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EMPLOYMENT OPPORTUNITIES IN SELECTED NON FARM BUSINESSES AND GOVERNMENT AGENCIES AS RELATED TO AGRICULTURAL TRAINING OR BACKGROUND, NEVADA, 1965.

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THE PURPOSES OF A SURVEY OF 363 NONFARM BUSINESSES AND AGRICULTURAL GOVERNMENT AGENCIES WERE TO (1) COMPARE THE NUMBER OF EMPLOYEES WITH THE NUMBER NEEDING AGRICULTURAL BACKGROUND, (2) ESTIMATE ENTRY OPPORTUNITIES DURING THE NEXT 5 YEARS, (3) DETERMINE EMPLOYEE JOB TITLES AND DIFFICULTY IN FINDING REPLACEMENTS, (4) DETERMINE EMPLOYEE CHARACTERISTICS DESIRED, (5) DETERMINE THE TYPE OF SCHOOL AND SUBJECT-MATTER AREAS NEEDED FOR TRAINING NEW EMPLOYEES, (6) DETERMINE TO WHAT EXTENT EMPLOYERS WOULD BE WILLING TO COOPERATE WITH SCHOOLS BY PROVIDING ON-THE-JOB TRAINING, AND (7) COMPARE NONFARM BUSINESSES IN THREE POPULATION AREAS TO DETERMINE NUMBER OF EMPLOYEES AND EXPANSION AND REPLACEMENT POTENTIAL. SOME FINDINGS WERE -- (1) OF 4,102 EMPLOYEES IN 310 NONFARM BUSINESSES, 716, OR 17.5 PERCENT, NEEDED AN AGRICULTURAL BACKGROUND, (2) APPROXIMATELY 6 TIMES AS MANY PEOPLE WERE EMPLOYED IN AGRICULTURAL PRODUCTION AS THERE WERE EMPLOYEES WHO NEEDED AGRICULTURAL TRAINING OR BACKGROUND FOR NONFARM BUSINESSES, (3) THERE WAS NO GREAT DEMAND IN MOST CLASSIFICATIONS OF NONFARM BUSINESSES FOR PEOPLE WITH AGRICULTURAL BACKGROUNDS, (4) THE PRIMARY EMPLOYEE CHARACTERISTIC DESIRED WAS STABILITY (IN GENERAL, EMPLOYERS PLACED PERSONAL TRAITS ABOVE SUBJECT-MATTER BACKGROUND IN IMPORTANCE) (5) EMPLOYERS FREQUENTLY MENTIONED MATHEMATICS, WRITING, SPELLING, GENERAL BUSINESS MANAGEMENT, AND GENERAL MECHANICS AS SUBJECTS TO BE TAUGHT IN HIGH SCHOOLS AND 2-YEAR TECHNICAL SCHOOLS, (6) ALMOST ALL EMPLOYERS IN LARGE FIRMS AND GOVERNMENT AGENCIES RECOGNIZED THE VALUE OF ON-THE-JOB TRAINING, AND (7) THE GREATEST NEED FOR ADDITIONAL EMPLOYEES WITHIN 5 YEARS WOULD BE IN THE LAS VEGAS AND RENO AREAS. EIGHTY-FOUR PAGES OF TABLES ARE INCLUDED IN THIS PRELIMINARY REPORT. (WB)

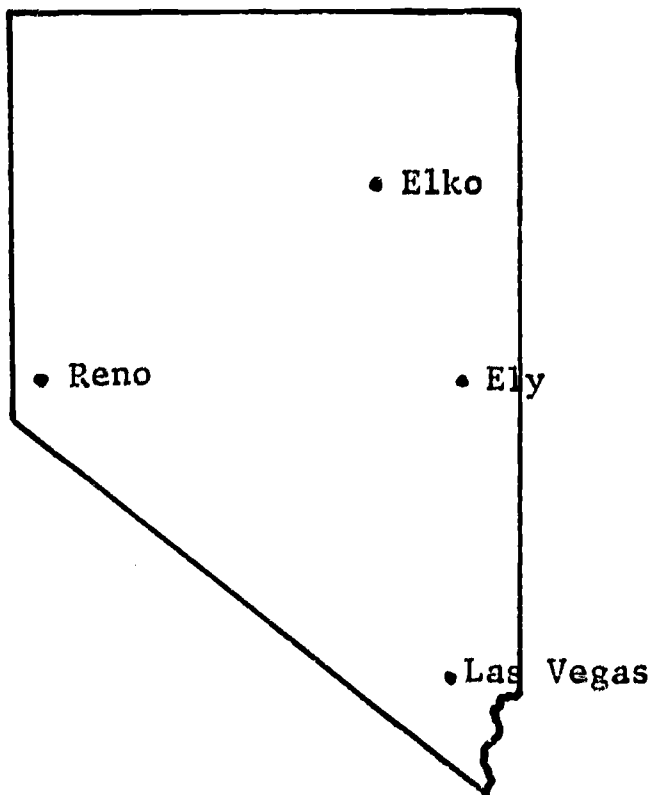
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**EMPLOYMENT OPPORTUNITIES
IN SELECTED NON FARM BUSINESSES
AND GOVERNMENT AGENCIES
AS RELATED TO AGRICULTURAL TRAINING
OR BACKGROUND
NEVADA, 1965**

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in cooperation with the
Nevada State Department of Education
Vocational and Technical Education Division

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INTRODUCTION

The full title of this study is "Employment Opportunities and Desired Characteristics of Future Employees in Selected Non-farm Businesses and Government Agencies as related to Agricultural Training or Background in Nevada". The title is descriptive of the major objectives of the investigation. It is jointly sponsored by the Department of Agricultural Economics and Education, Max C. Fleischmann College of Agriculture, University of Nevada and the Agricultural Education Section, Division of Vocational-Technical Education, State Department of Public Instruction, State of Nevada.

Project leader for the study was Howard H. Christensen, Assistant Professor of Agricultural Education, University of Nevada.

Project advisors were John W. Buntin, Assistant Superintendent in charge of Vocational - Technical Education, Nevada State Department of Education; Dr. J. B. Wychoff, Chairman, T. A. Butler, Associate Professor at Agricultural Mechanics, Department of Agricultural Economics and Agricultural Education, University of Nevada; J. R. Peddicord, Nevada State Supervisor of Agricultural Education. Dr. Ralph J. Woodin and Dr. Ralph Bender, Agricultural Education Department, Ohio State University, served as consultants for the study. Leo P. Herndon, Acting Teacher Educator in Agriculture, University of Nevada served as assistant project leader for tabulations also completed the section of the study on government agencies.

A grant was obtained through the Division of Vocational-Technical Education, Nevada State Department of Public Instruction, to help finance the project.

This report is preliminary in nature and is primarily a presentation of the basic tables. The detailed implications and discussion of the tables will be published at a later date.

OBJECTIVES AND PURPOSES OF THE STUDY

Several developments in the State of Nevada have made the need for information on employment opportunities in agriculture of vital importance at this time. The passage of the National Vocational Education Act of 1963 has created the need for an evaluation and redefining of policies for the organization and administration of vocational education, and particularly agricultural education, in the secondary schools.

The College of Agriculture, University of Nevada, has been aware of the need for a two-year technical program in agriculture. A pilot program for training technicians in agricultural occupations is currently under way with classes to start the fall semester, 1965. Data collected in this study

will be of value to this new program.

The developments listed previously indicate the need for steps to be taken in Nevada to provide training programs which will prepare students for productive employment. These developments indicate the need for an answer to the following questions: What employment opportunities are available in Nevada? What instructional programs could be provided which would train students to meet the demands for employment?

This study was designed with these major questions being paramount. The study is not limited exclusively to production agriculture, but is of a broader vocational nature to study the employment needs of the business firms and government agencies selected. Many of the firms selected for study were not of a strict agricultural nature, but employed people who used skills provided in agricultural training programs.

SPECIFIC OBJECTIVES

The complete study has for its objectives in both the selected non-farm businesses and agricultural government agencies the following:

1. To determine the number of employees presently employed and the number needing an agricultural background as compared to the total employees.
2. To estimate the entry opportunities due to expansion and replacement during the next five years.
3. To determine job titles of employees and degree of difficulty in obtaining replacements.
4. To determine employee characteristics desired of future employees such as: educational requirements for entry, residential background preferred, minimum and maximum age preferred, starting wage scale per week, type of training provided for new employees by the employer, and the extent experience and training is necessary for new employees.
5. To determine which of three types of schools namely, vocational or technical high school, post high school, or a two-year technical school, could best meet needs for training new employees.
6. To obtain an indication from employer responses as to what subject matter areas should be included in high school vocational programs and in a two-year technical program in agriculture.
7. To determine the extent that employers would be willing to cooperate with the high schools and two-year technical schools in providing on-the-job work experience programs for students.

Information to be obtained from the non-farm business firms:

8. To determine what percent of the gross income of the business is

agriculturally oriented.

9. To make a comparison of non-farm businesses classified into three population areas to determine the current number of employees, expansion and replacement potential.

DELIMITATION

1. The study was limited to only those firms whose main business address is in Nevada.
2. Interviews were made to determine agricultural opportunities in those cities and counties with a population of 3,000 or more.
3. Business firms and government agencies having several branches or subdivisions were interviewed at the main office.

PROCEDURES

1. A survey form was developed consisting of three major parts. Section I contained status information and function of the firm. Section II contained information on current and projected employment numbers, and characteristics desired of future employees. Section III determined percent of income agriculturally oriented, employer opinions as to subject matter that should be included in high school vocational programs and two-year technical programs, and employer willingness to cooperate in on-the-job training programs.
2. Interviewers were employed and trained to make a personal interview with the employer or his representative in non-farm business firms and government agencies.
3. An attempt was made to interview all available non-farm business firms in the State of Nevada that met the three criteria listed as follows:
 - a. Firms that do a substantial part of their business with farmers or ranchers, such as buying, selling or processing agricultural products or providing services to farm or ranch people.
 - b. The firm has at least one or more full-time employees.
 - c. There would appear to be some advantage to an employee, with an agricultural background or training, in seeking employment as compared to a person without such a background or training.
4. The non-farm business firms and government agencies were classified into seven occupational families or divisions according to their primary function or purpose. Each occupational family was subdivided into sub-families or divisions. The classification system used is as follows:

CLASSIFICATION OF NON-FARM BUSINESS FIRMS AND GOVERNMENT AGENCIES INTO
OCCUPATIONAL FAMILIES

- A. Agricultural & Allied Mechanics (Farm and/or General)
 - a. Sales--machinery and equipment and/or services
 - b. Metal Fabrication and/or Equipment Repair
 - c. Sales--supplies, hardware, machinery parts, building materials
 - d. Construction--buildings and other (with landscaping or land leveling)

- B. Animal Industry
 - a. Milk processing and sales
 - b. Meat Packers and/or wholesalers
 - c. Livestock dealers and buyers and/or trucking
 - d. Veterinarians--private practitioners
 - e. Other livestock firms

- C. Business--Economics, Finance, Agricultural Supply, Service
 - a. Banks
 - b. Insurance and/or Real Estate--ranch and farm specialization
 - c. Utilities--electrical power, telephone, and railroads
 - d. Feed dealers--agricultural supply and/or processors
 - e. Chemicals and Metals (agricultural and other)
 - f. Gasoline wholesale distributors
 - g. Food Markets (meat, grocery and nursery departments)

- D. Horticulture--Ornamental, Turf (Beautification)
 - a. Landscaping and lawn sprinkler contractors with or without nursery sales
 - b. Nursery stock sales
 - c. Golf course and/or hotel caretakers

- E. Plant Industry--Crops, Irrigation, Soil
 - a. Irrigation companies, and water conservation districts
 - b. Land leveling, well drilling, and irrigation pump and equipment sales
 - c. Commercial pest control operators--agricultural

- F. Education and Research

- G. Forestry, Land Management, Wildlife and Recreation

The first five categories included all of the non-farm businesses of economic importance to agriculture in Nevada. The seven categories make it possible to summarize the total employment opportunities in both the non-farm business firms and government agencies that may have employees needing an agricultural background or training.

- 5. The names of the non-farm business firms were obtained from three sources: (1) The yellow pages of the telephone books; (2) Lists of firms holding licenses with the State Department of Agriculture or the Directory of the Nevada Licensed Contractors; (3) County Extension Agents and Vocational Agriculture Teachers. All non-farm business firms and government agencies were selected on the basis of three criteria previously mentioned.

As the interviewers proceeded to cover the state, a few closely related firms were added that were not on the original list.

The levels of employment were classified into eight categories as follows: professional, managers and administrators, supervisory, technical, sales, clerical, skilled occupations, and semi-skilled or service workers. This classification system was used in making the interview by first asking the employer to group all of his employees by the job level of employment. Each level was sub-divided into job titles. Job titles were used as a basis for tabulation. Factors which determined the job level of the employee were: education, experience, and specific function of the job.

EXPLANATION OF PROCEDURES USED IN MAKING INTERVIEWS TO TAKE INTO CONSIDERATION THE TYPES OF BUSINESSES IN THE VARIOUS OCCUPATIONAL FAMILIES

Agricultural and Allied Mechanics.--A complete breakdown of job titles and employee information was obtained from all firms except for six automobile firms classified under 1c. In these six automobile firms only the service departments were included. The purpose of including these firms was to get an indication of the need for mechanics and parts salesmen as this may relate to setting up a future technicians training program. Listed under classification 1d (construction firms), only the employees working in landscaping or the agricultural portion of the business was studied.

Animal Industry.--All employees in all firms were classified and studied.

Business.--This division represented the firms with the greatest number of employees. Job titles and employee information as contained in Part II of the survey form were obtained only on that portion of the business in which the employee needed agricultural training or background.

Horticulture.--Many golf courses in Nevada are under the same management as the resort hotels, only those employees who were responsible for the turf and grounds were studied. All employees in other firms in this division were included.

Plant Industries.--All employees in this classification were studied.

Government Agencies.--In the cities and counties only those employees needing agricultural training or background were studied. The state and federal agencies that were selected were those who had employees who needed an agricultural training or background. All employees were included in the study.

Chart I

SUMMARY OF NON-FARM BUSINESSES ORIGINALLY SELECTED

Occupational Family	1*	2*	3*	4*	5*	6*	6a*	6b*	6c*	6d*	6e*
	Firms Original List	Number Interviewed	Survey Forms Part II Not Complete	Total Complete Interviews	No. Branches Included	No. Firms Not Interviewed	Small	No Contact	Out of Business	Different Business	Refused
Agriculture & Allied Mechanics	106	88	4	84	0	18	11	5	2	0	0
Animal Industry	97	66	0	66	21	31	16	3	9	0	3
Business	164	134	44	90	167	30	11	11	5	1	2
Horticulture	77	46	3	43	0	31	12	7	7	5	0
Plant Industry	44	29	2	27	0	15	7	4	2	1	1
TOTAL	488	363	53	310	188	125	57	30	25	7	6
Percentage forms complete				85.4							
Percentage of original list		74.6				25.4	11.6	6.1	5.1	1.4	1.2
No. firms not available (6c, 6d, 6e)	38										
Total firms available for interview	450										
% available for interview		80.6									

Reason for not making interview.

* Explanation on following page.

Chart I (Continued)

* Explanation of columns

1. Number of firms on original list. List developed as outlined in item four of Procedure. Introductory letters were sent to these firms prior to making personal interviews.
2. Total number of interviews completed and used in Part I of the study.
3. Number of survey forms in which Part II was not completed. Firms not completing this portion of the survey were not agriculturally oriented or did not have employees who needed agricultural type of training.
4. Total firms having all of the survey completed. (Column 2 minus Column 3)
5. Number of branches of the business included with the parent office contained in the interview. (See item three of the Delimitations)
6. Total firms not interviewed.

