oklahoma's education and manpower planners in recruiting, training, and thus effectively utilizing the state's human resources.

Research Questions

The objectives stated above can best be achieved by trying to answer the following research questions:

1. What is the rate of out-of-state migration of individuals trained in Oklahoma's Vocational and Technical Education programs?
2. Where do trainees tend to migrate within the state to obtain training-related jobs?
3. Is there a difference in the migration rates into and out of the individual counties in Oklahoma?
4. Do the various vocational education program divisions have the same rate and pattern of migration?
5. Are the eleven regions, established jointly by the state Department of Vocational and Technical Education, and the Oklahoma Employment Security Commission, of a homogeneous composition with respect to mobility?
6. If the eleven regions are not homogeneous, with respect to mobility, what form might an alternative regional pattern take?

Need for the Study

One of the major goals of Oklahoma is to increase its rate of industrial growth. To achieve this goal, the manpower policy of Oklahoma has included increased industrialization and a more efficient utilization of human resources. Involved in both of these goals is Vocational and Technical Education, which can provide a manpower pool attractive to industry by increasing the quantity and the quality of skills of Oklahoma's human resources.

In order to increase the effectiveness of the state's Vocational and Technical Education programs, there must exist a continuous system to measure education's contribution to the labor force, to analyze success and failure in meeting labor demands, and to provide the information feedback needed by Oklahoma's decision makers for planning more effective programs.

Knowledge of post-training behavior pattern is necessary in projecting labor supply data. Survey of literature pertaining to migration after training revealed a lack of information at the secondary and post-secondary levels of Vocational and Technical Education.

It would seem that a study which provides a description of recent mobility patterns of trainees of vocational and technical education programs would be helpful to those persons responsible for manpower training program planning.

Scope of the Study

1. All data were limited to persons terminating Oklahoma public vocational and technical programs in May, 1969 and persons

terminating training in private school vocational and technical programs between July 15, 1968 and July 15, 1969.

2. All vocational and technical trainees included in the study were to have accepted full time employment in the field for which they were trained or in a field related to training received.

Definition of Terms

Follow-Up Study. A study of the experiences or status of former pupils. (12, p. 671)

Gainful Employment. Employment in a recognized occupation for which persons normally receive a wage, salary, fee, or profit. (12, p 672)

Geographic Mobility. A movement from place to place.

Interstate Geographic Mobility. A movement from state to state.

Intrastate Geographic Mobility. A movement within the state.

Labor Mobility. The willingness or propensity to move. (1, p. 240)

Manpower Policy. The process embracing those principles and programs which aim to assist the individual to become fully employed in productive work of his choosing consonant with his aptitudes, talents, and interests under fair standards; to help sustain and rehabilitate the individual experiencing economic or personal hardship; and to help maintain the individual in as adaptable, flexable, and responsive a stance as possible to the changing requirements of the world of work. (11, p. 121)

Mobility. A quality of flexibility, adjustability, and freedom of movement among labor markets. (13, p. 82)

Out-Migration. The voluntary movement of individuals beyond and outside their community of residence.

Private Schools. Any privately owned school offering training in business, trade, or technical skills. Not included are parochial or other non-public schools offering general educational curricula.

Public Schools. Any school supported by local, state, or federal funds.

Trainee. As used in this study, trainee refers to that individual who has either graduated from an occupational training program or has terminated training prior to scheduled completion, but with sufficient skill to be gainfully employed.

CHAPTER II

REVIEW OF LITERATURE

Introduction

In the review of literature of labor mobility several significant points were observed: (1) the terms mobility and migration were used interchangeably (as well as geographic and residential mobility) when relating to the movement of labor; (2) studies of labor mobility indicated that there are various degrees of mobility, depending upon educational levels, age, and occupations; (3) in general, studies of mobility have been made by sociologists and economists.

Basically, mobility is a subjective concept concerning a person's willingness to make a change (2, p. 2). Geographic mobility is the movement of residence, and as concerns this study, a movement into a labor market (6, p. 24).

Geographic Mobility

In order to understand the complete migration picture involving occupational training, we must look at the total person involved. Examination of our manpower resources should, therefore, involve students of Psychology, Sociology, and Economics, as well as Education.

Gerald G. Sommers (7, p. 274) emphasizes this need:

> The geographic mobility of labor presents a focus for manpower policy depressed-area programs, and analysis of the investment in human resources. Although it provides a suitable basis for

> Multi-displinary study in each of these foci, the field has been largely the domain of economists, concerned primarily with measurement of the gains of mobility; and, to a smaller extent, of sociologists who have placed major stress on the noneconomic costs of mobility.

A lack of information in the area of this study indicated a need for research. Laure M. Sharp and Rebecca Krasnegor, supported by a grant from the U. S. Department of Health, Education and Welfare, found similar conditions in their study - The Use of Follow-up Studies in the Evaluation of Vocational Education. The purpose of their study was to evaluate the types of studies completed or in process which relate to vocational education and to indicate where there seemed to be a need for future studies. As a result of their evaluation, Sharp and Kresnegor (8, p. 18) implied the need for such a study when they stated:

> The need for comprehensive geographic coverage is imperative, especially in order to obtain some baseline data on the results of vocational training . . .
> For the graduates themselves, we need to know more about long term career patterns as well as about the student's attitudes toward employment . . .

Need for mobility study was emphasized by Jack Ladinsky (9, p. 475) when he stated:

> There is a curious neglect in research on the geographic mobility of labor: Professional and technical manpower is the fastest growing segment of the U. S. labor force and probably has a greater portion of the job vacancies than any other occupation stratum. However, among both labor economists and sociologists the locus of mobility research has been in the industrial sector on movement among blue-collar workers, non-whites, and the unemployed. Little work has been done on the mobility of white collar workers, and close to no work at all has been carried out on the mobility of professional and technical workers.

Again Sharp and Kresnegor (8, p. v.) expressed support for such a study when they summarized:

> Follow-up studies of vocational program graduates were demonstrated to be useful tools . . . and were recommended for future program assessment.

In Oklahoma during 1967, two major manpower studies were completed, one by Ling-Temco-Vought Systems Management Services (10) and another by Oklahoma State University (11). These studies were oriented toward identifying the actions and sequencing necessary for the establishment of flexible occupational training systems that could provide the state's present and future demands for skilled manpower. One of the major recommendations made was to establish a system to provide continuous detailed information for policy and operational decisions. Examples of the types of detailed information needed was given by Paul V. Braden in the study entitled Manpower Requirements and Occupational Programs in Oklahoma (12, p. 6).

> Significant leaders within the state of Oklahoma are concerned with making its vocational training programs relevant to the needs of industry. Some of the problems related to these programs which caused this involvement are:
>
> .... the heavy outmigration of Oklahoma's trained graduates to other states,
>
> .... the heavy migration from rural areas to urban centers,
>
> .... the increasing demand by industry for skilled and qualified people,
>
> and
>
> .... the urgent need for training programs that bridge the gap between cultural deprivation and career opportunities.

When Sharp and Kresnegor (8, pp. 15-16) reviewed what studies had been done in vocational education they became aware that the past research involved vocational education at the high school level. They stated:

> We know practically nothing about the students or graduates of post-high school vocational education . . . In general, follow-up studies of junior college students have been concerned with transfer to higher educational institutions rather than occupational outcome though many students are enrolled in occupational rather than academic curriculum.

The inadequacy of statewide mobility data was pointed out in a warning given by Rupert N. Evans in a 1966 publication entitled Occupational Data Requirements for Educational Planning (16, p. 16), when he stated that:

> . . . Almost all curriculum decisions for vocational education are made locally. If these decisions are made on national data, they are likely not to get local support. If decisions are made on local data (which is usually the case), the result is parochialism.

The real need is for regional information. It would appear that the extent of the region should be determined in part by mobility.

Mobility data for vocational and technical education trainees in Oklahoma included a "Three Year Follow-Up" collection of unpublished data, for the years 1964-1966, gathered by the Oklahoma Research Coordinating Unit (13). This was the only extensive study that supplied statewide migration data on graduates of secondary education programs. This compilation included distance of employment from home, the size of the community in relation to the home community, and the general area of employment. This last category, general area of employment, was divided into the following area sub-categories: (a) home; (b) same area; (c) out of the area, but in the state; (d) adjoining state; (e) non-adjoining state; (f) no answer. Aggregate data of this type which is very beneficial in helping to understand the population completing training, is not, however, completely satisfactory for use in planning training programs serving small regions within the state. Results of this study indicated that 43 percent of all vocational and technical education graduates of public school programs remained at home; 12 percent remained in the same area; 12 percent moved out of the area, but remained in the state; 6 percent moved to an adjoining state; and 12 percent moved to a non-adjoining state; while 15 percent did not

answer.

A more specific study by Wilfred M. Bates, entitled "An Examination of the Relationship of Selected Variables to Interstate Geographic Mobility of Technician Graduates of the Associated Degree Programs in Oklahoma" (14), provided insight into variables affecting mobility of graduates.

Factors influencing mobility of trainees from private vocational and technical schools in Oklahoma were investigated in a paper (15) by the writer. It was concluded that the combined interstate and intrastate migration rates of technical trainees was nearly five times that of business program trainees. When the SMSA regions were compared with the non-SMSA regions, trainees from neither catagory were found to be the more mobile. There was no significant net migration into or from the SMSA regions. However, migration from the metrapolitan city into the surrounding SMSA region was statistically significant at the 0.005 level. This indicated that intrastate migration was primarily localized to a regional movement. No additional study of private school trainee migration was found.

Intrastate Regional Division

Various schemes of dividing Oklahoma into discrete areas were found. Local governments rely on county boundaries; The U.S. Post Office Department utilizes the familiar ZIP code and its associated areas.

To facilitate manpower planning in Oklahoma,11 regions(12,p.33),were selected jointly by the Oklahoma Employment Security Commission and the State Department of Vocational and Technical Education. These regions have been used extensively in gathering and reporting of manpower data. For the description and names of these regions, see Figure 2, page 19.