Reason For Not Making Interview

- 6a. Small firms with less than one full-time employee.
- 6b. Contact not made with the firm for an interview.
- 6c. Firm out of business since sources used for making list was published.
- 6d. Number of firms changing to a different type of business since sources were published.
- 6e. Firms who refused to be interviewed.

Chart II. SUMMARY OF PERCENTAGE OF EMPLOYEES NEEDING AN AGRICULTURAL BACKGROUND COMPARED TO OTHER GROUPS OF TOTAL EMPLOYEES IN NEVADA

Part I

% needing agriculture background or training

1. Total work force compared to all employees needing an agricultural background or training.

Employees in Nevada

Total employees wage & salary	153,900*
Total employees agr. production	<u>9,362**</u>
	163,262

Total employees in Agr. production, government agencies, non-farm business
10,855** + 163,262

6.64

2. Total employees in agr. production as compared to total employees
9,362 + 163,262

5.73

3. Total employees in non-farm businesses needing agriculture background in Nevada as compared to total employees.

716** + 163,262

.43

Total employees in agricultural government agencies needing agric. training and background compared to total employees.

777** + 163,262

.47

SUMMARY OF PERCENTAGES OF EMPLOYEES NEEDING AGRICULTURAL BACKGROUND OF THE NON-FARM BUSINESSES STUDIED

Part II

4. Total employees (8176)*** in 363 non-farm business firms compared to (716) total employees needing a farm background. (Contains 53 firms with 14,074 employees not dealing with agricultural products or having employees needing agricultural background or training.)

4.0

5. Total employees (4102)**** in 310 non-farm businesses compared to total employees (716) needing a farm background. (The firms either have employees needing an agricultural background or part of the business is agriculturally oriented.)

17.5

Source of information:

* Nevada Employment Security Department
Carson City, Nevada estimate May, 1965

** Table 1

*** Table 3

**** Table 12.1

PRESENTATION OF DATA

Even though this is a preliminary report and further analysis of this data will be made at a later date, there are some generalizations that should be made at this time.

1. In Nevada, there are approximately six times as many people employed in agricultural production as there are employees who need agricultural training or background in non-farm businesses and government agencies. Approximately six and a half percent of the total work force in the state of Nevada need an agricultural background or training. Of this number, approximately one percent are engaged in non-farm businesses and agricultural government agencies. There slightly more employees who need agricultural background or training employed in government agencies than there are in non-farm businesses in Nevada. The greatest demand for full time employees in government agencies is for college graduates.
--see Chart III at the conclusion of this section--

2. Table 3 indicates there is not a great demand in any classification of non-farm businesses for people with an agricultural background except in some minor areas. There are very few jobs in non-farm businesses in the state of Nevada in which a person reared on a farm has a distinct advantage over non-farm reared people. Conversely, a farm background does not particularly become a disadvantage in seeking employment. In some cases employers indicated farm-reared people have learned good work habits and have other characteristics that make them superior employees. However, in view of the limited number of employment opportunities for people with a farm background in non-farm businesses, it would seem to indicate that educational programs must be broad enough so that these students will have the training and work habits to find employment in various occupations.

3. On an average, Nevada agricultural non-farm businesses are small. A review of Table 12.2 indicates the average number of employees per firm for the five occupational families was as follows:

Agricultural and allied mechanics.....	14.2
Animal industry.....	18.5
Business.....	13.5
Horticulture.....	9.2
Plant industry.....	8.9
State average.....	13.2

The fact that the businesses are small indicates the reason why the employer desires employees who are able to do many things well. For example, most employers in discussing their secretarial needs indicated they needed a secretary who could do all necessary jobs in the office. Most employers in the mechanical firms indicated their employees needed to do practically all of the mechanical jobs handled by the firm. On the other hand, the large firms, particularly those in the occupational family of business, expressed a need for specialized employees. This re-emphasizes the point that the vocational programs in high school must be broad in scope. In agricultural education, particularly, the student needs thorough comprehension of the fundamentals that would apply to practically any situation in which he is employed.

4. Table 12.2 indicates that the greatest expansion in the numbers of employees five years hence was in the Las Vegas area (75%), Reno area (46%); and all other areas of the state (23%). Many firms interviewed in the Las Vegas and Reno areas which were primarily agricultural in the past have decreased or eliminated the agricultural sections of their businesses in recent years. For this reason, students from the rural areas of the state will need the type and extensiveness of training necessary to be employable in these locations with the greatest labor markets.

5. One of the primary characteristics the employer desires in an employee is stability. In response to the question, "What background do you prefer?", a very common response was preference for a Nevada resident. Due to the nature of Nevada's work climate, the employer was seeking those employees whose tenure would be for a long period. Many employers mentioned the fact that they invested considerable money in training their employees to be able to do the job needed. If the employee did not stay with the firm for a reasonable length of time, the firm was losing money on him.

6. Generally the employee in the greatest demand by most businesses is the individual who has the potential for management or supervisory positions as well as sales positions. Most large firms have programs for identifying and promoting those employees with managerial potential.

7. In general, employers place such personal traits as ambition, dependability, honesty, and initiative as being more important than the subject matter background of employees.

8. As a general rule, the lower the education, the lower the wage; and there is more competition for the job. Many jobs in the skilled job titles do not follow this rule. Generally, employers in the mechanics and other firms where skills are a basic necessity for success on the job are far more directly concerned with what an individual is able "to do" rather than with his formal education. As a broad generalization, a student, in order to reach an acceptable income level, must either get a good education or enter the skilled occupations.

9. There appears to be a trend in many firms in Nevada away from requiring high school graduation as a prerequisite for employment. Instead, they are using selected standardized testing procedures for selection.

10. In many businesses, if an employee has the basic educational knowledge, his growth in the firm depends upon his initiative and development in the job. As one employer of a large firm indicated, there is not a direct relationship between formal education and managerial ability. In many of the firms, the employer prefers a student to work for the firm while attending college or high school rather than entering the firm directly from college. As a general rule, there is no great demand for college graduates entering business directly. One of the reasons given is that a college graduate expects more money than the employer thinks he is worth at the start. As some employers stated, in all jobs in the firm there are many menial tasks that must be done. A person starting from the bottom will usually do these if needed without question.

11. As a general rule, about 90% of employees in non-farm business firms are full time and 10% part time. This almost identically the same ratio between men and women employees (Table 12.4). Most of the part time employees were in the occupational family of business. Women employees and part time employees constituted a larger percentage in government agencies than in non-farm businesses.

12. Almost all of the employers in the large firms and department heads in government agencies recognized the value of on-the-job training as part of the total training program. Some of the basic reasons given by employers in non-farm businesses for their willingness to cooperate with the schools to provide on-the-job training are, first, it gives the employer the opportunity to choose employees who have the training and personal attributes to make a permanent contribution to the firm; secondly, it gives the employee an opportunity to learn responsibilities and life situations that the classroom failed to provide. The most common reason given by the non-farm businesses for not being willing to participate in on-the-job training programs was the limited size of the business. Other reasons were that the type of business was not adaptable to part time or student help, and labor union restrictions. Table 5 indicates that slightly more firms would be willing to cooperate in on-the-job training programs at the two-year technical level than at the high school level. The principle reason for this was that the students would be more mature. Many firms indicated they did not want high school age students working in the firm.

13. A review of Tables 9, 10, and 11 indicate that the employer had a more clear cut opinion of what should be taught in high school vocational programs than in the two-year technical schools. The most frequently mentioned subject matter for high school vocational programs were the abilities to spell and write. The employer was not referring to sophisticated writing; but the ability to write reports, invoices, and other common papers used as part of the business world. Another frequently mentioned need by most employers in all occupational families was general mathematics. The kind of mathematic needed were such fundamentals as the ability to figure percentages, fractions, and other common arithmetic used in business. In the field of agricultural and allied mechanics, employers mentioned the need to figure decimals in thousandths of an inch. The need for mathematics was indicated for the mechanic to be able to design and plan objects to be constructed as well as the ability to read blueprints and make mathematical calculations.

14. A special effort was made by all of the interviewers throughout the state to examine the area of horticulture. This occupational family is the most unstable of the five studied (Chart I). One of the reasons for this is that there is practically no production of ornamental plants in the state of Nevada, which would make it a year-round business. Most of the firms in the area of horticulture are in Las Vegas. This includes many small businesses starting the the area of sales. The general trend has been that they have soon included construction, additional sales activities, or have gone out of business. Part of the problem is that the period of horticultural sales is limited to a short season. Most of the employers interviewed, particularly in the Las Vegas area, indicated that the employees needed instruction in growing plants in that particular desert climate. The investigations of this research indicate that there are going to be many problems connected with planning an instructional program to meet the needs of employers. Instruction in the area of horticulture must be closely related to training for salesmanship. In most of the food chains and other sales units where ornamental plants are sold, the employee must be able to sell other merchandise if he is to fit into the organizational plan of the firm. The other possibility is to provide training in landscape contracting and similar work.

15. Table 11 showed the area of general business management subject matter need ranking first in the two-year technical program and fourth in the high school program. Most employers indicated today's employee does not know enough of the basic principles upon which business operates.

Tables 9 and 10 show the need for knowledge of general business being distributed nearly equally among the five occupational families. Based upon indications of this study, it would appear the subject matter area of instruction pertaining to general business should be expanded and stressed in the state of Nevada.

16. General mechanics as an area of subject matter need is shown in Table 11 ranking second at the high school level and fifth at the two-year technical level. Tables 9 and 10 show the need for general mechanics subject matter being nearly evenly spread among all the occupational families. Vocational programs should stress instruction in welding, machinery repair and overhaul, engine (gas and diesel) overhaul, and such mechanical skills needed in sales positions (horticulture and other agriculturally connected jobs) in addition to providing a good basic understanding and skill in general mechanics.

P A R T I

The tables in Part I are based upon all of the interviews made--three-hundred-sixty-three firms interviewed.

TABLE 1 SUMMARY OF EMPLOYMENT OPPORTUNITIES IN AGRICULTURE IN NON-FARM BUSINESSES, GOVERNMENT AGENCIES, AGRICULTURAL PRODUCTION IN THE STATE OF NEVADA, 1965.

Classification	No. Employers or Dept. Heads Interviewed	Number of Farms	Persons Currently Employed Needing an Agricultural Background				
			Total	Full-time	Part-time	% Total Employees	
Non-farm businesses	363		716*	656	60	6.6	11.0
Agricultural connected government agencies	39		777	591	186	7.2	9.9
Agricultural Production**			9362	4746	4616	86.2	79.1
TOTAL	402	2796	10855	5993	4862	100.0	100.0

*Includes employees that the employers indicated the employees needed an agricultural background. In some small firms this may not have included the owner.

**Estimates of County Agricultural Extension Agents.

TABLE 1a BREAKDOWN OF AGRICULTURAL PRODUCTION BY TYPES OF PRODUCTION AS ESTIMATED BY COUNTY AGRICULTURAL AGENTS.

Types of Agri. Production	Number of Farms	Persons Currently Employed Needing an Agricultural Background	
		Total	Part-time
Dairy	142	287	199
Livestock	1042	4975	2430
General - Crops (farms or ranches)	1612	4100	2117
Total agricultural production	2796	9362	4746

Table 2

SUMMARY OF THE NON-FARM BUSINESSES CLASSIFIED INTO SUBDIVISIONS OF OCCUPATIONAL FAMILIES TO INCLUDE NUMBER OF FIRMS, SIZE OF FIRM BY NUMBER OF EMPLOYEES, PERCENT GROSS INCOME AGRICULTURALLY ORIENTED IN THE STATE OF NEVADA, 1965.

Subdivisions of Occupational Families	No. of Firms			Size of Firms			Av. Percent Gross Income Agriculturally Oriented	
	No. Firms	By Number of Employees		Range	Median	Range	Median	
		Total Employees	Range					
Agriculture and Allied Mechanics	34	383	2-47	6.0	0-99	20.0		
Sales - mach & equip. &/or serv.	27	383	1-192	5.0	0-90	9.5		
Metal fabrication &/or equip. repair	21	262**	1-49	8.0	0-75	15.0		
Sales - supplies, mach. parts, bldg. materials	6	266	3-180	19.0	0-25	15.0		
Construction - bldgs. & other	88	1294		7.0*		15.2*		
Sub-Totals								
Animal Industry	14	532	3-192	25.0	0-100	99.0		
Milk processing & sales	21	260	1-42	8.0	3-100	100.0		
Meat packers &/or wholesalers	13	88	1-28	5.0	1-100	100.0		
Livestock buyers &/or trucking	11	54	2-13	5.0	0-100	3.0		
Veterinarians - private practitioners	7	93***	1-77	4.0	1-100	95.0		
Other livestock firms	66	1027		10.1*		82.8*		
Sub-Totals								
Business - Econ., Finance, Agr. Supply, Serv.	11	2014	2-1125	117.0	0-100	3.0		
Banks	29	208	2-38	5.0	0-100	50.0		
Insurance and real estate	16	5547	2-1700	93.5	0-80	5.0		
Utilities - elec., telephone, & railroads	23	1358	1-450	7.0	0-100	90.0		
Feed dealers - agr. supply, processors	10	2828	2-1250	65.0	0-17	0.0		
Chemicals & metals - (agr. & other)	13	437	3-175	11.0	0-50	6.5		
Gasoline wholesale distributors	32	2778	2-750	43.0	3-100	40.0		
Markets & grocery stores	134	15170		39.2*		37.3*		
Sub-Totals								

Table 2 (continued)

Subdivisions of Occupational Families	Size of Firms			Av. Percent Gross Income Agriculturally Oriented	
	By Number of Employees			Range	Median
	No. Firms	Total Employees	Range	Range	Median
Horticulture - Ornamental, Turf Landscaping & lawn sprinkler contractors	22	218	2-28	3-100	100.0
Nursery stock sales	8	34	2-4	85-100	100.0
Golf course &/or hotel caretakers	16	175***	3-50	0-100	75.0
Sub-Totals	46	427			91.3*
Plant Industry - Crops, Irrigation, Soil Irrigation companies and water conservation districts	8	123	1-92	0-100	100.0
Land leveling, well drilling & irrigation pump & equip. sales	12	79	2-14	4-100	92.5
Commercial pest control operators	9	65	2-24	0-100	7.0
Sub-Totals	29	258			68.0*
TOTAL	363	18176			

*Weighted = number of firms X median for each category ÷ total number of firms
 **Includes only the service departments in the automobile firms interviewed
 ***Includes only the turf, grounds and shrub caretakers or employees working in agricultural part of the business

Table 3

SUMMARY OF EMPLOYER OPINIONS IN ALL THREE HUNDRED SIXTY THREE NON-FARM BUSINESSES TO SHOW THE PERCENTAGE OF EMPLOYEES WHO NEED A FARM BACKGROUND COMPARED TO THE TOTAL EMPLOYEES.

Sub-divisions of Occupational Families	No. Firms		Firms w/Employees Needing Agr. Background		No. Employees Needing Agriculture Background		% of Total Employees Needing Agr. Background
	Interviewed	Total	Total	%	Total*	Parttime	
Agricultural & Allied Mechanics	34	383	6	17.6	40	40	10.4
Sales - Mach. & equip. &/or serv.	27	383	5	18.5	43	42	11.2
Metal Fabrication &/or equip. repair	21	262	3	14.3	7	7	2.7
Sales - supplies, mach. parts, bldg. materials	6	266	2	33.3	21	20	8.0
Construction - bldgs. & other	88	1294	16	18.2	111	109	8.6**
Sub-Totals							
Animal Industry	14	532	6	42.8	30	30	5.6
Milk processing & sales	21	260	4	19.0	41	40	15.8
Meat packers &/or wholesalers	13	88	5	38.5	10	7	11.4
Livestock buyers &/or trucking	11	54	1	9.1	6	1	11.1
Veterinarians - private practitioners	7	93	6	85.7	85	83	91.4
Other livestock firms	66	1027	22	33.3	172	161	16.7**
Sub-Totals							
Business - Econ., Finance, Agr. Supply, Serv.	11	2014	5	45.4	79	79	3.9
Banks	29	208	9	31.0	25	17	12.0
Insurance & Real Estate	16	5547	4	25.0	12	12	.2
Utilities - elec., telephone, & railroads	23	1358	9	39.1	53	39	3.9
Feed dealers - agr. supply, processors	10	2828	0	0.0	0	0	0.0
Chemicals & Metals (Agr. & other)	13	437	2	15.4	45	43	10.3
Gasoline wholesale distributors	32	2778	5	15.6	73	70	2.6
Markets & Grocery stores	134	15170	34	25.4	287	260	1.9**
Sub-Totals							
Horticulture - Ornamental, Turf	22	218	2	9.1	6	2	3.2
Landscaping & lawn sprinkler contractors	8	34	1	12.5	1	1	2.9
Nursery stock sales	16	175	5	31.2	49	39	38.8**
Golf course &/or hotel caretakers	46	427	8	17.4	70	60	17.8**
Sub-Totals							

Table 3 (Continued)

Sub-divisions of Occupational Families	No. Firms		Firms w/ Employees Needing Agr. Background		No. Employees Needing Agriculture Background		% of Total Employees Needing Agr. Background
	Total	Interviewed	Total	%	Total*	Parttime	
Plant Industry - Crops, Irrigation, Soil Irrigation companies & Water Conservation Districts	123	8	3	37.5	38	35	30.9
Land leveling, well drilling & irrigation pump & equip. sales	70	12	8	66.6	37	31	52.8
Commercial pest control operators	$\frac{65}{258}$	$\frac{9}{29}$	$\frac{1}{12}$	$\frac{11.1}{41.4}$	$\frac{1}{76}$	$\frac{1}{66}$	$\frac{1.5}{29.4^{**}}$
Sub-Totals	18176	363	92	25.3	716	656	4.0
TOTAL							

* Total number of employees given is that indicated by the employer as needing an agricultural background. In some small firms the owner was not included.

** Percentages are weighted averages of the occupational families.

TABLE 4 SUMMARY OF THE NUMBER OF EMPLOYEES WHO NEED AGRICULTURAL TRAINING OR BACKGROUND IN GOVERNMENT AGENCIES - - CITY, COUNTY, STATE, FEDERAL - - CLASSIFIED INTO OCCUPATIONAL FAMILIES, NEVADA, 1965.

Occupational Families	No. Agenc. Inter-viewed	Total of All Employees in Agencies Interviewed	No. Employees in Agencies		% of Total Employees Needing Agr. Background
			Needng Agr. Training	or Background Part-time	
A. Agricultural & Allied Mechanics					
City	0	0	0	0	0.0
County	0	0	0	0	0.0
State	1	25	20	0	80.0
Federal	0	0	0	0	0.0
Sub-Total	1	25	20	0	80.0
B. Animal Industry					
City	0	0	0	0	0.0
County	0	0	0	0	0.0
State	1	16	14	0	87.5
Federal	1	13	9	0	69.2
Sub-Total	2	29	23	0	79.3
C. Business - Economics, Financial					
City	0	0	0	0	0.0
County	0	0	0	0	0.0
State	2	15	11	0	73.3
Federal	2	38	10	24	89.8
Sub-Total	4	53	45	24	84.9
D. Horticulture - Ornamental, Turf					
City	10	1833	52	24	2.8
County	3	568	20	2	3.5
State	1	20	17	0	85.0
Federal	0	0	0	0	0.0
Sub-Total	14	2421	89	26	3.7

TABLE 4 (Continued)

Occupational Families	No. Agenc. Inter-viewed	Total of All Employees in Agencies Interviewed	No. Employees in Agencies Needing Agr. Training or Background		% of Total Employees Needing Agr. Background
			Total	Part-time	
E. Plant Industry - Crops, Soils					
Irrigation	0	0	0	0	0.0
City	0	0	0	0	0.0
County	1	14	12	0	85.7
State	0	0	0	0	0.0
Federal	1	14	12	0	85.7
Sub-Total	1	14	12	0	
F. Education & Research					
City	0	0	0	0	0.0
County	0	0	0	0	0.0
State	7	199	116	35	75.9
Federal	1	105	5	0	4.8
Sub-Total	8	304	121	35	51.3
G. Land Management, Wildlife & Recreation, Forestry					
City	0	0	0	0	0.0
County	0	0	0	0	0.0
State	2	154	126	0	81.8
Federal	7	605	205	101	50.6
Sub-Total	9	759	331	101	56.9
TOTALS	39	3605	777	186	21.6

Table 5 SUMMARY OF THREE HUNDRED SIXTY-THREE EMPLOYER RESPONSES TO THE QUESTION, "WOULD YOU BE WILLING TO COOPERATE IN A TRAINING PROGRAM FOR ON-THE-JOB TRAINING?"

Sub-divisions of Occupational Families	No. Firms	High School		2-Year Technical or Vocational	
		Yes	No	Yes	No
		Undecided		Undecided	
Agricultural & Allied Mechanics	34	22	9	3	2
Sales - mach. & equip. &/or serv.				5	2
Metal fabrication &/or equip. repair	27	12	13	2	2
Sales - supplies, hardware, mach. parts, bldg. materials	21	12	7	2	3
Construction - bldgs. & other	$\frac{6}{88}$	$\frac{3}{49}$	$\frac{1}{30}$	$\frac{2}{9}$	$\frac{1}{8}$
Sub-Total		55.6	34.0	10.2	9.0
Percentage				66.0	25.0
Animal Industry	14	9	5	0	1
Milk processing & sales				3	1
Meat packers &/or wholesalers	21	11	9	1	1
Livestock dealers & buyers &/or trucking	13	5	8	0	0
Veterinarians - private practitioners	11	6	3	2	3
Other livestock firms	$\frac{7}{66}$	$\frac{4}{35}$	$\frac{1}{26}$	$\frac{2}{5}$	$\frac{3}{8}$
Sub-Total		53.0	39.4	7.6	12.1
Percentage				56.1	31.8
Business - Econ., Finance, Agr. Supply, Serv.	11	6	4	1	1
Banks				3	1
Insurance & Real Estate - ranch & farm spec.	29	10	16	5	7
Utilities - elec. power, telephone & railroads	16	6	5	1	1
Feed dealers - agr. supply, processors	23	20	2	3	3
Chemicals & metals (agr. & other)	10	2	5	2	2
Gasoline wholesale distributors	13	4	7	6	5
Markets & grocery stores	$\frac{32}{134}$	$\frac{23}{71}$	$\frac{8}{47}$	$\frac{1}{16}$	$\frac{2}{17}$
Sub-Total		53.0	35.0	12.0	12.7
Percentage				62.7	24.6

Table 5 (continued)

Sub-divisions of Occupational Families	No. Firms	High School			2-Year Technical or Vocational		
		Yes	No	Undecided	Yes	No	Undecided
Horticulture - Ornamental, Turf Landscaping & lawn sprinkler contractors Nursery stock sales Golf course &/or hotel caretakers Sub-Total Percentage	22 8 16 46	16 5 10 31 67.4	5 1 3 9 19.5	1 2 3 6 13.0	16 5 10 31 67.4	5 1 3 9 19.5	1 2 3 6 13.0
Plant Industry - Crops, Irrigation, Soil Irrigation Companies & water conserv. dist. Land leveling, well drilling & irrigation pump & equipment sales Commercial pest control operators - agr. Sub-Total Percentage	8 12 9 29	3 8 8 19 65.5	4 3 1 8 27.5	1 1 0 2 7.0	3 9 8 20 69.0	4 2 1 7 24.0	1 1 0 2 7.0
TOTALS	363	205	120	38	230	92	41
Average weighted percentage		56.4*32.9*		10.5*	63.4*25.3*		11.5*

*Average weighted percentage = Sum of No. Firms X percent ÷ Total Firms

TABLE 6 SUMMARY OF RESPONSES OF THIRTY-NINE DEPARTMENT HEADS IN GOVERNMENT AGENCIES INTERVIEWED TO THE QUESTION, "WOULD YOU BE WILLING TO COOPERATE IN A TRAINING PROGRAM FOR ON-THE-JOB TRAINING?"

Occupational Families	No. Dept. Heads	High School			2-Year Tech. or Voc.		
		Yes	No	Undecided	Yes	No	Undecided
A. Agricultural & Allied Mechanics							
City	0	--	--	--	--	--	--
County	0	--	--	--	--	--	--
State	1	1	0	0	1	0	0
Federal	--	--	--	--	--	--	--
Sub-Totals	1	1	0	0	1	0	0
Percent		100.0			100.0		
B. Animal Industry							
City	0	--	--	--	--	--	--
County	0	--	--	--	--	--	--
State	2	1	1	0	1	1	0
Federal	1	0	1	0	0	1	0
Sub-Totals	3	1	2	0	1	2	0
Percent		33.3	66.6		33.3	66.6	
C. Business - Economics, Financial							
City	0	--	--	--	--	--	--
County	0	--	--	--	--	--	--
State	1	0	1	0	0	1	0
Federal	2	1	1	0	1	1	0
Sub-Totals	3	1	2	0	1	2	0
Percent		33.3	66.6		33.3	66.6	
D. Horticulture - Ornamental, Turf							
City	9	5	2	2	6	1	2
County	3	3	0	0	3	0	0
State	2	1	1	0	1	1	0
Federal	0	--	--	--	--	--	--
Sub-Totals	14	9	3	2	10	2	2
Percent		64.3	21.4	14.3	71.4	14.3	14.3



TABLE 6 (Continued)

Sub-divisions of Occupational Families	No. Dept. Heads	High School		2-Year Tech. or Voc.	
		Yes	No	Yes	No
E. Plant Industry - Crops, Soils					
Irrigation	0	--	--	--	--
City	0	--	--	--	--
County	1	1	0	1	0
State	0	--	--	--	--
Federal	1	1	--	1	--
Sub-Totals	1	1	0	1	0
Percent		100.0	--	100.0	--
F. Education & Research					
City	0	--	--	--	--
County	0	--	--	--	--
State	7	4	2	6	0
Federal	1	0	1	0	0
Sub-Totals	8	4	3	6	0
Percent		50.0	37.5	75.0	25.0
G. Land Management, Wildlife & Recreation					
Forestry	0	--	--	--	--
City	0	--	--	--	--
County	2	1	1	2	0
State	7	1	4	2	6
Federal	9	2	5	2	6
Sub-Totals	9	2	5	2	6
Percent		22.2	55.6	22.2	66.7
Totals	39	19	15	22	12
Percent		48.7*	38.5*	56.4*	30.8*

*Weighted Percent = No. Dept. Heads X percent in each category + Total No. Dept. Heads.

Table 7 SUMMARY OF THE THREE HUNDRED SIXTY-THREE NON-FARM BUSINESSES BY YEARS OF OPERATION DISTRIBUTED INTO THREE CATEGORIES INDICATING LENGTH OF TENURE, ALSO, RANGE AND MEDIAN.

Sub-divisions of Occupational Families	No. Firms	No. of Businesses by Years in Operation				Range	Median
		1-5 Years	6-20 Years	Over 21 Years			
Agricultural & Allied Mechanics							
Sales - machinery & equip. &/or services	34	8	14	12	1-62	20.0	
Metal Fabrication &/or equip repair	27	6	13	8	2-55	11.0	
Sales - supplies, machinery parts, bldg. mat.	21	7	2	12	1-65	21.0	
Construction - bldgs. & other	6	0	5	1	6-40	13.5	
Animal Industry							
Milk processing and sales	14	3	5	6	1-59	16.0	
Meat packers &/or wholesalers	21	7	8	6	1-80	10.0	
Livestock buyers &/or trucking	13	2	6	5	2-50	18.0	
Veterinarians - private practitioners	11	4	7	0	1-19	8.0	
Other livestock firms	7	3	4	0	1-11	8.0	
Business - Finance. Agr. Supply, Service							
Banks	11	3	1	7	1-62	26.0	
Insurance firms & real estate	29	4	16	9	2-50	14.0	
Utilities	16	1	3	12	4-95	37.5	
Feed dealers - agr. supply, processors	23	5	6	12	1-64	24.0	
Chemicals and metals	10	1	4	5	4-51	17.5	
Gasoline and wholesale distributors	13	1	3	9	4-40	30.0	
Markets and grocery stores	32	7	17	8	1-75	13.0	
Horticulture - Ornamental, Turf							
Landscaping and lawn sprinkler contractors	22	8	10	4	2-40	11.0	
Nursery stock sales	8	4	4	0	4-13	6.0	
Golf course &/or hotel caretakers	16	8	6	2	1-29	5.5	
Plant Industry - Crops, Irrigation, Soil							
Irrigation companies and water conservation dist.	8	0	1	7	7-64	43.0	
Land leveling, well drilling & irrigation pump and equip. sales	12	7	4	1	1-59	3.5	
Commercial pest control operators - agr.	9	4	5	0	2-20	7.0	

TABLE 8 SUMMARY OF SOURCES MOST FREQUENTLY USED BY THREE HUNDRED SIXTY-THREE NON-FARM BUSINESSES AND THIRTY-NINE GOVERNMENT AGENCIES INTERVIEWED IN SECURING NEW EMPLOYEES, AS TO OCCUPATIONAL FAMILIES, NEVADA 1965.

Occupational Families	No. Firms or Gov. Agcy.	% State Empl. Service	% Adver- tisement	% Indv. Recon.	Employees' Own Initia- tive	% College Placement Service	% Public High Schools	% Unions	% Other
Agricultural & Allied Mechanics Non-Farm Businesses Gov. Agencies	88 1	23.8 0.0	10.9 0.0	18.8 0.0	39.6 0.0	0.0 0.0	0.0 0.0	1.9 0.0	5.0 100.0*
Animal Industry Non-Farm Businesses Gov. Agencies	66 3	18.9 0.0	5.1 0.0	17.7 50.0	43.0 0.0	5.1 0.0	3.8 0.0	5.1 0.0	1.3 50.0
Business - Economics, Finance, Agr. Supply, Service Non-Farm Businesses Gov. Agencies	134 3	24.0 0.0	9.5 0.0	17.1 0.0	34.8 0.0	1.9 50.0	2.5 0.0	7.0 0.0	3.2 50.0
Horticulture - Ornamental, Turf Non-Farm Businesses Gov. Agencies	46 13	37.8 26.7	2.2 20.0	13.3 16.7	35.6 26.7	0.0 0.0	2.2 3.3	6.7 0.0	2.2 6.6
Plant Industry - Crops, Irrigation, Soil Non-Farm Businesses Gov. Agencies	29 1	28.1 0.0	12.5 0.0	21.9 0.0	37.5 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 100.0*
Education & Research Gov. Agencies	8	0.0	0.0	0.0	0.0	11.1	11.1	0.0	77.8
Forestry, Land Management, Wildlife and Recreation Gov. Agencies	10	0.0	0.0	6.3	12.5	12.5	6.2	0.0	62.5

* Other: Most State and Federal Agencies are required to draw employees from Civil Service rosters.