CHAPTER III

METHODOLOGY

Introduction

This study was conducted as a part of Oklahoma's Occupational Training Information System (OTIS) which was designed to provide a continuous and detailed system of improved data collection for the purpose of encouraging necessary changes in Oklahoma's State Plan for Vocational Education. Data on supply of and demand for trained manpower were collected. Analysis of results, based on interfacing of supply and demand figures in conjunction with data on program costs and effectiveness, provided a systematic tool to responsible decision makers for improving existing programs and for developing new programs. An overview of the system is depicted in Figure 1.

Instrumentation

To obtain information about the students and their respective programs, an instrument entitled OTIS Supply 2 (See Appendix A.) was administered to all the public schools during the fall of 1968. Public school instruments were distributed through the State Department of Vocational and Technical Education. Initial data on private school programs were provided by the State Accrediting Agency of the Veterans Administration. Only schools involved in training of

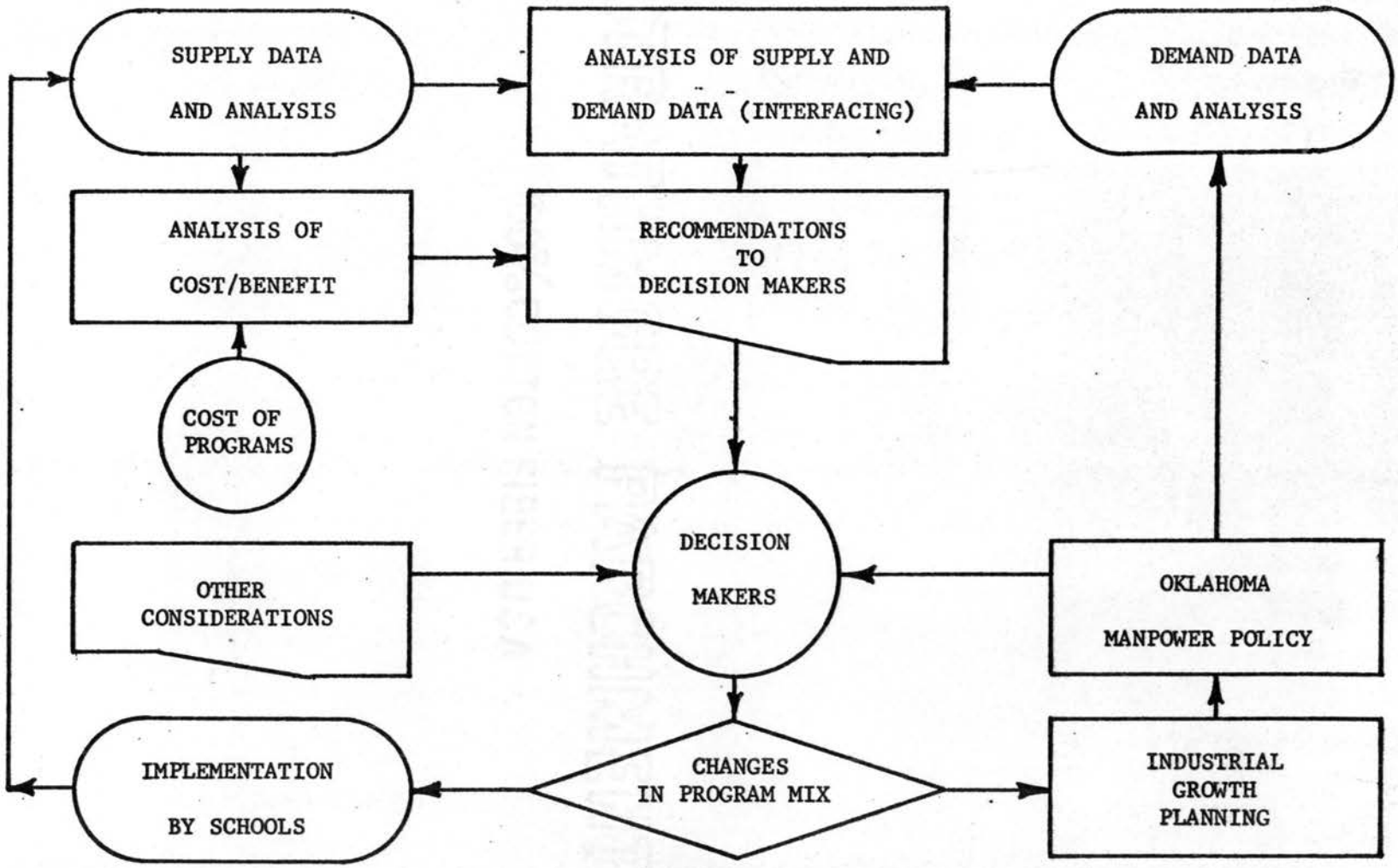


FIGURE 1. OVERVIEW OF OCCUPATIONAL TRAINING INFORMATION SYSTEM. (OTIS).

Veterans were included initially. The Oklahoma Association of Private Schools, organized in 1968, was later instrumental in updating the list of schools and soliciting cooperation of the school administrators.

Information pertaining to the individual student's status after termination of training, was obtained through use of a follow-up questionnaire. Public school students who indicated (OTIS Supply 2) that they would graduate in May, 1969, were followed up in the fall of 1969. No questionnaires were administered during the summer due to the unstable nature of summer jobs.

Names and addresses of students terminating training in private schools during the 1968-1969 school year were provided by administrators of the respective schools, who also sent a pre-letter (See Appendix B) introducing the OTIS project to each of the former students. These former students were then also followed up during the fall of 1969.

Follow-Up

In September 1969, the 13,775 former students from public schools and 3,313 from private schools to be followed up were mailed a questionnaire (See Appendix C) in the form of a reply-paid postcard sealed into an envelope. The card was imprinted with unique numbers by the computer during addressing procedure. The student's social security number was employed, in coded form, whenever available. The number of students included in each mailing and number of responses ultimately received are summarized in Table I.

TABLE I

SUMMARY OF FOLLOW-UP MAILING RETURNS

	QUESTIONNAIRES	PERCENT RETURNED
FIRST MAILING		
PUBLIC	13,775	10.0 %
PRIVATE	3,313	15.3 %
FIRST REMINDER		
PUBLIC	12,397	10.0 %
PRIVATE	2,806	11.0 %
SECOND REMINDER		
PUBLIC	11,020	14.0 %
PRIVATE	2,442	18.5 %
FINAL RESULTS		
PUBLIC	--	34.0 %
PRIVATE	--	44.8 %

The initial response to this questionnaire consisted of a ten percent return from public school graduates and a 15.3 percent return from private school trainees. Four weeks after the initial questionnaire, a reminder (See Appendix D.) was mailed to all the non-respondents. This reminder, in the form of a manila colored reply-paid double postal card, yielded an additional ten percent return from private school graduates and an 11 percent return from private school graduates. A third and final questionnaire (See Appendix E.) was mailed eight weeks after the initial questionnaire. This also was on a reply-paid card, but with a more personalized introductory note bearing, handwritten, the student's first name and the program in which he was enrolled.

The light green colored card was surprinted with the word "URGENT" in red half tone. This final reminder resulted in an additional 14 percent return from public school graduates and an 18.5 percent return from private school trainees.

Population

Statistical sampling methods were not used because of the OTIS interfacing requirement of supply and demand on a one-for-one basis. An attempt was made to utilize the entire population of Oklahoma's occupational trainees for the 1968-1969 school year. Table II enumerates the population both for public and private schools used for the OTIS follow-up, and the number of graduates and trainees used in this study as its population.

TABLE II

OTIS FOLLOW-UP POPULATION

	Public		Private		Total	
Number Followed-up	13,775		3,313		17,088	
Number of Useable Responses	4,758	100 %	1,264	100 %	6,022	100%
Number who took Jobs	1,296	27 %	903	71 %	2,199	37%
Number who took Jobs in related fields and reported Job Location	511	11 %	789	62 %	1,300	22%

A bias check was made by the Occupational Training Information System (19, p. D-3) to determine if the responses to the questionnaire were representative of the total population.

A random sample of 100 names and addresses, stratified on the public school program service areas, was taken from the non-respondents to the follow-up questionnaire. Results are shown in Table III.

TABLE III

BIAS SAMPLE

Results	Numbers
No. of Responses	91
No. Deceased	2
No. Moved, leaving no forwarding address; changed name after marriage, and/or otherwise non-traceable	7
Total	100

Responses to Question II were combined into three categories: (a) Working full time; (b) Continuing full time in school; and (c) Other. Chi-square analysis of these three categories showed no statistical difference, at the 0.05 level of significance, between the bias sample and the questionnaires returned.

Further inferences, with reference to specific job status, job location, and individual program areas, should be made with caution.

The sub-population used in this study included only those training programs where the primary purpose was to train for a gainful occupation. Consequently, Home Economics was omitted since by definition their objectives are not directly job related. Of the private school programs, commercial flight training was omitted because the inherent professional nature of the occupation placed it out of the vocational and technical education classification.

Only those respondents working full time in the occupation for which they were trained, or in an occupational field related to the training received met the stated limitations and were included in this study. The resulting sub-population can be seen in Table II on page 15.

CHAPTER IV

ANALYSIS OF DATA

Introduction

In analyzing the data in this chapter an attempt was made to structure the analysis around elements which provide a viable response to the research questions presented in Chapter I. In order to facilitate determination and description of mobility patterns, it was deemed necessary to consolidate postal ZIP code units of location into larger units or divisions of the state. The first zoning method was that of primary ZIP zones. These consisted of 17 areas; each containing all the post offices having the same first three digits (730 through 749) of the Oklahoma ZIP codes. These zone boundaries followed neither that of the counties used in local government planning, nor of any other regional division scheme devised for statewide manpower planning and were therefore not utilized past the preliminary stages of analysis.

The second method of sectioning the state utilized the 77 counties. This, while providing a more detailed examination of mobility, contained too many cells (5929) for the data units available. The third system used was that of the existing eleven regions established jointly by the State Department of Vocational and Technical Education, and the Oklahoma Employment and Security Commission. These regions are outlined in Figure 2.