Table 9

COMPILED REPORT OF RESPONSES OF FOUR HUNDRED AND TWO EMPLOYERS IN NON-FARM BUSINESSES AND GOVERNMENT AGENCIES TO THE QUESTION, "WHAT DO YOU THINK SHOULD BE EMPHASIZED IN HIGH SCHOOL VOCATIONAL PROGRAMS?"

Column Code	Agriculture & Allied Mech.		Animal Industry			Business-Economics Finance, Supply				Hort.		Plant Industry		Gov. Agen.	Totals						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Sales-mach. & equip.	Metal fab. & repair	Sales-supplies	Milk processing	Meat products	Livestock dealers	Veterinarians	Banks	Ins. & real estate	Utilities	Feed & agr. supply	Chem. & gas distr.	Food markets	Sales & constr.	Caretakers	Irrigation	Pest control	Gov. agencies. City, Co., State, Fed.	Total responses	% total category	% each category is of grand total
AGRICULTURE	2	1	1	2	1	5	1	1	1	1	5	1	1	2	5	7	4	4	40	26.0	
General agriculture																			32	20.8	
Horticulture																			11	7.1	
Soils & irrigation																			10	6.5	
Animal husbandry																			10	6.5	
Animal nutrition																			9	5.8	
Animal management																			18	5.2	
L.S. judg. & grad.																			8	5.2	
Agronomy																			6	3.9	
Insecticides & chem.																			4	2.6	
Meat cutting & mkt.																			4	2.6	
Animal diseases																			4	2.6	
Use of fertilizers																			2	1.3	
Forestry																			154	100.0	13.2
Sub-Totals	2	1	2	6	13	15	2	1	3	2	16	2	10	34	17	13	6	12	154	100.0	13.2
CLERICAL																			53	40.2	
Acctg. & bkcp.																			30	22.7	
Gen. cler. courses																			25	18.9	
Typing																			24	18.2	
Bus. machines																			1	1	11.3
Sub-Totals	10	4	8	5	2	3	3	16	16	10	6	12	7	10	2	17	6	1	132	100.0	11.3

Table 5 (continued)

C. Column Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
COMMUNICATIONS																					
Spelling & writing	4	3	6	6	3	2	1	13	7	9	11	10	6	5	3	3	4	2	98	64.9	
Speaking abilities	4		1	1	4	1	1	4	6	1	2	5	3		2	1	7	44	29.1		
Gen. Communications	$\frac{1}{9}$	$\frac{3}{3}$	$\frac{7}{7}$	$\frac{7}{7}$	$\frac{1}{8}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{1}{18}$	$\frac{2}{15}$	$\frac{1}{11}$	$\frac{1}{14}$	$\frac{15}{15}$	$\frac{9}{9}$	$\frac{5}{5}$	$\frac{5}{5}$	$\frac{1}{6}$	$\frac{1}{10}$	$\frac{9}{151}$	$\frac{6.0}{100.0}$	$\frac{12.9}{12.9}$	
Sub-Totals																					
ECONOMICS																					
Gen. Business & mgmt.	5	2	5	2	2	1	2	1	13	3	4	6	9	4	1	4	2	2	68	63.6	
General economics		1		1	4		1	2	7	3	3		7	1			1	19	17.7		
Mdse. & marketing	1		1				1				$\frac{1}{8}$							11	10.3		
Business law	$\frac{6}{6}$	$\frac{3}{3}$	$\frac{6}{6}$	$\frac{3}{3}$	$\frac{6}{6}$	$\frac{1}{1}$	$\frac{3}{3}$	$\frac{2}{5}$	$\frac{5}{25}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{6}{6}$	$\frac{16}{16}$	$\frac{5}{5}$	$\frac{1}{1}$	$\frac{4}{4}$	$\frac{2}{3}$	$\frac{9}{107}$	$\frac{8.4}{100.0}$	$\frac{9.2}{9.2}$	
Sub-Totals																					
MATHEMATICS																					
Gen mathematics	4	10	4	5	6	4	2	1	3	2	2	1	9	4	2	3	5	70	81.4		
Alg. & geometry	$\frac{2}{6}$	$\frac{7}{17}$	$\frac{4}{4}$	$\frac{5}{5}$	$\frac{6}{6}$	$\frac{4}{4}$	$\frac{2}{2}$	$\frac{1}{1}$	$\frac{2}{5}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{3}{3}$	$\frac{9}{9}$	$\frac{4}{4}$	$\frac{1}{3}$	$\frac{2}{5}$	$\frac{5}{5}$	$\frac{16}{86}$	$\frac{18.6}{100.0}$	$\frac{7.4}{7.4}$	
Sub-Totals																					
MECHANICS																					
Gen. mechanics	15	6	7	3	1	4	4	1	1	6	7	10		1	5	5	17	88	28.1		
Welding	10	15	5	1		1	1		2	5	1	1			5	5	45	45	14.4		
Diesel & heavy equip.	10	7						3		3	1	4	1		2	2	28	28	8.9		
Auto mechanics	8	6	3		3	3				3		2	1	2	1	1	25	25	8.0		
Carpt. & bldg. const.	3	1	4		1	1						2	2				19	19	6.1		
Mach. & metal worker	4	9	2			2				6	3	1		1	1	1	18	18	5.8		
Elec., wiring, motors	2	1				2				1				1	5	5	16	16	5.1		
Equip. oper. & mach. rep.	2				1	3				1				4	1	3	2	14	4.5		
Drafting & plan reading			3	1								1					13	13	4.1		
Gas engines	2					2					1	1			7		13	13	4.1		
Equip. maintenance	1	1		1		1				1	2	1				2	1	11	3.5		
Plumb. & refrig.	1	2	1							2		1		3	1	1	11	11	3.5		
Eng. & surveying	1	1								1					2		5	5	1.6		
Parts & inventory	2			2						1							4	4	1.3		
Electronics	$\frac{1}{62}$	$\frac{52}{52}$	$\frac{25}{25}$	$\frac{5}{5}$	$\frac{2}{2}$	$\frac{17}{17}$	$\frac{3}{3}$	$\frac{1}{29}$	$\frac{3}{3}$	$\frac{1}{29}$	$\frac{1}{15}$	$\frac{24}{24}$	$\frac{4}{4}$	$\frac{12}{12}$	$\frac{13}{13}$	$\frac{29}{29}$	$\frac{20}{20}$	$\frac{3}{313}$	$\frac{1.0}{100.0}$	$\frac{26.7}{26.7}$	
Sub-Totals																					

Table 9 (continued)

Column Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PERSONAL TRAITS																					
Personality traits	6	10	2	2	6	4	4	1	2		2		15	1			1	3	55	30.2	
Public relations	3	4	6	3	5	2	2	3	5		2	6	8			3	4	2	52	28.6	
Salesmanship	9	2	2	3	4	1	1		3		2	6	13					1	51	28.0	
Practical work exp.		4	2	2	2	2	2	1	3	1	3	12	3	3	1	1	5	6	24	13.2	
Sub-Totals	18	20	12	8	17	9	9	5	10	1	9	12	39	6	1	4	5	6	182	100.0	15.6
SCIENCE																					
Biological science						2					1	1		10	1		5	1	20	46.5	
Physical science			1	3	1	1										3	4	4	12	27.9	
Chemistry			1	1	4	4						3		10	1	2	9	5	11	25.6	
Sub-Totals			1	4	4	4						4		10	1	5	9	5	43	100.0	3.7
TOTALS	113	100	65	43	53	55	12	46	77	55	70	78	94	86	43	82	34	62	1168	100.0	



Table 10

COMPILED REPORT OF RESPONSES OF FOUR HUNDRED AND TWO EMPLOYERS IN NON-FARM BUSINESSES AND GOVERNMENT AGENCIES TO THE QUESTION, "WHAT DO YOU THINK SHOULD BE TAUGHT IN A TWO-YEAR TECHNICAL PROGRAM ADMINISTERED BY THE COLLEGE OF AGRICULTURE AT THE UNIVERSITY OF NEVADA?"

	Agriculture & Allied Mech.		Animal Industry				Business, Economics, Finance, Supply				Hort.		Plant Industry		Gov. Agen.		Totals				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Column Code																					
AGRICULTURE																					
Horticulture		3		1								2		31	16			4	62	17.6	
Soils & irrig.		3			3			1				1		9	7	9		7	42	11.8	
Gen. agr.	2	1	1	1	1	5	3	3	1		7			1	1	4		2	33	9.3	
Meat cutting & mkt.					14	3						14		5		1	6	5	32	9.0	
Insect & weed control	1		1		5	7	3	2			9	2	1	1	1	1		1	31	8.7	
Animal husbandry	1	2	1		1	2		2		4	3	1	1	2	9	4		3	22	6.2	
Agronomy	1	1		1	1	2	4				1	1	1	10	1	2		4	20	5.6	
Farm mgmt.											2	1		1	1			2	17	4.8	
Plant path. & ecol.	1		2								3			1	6			2	16	4.5	
Use of fertilizers				1	1	1		1			5	2		1		1		1	15	4.2	
Animal nutrition		1		1	1	3					3							1	11	3.1	
Animal diseases				8							1								11	3.1	
Dairy husbandry				1														1	10	2.8	
Lab. tech.														2					4	1.1	
Forestry														3	1				355	100.0	25.3
Sub-Totals	6	11	5	12	23	25	14	12	8	1	43	3	23	65	42	22	8	32	355	100.0	25.3
CLERICAL																					
Acct. & bookkeeping	6	2	4	1	2	1	1	4	9	1	1	4	7	3		1		2	47	52.9	
Business machines	3	1	1	1				2		1	1	1	4			2			18	20.2	
Gen. clerical courses	2	1	2		1		1	1		2	1	1	1	1		1		1	14	15.7	
Typing	1		1		1			2	1	1	2	1	1	4	1			3	10	11.2	
Sub-Totals	12	7	8	2	3	1	1	9	10	5	4	6	12	4	1	4	3	3	89	100.0	6.3

Table 10 (continued)

Column Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
COMMUNICATIONS																					
Spelling & writing	1		1	2	1	2	1	5	6	4	1	3	6	1	3	1		5	41	58.6	
Speaking abilities	3		1	1	5	1	1	2	6	4	4	2	1	1	3	1		3	29	41.4	
Sub-Totals	4		2	3	6	3	2	7	12	4	5	5	7	1	3	1		8	70	100.0	5.0
ECONOMICS																					
General business & mgmt.	5	1	5	5	7	4	1	4	10	6	5	9	8	4	2	4	2	2	84	43.5	
General economics	1	1		2	1	2	1	2	11	3	2	3				4		1	34	17.6	
Mdse. & marketing	1		2	1		1	1	4		4	4	4	14			1		1	33	17.1	
Business law		1		1		1	2	2	15	2		2						4	27	14.0	
Real estate & appraisal							2	2	12	11	11	16	1	4	2	9	2	8	15	7.8	
Sub-Totals	7	3	7	8	8	8	3	4	48	11	11	16	25	4	2	9	2	8	193	100.0	13.7
MATHEMATICS																					
Gen. mathematics		3		2	3	2	1	5	1	1	3	6	8	3	3	2		1	39	68.4	
Algebra & geometry	1	8	1	2	3	2	2	4	1	1	3	6	2	3	2	2		1	18	31.6	
Sub-Totals	1	11	1	4	3	4	1	9	1	1	3	6	10	3	2	2		1	57	100.0	4.1
MECHANICS																					
General mechanics	1	3	2	1	1	3	1	1		5	8	6		2		6	1	15	55	14.5	
Advanced welding	9	11	6	1		1		1		2	3	3				4		1	41	10.8	
Drafting, plan reading	2	11	2			1				1		2	1	3	1	2		3	28	7.3	
Diesel & heavy equipment repair	12	1		4		4	1					1			1	7			27	7.1	
Advanced mechanics	17	5	3									1							26	6.8	
Auto mechanics	7	5	1	1						1	2	4	1			2		1	25	6.6	
Eng. & surveying	2	5	1					2		2	1	1			1	6		2	23	6.0	
Mach. & metal worker	5	9	2	1	1	1						1		1		2		1	23	6.0	
Equip. maintenance	5	5	3	2		2	1				2	1				1		1	21	5.5	
Equip. oper. & repair	2			5		5		1			1	1	2	1	1	6		1	21	5.5	
Electronics	2	1	1				1			5	1	2	2	1	1	1		3	20	5.2	
Elec., wiring, motors	3	1	1							2	1	2		4		3		18	4.7		
Carpt. & bldg. const.	2	2	2				2	1				2		1		1		4	17	4.5	
Gas engines	6			2			1			1		2		1		1		14	3.7		
Plumb. & refrig.	1	2	1	1			1					2	3	1				11	2.9		
Hydraulics	5																	6	1.6		
Parts inventory	1	1	25	4	2	18	7	1	5	19	19	32	10	15	4	42	3	31	381	100.0	27.2
Sub-Totals	82	62	25	4	2	18	7	1	5	19	19	32	10	15	4	42	3	31	381	100.0	27.2



Table 10 (continued)

Column Code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PERSONAL TRAITS																					
Salesmanship & advt.	8	1	3	2	3	2	2	2	12	3	2	7	12	5		1	1	5	69	34.3	
Public relations	4	1	4	3	4	3	2	8	4	4	2	7	11	2		2	2	2	59	29.3	
Personality traits	3	3		1		8		4	2	2	4	1	6	3	1				39	19.4	
Practical work exp.	4	4		1	1	1		1	1	1		1	2	1	1			18	9.0		
Human relations						1		1	3		2	3	3	2	1			3	16	8.0	
Sub-Totals	19	9	7	7	8	15	2	6	28	10	10	16	34	13	3	3	1	10	201	100.0	14.3
SCIENCE																					
Physical sci. & chem.				1	1	1	3			1	5	1	3	3	5	12	4		36	63.2	
Biological science			1	2	2	1	2			1	1	1	4	7	3	2	2	4	21	36.8	
Sub-Totals			1	3	3	1	5			1	6	1	7	7	8	14	6	4	57	100.0	4.1
TOTAL	131	100	56	36	53	75	34	50	120	51	96	90	122	112	63	97	20	97	1403	100.0	



Table 11

SUMMARY OF FOUR HUNDRED AND TWO EMPLOYER RESPONSES TO THE TWO QUESTIONS: "WHAT SHOULD BE TAUGHT IN A HIGH SCHOOL VOCATIONAL PROGRAM AND A TWO YEAR TECHNICAL PROGRAM ADMINISTERED BY THE COLLEGE OF AGRICULTURE AT THE UNIVERSITY OF NEVADA?"

I. Rank order of major subject matter or topic divisions

Rank Order	<u>High School</u>		<u>Two Year Technical School</u>	
	Division	% total	Division	% total
1.	Mechanics	26.7	Mechanics	27.2
2.	Personal Traits	15.6	Agriculture	25.3
3.	Agriculture	13.2	Personal Traits	14.3
4.	Communications	12.9	Economics	13.7
5.	Clerical	11.3	Clerical	6.3
6.	Economics	9.2	Communications	5.0
7.	Mathematics	7.4	Mathematics	4.1
8.	Science	3.7	Science	4.1

II. Summary to compare High School and Two Year Technical School

	<u>High School</u>	<u>Two Year Technical School</u>
Total Topic areas listed	47	52
Number topic areas with 20 or more listed	19	24
Percent of total	74.6%	63.6%
Number topic areas with less than 20 listed	28	29
Percent of total	25.4%	36.4%
Total Employer responses	1168	1403

Table 11 (cont.)

III. Summary of specific subject matter or topic areas listed in rank order from the highest to include twenty or more responses, also the percentage of each topic compared to the total number of responses listed by the employers.

		High School		Two Year Technical School			
Rank	Topic Areas	No. Responses	%	Rank	Topic Areas	No. Responses	%
1.	Spelling and writing	98	8.39	1.	General Business Management	84	5.98
2.	General Mechanics	88	7.53	2.	Salesmanship	69	4.91
3.	General Mathematics	70	5.99	3.	Horticulture	62	4.41
4.	General Business & Management	68	5.82	4.	Public Relations	59	4.20
5.	Personality Traits	55	4.70	5.	General Mechanics	55	3.92
6.	Accounting and Bookkeeping	53	4.53	6.	Soils and Irrigation	42	2.99
7.	Public Relations	52	4.45	7.	Advanced Welding	41	2.92
8.	Salesmanship	51	4.36	8.	Spelling and writing	41	2.92
9.	Welding	45	3.85	9.	Personality Traits	39	2.77
10.	Speaking Abilities	44	3.76	10.	General Mathematics	39	2.77
11.	General Agriculture	40	3.42	11.	Physical Science and Chemistry	36	2.56
12.	Horticulture	32	2.73	12.	General Economics	34	2.42
13.	General clerical courses	30	2.57	13.	General Agriculture	33	2.35
14.	Diesel and heavy equipment	28	2.39	14.	Merchandising and Marketing	33	2.35
15.	Auto Mechanics	25	2.14	15.	Meat Cutting and Marketing	32	2.28
16.	Typing	25	2.14	16.	Insect and Weed Control	31	2.20
17.	Practical work experience	24	2.05	17.	Speaking Abilities	29	2.06
18.	Business Machines	24	2.05	18.	Animal Husbandry	29	2.06
19.	Biological Sciences	20	1.71	19.	Drafting and plan reading	28	1.99
				20.	Business Law	27	1.92
				21.	Diesel & Heavy Equipment Repair	27	1.92
				22.	Advanced Mechanics	26	1.85
				23.	Auto Mechanics	25	1.78
				24.	Machinists and Metal workers	23	1.63
				25.	Engineering and surveying	23	1.63
				26.	Agronomy	22	1.56
				27.	Biological Sciences	21	1.49
				28.	Equipment Maintenance	21	1.49
				29.	Equipment Operation and Repair	21	1.49
				30.	Farm Management	20	1.42
				31.	Electronics	20	1.42

TABLE 12.1
COMPILED OPINIONS OF THREE HUNDRED TEN NON-FARM BUSINESSES CLASSIFIED INTO POPULATION AREAS BY
SUBDIVISIONS OF OCCUPATIONAL FAMILIES TO INCLUDE: NUMBER OF EMPLOYEES; FULL-TIME, PART-TIME,
MALE AND FEMALE; EXPANSION IN NUMBER OF EMPLOYEES FIVE YEARS HENCE; AND REPLACEMENTS NEEDED
DURING THE NEXT FIVE YEARS, NEVADA, 1965.

SUBDIVISIONS OF OCCUPATIONAL FAMILIES	Total Employees	I. Reno, Sparks, Carson City				II. Las Vegas, Henderson, B.C.				III. All Other Nevada Areas													
		Current		Expansion 5 yrs. hence		Current		Expansion 5 yrs. hence		Current		Expansion 5 yrs. hence											
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female										
Agri. & Allied Mechanics																							
Sales - Mach. & Equip.																							
Metal Fabrication &/or equip. repair	383	8	132	14	0	0	84	311	6	92	15	1	0	43	66	20	107	12	4	6	67	52	
Sales-supplies, Mach. parts, Bldg. materials	383	7	114	5	137	0	79	265	7	79	6	0	1	79	65	13	37	0	4	0	9	25	
Construction - Bldg. & other	262	7	135	10	0	0	34	131	5	66	2	1	0	34	128	9	37	6	1	4	13	27	
	266	1	20	1	1	0	31	5	3	58	1	0	0	71	16	2	185	0	0	0	0	0	
Sub-Totals	1294	23	401	30	138	0	228	712	21	295	24	2	1	227	275	44	366	18	9	10	89	104	
Animal Industry																							
Milk processing & sales	532	5	166	14	5	0	136	205	5	268	29	0	9	82	212	4	35	4	0	2	18	46	
Meat Packer &/or wholesaler	260	10	98	9	3	1	16	52	4	69	10	1	0	26	66	7	58	6	4	1	20	4	
Livestock Buyer & Trucking	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	58	3	18	9	14	16	
Veterinarian	54	3	6	2	2	0	7	13	5	13	5	9	3	16	56	3	3	4	4	3	2	8	
Other Livestock Firms	93	1	5	0	0	0	0	0	3	4	2	0	0	2	2	3	79	0	2	1	18	247	
Sub-Totals	1027	19	275	25	10	1	159	270	17	354	46	10	12	126	336	30	233	17	28	16	72	321	

TABLE 12.1 (Continued)

SUBDIVISIONS OF OCCUPATIONAL FAMILIES	Total Employees	I. Reno, Sparks, Carson City										II. Las Vegas, Henderson, B.C.										III. All Other Nevada Areas									
		No. of firms		Current		Expansion 5 yrs. hence		Replacements Next 5 yrs.		No. of firms		Current		Expansion 5 yrs. hence		Replacements Next 5 yrs.		No. of firms		Current		Expansion 5 yrs. hence		Replacements Next 5 yrs.							
		Male	Female	Full-time	Part-time	Male	Female	Male	Female	Male	Female	Full-time	Part-time	Male	Female	Male	Female	Male	Female	Full-time	Part-time	Male	Female	Male	Female						
Business- Econ. Finance	226	4	216	6	0	0	60	100	1	11	1	0	0	5	0	0	1	2	0	0	35	16	0	0	0	0					
Banks	94	7	21	10	7	3	20	16	0	0	0	0	0	0	0	0	11	35	16	0	0	20	0	0	0	8					
Ins. & Real Estate	22	1	9	0	0	0	4	3	1	1	0	0	0	0	0	0	3	11	1	0	3	0	3	0	0	4					
Utilities	140	5	21	2	6	1	18	60	5	19	1	2	1	10	5	11	46	4	4	33	4	8	0	64	0						
Feed Dealer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Chemicals & Metals	68	2	49	0	0	0	4	25	0	0	0	0	0	0	0	0	3	13	4	1	1	8	4	4	0						
Gasoline Distr.	546	4	48	4	1	1	30	41	17	403	46	5	0	556	678	5	29	5	2	2	5	5	2	9	9						
Food Markets																															
Sub-Totals	1096	23	364	22	14	5	136	245	24	424	48	7	1	571	683	34	136	30	36	9	44	89									
Horticulture	218	13	99	14	3	3	94	42	8	64	19	7	5	73	52	1	1	2	0	1	2	1	2	1	1						
Landscaping Contr.	34	5	13	0	1	1	5	0	1	0	1	6	0	5	1	2	5	1	0	6	3	0	3	0	0						
Nursery Stock sales	175	10	114	2	9	1	72	131	4	29	0	11	0	21	105	2	5	1	3	0	12	4	4	4	4						
Golf & Hotel																															
Sub-Totals	427	28	226	16	13	5	171	173	13	93	20	24	5	99	158	5	11	4	3	7	17	5									
Plant Industry	123	2	3	0	1	0	4	0	0	0	0	0	0	0	0	6	98	8	11	2	3	50									
Irrigation Companies	70	3	13	0	0	1	9	3	0	0	0	0	0	0	0	9	44	0	10	2	21	143									
Land Lev., Well Dr.	65	0	0	0	0	0	0	0	6	28	5	1	0	28	2	3	23	7	1	0	21	22									
Pest control operator																															
Sub-Totals	258	5	16	0	1	1	13	3	6	28	5	1	0	28	2	18	165	15	22	4	45	215									
TOTALS	4102	98	1282	93	176	12	707	1403	81	1194	143	44	19	1051	1454	131	911	84	98	46	267	734									

P A R T I I

Tables presented in this portion of the study (Part II) are based upon THREE-HUNDRED-TWENTY-NINE non-agricultural firms indicating they employ persons who needed an agricultural training or background.

Tables preceding this point were based upon a total of three-hundred sixty-three firms interviewed and from whom answers to Part I of the study were obtained. The total three-hundred-sixty-three firms responding to Part I contained fifty-three firms indicating they were not agriculturally orientated or did not employ people who needed agricultural training or background. The fifty-three firms were deducted from the total to give authenticity to the data presented hereafter.

Table 12.2 SUMMARY OF THREE HUNDRED AND TEN NON-FARM BUSINESSES CLASSIFIED INTO OCCUPATIONAL FAMILIES TO INCLUDE: AVERAGE NUMBER OF EMPLOYEES PER FIRM DIVIDED INTO FULL TIME, PART TIME, MALE AND FEMALE; EMPLOYEES NEEDED DURING THE NEXT FIVE YEARS DUE TO EXPANSION, REPLACEMENT AND TOTAL FUTURE EMPLOYEE REQUIREMENTS; PERCENTAGE OF FULL TIME, PART TIME, MALE AND FEMALE; ALSO, EMPLOYEES NEEDED DURING THE NEXT FIVE YEARS DUE TO EXPANSION, REPLACEMENT, AND TOTAL FUTURE EMPLOYEE REQUIREMENTS, COMPARED TO THE TOTAL CURRENT EMPLOYEES.

OCCUPATIONAL FAMILIES	I. Reno, Sparks, Carson City										II. Las Vegas, Boulder City, Henderson									
	No. Firms	Total Employees	Full Time Male	Full Time Female	Part Time Male	Part Time Female	Expansion 5 Yrs. Hence	Replacements During 5 Yrs.	3. Future Emp. Requirements	No. Firms	Total Employees	Full Time Male	Full Time Female	Part Time Male	Part Time Female	Expansion 5 Yrs. Hence	Replacements During 5 Yrs.	3. Future Emp. Requirements		
Agri. & Allied Mech.																				
Total	23	569	401	30	138	0	228	712	940	21	322	295	24	2	1	227	275	502		
Average	.	24.7	17.4	1.3	6.0	0	9.9	30.9	40.8		15.3	14.0	1.1	.1	.01	10.8	13.1	23.9		
Percentage		100.0	70.5	5.3	24.2	0.0	40.1	125.1	165.2		100.0	91.6	7.4	.6	.3	70.5	85.4	155.9		
Animal Industry																				
Total	19	311	275	25	10	1	159	270	429	17	422	354	46	10	12	126	336	462		
Average		16.4	14.5	1.3	.5	.1	8.4	14.2	22.6		24.8	20.8	2.7	58.8	70.6	7.4	19.8	27.2		
Percentage		100.0	88.4	8.0	3.2	.3	51.1	86.8	137.9		100.0	93.9	10.9	2.4	2.8	29.8	79.6	109.5		
Business																				
Total	23	405	364	22	14	5	142	266	408	24	480	424	48	7	1	571	683	1254		
Average		17.6	15.8	.9	.6	.2	6.2	11.6	17.7		20.0	17.7	2.0	29.2	.04	23.8	28.4	52.2		
Percentage		100.0	89.9	5.4	3.4	1.2	35.1	65.7	100.7		100.0	88.2	10.0	1.4	.2	119.0	142.3	261.2		
Horticulture																				
Total	28	260	226	16	13	5	171	173	344	13	142	93	20	24	5	99	158	257		
Average		9.3	8.1	.6	.5	.2	6.1	6.2	12.3		10.9	7.1	1.5	1.8	.4	7.6	12.1	19.8		
Percentage		100.0	86.9	6.1	5.0	1.9	65.8	66.5	132.3		100.0	65.5	14.1	16.9	3.5	69.7	111.3	181.0		
Plant Industry																				
Total	5	18	16	0	1	1	13	3	16	6	34	28	5	1	0	28	2	30		
Average		3.6	3.2	0	.2	.2	2.5	0.6	3.2		5.7	4.7	.8	.2	0	4.7	0.3	5.0		
Percentage		100.0	88.9	0.0	5.5	5.5	72.2	16.7	88.9		100.0	82.3	14.7	2.9	0.0	82.3	5.9	88.2		
TOTAL AVERAGE PERCENTAGE	98	1563	1282	93	176	12	713	1424	2151	81	1400	1194	143	44	19	1051	1454	2505		
		15.9	13.1	.9	1.8	.1	7.3	14.5	21.9		17.3	14.7	1.8	.5	.2	13.0	8.0	30.9		
		100.0	82.0	5.9	11.3	.8	45.6	91.1	137.6		100.0	85.3	10.2	3.1	1.3	75.1	103.8	178.9		

Table 12.2continued

III. All Other State Areas

	No. Firms	T. Employees		Full Time		Part Time		Expansion 5 Yrs. Hence	Replacements During 5 Yrs.	T. Future Emp. Requirements
		Male	Female	Male	Female	Male	Female			
Agr. & Allied Tech.										
Total	44	403	366	18	9	10	89	104	193	
Average		9.1	8.3	.4	.2	.2	2.0	2.4	4.4	
Percentage		100.0	90.8	4.5	2.2	2.5	22.1	25.8	47.9	
Animal Industry										
Total	30	294	233	17	28	16	72	321	393	
Average		9.8	7.8	.6	.9	.5	2.4	10.7	13.1	
Percentage		100.0	79.3	5.8	9.5	5.4	24.5	109.2	133.7	
Business										
Total	34	211	136	30	36	9	44	89	133	
Average		6.2	4.0	.9	1.0	.3	12.9	26.2	39.1	
Percentage		100.0	64.4	14.2	17.1	4.3	20.8	42.2	63.0	
Horticulture										
Total	5	24	11	4	3	7	17	5	22	
Average		5.0	2.2	.8	.6	1.4	3.4	1.0	4.4	
Percentage		100.0	44.0	16.0	12.0	28.0	68.0	20.0	88.0	
Plant Industry										
Total	18	206	165	15	22	4	45	215	260	
Average		11.4	9.2	.8	1.2	.2	2.5	11.9	14.4	
Percentage		100.0	80.1	7.3	10.7	1.9	21.8	104.4	126.2	
TOTAL	131	1139	911	84	98	46	267	734	1001	
AVERAGE		8.7	6.9	.6	.7	.3	2.0	5.6	7.6	
PERCENTAGE		100.0	80.0	7.4	8.6	4.0	23.4	64.4	87.9	

Table 12.3 SUMMARY OF EMPLOYEES IN BOTH NON-FARM BUSINESSES AND GOVERNMENT AGENCIES TO INCLUDE: NUMBER OF EMPLOYEES PER FIRM, PERCENTAGE OF EMPLOYEES COMPARED WITH THE TOTAL EMPLOYEES; DIVIDED INTO FULL TIME, PART TIME, MALE AND FEMALE; EXPANSION, REPLACEMENT AND TOTAL FUTURE EMPLOYEE REQUIREMENTS, NEVADA, 1965.

	No. Firms	Total		CURRENT				Expansion 5 Yrs. Hence	Replacement During Next 5 Yrs.	Future Employee Requirements
		Male	Female	Full Time		Part Time				
				Male	Female	Male	Female			
Summary Non Farm Businesses										
Total	310	4102	3387	320	318	77	2031	3612	5643	
Average		13.2	10.9	1.03	1.02	.25	6.5	11.7	18.2	
Percentage		100.0	82.6	7.8	7.7	1.9	49.5	88.0	137.6	
Summary Government Agencies										
Total	39	1073	725	167	173	8	185	808	993	
Average		27.1	18.5	4.2	4.3	.2	4.8	20.7	25.5	
Percentage		100.0	67.6	15.6	16.1	.7	17.2	75.3	92.5	
Summary Provides Both Non Farm Businesses & Government Agencies										
TOTAL	349	5175	4112	487	491	85	2216	4420	6636	
AVERAGE		14.8	11.8	1.4	1.4	.2	6.3	12.7	19.0	
PERCENTAGE		100.0	79.5	9.4	9.5	1.6	42.8	85.4	128.2	

Table 12.4 SUMMARY OF ALL EMPLOYEES IN BOTH NON-FARM BUSINESSES AND GOVERNMENT AGENCIES TO INCLUDE: A COMPARISON OF THE TOTAL NUMBER OF FULL TIME EMPLOYEES TO THE PART TIME EMPLOYEES; ALSO A COMPARISON OF TOTAL MALE EMPLOYEES TO THE FEMALE EMPLOYEES.