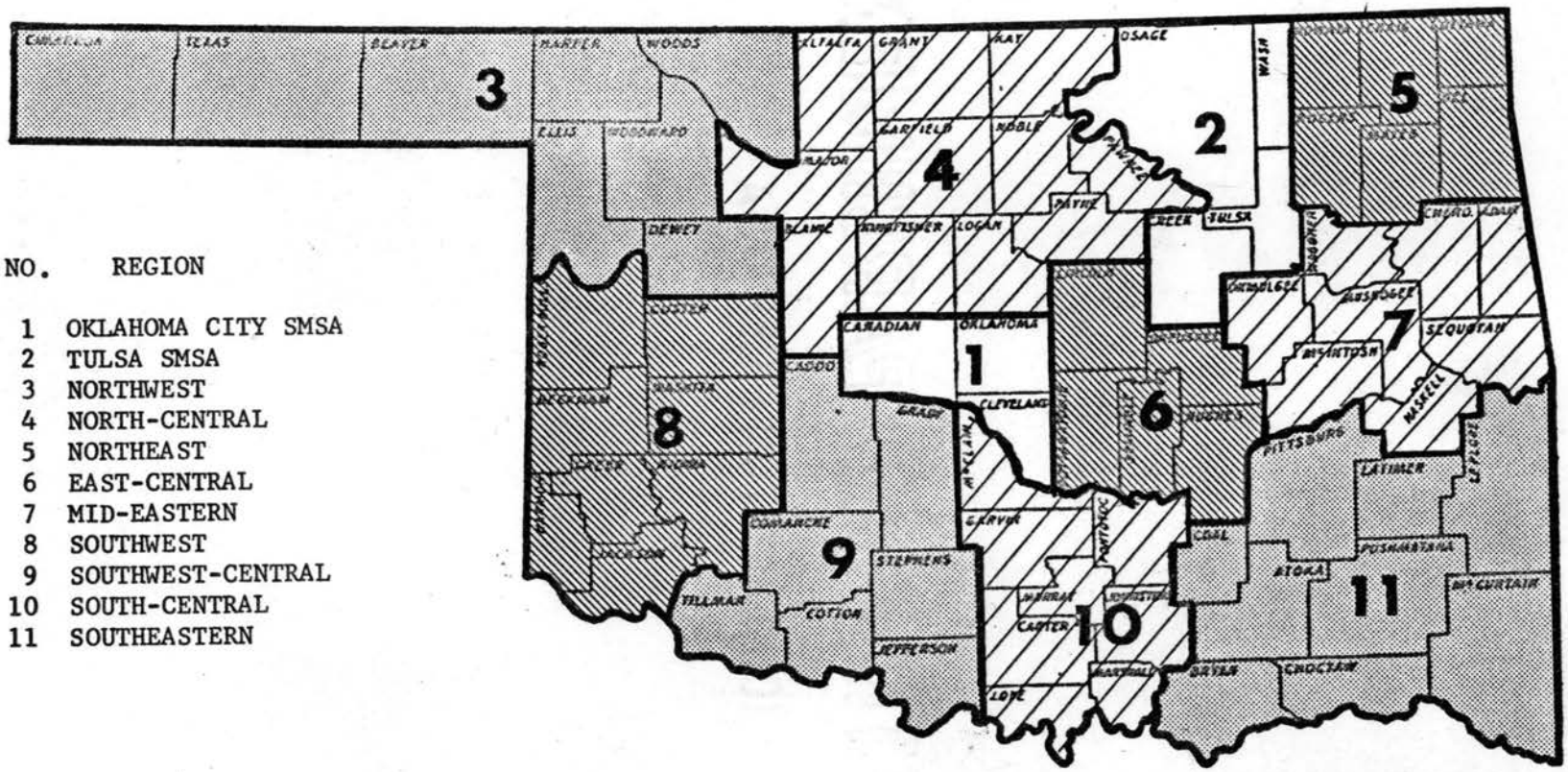


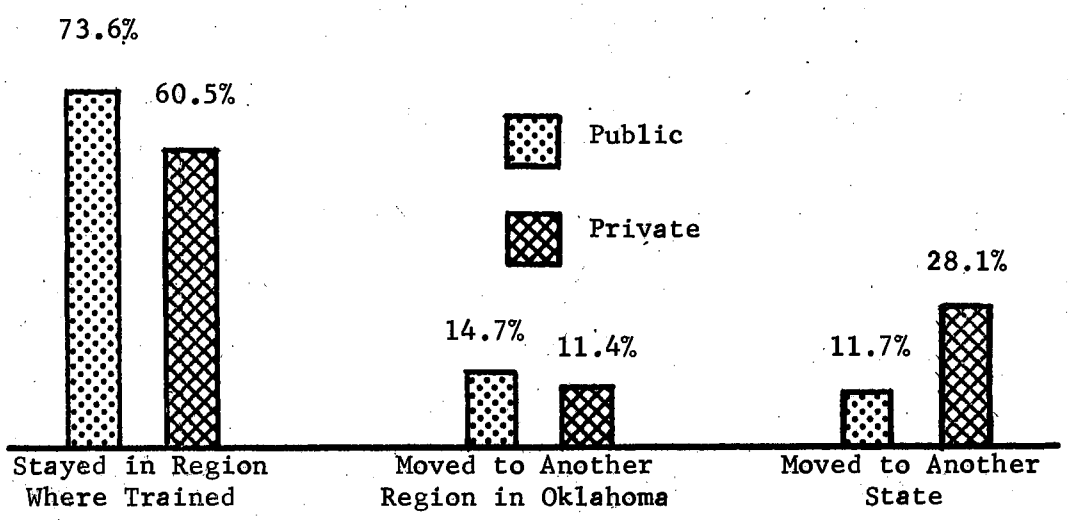
FIGURE 2. ELEVEN REGIONS IN OKLAHOMA USED FOR MANPOWER PLANNING

Out-Migration

The number of trainees leaving Oklahoma after terminating occupational training programs are shown in Figure 3. Of the graduates from the public schools, 11.7 percent accepted training-related jobs outside of Oklahoma. Out-migration of private school trainees was 2.4 times as high at 28.1 percent.

FIGURE 3

RATES OF POST-TRAINING MIGRATION FOR PUBLIC AND FOR PRIVATE SCHOOL OCCUPATIONAL TRAINING GRADUATES



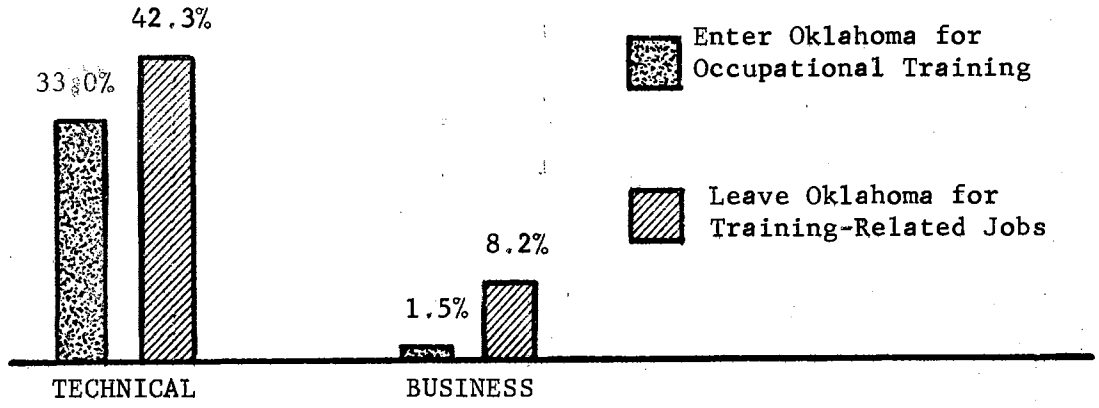
Twenty percent of private school enrollees were from out of state. This may have influenced the higher private school out-migration rate. The majority of the public school enrollees were at the secondary

education level and therefore lived in the school locale. Maturity level may have also been influential. Private schools involved students of a higher age, 20.9 as compared to 16.6 for the public school (17,p. 34). These more mature students, of which 62.7 percent were males, and 32.8 percent were married (17, pp. 34,35), would have more propensity to move or to return to their home state. Another reason which could have contributed to high out-migration rate in the case of private schools is that of higher salaries that trainees get in other states (18, p. 91).

Figure 4 shows that 33.0 percent of Technical enrollees and 1.5 percent of Business enrollees entered Oklahoma for Training. Net private school out-migration was 9.3 percent and 6.7 percent for the respective programs. This was comparable to the 11.7 percent out-migration for public school graduates.

FIGURE 4

INTERSTATE MOBILITY PATTERNS OF PRIVATE SCHOOL TRAINEES



Of the private school trainees leaving Oklahoma, 154 migrated to non-contiguous states, and 69 migrated to contiguous states (Table IV).

TABLE IV

OUT-MIGRATION OF PRIVATE SCHOOLS

Contiguous States	Trainees
Arkansas	7
Colorado	6
Kansas	7
Missouri	7
New Mexico	0
Texas	42
Total	69
Non-Contiguous States	
All	Total 154

Out-migration by region for public schools was compared with the numbers expected to leave. (See Table V.) Regions 1 (Oklahoma City SMSA) and 2 (Tulsa SMSA) had significantly fewer than expected out-migrants. Region 5 (Northeast) and Region 7 (Mid-Eastern) had significantly more than expected out-migrants.

Examination of data on the county basis revealed that in Region 5 all the five out-migrants were from Ottawa county, home of Northeastern State Junior College; and in Region 7, all of the 24 out-migrants

were from Okmulgee county, location of Oklahoma State Tech. Regions 1 and 2 are the two most highly industrialized areas in Oklahoma and therefore would have more variety and numbers of available jobs in the area of training.

Due to lack of independence between regions, caution should be exercised in interpretation of statistical significance.

TABLE V

OKLAHOMA OUT-MIGRATION BY REGIONS
FOR PUBLIC SCHOOLS

Region	Trainees		Left Oklahoma	Expected * To Leave	Chi-square
	No.	%			
1	129	25.2	2	15	11.27 **
2	71	13.9	2	8	4.50 **
3	7	1.4	1	1	0.00
4	50	9.8	2	6	2.67
5	43	8.4	16	5	24.20 **
6	16	3.1	2	2	0.00
7	75	14.7	24	9	25.00 **
8	20	3.9	2	2	0.00
9	58	11.4	5	7	0.57
10	25	4.9	2	3	0.33
11	17	3.3	2	2	0.00
Total	511	100.0	60	60	68.54 **

* Based on the total number of out-migrants (60), multiplied by the region's percentage of total (511) trainees.

** Significant at 0.05 level.

Similar examination of private school data (See Table VI.) revealed at the 0.05 level of significance, that Region 1 had more out-migrants than expected and Region 2 had fewer than expected. The out-migration rate for Region 2 (Tulsa) was 1.5 times that of Region 1 (Oklahoma City). This difference may be explained by program differences in the two cities. The ratio of Technical to Business trainees was 1.6 times higher in Tulsa than in Oklahoma City. Data for the private school is given in Tables XVI through XVIII. Figure 4 shows that the Technical trainees had a rate of out-migration five times that of Business trainees. Also, 65.7 percent of Tulsa's Technical trainees were from highly specialized Aeromechanical programs which had a very high out-migration rate of 75.6 percent.

TABLE VI

OKLAHOMA OUT-MIGRATION BY REGIONS
FOR PRIVATE SCHOOLS

Region	Trainees No.	Trainees %	Left Oklahoma	Expected * To Leave	Chi-square
1	306	38.8	29	86	37.78 **
2	459	58.2	189	129	27.91 **
4	11	1.4	1	3	1.33
5	13	1.6	3	4	0.25
Total	789	100.0	222	222	67.27**

* Based on the total number of out-migrants (222) multiplied by the region's percentage of total (789) trainees.

** Significant at 0.05 level.

Intrastate Migration

The succeeding analysis refers to the eleven regions in Oklahoma by numerical symbols 1 through 11. The corresponding names of the regions are shown in Figure 2 on page 19.

Public Schools

Intrastate migration patterns of vocational-technical graduates from public schools can be seen in Table VII. The migration matrix for all six public school program areas combined revealed that 83.4 percent of the graduates who did not out-migrate accepted jobs in the region in which they were trained. The remaining 16.8 percent were scattered over the 110 region-to-region migration cells. Similar patterns for intrastate migration of graduates were studied for each of the six program areas. The data can be seen in Table VIII for Agriculture, Table IX for Distributive Education, Table X for Health, Table XI for Office Education, Table XII for Technical and Table XIII for Trade and Industrial. It can be seen that the graduates in all these programs tend to stay near their homes and/or the place where they were trained. No significant migration out of the region was detected.

Only three regions had significant inter-regional public school migration at the .05 level of significance. (See Table XIV, page 33). An inspection of the related data found in Table VII, shows that Region 2 had an in/out migration ratio of 21/2 for a relatively high net gain on the inter-regional level. Region 7 had a ratio of 2/36 for a relatively high net loss of graduates. Region I had significantly less out-migration than was expected.

TABLE VII

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
TOTAL FOR 6 SERVICE AREAS

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	117	2	0	3	0	3	0	0	1	1	0	127	2	129	10
	2	1	67	0	0	1	0	0	0	0	0	0	69	2	71	2
	3	0	0	4	2	0	0	0	0	0	0	0	6	1	7	2
	4	1	1	0	44	0	0	0	0	1	0	1	48	2	50	4
	5	1	5	0	1	17	0	2	0	0	1	0	27	16	43	10
FROM	6	3	0	0	0	0	11	0	0	0	0	0	14	2	16	3
	7	3	13	1	4	7	0	15	2	2	1	3	51	24	75	36
	8	0	0	0	0	0	0	0	17	1	0	0	18	2	20	1
	9	2	0	0	0	0	0	0	1	49	1	0	53	5	58	4
	10	1	0	0	0	0	0	0	0	1	21	0	23	2	25	2
	11	0	0	0	0	0	1	0	0	0	0	14	15	2	17	1
COLUMN TOTALS		129	88	5	54	25	15	17	20	55	25	18	451	60	511	75
ENTER REGIONS		12	21	1	10	8	4	2	3	6	4	4	376	DID NOT LEAVE REGION		

TABLE VIII

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
VOCATIONAL AGRICULTURE

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	4	0	0	0	0	0	0	0	0	0	0	4	0	4	0
	2	0	2	0	0	0	0	0	0	0	0	0	2	0	2	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	6	0	0	0	0	0	0	0	6	0	6	0
	5	0	0	0	0	2	0	0	0	0	1	0	3	2	5	1
FROM	6	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0
	7	0	1	0	0	0	0	3	0	0	0	0	4	0	4	1
	8	0	0	0	0	0	0	0	5	0	0	0	5	0	5	0
	9	0	0	0	0	0	0	0	0	9	0	0	9	1	10	0
	10	1	0	0	0	0	0	0	0	0	6	0	7	0	7	1
	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
COLUMN TOTALS		5	3	0	6	2	1	3	5	9	7	0	41	4	45	3
ENTER REGIONS		1	1	0	0	0	0	0	0	0	1	0	38 DID NOT LEAVE REGION			

TABLE IX

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
DISTRIBUTIVE EDUCATION

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	7	0	0	0	0	0	0	0	0	0	0	7	0	7	0
	2	0	6	0	0	0	0	0	0	0	0	0	6	0	6	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	4	0	0	0	0	0	0	0	4	0	4	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROM	6	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0
	7	0	0	0	0	0	0	2	0	0	0	0	2	0	2	0
	8	0	0	0	0	0	0	0	3	0	0	0	3	0	3	0
	9	0	0	0	0	0	0	0	0	10	0	0	10	1	11	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0
COLUMN TOTALS		7	6	0	4	0	1	2	3	10	0	1	34	1	35	0
ENTER REGIONS		0	0	0	0	0	0	0	0	0	0	0	34 DID NOT LEAVE REGION			

TABLE X

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
HEALTH EDUCATION

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	37	0	0	2	0	1	0	0	1	1	0	42	2	44	5
	2	1	15	0	0	0	0	0	0	0	0	0	16	0	16	1
	3	0	0	2	2	0	0	0	0	0	0	0	4	1	5	2
	4	1	0	0	8	0	0	0	0	0	0	0	9	0	9	1
	5	0	0	0	0	4	0	2	0	0	0	0	6	1	7	2
FROM	6	2	0	0	0	0	7	0	0	0	0	0	9	0	9	2
	7	0	0	0	0	0	0	2	0	0	0	0	2	0	2	0
	8	0	0	0	0	0	0	0	4	0	0	0	4	1	5	0
	9	1	0	0	0	0	0	0	1	9	0	0	11	0	11	2
	10	0	0	0	0	0	0	0	0	1	7	0	8	2	10	1
	11	0	0	0	0	0	1	0	0	0	0	5	6	0	6	1
COLUMN TOTALS		42	15	2	12	4	9	4	5	11	8	5	117	7	124	17
ENTER REGIONS		5	0	0	4	0	2	2	1	2	1	0	100 DID NOT LEAVE REGION			

TABLE XI

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
OFFICE EDUCATION

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	30	0	0	0	0	1	0	0	0	0	0	31	0	31	1
	2	0	20	0	0	1	0	0	0	0	0	0	21	1	22	1
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	1	0	5	0	0	0	0	1	0	0	7	0	7	2
	5	0	1	0	0	3	0	0	0	0	0	0	4	7	11	1
FROM	6	1	0	0	0	0	0	0	0	0	0	0	1	1	2	1
	7	0	3	0	0	0	0	2	0	0	0	0	5	0	5	3
	8	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0
	9	1	0	0	0	0	0	0	0	8	0	0	9	2	11	1
	10	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
	11	0	0	0	0	0	0	0	0	0	0	3	3	0	3	0
COLUMN TOTALS		32	25	0	5	4	1	2	1	9	1	3	83	11	94	10
ENTER REGIONS		2	5	0	0	1	1	0	0	1	0	0	73	DID NOT LEAVE REGION		

TABLE XII

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
TECHNICAL EDUCATION

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	10	0	0	1	0	0	0	0	0	0	0	11	0	11	1
	2	0	1	0	0	0	0	0	0	0	0	0	1	1	2	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	1	0	0	0	0	0	0	1	2	2	4	1
	5	1	2	0	0	3	0	0	0	0	0	0	6	2	8	3
FROM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	1	4	0	0	3	0	1	0	0	0	1	10	3	13	9
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	1	0	0	1	1	2	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLUMN TOTALS		12	7	0	2	6	0	1	0	1	0	2	31	9	40	14
ENTER REGIONS		2	6	0	1	3	0	0	0	0	0	2	17 DID NOT LEAVE REGION			

TABLE XIII

PUBLIC SCHOOL REGIONAL GEOGRAPHIC MIGRATION
TRADE AND INDUSTRIAL

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	29	2	0	0	0	1	0	0	0	0	0	32	0	32	3
	2	0	23	0	0	0	0	0	0	0	0	0	23	0	23	0
	3	0	0	2	0	0	0	0	0	0	0	0	2	0	2	0
	4	0	0	0	20	0	0	0	0	0	0	0	20	0	20	0
	5	0	2	0	1	5	0	0	0	0	0	0	8	4	12	3
FROM	6	0	0	0	0	0	2	0	0	0	0	0	2	1	3	0
	7	2	5	1	4	4	0	5	2	2	1	2	28	21	49	23
	8	0	0	0	0	0	0	0	4	1	0	0	5	1	6	1
	9	0	0	0	0	0	0	0	0	12	1	0	13	0	13	1
	10	0	0	0	0	0	0	0	0	0	7	0	7	0	7	0
	11	0	0	0	0	0	0	0	0	0	0	5	5	1	6	0
COLUMN TOTALS		31	32	3	25	9	3	5	6	15	9	7	145	28	173	31
ENTER REGIONS		2	9	1	5	4	1	0	2	3	2	2	114 DID NOT LEAVE REGION			

TABLE XIV

PUBLIC SCHOOL REGIONAL IN/OUT-MIGRATION

REGION	1	2	3	4	5	6	7	8	9	10	11	TOTAL
TOTAL TRAINED IN REGION	129	71	7	50	43	16	75	20	58	25	17	511
EXPECTED TO ENTER/LEAVE **	19	10	1	7	6	2	11	3	9	4	3	75
ENTER REGION	12	21	1	10	8	4	2	3	6	4	4	75
Chi-Square Value	2.58	12.10*	0.00	1.29	0.67	2.00	7.36*	0.00	1.00	0.00	0.33	27.33*
LEAVE REGION	10	2	2	4	10	3	36	1	4	2	1	75
Chi-Square Value	4.26*	6.40*	1.00	1.29	2.67	0.50	56.82*	1.33	2.78	1.00	1.33	79.38*

* Significant at the 0.05 level

** Based on total number of regional migrants(75), multiplied by the region's percentage of total trained(511) in the state.