Summary of Both Non Farm Businesses and Government Agencies	Number of Full Time Compared to Part Time Employees			Number of male employees Compared to Female Employees		
	Total	Full Time	Part Time	Total	Male	Female
Non Farm Businesses						
Total	4102	3707	395	4102	3705	397
Percentage	100.0	90.4	9.6	100.0	90.3	9.7
Government Agencies						
Total	1073	892	181	1073	898	175
Percentage	100.0	83.1	16.9	100.0	83.7	16.3
TOTAL BOTH						
TOTAL EMPLOYEES	5175	4599	576	5175	4603	572
PERCENTAGE OF TOTAL	100.0	88.9	11.1	100.0	88.9	11.1

Table 13

SUMMARY OF THIRTY-NINE GOVERNMENT AGENCIES CLASSIFIED INTO OCCUPATIONAL DIVISIONS WITH TOTAL, AVERAGE AND PERCENTAGE TO SHOW: CURRENT EMPLOYEES, TOTAL, FULL-TIME AND PART-TIME, MALE AND FEMALE; FIVE YEAR EXPANSION, REPLACEMENT AND TOTAL FUTURE EMPLOYEE REQUIREMENT.

Occupational Families	No. Agencies	Total Employees		Current		Expansion		Replacement		Total Future Employee Requirements
		Male	Female	Full-time	Part-time	5 Years Hence	During Next 5 Years			
Agriculture & Allied Mechanics	1	15	0	0	0	0	0	0	0	23
Animal Industry	2	28	4	0	0	3	20	20	20	27
Business	4	74	17	20	4	6	21	26	26	76
Plant Industry	1	30	0	15	0	0	26	67	67	9.5
Total	8	147	21	35	4	9	8.4	45.6	51.7	
Average Percentage	-	18.4	2.6	4.4	.5	1.1				
	-	100.0	1.2	12.2	0.0	6.1				
Horticulture	14	82	1	10	0	39	61	61	100	7.1
Total	-	5.9	.07	.7	0.0	2.8	4.4	4.4	4.4	122.0
Average Percentage	-	100.0	1.2	12.2	0.0	47.6				
Education & Research	8	202	52	27	4	62	262	262	324	40.5
Total	-	25.2	6.5	3.4	.5	7.5	32.7	32.7	40.5	160.4
Average Percentage	-	100.0	14.5	15.7	0.0	30.7	129.7	129.7	160.4	
Forestry & Land Management	9	642	93	101	0	75	418	418	493	54.8
Wildlife & Recreation	-	71.3	10.3	11.2	0.0	8.3	46.4	46.4	54.8	76.8
Total	-	100.0	14.5	15.7	0.0	11.7	65.1	65.1	76.8	
Average Percentage	-									
TOTALS	39	1073	167	173	8	185	808	808	993	25.5
AVERAGE*	-	27.1	4.2	4.4	.2	4.8	20.7	20.7	25.5	92.5
PERCENTAGE**	-	100.0	15.6	16.1	.7	17.2	75.3	75.3	92.5	

* Average number of employees per agency in all occupational families.

** Percentage of employees per agency in all occupational families.

Table 14.1

EMPLOYERS INTERVIEWED IN THIRTY-NINE AGRICULTURAL GOVERNMENT AGENCIES: A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO THE ESTIMATED EXPANSION FIVE YEARS HENCE, AND ESTIMATED REPLACEMENTS; ALSO, A SCALE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles	No. Depts. With Job Title	No. Cur- rently Employed	Expansion 5 Yrs. Hence No. % Increase	Replacement During Next 5 Yrs. No. % Replacement	Ave. Difficulty in Filling Position*
1. Professional Occupations					
Veterinarian	4	9	1 11.1	8 88.9	2.25
Financial Advisor	4	19	2 10.5	10 52.6	2.25
Research	2	7	1 14.3	1 14.3	2.00
Teaching - College, High School	2	1	5 20.0	1 100.0	2.00
Extension	1	26	0 0.0	8 30.8	2.00
Home Extension Agent	1	12	2 16.7	3 25.0	2.00
Pathologist	1	1	0 0.0	0 0.0	3.00
Entomologist	1	1	0 0.0	0 0.0	1.00
Chemist, Biologist, Botanist, Soil Scientist	6	235	50 21.3	33 35.3	2.00
Public relations - Newspaper, TV, Agriculturist	2	4	2 50.0	0 0.0	1.00
Teaching & Research	5	47	14 29.8	11 23.4	1.60
Forester	2	39	12 30.8	28 71.8	2.00
Extension Specialist	3	4	6 150.0	1 25.0	2.66
Graduate Assistant	5	28	82.1	339.3	2.00
Sub-Totals	39	433	27.3**	57.5**	2.25**
2. Managers & Administrators					
Administrator	14	40	8 20.0	16 40.0	2.28
Administrative Assistant	5	15	4 26.7	18 120.0	2.40
Sub-Totals	19	55	12 21.8**	34 61.8**	2.31**
3. Supervisory Occupations					
District Supt. or Supervisor	16	30	2 6.1	8 26.6	1.69
Assistant Supervisor	9	13	2 15.4	9 69.2	1.89
Foreman	2	4	0 0.0	5 125.0	1.50
Sub-Totals	27	47	4 8.5**	22 46.8**	1.74**

Table 14.1 (Continued)

Level of Employment Job Titles	No. Depts. With Job Title	No. Cur- rently Employed	Expansion 5 Yrs. Hence No. % Increase	Replacement During Next 5 Yrs. No. % Increase	Ave. Difficulty in Filling Position*
4. Technical Occupations					
Fieldman - general	9	94	3 3.2	35 37.2	1.66
Inspector	2	3	1 33.3	4 133.3	1.00
Laboratory technician	4	12	2 1.7	17 141.7	1.33
Pest control - rodents	1	30	0 0.0	15 50.0	3.00
Sub-Totals	16	139	6 4.3**	71 51.1**	1.58**
5. Clerical Occupations					
Secretary	14	100	18 18.0	86 86.0	1.68
Helper	4	49	3 4.9	21 42.8	1.75
Sub-Totals	18	149	21 14.1**	107 71.8**	1.69**
6. Skilled Occupations					
Special Equipment Operator	2	5	0 0.0	1 20.0	2.00
Maintenance - Spec. Equip.	1	1	0 0.0	1 100.0	2.00
Greens Keeper	5	19	16 84.2	6 31.6	2.16
Sub-Totals	8	25	16 64.0**	8 32.0**	2.10**
7. Semi-skilled or Service Workers					
Landscape - propagation, shrubs, lawns, grounds maintenance	12	55	34 61.8	25 45.4	1.58
Pest control - weeds, insects	1	15	0 0.0	15 100.0	1.00
Unskilled part-time help	5	23	7 30.4	83 360.9	1.00
Truck Driver	1	4	0 0.0	1 25.0	1.00
General construction worker	1	3	5 166.6	10 333.3	2.00
Farmer	3	14	0 0.0	2 14.3	1.00
Trainee	7	16	43 268.7	116 725.0	1.57
Reporter of Data	1	20	0 0.0	100 500.0	2.00
Farm hand	2	5	0 0.0	1 20.0	1.00
Sub-Totals	33	155	89 57.4**	353 227.7**	1.39**
Totals	160	1003	266	844	1.86**

*Scale: None = 1; Some = 2; Great difficulty = 3.

**Weighted = No. Depts. with Job Title X percent or Ave. Difficulty in Filling Position + Total No. Depts.

TABLE 14.2 EMPLOYEES IN EIGHTY-FOUR NON-FARM BUSINESSES INTERVIEWED IN AGRICULTURE AND ALLIED MECHANICS: A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO THE ESTIMATED EXPANSION FIVE YEARS HENCE, AN ESTIMATED REPLACEMENT DURING THE NEXT FIVE YEARS; ALSO, A SCALE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles***	No. Firms with Job Title	No. Cur- rently Empl.	Expansion 5 Years Hence No. % Increase	Replacement During Next 5 Years No. % Replacement	Ave. Difficulty in Filling Position**
1. Professional Occupations Public Accountant	3	3	0.0	0.0	2.00
2. Managers & Administrators General Manager	47	56	17.8	3	2.50
Office Manager	13	12	14.2	3	2.30
Sales Manager	10	10	70.0	5	2.44
Parts Manager	8	9	88.9	5	2.71
Service Manager	10	10	20.0	1	2.62
Plant Manager	4	4	0.0	2	2.75
Purchasing Manager	4	5	25.0	1	2.25
Credit Manager	2	2	0.0	0	3.00
Advertising Manager	2	0	100.0	0	2.00
Sub-Totals	100	103	29.3**	20	2.50**
3. Supervisory Occupations Shop Foreman	18	33	109.0	12	2.22
Plant Superintendent	5	7	85.7	6	2.20
Sub-Totals	23	40	103.9**	18	2.21**
4. Technical Occupations Draftsman	1	3	33.3	1	2.00
Estimator Engineer	1	1	100.0	0	3.00
Sub-Totals	2	4	66.6**	1	2.50**
5. Sales Occupations General Salesman	25	48	39.6	24	2.00
Machinery Salesman	9	18	50.0	29	2.44
Driver Salesman	4	8	225.0	7	2.50
Partsman	20	50	44.0	108	2.37
Job Write-up Salesman	3	4	75.0	2	2.00
Clerk	12	28	35.7	20	1.42
Sub-Totals	73	156	53.1**	190	2.09**

TABLE 14.2 (Continued)

Level of Employment Job Titles****	No. Firms with Job Title	No. Cur- rently Empl.	Expansion 5 Years Hence No. % Increase	Replacement During Next 5 Years No. % Replacement	Ave. Difficulty in Filling Position***
6. Clerical Occupations					
Bookkeeper	19	26	7	14	2.00
General Secretary	34	53	14	53	1.76
Sub-Totals	53	79	21	67	1.85**
7. Skilled Occupations					
Automotive & Gen. Mech.	35	148	63	115	1.88
Diesel & Automotive and/or heavy equip.	7	68	56	235	2.43
Steel Worker	4	145	35	221	1.25
Welder	13	36	27	40	1.61
Equip. & Plant Operator	5	17	7	3	2.20
Sheet Metal Worker	5	10	31	41	1.40
General Repair	6	9	1	13	1.33
Machinist	4	5	13	20	3.00
Metal Fab Layout Man	2	6	3	3	2.00
Ornamental Iron Worker	1	3	1	1	3.00
Electric Motor Winding	1	2	3	0	2.00
Sub-Totals	83	449	240	692	1.88**
8. Semi-Skilled or Service					
Truck Driver	12	16	8	7	1.60
General Construction	5	15	17	41	1.20
Shipping & Receiving	4	8	5	10	1.00
Warehouseman	4	9	30	9	1.50
General Laborer	8	18	30	35	1.57
Janitor	4	6	0	22	1.00
Sub-Totals	37	72	90	124	1.40**
Total	374	903	508	1,112	2.06*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X Percentage of scale for each job title + Total No. Firms.

***Average of employer responses using scale: None = 1; Some = 2; Great Difficulty = 3.

****All similar job titles in all categories under each heading listed on Table 2 are included.

TABLE 14.3 COMPILED OPINIONS OF SIXTY-SIX NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF ANIMAL INDUSTRY; A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO ESTIMATED REVISION FIVE YEARS HENCE, AND REPLACEMENT DURING THE NEXT FIVE YEARS; ALSO, A SCALE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles***	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position***
			5 Yrs. Hence No. % Increase	During Next 5 Yrs. No. % Replacement	No. % Increase	No. % Replacement	
1. Professional Occupations							
Veterinarian	9	14	8	57.1	3	21.4	2.25
Attorney for Livestock Firm	1	1	0	0.0	0	0.0	3.00
Financial Advisor	1	1	0	0.0	0	0.0	3.00
Sub-Totals	11	16	8	46.7**	3	17.5**	2.39**
2. Managers & Administrators							
General Manager	51	70	1	1.4	0	0.0	1.67
Office Manager	13	13	3	23.0	6	46.1	1.71
Sales Manager	10	13	5	38.5	2	15.4	1.62
Plant Manager	7	7	1	14.3	1	14.3	2.00
Credit Manager	2	2	2	100.0	0	0.0	1.00
Sub-Totals	83	105	12	12.7**	9	10.3**	1.68**
3. Supervisory Occupations							
Shop Foreman	5	5	2	40.0	0	0.0	2.00
Ranch Foreman	3	6	0	0.0	0	0.0	1.35
Slaughterhouse Superintendent	2	2	4	200.0	0	0.0	3.00
Sales Yard Superintendent	1	1	1	100.0	0	0.0	1.00
Plant or Mill Superintendent	16	18	7	38.9	6	33.3	2.00
Sub-Totals	27	32	14	11.6**	6	19.7**	1.96**
4. Technical Occupations							
Laboratory Technician	6	5	2	40.0	5	100.0	1.67
Artificial Inseminator	2	1	5	250.0	0	0.0	1.00
Sub-Totals	8	6	7	92.5**	5	75.0**	1.50**
5. Sales Occupations							
General Salesman	17	60	16	26.6	66	110.0	1.69
Driver Salesman	11	229	85	37.0	281	123.0	1.70
Store--Display Salesman	2	9	10	111.0	25	277.0	1.00
Sub-Totals	30	298	111	36.0**	372	126.0**	1.65**
6. Clerical Occupations							
Bookkeeper	21	30	9	30.0	20	66.6	1.71
General Secretary	23	56	15	26.7	31	55.3	1.68
Sub-Totals	44	86	24	28.3**	51	60.7**	1.69**

TABLE 14.3 (Continued)

Level of Employment Job Titles****	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position***
			No.	5 Yrs. Hence % Increase	No.	During Next 5 Yrs. % Replacement	
7. Skilled Occupations							
Dairy Plant Processor	6	24	3	12.5	10	41.6	2.25
Milk Driver-Bulk Tank	4	9	3	33.3	2	22.2	1.67
Mill Operator	1	1	0	0.0	0	0.0	2.00
Dairy Plant Maintenance	7	10	5	50.0	3	30.0	1.67
Meat Firm-Spec. Equip. Operator	2	10	2	20.0	1	10.0	1.50
Meat Cutter	16	79	23	29.1	9	11.3	1.50
Apprentice--Meat Cutter	6	12	4	33.3	1	8.3	1.00
Butcher	3	13	9	69.2	1	7.7	1.67
General Mechanic	9	18	9	50.0	6	33.3	1.86
Cattle Truck Driver-Diesel	6	15	5	33.3	7	46.7	1.67
Sub-Totals	60	191	63	35.6**	40	23.4**	1.64**
5 8. Semi-Skilled or Service Workers							
Truck Driver	16	44	9	20.4	65	148.0	1.23
Slaughterhouse Employee	3	10	0	0.0	0	0.0	1.00
Warehouseman	11	84	10	12.0	82	97.6	1.12
Veterinary Animal Care	8	18	8	44.4	45	25.0	2.00
Janitor	6	11	2	18.2	8	72.7	1.33
Ranch Maintenance	3	5	1	20.0	3	60.0	1.00
Horse Wrangler & Cowboy	3	9	4	44.4	20	222.0	1.00
General Laborer	15	101	5	4.9	213	211.0	1.10
Sub-Totals	65	282	39	18.3**	436	124.5**	1.25**
TOTALS	328	1,016	278	25.2*	922	55.3*	1.63*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figures in each column for each job title divided by Total Firms.