As can be seen in Tables VII through XIII, migration of public school graduates between pairs of regions disclosed several cells which had considerably higher interaction than others. Twelve percent of the trainees in Region 5 moved to Region 2. Seventeen percent of trainees in Region 7 moved to Region 2 and nine percent to Region 5.

Inspection of county-to-county movement showed that the migration from Region 7 to Region 2 was significant, because eleven of the thirteen individuals involved moved from Okmulgee County, site of Oklahoma State Tech,to Tulsa County. The other interactions were apparently randomly scattered over the groups of counties. The relationship between Region 7 and Region 2 is recorded in Table XV.

TABLE XV

THE RELATIONSHIP BETWEEN REGION 7 AND REGION 2

Total no. of graduates in Region 7	75
No. of graduates who migrate from Region 7 to other regions	36
Total no. of graduates in Okmulgee County	65
No. of graduates in Okmulgee County who migrate to other regions	36
No. of graduates in Okmulgee County who migrate to Region 2	11

It can be seen that Okmulgee with its Technical Institute provides almost total migration from the region. Tulsa metropolitan area

(Region 2) accounts for eleven of those graduates who migrate from Okmulgee.

Private Schools

As the private schools are concentrated in Tulsa and Oklahoma City, the two metropolitan areas in Oklahoma, they tend to attract students from all over the state-- some of them from all over the country. After the completion of their training, these students tend to go back to their respective regions or states. This trend can be seen in Table XVI which shows data for all programs. Tables XVII and Table XVIII show similar analysis for Technical and Business programs respectively. It can be seen that 87.2 percent of the graduates accepted jobs in the region in which they were trained. The remaining 18.8 percent scattered over the other regions.

TABLE XVI

PRIVATE SCHOOL REGIONAL GEOGRAPHIC MIGRATION
ALL PROGRAMS

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	223	4	3	8	0	8	4	9	11	6	1	277	29	306	54
	2	10	238	0	5	7	0	3	0	2	0	5	270	189	459	32
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	1	0	0	9	0	0	0	0	0	0	0	10	1	11	1
	5	0	2	0	1	7	0	0	0	0	0	0	10	3	13	3
FROM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLUMN TOTALS		234	244	3	23	14	8	7	9	13	6	6	567	222	789	90
ENTER REGIONS		11	6	3	14	7	8	7	9	13	6	6	477	DID NOT LEAVE REGION		

TABLE XVII

PRIVATE SCHOOL REGIONAL GEOGRAPHIC MIGRATION
TECHNICAL PROGRAMS

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
FROM	1	90	2	2	5	0	5	3	6	5	3	1	122	22	144	32
	2	7	124	0	3	4	0	0	0	2	0	4	144	173	317	20
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLUMN TOTALS		97	126	2	8	4	5	3	6	7	3	5	266	195	461	52
ENTER REGIONS		7	2	2	8	4	5	3	6	7	3	5	214	DID NOT LEAVE REGION		

TABLE XVIII

PRIVATE SCHOOL REGIONAL GEOGRAPHIC MIGRATION
BUSINESS PROGRAMS

REGION:	TO	1	2	3	4	5	6	7	8	9	10	11	ROW TOTAL	LEAVE OKLA	TOTAL TRAINED	LEFT REGION
	1	133	2	1	3	0	3	1	3	6	3	0	155	7	162	22
	2	3	114	0	2	3	0	3	0	0	0	1	126	16	142	12
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	1	0	0	9	0	0	0	0	0	0	0	10	1	11	1
	5	0	2	0	1	7	0	0	0	0	0	0	10	3	13	3
FROM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLUMN TOTALS		137	118	1	15	10	3	4	3	6	3	1	301	27	328	38
ENTER REGIONS		4	4	1	6	3	3	4	3	6	3	1	263 DID NOT LEAVE REGION			

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The primary objective of this study was to describe post-training geographic mobility of recent graduates in vocational and technical training programs in Oklahoma. 13,775 graduates from public schools and 3,313 graduates from private schools were followed during the fall of 1969 to collect data on program effectiveness and mobility of graduates. Data, in respect to 1,300 graduates who found jobs in fields related to their training were used to study their mobility patterns after completing their respective programs.

Findings

The findings of this study can be most effectively reported by responding to the research questions posed in Chapter I. The following answers are based on the analysis of the preceding chapter.

Research Question 1

What is the rate of out-of-state migration of trained manpower from Oklahoma's Vocational and Technical Education programs?

It was found that 11 percent of the graduates from public schools who were placed in an occupational field related to training migrated out of the state. Corresponding figures for private schools is 28.1 percent.

Research Question 2

Where does trained manpower tend to migrate within the state to obtain training-related jobs?It was found that those trainees who do not out-migrate from the state tend to remain near or in the same region in which they were trained. In the case of public school graduates 73.6 percent of all the graduates remained in the same region in which they were trained. The summary of this finding can be seen in Figure 5.

In the case of private school graduates, 60.4 percent found jobs in the region in which they were trained.

Research Question 3

Is there a difference in the migration rates into and out of the individual counties in Oklahoma? No particular pattern of inter-county mobility could be established as the data were not sufficient for such a detailed analysis. The results found, however, can be seen in Figure 6.

Research Question 4

Do the various vocational education program divisions have the same rate and pattern of migration? Individual training programs tend to follow the same pattern of graduate mobility as in the case of all graduates. See Figure 5 for the results found.

Research Question 5

Are the eleven regions, established jointly by the State Department of Vocational and Technical Education, and the Oklahoma Employment

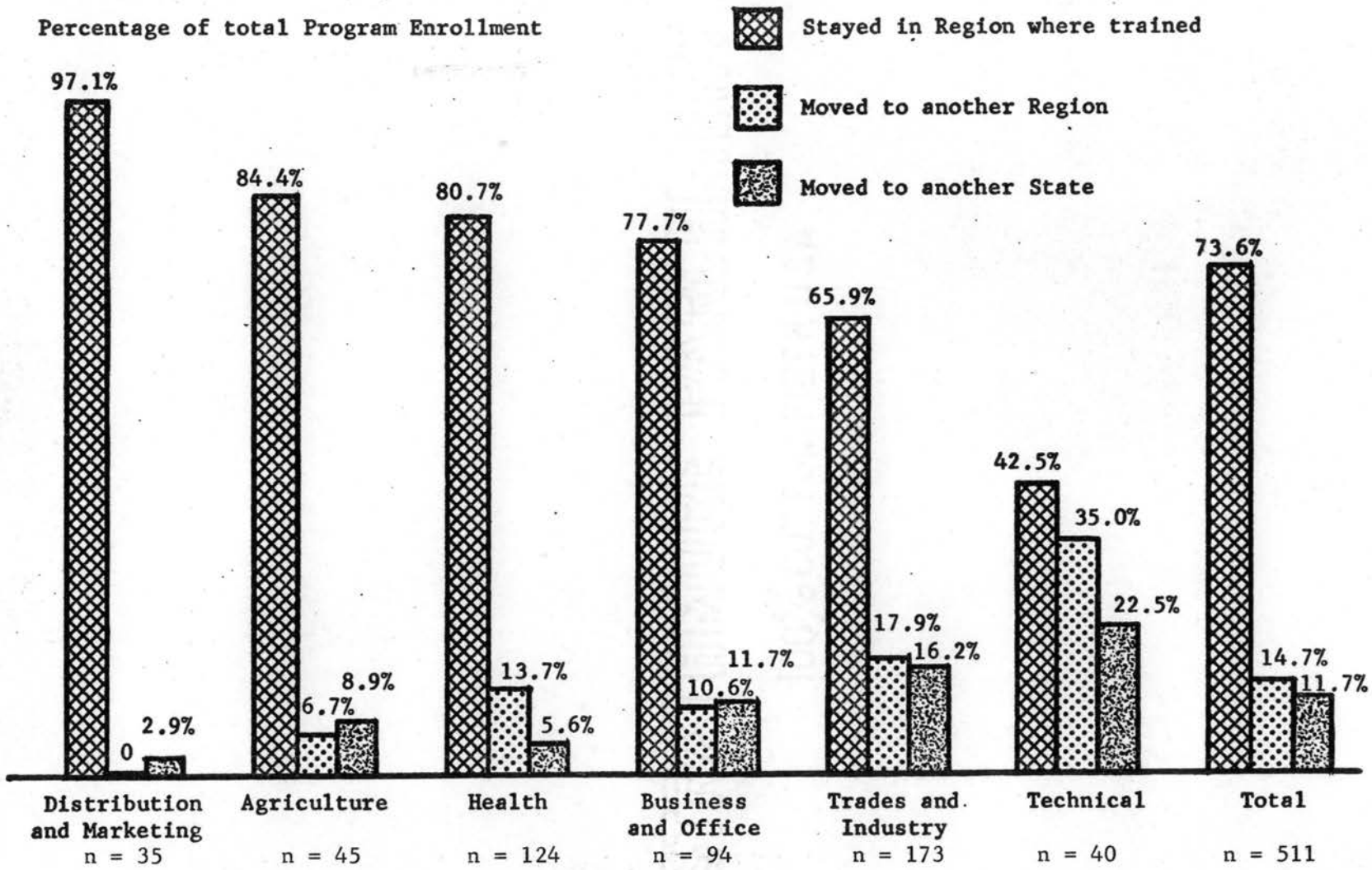


FIGURE 5. COMPARATIVE MIGRATION OF GRADUATES FROM PUBLIC VOCATIONAL AND TECHNICAL PROGRAMS IN OKLAHOMA.

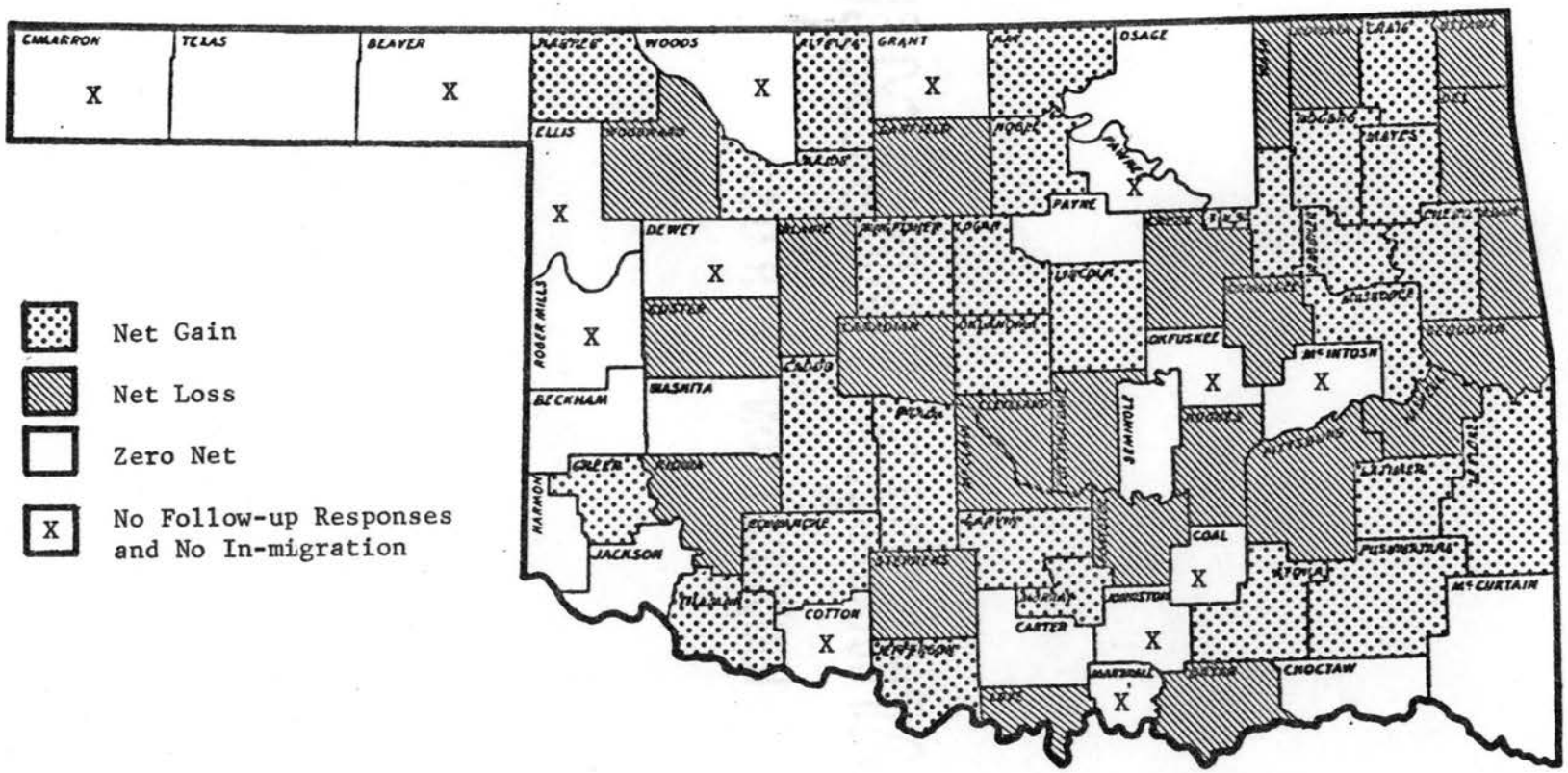


FIGURE 6. NET COUNTY MIGRATION OF GRADUATES FROM PUBLIC VOCATIONAL AND TECHNICAL PROGRAMS.

Security Commission, of a homogeneous composition with respect to mobility? On the basis of available data it was found that the regions hold their validity to a great extent. The only exception was found in the case of Tulsa SMSA and the Mid-Eastern regions.

Research Question 6

If the eleven regions are not homogeneous, with respect to mobility, what form might an alternative regional pattern take? On the basis of available data the only change that could be visualized was a transfer of Okmulgee County from Region 7 (Mid-Eastern) to Region 2 (Tulsa SMSA).

Recommendations

1. No viable patterns of mobility can be established on the basis of a single year's data. It is recommended that a longitudinal study of the subject be undertaken as an integral part of the Occupational Training Information System.

2. Out-migration of graduates might be reduced by making available to them greater job opportunities and/or information about the available job opportunities. The latter is recommended as a means which should be employed without any delay.

3. The validity of regions should be further studied in context with longitudinal mobility as well as other factors which affect manpower policy in the state.

4. Further study of those graduates who migrate out of the state is recommended in order to provide them with information about available and expanding job opportunities within the state.

5. Further study of those individuals who in-migrate from other states to attend vocational and technical programs ought to be conducted in order to retain those who might have critical skills and those who simply want to remain. One way, perhaps, to influence these individuals would be to provide them with up-to-date job information.

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APPENDIX A

OTIS SUPPLY FORM 2

OCCUPATIONAL TRAINING INFORMATION SYSTEM

1. NAME _____ (LAST / FIRST / MIDDLE) 2. AGE _____ 3. SEX (CHECK ONE) ☐ M ☐ F

4. ARE YOU MARRIED (CHECK ONE) ☐ YES ☐ NO 5. SOCIAL SECURITY NUMBER (IF ANY) ☐☐☐ ☐☐ ☐☐☐☐

6. PERMANENT ADDRESS (WHERE YOU CAN BE REACHED AFTER GRADUATION OR COMPLETION: PARENT'S HOME, ETC.)

_____ (NUMBER AND STREET / CITY, TOWN, COMMUNITY / STATE / ZIP CODE)

7. ARE YOU THE HEAD OF A HOUSEHOLD? ☐ YES ☐ NO 8. ARE YOU PHYSICALLY HANDICAPPED? ☐ YES ☐ NO

9. WHAT IS THE NAME OF THE HIGH SCHOOL YOU ARE NOW ATTENDING OR LAST ATTENDED? (IF ANY) _____

10. LOCATION OF HIGH SCHOOL LAST ATTENDED _____ (CITY, TOWN, OR COMMUNITY / STATE)

11. WHAT PROGRAM ARE YOU NOW TAKING (EXAMPLE: VOCATIONAL CARPENTRY) _____

12. NAME OF SCHOOL OR INSTITUTION OFFERING THIS PROGRAM _____

13. EXPECTED DATE OF GRADUATION OR COMPLETION FROM THIS PROGRAM _____ (MONTH / YEAR)

14. IN THIS PROGRAM, I AM NOW IN THE (CHECK ONE)
☐ FIRST YEAR ☐ SECOND YEAR ☐ THIRD YEAR ☐ FOURTH YEAR

15. WHO MOST INFLUENCED YOU TO ENROLL IN THIS PROGRAM? (CHECK ONE)
☐ RELATIVES ☐ HIGH SCHOOL PRINCIPAL ☐ HIGH SCHOOL COUNSELOR
☐ FRIENDS ☐ HIGH SCHOOL ACADEMIC TEACHER ☐ OTHER
☐ EMPLOYER ☐ VOCATIONAL TEACHER ☐ NOBODY

16. WHY DID YOU ENROLL IN THIS PROGRAM? (CHECK ONE)
☐ TO PREPARE FOR A JOB ☐ OTHER (SPECIFY) _____

17. HOW MANY YEARS OF SCHOOL DID YOU COMPLETE BEFORE ENTERING THIS PROGRAM?
ELEMENTARY OR HIGH SCHOOL
☐ 4 OR LESS ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12
COLLEGE
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ MORE THAN 4

18. WHAT WERE YOU DOING BEFORE YOU FIRST ENROLLED IN THIS PROGRAM? (CHECK ONE)
☐ EMPLOYED FULL TIME (EXCEPT SUMMER EMPLOYMENT) ☐ GOING TO SCHOOL ☐ UNEMPLOYED (LOOKING FOR WORK)
☐ MILITARY ☐ OTHER

19. IF YOUR ANSWER TO QUESTION 18 WAS "EMPLOYED FULL TIME", WHAT WAS YOUR JOB CATAGORY? (CHECK ONE) (LEAVE BLANK OTHERWISE)
☐ PROFESSIONAL OR KINDRED WORKERS (INCLUDES ACCOUNTANTS, ENGINEERS, PERSONNEL WORKERS, ETC.)
☐ TECHNICIANS (DRAFTSMAN, ELECTRICAL TECHNICIAN, ETC.)
☐ MANAGERS, OFFICIALS, PROPRIETORS, FARM OWNERS, FARM MANAGERS
☐ CLERICAL WORKERS (INCLUDES BOOKKEEPERS, CASHIERS, STOREKEEPERS, ETC.)
☐ SALES WORKERS
☐ CRAFTSMAN, FOREMAN, AND KINDRED WORKERS (INCLUDES CARPENTERS, ELECTRICIANS, MACHINISTS, ETC.)
☐ OPERATIVES AND KINDRED WORKERS (INCLUDES APPRENTICES ASSEMBLERS, TRUCK DRIVERS, DELIVERY MEN, WELDERS, ETC.)
☐ SERVICE WORKERS (INCLUDING PRIVATE HOUSEHOLD, JANITORS, GUARDS, ETC.)
☐ LABORER, (INCLUDING FARM)
☐ OTHER (SPECIFY) _____

20. IF EMPLOYMENT OPPORTUNITIES ARE EQUAL, DO YOU PLAN TO WORK IN OKLAHOMA WHEN YOU FINISH THIS PROGRAM?
☐ YES ☐ NO ☐ DON'T KNOW

OTIS SUPPLY FORM-2

21. I AM PRESENTLY (CHECK ONE)

[*ADULT-PREPARATORY MEANS PROGRAMS FOR ADULTS TO PREPARE THEM FOR GAINFUL EMPLOYMENT.