***Scale: None = 1, Some = 2, Great Difficulty = 3.

****All similar job titles in all categories under each heading as listed on Table 2

TABLE 14.4

COMPILED OPINIONS OF EMPLOYERS OF NINETY NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF, ECONOMICS, FINANCE, AGRICULTURAL SUPPLY, SERVICE: A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO THE EXPANSION FIVE YEARS HENCE, AN ESTIMATED REPLACEMENT DURING THE NEXT FIVE YEARS; ALSO, A SCALE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles****	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position***
			5 Yrs. Hence No.	% Increase	During Next 5 Yrs. No.	% Replacement	
1. Professional Occupations							
Ranch Appraiser & Accountant	2	4	1	25.0	0	0.0	2.00
Water Engineer	1	6	3	50.0	2	33.3	3.00
Sub-Totals	3	10	4	33.3**	2	11.1**	2.33**
2. Managers & Administrators							
Real Estate & Insurance-Gen. Mgr.	17	25	0	0.0	2	8.0	2.50
Feed Stores & Supplies-Gen. Mgr.	15	20	3	15.0	2	10.0	2.57
Petroleum Distributor-Gen. Mgr.	9	10	0	0.0	1	10.0	2.60
Bank Credit & Loan Manager	6	221	60	27.1	100	45.2	2.67
Food Market-Gen. Mgr.	15	52	61	122.0	77	148.0	2.18
Food Market-Meat Dept. Mgr.	2	1	1	100.0	1	50.0	2.25
Food Market-Produce Mgr.	4	6	2	33.3	0	0.0	2.50
Office & Credit Manager	12	17	4	23.5	4	23.5	2.54
Dept. & Assistant Mgr.	4	32	34	106.2	65	203.1	2.25
Sub-Totals	84	383	165	38.8**	252	48.3**	2.47**
3. Supervisory Occupations							
Food Market-Produce Dept. Supr.	17	37	27	73.0	9	24.3	1.88
Food Market-Meat Dept. Supr.	17	32	21	65.6	18	56.2	1.80
Plant Superintendent	6	8	0	0.0	0	0.0	2.67
Rural Electric Line Supervisor	1	1	0	0.0	0	0.0	2.00
Shop and/or Ranch Supervisor	2	2	0	0.0	0	0.0	2.00
Sub-Totals	43	80	48	54.8**	27	31.8**	1.97**
4. Technical Occupations							
Food Market-Produce Buyer	2	1	4	400.0**	0	0.0**	2.50**

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title ÷ Total Firms.

***Average of employer responses using scale: None = 1; Some = 2; Great Difficulty = 3.

****All similar job titles in all categories under each heading as listed on Table 2.

TABLE 14.4 (Continued)

Level of Employment Job Titles***	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position**
			No.	% Increase	No.	% Replacement	
5. Sales Occupations							
Farm Supply Salesman	3	9	6	66.7	4	44.4	1.67
Rural Petroleum Salesman	7	21	0	0.0	20	95.2	2.14
Plumbing & Heating Salesman	1	6	5	83.3	20	33.3	3.00
Nursery Salesman	6	11	14	127.3	25	227.3	2.33
Insurance Salesman	10	59	55	93.2	29	49.1	1.60
Real Estate Salesman	8	11	4	36.4	0	0.0	1.20
General Salesman	5	7	3	42.8	17	242.8	1.60
Driver Salesman	6	15	1	6.7	3	20.0	1.33
Feed Salesman	3	6	4	66.7	1	16.7	2.33
Clerks - Store or Business	7	20	34	170.0	59	295.0	1.57
Sub-Totals	56	165	126	70.0**	178	109.6**	1.72**
6. Clerical Occupations							
Bookkeeper	10	15	2	13.3	1	6.7	1.71
General Secretary	23	38	21	55.3	29	76.3	1.74
Sub-Totals	33	53	23	42.6**	30	55.2**	1.73**
7. Skilled Occupations							
Water Estimator	1	3	1	33.3	1	33.3	2.00
Mechanics & Maintenance	2	3	3	100.0	0	0.0	2.00
Mill Operator	2	9	0	0.0	4	44.4	2.00
Market Meat Cutter	20	148	164	110.8	165	111.5	1.42
Market Produce Dept. Worker	12	90	111	123.3	54	60.0	1.58
Rural Electric Lineman	2	8	2	25.0	3	37.5	1.00
Gasoline Bulk Tank Driver	8	24	9	37.5	9	37.5	1.87
Sub-Totals	47	285	290	91.0**	236	73.3**	1.58**
8. Semi-Skilled or Service Workers							
Apprentice Produce Worker	4	11	11	100.0	5	45.4	1.00
Apprentice Meat Cutter	6	10	7	70.0	5	50.0	1.33
Apprentice Market Manager	1	36	45	125.0	105	29.2	1.00
Meat Wrapper:	6	38	55	144.7	98	257.9	1.83
Farm Machinery Worker	2	16	0	0.0	0	0.0	1.50
Warehouseman	6	14	3	21.4	12	85.7	1.17
Truck Driver:	7	13	0	0.0	1	7.7	1.71
General Laborer	8	24	1	4.2	44	183.3	1.14
Sub-Totals	40	162	122	49.4**	270	102.3**	1.38**
TOTALS	308	1,139	782	58.7*	995	68.0*	1.91*

TABLE 14.5 COMPILED OPINIONS OF EMPLOYERS OF FORTY-THREE NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF HORTICULTURE: ORNAMENTAL, TURF (BEAUTIFICATION); A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO EXPANSION FIVE YEARS HENCE, AND REPLACEMENT DURING THE NEXT FIVE YEARS; ALSO, A SCALE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles***	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position***
			No.	5 Yrs. Hence % Increase	No.	During Next 5 Yrs. % Replacement	
1. Professional Landscape Architect Sub-Totals	$\frac{3}{3}$	$\frac{2}{2}$	$\frac{4}{4}$	$\frac{200.0}{200.0} \frac{-}{**}$	$\frac{1}{1}$	$\frac{50.0}{50.0} \frac{-}{**}$	$\frac{3.00}{3.00} \frac{-}{**}$
2. Managers & Administrators General Manager Office & Sales Manager Sub-Totals	$\frac{27}{3}$ $\frac{3}{30}$	$\frac{40}{3}$ $\frac{3}{43}$	$\frac{5}{6}$ $\frac{1}{6}$	$\frac{12.5}{33.3} \frac{-}{14.6} \frac{-}{**}$	$\frac{2}{2}$ $\frac{0}{2}$	$\frac{5.0}{0.0} \frac{-}{4.5} \frac{-}{**}$	$\frac{2.50}{2.00} \frac{-}{2.45} \frac{-}{**}$
3. Supervisory Occupations Landscape & Sprinkler Foreman Golf Course Greens Supervisor Grounds, Shop, & Plant Supervisor Sub-Totals	$\frac{13}{11}$ $\frac{3}{27}$	$\frac{20}{15}$ $\frac{3}{38}$	$\frac{14}{3}$ $\frac{0}{17}$	$\frac{70.0}{20.0} \frac{-}{41.8} \frac{-}{**}$	$\frac{2}{2}$ $\frac{0}{4}$	$\frac{10.0}{0.0} \frac{-}{10.2} \frac{-}{**}$	$\frac{2.37}{2.18} \frac{-}{2.33} \frac{-}{2.29} \frac{-}{**}$
4. Technical Occupations Fieldman and/or Estimator Sub-Totals	$\frac{6}{6}$	$\frac{4}{4}$	$\frac{6}{6}$	$\frac{150.0}{150.0} \frac{-}{**}$	$\frac{1}{1}$	$\frac{25.0}{25.0} \frac{-}{**}$	$\frac{2.50}{2.50} \frac{-}{**}$
5. Sales Occupations Nursery Salesman Florist Clerk Sub-Totals	$\frac{13}{3}$ $\frac{4}{20}$	$\frac{52}{5}$ $\frac{8}{65}$	$\frac{29}{4}$ $\frac{5}{38}$	$\frac{55.8}{80.0} \frac{-}{62.5} \frac{-}{60.8} \frac{-}{**}$	$\frac{16}{2}$ $\frac{0}{18}$	$\frac{30.8}{40.0} \frac{-}{0.0} \frac{-}{26.0} \frac{-}{**}$	$\frac{1.50}{1.67} \frac{-}{1.75} \frac{-}{1.57} \frac{-}{**}$
6. Clerical Occupations General Secretary Sub-Totals	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{100.0}{100.0} \frac{-}{**}$	$\frac{1}{1}$	$\frac{10.0}{10.0} \frac{-}{**}$	$\frac{2.00}{2.00} \frac{-}{**}$

TABLE 14.5 (Continued)

Level of Employment Job Titles***	No. Firms With Job Title	Currently Employed	Expansion		Replacement		Ave. Difficulty In Filling Position***
			5 Yrs. Hence No.	% Increase	During Next 5 Yrs. No.	% Replacement	
7. Skilled Occupations							
Tree Pruner	2	5	31	620.0	15	300.0	1.00
Special Equipment Operator	4	11	5	45.4	4	36.4	1.25
Mechanic	5	5	6	120.0	1	20.0	1.75
Plumber	1	1	3	300.0	0	0.0	2.00
Sub-Totals	12	22	45	193.5**	20	70.5**	1.48**
8. Semi-Skilled or Service Workers							
Landscape Contractor Employee	15	66	52	78.8	50	75.7	1.80
Golf Course Worker	15	106	86	81.1	132	124.5	1.46
Gardener	7	15	11	73.3	9	60.0	1.20
General Laborer	8	26	9	34.6	63	242.3	1.12
Sub-Totals	45	213	158	70.8**	254	119.1**	1.47**
TOTAL	153	397	284	70.5*	301	49.2*	1.92*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X percentage of scale for each job title divided by Total Firms.

***Average of employer responses using scale: None = 1; Some = 2; Great Difficulty = 3.

****All similar job titles in all categories under each heading listed on Table 2.

TABLE 14.6 COMPILED OPINIONS OF EMPLOYERS OF TWENTY-SEVEN NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF PLANT INDUSTRY, CROPS, IRRIGATION, SOIL: A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO THE ESTIMATED EXPANSION FIVE YEARS HENCE, AN ESTIMATED REPLACEMENT DURING THE NEXT FIVE YEARS: ALSO, A RATE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles****	No. Firms with Job Title	Currently Employed	Expansion 5 Yrs. Hence		Replacement During Next 5 Yrs.		Average Difficulty In Filling Position***
			No.	% Increase	No.	% Replacement	
1. Professional Occupations							
Water Engineer	2	1	2	200.0	0	0.0	2.50
Attorney	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{0}{2}$	$\frac{0.0}{133.3^{**}}$	0	0.0	$\frac{1.00}{2.00^{**}}$
Sub-Totals							
2. Managers & Administrators							
General Manager	22	26	0	0.0	0	0.0	3.00
Office Manager	$\frac{1}{23}$	$\frac{2}{28}$	0	0.0	0	0.0	$\frac{3.00}{3.00^{**}}$
Sub-Totals							
3. Supervisory Occupations							
Water Engineer Supervisor	2	8	0	0.0	1	12.5	2.00
Shop & Ranch Foreman	3	3	2	66.7	1	33.3	2.00
Insect Control Supervisor	$\frac{1}{6}$	$\frac{0}{11}$	$\frac{2}{4}$	$\frac{200.0}{66.7^{**}}$	0	0.0	$\frac{1.00}{1.83^{**}}$
Sub-Totals							
4. Technical Occupations							
Flight Instructor for Crop Duster	1	10	10	100.0	0	0.0	2.00
Draftsman	1	2	0	0.0	1	50.0	2.00
Crop Duster	$\frac{1}{3}$	$\frac{1}{13}$	$\frac{2}{12}$	$\frac{200.0}{100.0^{**}}$	0	0.0	$\frac{3.00}{2.33^{**}}$
Sub-Totals							
5. Sales Occupations							
Store Clerk	2	3	3	100.0**	0	0.0**	1.50**
6. Clerical Occupations							
Bookkeeper	4	4	4	100.0	1	25.0	1.00
General Secretary	$\frac{10}{14}$	$\frac{19}{23}$	$\frac{4}{8}$	$\frac{40.0}{57.1^{**}}$	2	20.0	$\frac{1.40}{1.28^{**}}$
Sub-Totals							

TABLE 14.6 (Continued)

Level of Employment Job Titles****	No. Firms with Job Title	Currently Employed	Expansion		Replacement		Average Difficulty In Filling Position***
			No.	% Increase	No.	% Replacement	
7. Skilled Occupations							
Heavy Equipment Operator	11	45	12	26.7	66	146.7	1.75
Printer	1	4	2	50.0	0	0.0	1.00
Lineman	1	7	2	28.6	7	100.0	2.00
Power House Operator	1	4	0	0.0	1	25.0	2.00
Watermaster	2	2	0	0.0	0	0.0	2.50
Dam & Reservoir Maintenance	3	4	0	0.0	0	0.0	1.00
Sub-Totals	19	66	16	19.6**	74	91.5**	1.70**
8. Semi-skilled or Service Workers							
Insect Sprayer	6	19	25	13.1	2	1.0	2.20
Well Driller & Pump Employee	4	11	8	72.7	3	27.3	1.25
Truck Driver	1	5	0	0.0	2	40.0	1.00
Irrigator	1	3	0	0.0	2	66.7	1.00
Ditch-rider	5	22	0	0.0	8	36.4	1.33
Airplane crop duster loader	1	4	0	0.0	20	500.0	3.00
General Laborer	7	36	9	25.0	94	261.1	1.17
Sub-Totals	25	100	42	22.0**	131	109.0**	1.52**
TOTAL	95	247	87	35.2*	211*	85.4*	1.96*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of firms X total figure in each column for each job title + Total Firms.

***Average of employer responses using scale: None = 1; Some = 2; Great difficulty = 3.

****All similar job titles in all categories under each heading as listed on Table 2.

TABLE 14.7 SUMMARY OF WEIGHTED AVERAGES FOR EACH LEVEL OF EMPLOYMENT IN FIVE OCCUPATIONAL DIVISIONS IN NON-FARM BUSINESS AND GOVERNMENT AGENCIES: A COMPARISON OF THE NUMBER CURRENTLY EMPLOYED TO EXPANSIONS FIVE YEARS HENCE AND REPLACEMENTS DURING NEXT FIVE YEARS: ALSO, RATE OF DIFFICULTY IN OBTAINING REPLACEMENTS.