@ADULT-SUPPLEMENTARY MEANS PROGRAMS FOR ADULTS TO IMPROVE SKILLS OR TO ACQUIRE EXTRA SKILLS.]

- ☐ A HIGH SCHOOL FRESHMAN
- ☐ A HIGH SCHOOL SOPHOMORE
- ☐ A HIGH SCHOOL JUNIOR
- ☐ A HIGH SCHOOL SENIOR
- ☐ IN POST HIGH SCHOOL FIRST YEAR
- ☐ IN POST HIGH SCHOOL SECOND YEAR
- ☐ IN ADULT-PREPARATORY TRAINING*
- ☐ IN ADULT-SUPPLEMENTARY TRAINING@

22. WHICH DESCRIBES YOU? (CHECK ONE)

- ☐ INDIAN
- ☐ NEGRO
- ☐ WHITE
- ☐ MEXICAN AMERICAN
- ☐ ORIENTAL
- ☐ OTHER

23. IN WHAT SIZE COMMUNITY DID YOU LIVE MOST OF YOUR LIFE BEFORE AGE 14? (CHECK ONE)
(IF YOU DON'T REMEMBER, MAKE AN APPROXIMATION)

- ☐ LESS THAN 2,500 POPULATION
- ☐ 2,501 TO 10,000 POPULATION
- ☐ 10,001 TO 25,000 POPULATION
- ☐ 25,001 TO 50,000 POPULATION
- ☐ OVER 50,000 POPULATION

24. WHAT WAS YOUR FAMILY'S PRIMARY SOURCE OF INCOME MOST OF YOUR LIFE BEFORE YOU WERE 14? (CHECK ONE)

- ☐ FARMING
- ☐ SELF EMPLOYED (NON AGRICULTURAL)
- ☐ WAGES OR SALARY
- ☐ WELFARE
- ☐ OTHER
- ☐ SAVINGS

25. EDUCATION OF FATHER OR HEAD OF HOUSEHOLD WHEN YOU WERE GROWING UP. (CHECK HIGHEST LEVEL ATTAINED)

- ☐ 4TH GRADE OR LESS
- ☐ GRADUATED FROM HIGH SCHOOL
- ☐ 5TH OR 6TH GRADE
- ☐ SOME COLLEGE BUT NO DEGREE
- ☐ 7TH OR 8TH GRADE
- ☐ ASSOCIATE DEGREE
- ☐ 9TH OR 10TH GRADE
- ☐ BACCALAUREATE DEGREE
- ☐ 11TH OR 12TH GRADE (NON-GRADUATE)
- ☐ GRADUATE WORK OR PROFESSIONAL DEGREE

26. OCCUPATION OF FATHER OR HEAD OF HOUSEHOLD WHEN YOU WERE GROWING UP? (CHECK ONE)

- ☐ PROFESSIONAL OR KINDRED WORKERS (INCLUDES ACCOUNTANTS, ENGINEERS, PERSONNEL WORKERS, ETC.)
- ☐ TECHNICIANS (DRAFTSMEN, ELECTRICAL TECHNICIANS, ETC.)
- ☐ MANAGERS, OFFICIALS, PROPRIETORS, FARM OWNERS, FARM MANAGERS
- ☐ CLERICAL OR KINDRED WORKERS (INCLUDES BOOKKEEPERS, CASHIERS, STOREKEEPERS, ETC.)
- ☐ SALES WORKERS
- ☐ CRAFTSMEN, FOREMEN, AND KINDRED WORKERS (INCLUDES CARPENTERS, ELECTRICIANS, MACHINISTS, ETC.)
- ☐ OPERATIVES AND KINDRED WORKERS (INCLUDES APPRENTICES ASSEMBLERS, TRUCK DRIVERS, DELIVERY MEN, WELDERS, ETC.)
- ☐ SERVICE WORKERS (INCLUDING PRIVATE HOUSEHOLD WORKERS, JANITORS, GUARDS, ETC.)
- ☐ LABORERS (INCLUDING FARM)
- ☐ OTHER (SPECIFY) _____

27. WHAT WAS THE APPROXIMATE ANNUAL INCOME OF THE HOUSEHOLD IN WHICH YOU LIVED LAST YEAR? (CHECK ONE)

- ☐ UNDER $3000.00
- ☐ $ 9000.00 TO $11999.00
- ☐ $3000.00 TO $4999.00
- ☐ $12000.00 TO $15000.00
- ☐ $5000.00 TO $6999.00
- ☐ OVER $15000.00
- ☐ $7000.00 TO $8999.00

28. HOW MANY PEOPLE LIVED IN THE HOUSEHOLD REFERRED TO IN QUESTION NUMBER 27 ABOVE?

_____
(NUMBER)

APPENDIX B

PRE-LETTER BY PRIVATE SCHOOL ADMINISTRATORS

Dear Alumnus:

By the time you receive this letter, the United States may have landed the first men on the surface of the moon, 239,000 miles away. This feat has been made possible with the joint efforts of a large number of highly skilled people. Technical and other supporting skills, some like your own, are necessary for technical accomplishments of this magnitude. As such you are a part of the great endeavor which made this dream come true. We are justifiably proud of our training programs of which your success is a living testimony. We are now involved in a project which will enable us to improve our programs still further. You can be of great service by providing the information on which to base these decisions to make the necessary improvements.

Within a few weeks, you will receive a convenient postage paid reply card from the Occupational Training Information System. Please complete and return the card without undue delay. The information received will be considered confidential and no personal identification will be required of you. In addition to improving our training programs, this information will aid in providing better job placements for you in the future, if needed.

If we can help you in any way, please do not hesitate to let us know. We thank you for your valuable assistance and wish you the best of luck in your endeavors.

Sincerely,

APPENDIX C

FOLLOW-UP QUESTIONNAIRE

PATENT NO. 3,104,799 OTHER PATENTS PENDING DATA-MAILER ®

↓ TO OPEN TEAR ALONG THIS PERFORATION ↓
↓ USE THUMB NOTCH TO REMOVE CONTENTS ↓

OCCUPATIONAL TRAINING INFORMATION SYSTEM

IN CO-OPERATION WITH
STATE DEPARTMENT OF VOCATIONAL - TECHNICAL EDUCATION, AND ASSOCIATION OF PRIVATE SCHOOLS

401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

STILLWATER OKLAHOMA

NON-PROFIT
ORGANIZATION
1.6¢ PAID
PERMIT NO. 191

TO:

NOTICE: IF ADDRESS ON THIS ENVELOPE IS INCORRECT PLEASE
ADD CORRECT ADDRESS AND FORWARD CARD TO THE ADDRESSEE

DEAR FRIEND,

WE, LIKE YOU, ARE PROUD OF THE TRAINING YOU RECEIVED IN YOUR OCCUPATIONAL PROGRAM. PLEASE LET US KNOW WHAT YOU ARE DOING AT THIS TIME BY COMPLETING THE FIVE QUESTIONS BELOW. THIS SHOULD TAKE NO MORE THAN A FEW MINUTES OF YOUR TIME. WE NEED THIS INFORMATION TO HELP AID YOU IN LATER JOB PLACEMENT AND TO KNOW HOW TO IMPROVE OUR PROGRAMS.

- THANK YOU!

I. DID YOU COMPLETE THE OCCUPATIONAL PROGRAM IN WHICH YOU WERE ENROLLED? (CHECK ONE) [1] YES [2] NO

II. EMPLOYMENT STATUS (CHECK ONE ONLY)
- [1] WORKING FULL TIME IN OCCUPATION FOR WHICH YOU WERE TRAINED IN THE OCCUPATIONAL TRAINING PROGRAM.
- [2] WORKING FULL TIME IN OCCUPATION RELATED TO TRAINING RECEIVED.
- [3] WORKING FULL TIME IN OCCUPATION NOT RELATED TO TRAINING RECEIVED.
- [4] CONTINUING FULL TIME IN SCHOOL IN FIELD RELATED TO TRAINING.
- [5] CONTINUING FULL TIME IN SCHOOL IN FIELD NOT RELATED TO TRAINING.
- [6] ARMED SERVICES.
- [7] EMPLOYED PART TIME, BUT NOT ATTENDING SCHOOL.
- [8] UNEMPLOYED, SEEKING EMPLOYMENT.
- [9] UNEMPLOYED, NOT SEEKING EMPLOYMENT.

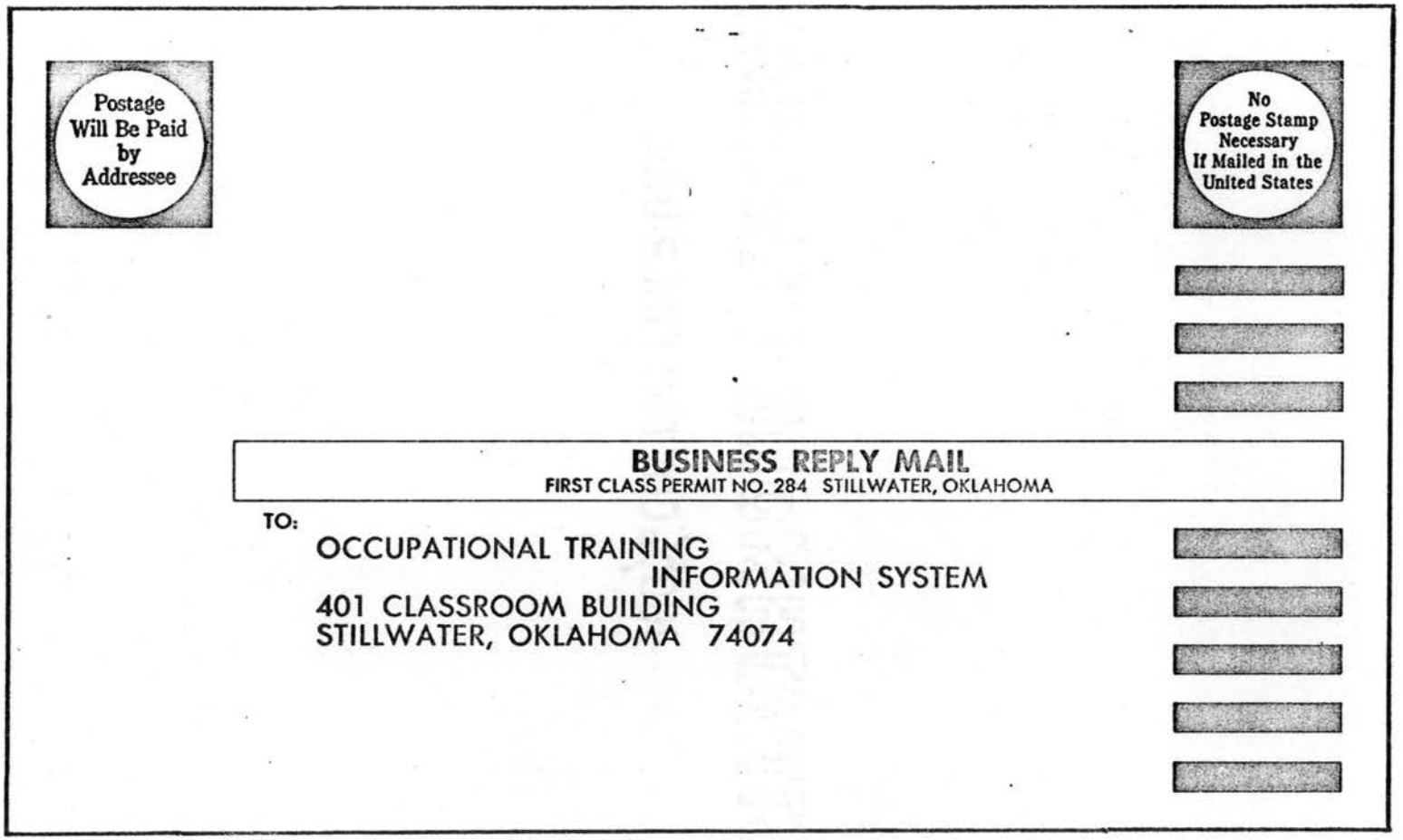
III. IF EMPLOYED:

(a) WHAT IS YOUR JOB TITLE?_____
(EXAMPLES: NURSES AID, ELECTRONICS TECHNICIAN, ETC.)

(b) LOCATION OF JOB:_____
(CITY) (STATE) (ZIP CODE)

IV IF EMPLOYED WHAT IS YOUR YEARLY SALARY RANGE? (CHECK ONE)
- [1] UNDER $3,000
- [2] $3,001 - 4,000
- [3] $4,001 - 5,000
- [4] $5,001 - 6,000
- [5] $6,001 - 7,000
- [6] OVER $7,000

V HOW WOULD YOU RATE YOUR OCCUPATIONAL PROGRAM IN TERMS OF EMPLOYMENT BENEFITS TO YOU? (CHECK ONE)
- [1] HIGH
- [2] AVERAGE
- [3] LOW
- [4] NOT APPLICABLE


Postage
Will Be Paid
by
Addressee
No
Postage Stamp
Necessary
If Mailed in the
United States
BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 284 STILLWATER, OKLAHOMA
TO:
OCCUPATIONAL TRAINING
INFORMATION SYSTEM
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

APPENDIX D

FIRST FOLLOW-UP REMINDER

Dear Friend:

You recently received a request for some information about a Home Economics, Agriculture, Distributive Education, Business, or Technical Course or Program you took in an Oklahoma public or private school. Your reply is urgently needed in our effort to improve Oklahoma's occupational education programs.

Take an additional moment to tear off and complete the attached card. If, however; you have already mailed the questionnaire, please disregard this reminder.

THANK YOU!

FIRST CLASS
Permit No.
284
Stillwater, Okla.

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

OCCUPATIONAL TRAINING INFORMATION SYSTEM
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

I. DID YOU COMPLETE THE OCCUPATIONAL PROGRAM IN WHICH YOU WERE ENROLLED? (CIRCLE ONE) 1. YES 2. NO

II. EMPLOYMENT STATUS (CIRCLE ONE ONLY)

1. WORKING FULL TIME IN OCCUPATION FOR WHICH YOU WERE TRAINED IN THE OCCUPATIONAL TRAINING PROGRAM.
2. WORKING FULL TIME IN OCCUPATION RELATED TO TRAINING RECEIVED.
3. WORKING FULL TIME IN OCCUPATION NOT RELATED TO TRAINING RECEIVED.
4. CONTINUING FULL TIME IN SCHOOL IN FIELD RELATED TO TRAINING.
5. CONTINUING FULL TIME IN SCHOOL IN FIELD NOT RELATED TO TRAINING.
6. ARMED SERVICES.
7. EMPLOYED PART TIME, BUT NOT ATTENDING SCHOOL.
8. UNEMPLOYED, SEEKING EMPLOYMENT.
9. UNEMPLOYED, NOT SEEKING EMPLOYMENT.

III. IF EMPLOYED:

(a) WHAT IS YOUR JOB TITLE?_____
(Examples: Nurses Aid, Electronics Technician, etc.)

(b) LOCATION OF JOB:_____
(City) (State) (Zip Code)

IV. IF EMPLOYED WHAT IS YOUR YEARLY SALARY RANGE? (CIRCLE ONE)

1. UNDER $3,000
2. $3,001 - 4,000
3. $4,001 - 5,000
4. $5,001 - 6,000
5. $6,001 - 7,000
6. OVER $7,000

V. HOW WOULD YOU RATE YOUR OCCUPATONAL PROGRAM IN TERMS OF EMPLOYMENT BENEFITS TO YOU? (CIRCLE ONE)

1. HIGH
2. AVERAGE
3. LOW
4. NOT APPLICABLE

№ 28312

DETACH AND MAIL THIS CARD

OCCUPATIONAL TRAINING INFORMATION SYSTEM
IN CO-OPERATION WITH
STATE DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION, AND ASSOCIATION OF PRIVATE SCHOOLS
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

PLEASE FORWARD PROMPTLY

APPENDIX E

SECOND AND LAST FOLLOW-UP REMINDER

Sock it to me Donna !

We just gotta know how you are doing and how you feel about the Office Educ program you were in.

Please help us improve that program by completing the attached card and hot footing it out to the mail box. Do it now and fill my Christmas stocking!

THANK YOU !

Paul

FIRST CLASS
Permit No.
284
Stillwater, Okla.

BUSINESS REPLY MAIL
NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

OKLAHOMA STATE UNIVERSITY
OCCUPATIONAL TRAINING INFORMATION SYSTEM
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

I COMPLETED THE OCCUPATIONAL PROGRAM IN WHICH I WAS ENROLLED:
[1] Yes (Check one)
[2] No

I AM: (Check one)
[1] Working full time in occupation for which I was trained.
[2] Working full time in occupation related to training received.
[3] Working full time in occupation not related to training received.
[4] Continuing full time in school in field related to training.
[5] Continuing full time in school in field not related to training.
[6] In armed services.
[7] Employed part time, but not attending school.
[8] Unemployed, seeking employment.
[9] Unemployed, not seeking employment.

IF EMPLOYED:
My job title is: _____
(Examples: Nurses Aid, Electronics Technician)

The location of my job is: _____
(City) (State) (Zip Code)

My yearly salary range:
[1] Under $3,000 (Check one)
[2] $3,000 - 4,000
[3] $4,000 - 5,000
[4] $5,000 - 6,000
[5] $6,000 - 7,000
[6] Over $7,000

I RATE MY OCCUPATIONAL PROGRAM IN TERMS OF EMPLOYMENT BENEFITS AS:
(Check one)
[1] High
[2] Average
[3] Low
[4] Not applicable

URGENT

№ 64090

OKLAHOMA STATE UNIVERSITY
OCCUPATIONAL TRAINING INFORMATION SYSTEM
IN CO-OPERATION WITH
STATE DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION, AND ASSOCIATION OF PRIVATE SCHOOLS
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

PLEASE FORWARD PROMPTLY

VITA

K. Bryn Whatley

Candidate for the Degree of

Master of Science

Thesis: GEOGRAPHIC MOBILITY OF TRAINEES LEAVING VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS IN OKLAHOMA

Major Field: Technical Education

Biographical:

Personal Data: Born in Fowler, Kansas, October 13, 1934, the son of S. L. and Ruby Whatley.

Education: Graduated from Classen High School, Oklahoma City, Oklahoma, in May 1953; received the Bachelor of Science degree from Oklahoma State University in 1967, with a major in Technical Education and minor in Electronics Technology; completed requirements for a Master of Science degree at Oklahoma State University in July 1970, as a Manpower Fellow with a major in Technical Education.

Professional Experience: Television Serviceman, Fred's T. V., Stillwater, Oklahoma, 1956-58; Electronics Technician, Thompson's Radio and Television 1958-64; Quality Control Engineer in charge of Aerospace Flight-Unit Semi-conductors, Labko Scientific, Stillwater, Oklahoma, 1964-1966 full time, 1966-1970 as Consultant Engineer; Senior Electronics Instructor, Northwest Classen High School, Oklahoma City, Oklahoma, 1966-1968; Associate Programer Analyst, Occupational Training Information System, Oklahoma State University, Stillwater, Oklahoma, 1968-1970.

Professional Organizations: Phi Delta Kappa; Iota Lambda Sigma.