Level of Employment Job Titles	No. Currently Employed	Expansion 5 Years Hence		Replacements During Next 5 Years		Av. Dif. In Filling Positions
		No.	% Increase	No.	% Replacement	
Professional Occupations						
Agricultural & Allied Mechanics	3	0	0.0	0	0.0	2.00
Animal Industry	16	8	46.7	3	17.5	2.39
Business--Economics, Finance	10	4	33.3	2	11.1	2.33
Horticulture--Ornamental, Turf	2	4	200.0	1	50.0	3.00
Plant Industry--Crops, Soils, etc.	3	2	133.3	0	0.0	2.00
Government Agencies	433	118	27.3	249	57.5	2.25
Sub-Totals	467	136	29.3*	255	54.4*	2.26*
Managerial and Administrators						
Agricultural & Allied Mechanics	103	32	29.3	20	16.0	2.50
Animal Industry	105	12	12.7	9	10.3	1.68
Business--Economics, Finance	383	165	38.8	252	48.3	2.47
Horticulture--Ornamental, Turf	43	6	14.6	2	4.5	2.45
Plant Industry--Crops, Soils, etc.	28	0	0.0	0	0.0	3.00
Government Agencies	55	12	21.8	34	61.8	2.31
Sub-Totals	717	227	29.3*	317	35.6*	2.36*
Supervisory Occupations						
Agricultural & Allied Mechanics	40	42	103.9	18	45.1	2.21
Animal Industry	32	14	11.6	6	19.7	1.96
Business--Economics, Finance	80	48	54.8	27	31.8	1.97
Horticulture--Ornamental, Turf	38	17	41.8	4	10.2	2.29
Plant Industry--Crops, Soils, etc.	11	4	66.7	2	20.8	1.83
Government Agencies	47	4	8.5	22	46.8	1.74
Sub-Totals	248	129	46.9*	79	31.4*	2.01*
Technical Occupations						
Agricultural & Allied Mechanics	4	2	66.6	1	16.6	2.50
Animal Industry	6	7	92.5	5	75.0	1.50
Business--Economics, Finance	1	4	400.0	0	0.0	2.50
Horticulture--Ornamental, Turf	4	6	150.0	1	25.0	2.50
Plant Industry--Crops, Soils, etc.	13	12	100.0	1	16.7	2.33
Government Agencies	139	6	4.3	71	51.1	1.58
Sub-Totals	167	37	22.3*	79	47.5*	1.68*

TABLE 14.7 (Continued)

Sales Occupations													
Agricultural & Allied Mechanics	156	81	53.1	190	114.7	2.09							
Animal Industry	298	111	36.0	372	126.0	1.65							
Business--Economics, Finance	165	126	70.0	178	109.6	1.72							
Horticulture--Ornamental, Turf	65	38	60.8	18	26.0	1.57							
Plant Industry--Crops, Soils, etc.	3	3	100.0	0	0.0	1.50							
Government Agencies													
Sub-Totals	<u>687</u>	<u>359</u>	<u>50.7*</u>	<u>758</u>	<u>109.5*</u>	<u>1.76*</u>							
Clerical Occupations													
Agricultural & Allied Mechanics	79	21	26.8	67	84.7	1.85							
Animal Industry	86	24	28.3	51	60.7	1.69							
Business--Economics, Finance	53	23	42.6	30	55.2	1.73							
Horticulture--Ornamental, Turf	10	10	100.0	1	10.0	2.00							
Plant Industry--Crops, Soils, etc.	23	8	57.1	3	21.4	1.28							
Government Agencies	<u>149</u>	<u>21</u>	<u>14.1</u>	<u>107</u>	<u>71.8</u>	<u>1.69</u>							
Sub-Totals	<u>400</u>	<u>107</u>	<u>26.4*</u>	<u>259</u>	<u>65.3*</u>	<u>1.71*</u>							
Skilled Occupations													
Agricultural & Allied Mechanics	449	240	76.9	692	143.7	1.88							
Animal Industry	191	63	35.6	40	23.4	1.64							
Business--Economics, Finance	285	290	91.0	236	73.3	1.58							
Horticulture--Ornamental, Turf	22	45	193.5	20	70.5	1.48							
Plant Industry--Crops, Soils, etc.	66	16	19.6	74	91.5	1.70							
Government Agencies	<u>25</u>	<u>16</u>	<u>64.0</u>	<u>8</u>	<u>32.0</u>	<u>2.10</u>							
Sub-Totals	<u>1,038</u>	<u>670</u>	<u>71.7*</u>	<u>1,070</u>	<u>94.7*</u>	<u>1.74*</u>							
Semi-Skilled or Service Workers													
Agricultural & Allied Mechanics	72	90	171.1	124	157.1	1.40							
Animal Industry	282	39	18.3	436	124.5	1.25							
Business--Economics, Finance	162	122	49.4	270	102.3	1.38							
Horticulture--Ornamental, Turf	213	158	70.8	254	119.1	1.47							
Plant Industry--Crops, Soils, etc.	100	42	22.0	131	109.0	1.52							
Government Agencies	<u>155</u>	<u>89</u>	<u>57.4</u>	<u>353</u>	<u>227.1</u>	<u>1.39</u>							
Sub-Totals	<u>984</u>	<u>540</u>	<u>52.5*</u>	<u>1,568</u>	<u>136.6*</u>	<u>1.38*</u>							
TOTAL	4,708	2,205	47.0**	4,385	85.1**	1.82**							

*Weighted Computations = Sum of number currently employed X percent increase divided by total currently employed.

**Weighted Computations = Sum of total currently employed per category X total percent increase per category divided by TOTAL currently employed.

TABLE 15.1 COMPILED OPINIONS OF THIRTY-NINE DEPARTMENT HEADS IN AGRICULTURAL GOVERNMENT AGENCIES INTERVIEWED AS TO DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE; RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles	No. Depts. with Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)		Experience Necessary (Percent)	
		Farm	Urban	None	Range	Minimum	Maximum		Range
1. Professional Occupations									
Veterinarian	4	100.0	0.0	0.0	--	--	55-***	100.0	50.0
Financial Advisor	4	50.0	0.0	50.0	***-30	--	45-***	100.0	75.0
Research	2	50.0	0.0	50.0	25-28	27.5	45-50	100.0	47.5
Teaching - College, H.S.	2	50.0	0.0	50.0	--	--	40-45	100.0	42.5
Extension	1	100.0	0.0	0.0	--	--	--	100.0	0.0
Home Extension Agent	1	0.0	0.0	100.0	--	--	50-55	100.0	0.0
Pathologist	1	100.0	0.0	0.0	--	--	50-55	100.0	0.0
Entomologist	1	100.0	0.0	0.0	--	--	50-55	100.0	0.0
Chemist, Biologist, Botanist, Soil Scientist	6	50.0	0.0	50.0	18-25	22.0	45-65	100.0	16.7
Public relations - Newspaper, TV, Agriculturist	2	100.0	0.0	0.0	--	--	50-55	100.0	52.5
Teaching & Research	5	100.0	0.0	0.0	--	--	--	100.0	0.0
Forester	2	50.0	0.0	50.0	--	--	--	100.0	0.0
Extension Specialist	3	33.3	0.0	66.7	24-30	27.0	55-60	100.0	0.0
Graduate Assistant	5	40.0	0.0	60.0	18-21	18.0	40-50	100.0	45.0
Sub-Totals	39	64.1**	0.0	35.9**		22.4**		100.0**	53.2**
2. Managers & Administrators									
Administrator	14	71.4	0.0	28.6	18-30	21.0	45-60	100.0	55.0
Administrative Assistant	5	80.0	0.0	20.0	18-22	20.0	40-55	100.0	55.0
Sub-Totals	19	73.7**	0.0	26.3**		20.7**		100.0**	55.0**
3. Supervisory Occupations									
District Supt. or Supervisor	16	75.0	0.0	25.0	18-25	23.0	45-55	100.0	55.0
Assistant Supervisor	9	66.7	0.0	33.3	21-25	21.0	45-55	88.9	44.4
Foreman	2	100.0	0.0	0.0	21-25	23.0	45-55	100.0	100.0
Sub-Totals	27	74.1**	0.0	25.9**		22.3**		96.3**	55.0**

TABLE 15.1 (Continued)

Level of Employment Job Titles	No. Depts. with Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Experience Necessary (Percent)
		Farm	Urban	Range	Mean		
4. Technical Occupations							
Fieldman - general	9	88.8	0.0	18-25	21.5	45-55	55.0
Inspector	2	100.0	0.0	--	25.0	50-55	52.5
Laboratory technician	4	50.0	0.0	--	21.0	--	55.0
Pest control - rodents	1	100.0	0.0	--	--	--	45.0
Sub-Totals	16	81.2**	0.0	--	20.5**	--	54.0**
5. Clerical Occupations							
Secretary	14	14.2	0.0	18-25	18.0	50-60	55.0
Helper	4	0.0	0.0	--	25.0	--	50.0
Sub-Totals	18	11.1**	0.0	--	19.1**	--	53.9**
6. Skilled Occupations							
Special Equipment Operator	2	100.0	0.0	18-25	21.5	--	40.0
Maintenance - Spec. Equip.	1	0.0	0.0	--	--	--	--
Greens Keeper	5	37.5	0.0	18-25	23.0	45-65	55.0
Sub-Totals	8	48.4**	0.0	--	22.6**	--	50.7**
7. Semi-skilled or Service Workers							
Landscape - propagation, shrubs, Lawns, grounds maintenance	12	33.3	0.0	16-40	18.0	45-65	60.0
Pest control - weeds, insects	1	100.0	0.0	--	--	--	--
Unskilled part-time help	5	40.0	0.0	16-21	16.0	60-65	62.5
Truck Driver	1	0.0	0.0	--	--	--	--
General construction worker	1	0.0	0.0	--	25.0	--	50.0
Farmer	3	100.0	0.0	--	18.0	--	--
Trainee	7	42.8	0.0	--	18.0	--	45.0
Reporter of Data	1	0.0	100.0	--	16.0	--	25.0
Farm hand	2	100.0	0.0	--	--	--	--
Sub-Totals	33	45.4**	3.0**	--	17.8**	--	54.7**
Total:	160	58.0**	0.6**		20.7**		54.0**
							88.1**
							38.6**

**Weighted = Number Depts. X percent, or mean + Total No. Depts.

***Information given by persons interviewed non-reliable.

TABLE 15.2 COMPILED OPINIONS OF EIGHTY-FOUR EMPLOYERS INTERVIEWED IN NON-FARM BUSINESSES IN AGRICULTURE AND ALLIED MECHANICS AS TO DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE: RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles**	No. Firms With Job Titles	Residential Background (Percentage)		Age For Employment		Training Needed (Percent)	Experience Necessary (Percent)	
		farm	Urban	Range	Mean			Range
1. Professional Occupations	3	25.0	0.0	23-30	26.0	50-65	55.0	100.0
Public Accountant								
2. Managers & Administrators	47	11.7	17.6	23-50	28.6	25-65	49.0	35.3
General Manager	13	0.0	18.2	25-40	30.0	35-60	44.0	27.3
Office Manager	10	10.0	0.0	20-35	26.1	25-65	44.1	62.5
Sales Manager	8	0.0	20.0	21-35	25.7	35-60	45.0	80.0
Parts Manager	10	0.0	20.0	22-35	26.1	35-60	48.0	88.8
Service Manager	4	0.0	25.0	25-35	30.0	35-65	56.1	100.0
Plant Manager	4	0.0	0.0	25-40	35.0	45-65	53.0	0.0
Purchasing Manager	2	0.0	0.0	30-50	40.0	30-50	40.0	100.0
Credit Manager	2	0.0	0.0	--	25.0	50-55	52.5	0.0
Advertising Manager	2	6.5**	15.2**	--	28.5**	50-55	43.2**	47.7**
Sub-Totals	100							
3. Supervisory Occupations	18	11.1	11.1	21-38	27.8	30-65	48.5	100.0
Shop Foreman	5	0.0	0.0	23-35	27.6	40-60	52.0	40.0
Plant Superintendent	23	8.7**	8.7**	--	27.7**	--	49.3**	86.9**
Sub-Totals								
4. Technical Occupations	1	0.0	0.0	--	21.0	--	50.0	0.0
Draftsman	1	0.0	0.0	--	21.0	--	50.0	100.0
Estimator Engineer	2	0.0	0.0	--	21.0**	--	50.0**	50.0**
Sub-Totals								
5. Sales Occupations	25	8.0	0.0	21-30	24.9	35-50	49.0	52.0
General Salesman	9	22.2	11.1	21-30	25.4	30-50	42.8	44.4
Machinery Salesman	4	25.0	0.0	17-24	20.2	25-60	40.0	75.0
Driver Salesman	20	10.0	5.0	18-30	23.1	45-50	46.2	30.0
Partsman	3	0.0	33.3	18-30	22.3	30-65	47.5	66.6
Job Write-Up Salesman	12	8.3	0.0	18-24	20.0	--	48.0	33.3
Clerks	73	10.9**	4.1**	--	23.3**	--	46.7**	43.8**
Sub-Totals								

TABLE 15.2 (Continued)

Level of Employment Job Titles**	No. Firms With Job Titles	Residential Background (Percentage)		Age For Employment		Training Needed (Percent)	Experience Necessary (Percent)
		Farm	Urban	Range	Mean		
6. Clerical Occupations	19	0.0	0.0	18-33	22.1	35-65	50.0
Bookkeeper		5.8	5.8	17-35	22.2	35-65	47.0
General Secretary	34	3.7**	3.7**		19.3**		48.0**
Sub-Totals	53						
6. Clerical Occupations							47.3
Bookkeeper							29.4
General Secretary							35.8**
7. Skilled Occupations	35	6.4	9.6	17-30	21.7	35-65	53.0
Automobile & Gen. Mech.	7	14.2	14.2	21-55	23.3	40-60	51.0
Diesel & Automotive and/or heavy equip.	4	25.0	0.0	18-25	21.0	--	--
Steel Worker	13	7.7	7.7	18-30	22.0	45-70	52.0
Welder	5	25.0	0.0	20-25	21.5	45-60	54.0
Equip. & Plant Operator	5	20.0	0.0	16-24	19.4	45-60	52.0
Sheet Metal Worker	6	0.0	16.0	18-30	23.3	35-55	45.0
General Repair	4	0.0	50.0	18-25	21.0	50-70	60.0
Machinist	2	50.0	0.0	21-48	19.5	45-50	47.5
Metal Fab Layout Man	1	0.0	0.0	--	30.0	--	65.0
Ornamental Iron Worker	1	0.0	0.0	--	18.0	--	--
Electric Motor Winding	1	0.0	0.0	--	21.8**	--	49.2**
Sub-Totals	83	10.2**	10.0**				
7. Skilled Occupations							80.6
Automobile & Gen. Mech.							71.5
Diesel & Automotive and/or heavy equip.							75.0
Steel Worker							77.0
Welder							100.0
Equip. & Plant Operator							60.0
Sheet Metal Worker							83.0
General Repair							100.0
Machinist							100.0
Metal Fab Layout Man							0.0
Ornamental Iron Worker							0.0
Electric Motor Winding							0.0
Sub-Totals							78.6**
8. Semi-Skilled or Service	12	10.0	10.0	18-25	20.0	35-65	49.0
Truck Driver	5	20.0	0.0	18-20	19.7	50-65	58.7
General Construction	4	0.0	0.0	16-25	20.0	20-50	32.5
Shipping & Receiving	4	25.0	0.0	18-25	20.0	30-60	46.0
Warehouseman	8	25.0	0.0	16-30	19.8	30-60	51.2
General Laborer	4	0.0	0.0	18-30	22.6	45-65	55.0
Janitor	37	11.3**	5.9**		20.2**		49.3**
Sub-Totals	374	8.5*	8.7*		23.8*		47.0*
TOTAL							54.3*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X percentage or mean for each job title divided by Total Firms.

***Same job titles as listed in Table 2.

TABLE 15.3 COMPILED: OPINIONS OF EMPLOYERS OF SIXTY-SIX NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF ANIMAL INDUSTRY AS TO DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE: RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles***	No. Firms With Job Title	Background (Percentage)		Age For Employment		Training Needed (Percent)	Ave. Experienc Necessar (Percent)			
		Farm	Urban	None	Range			Mean		
					Minimum				Maximum	
1. Professional Occupations										
Veterinarian	9	0.0	25.0	75.0	21-27	24.2	35-65	45.7	44.4	0.0
Attorney for Livestock Firm	1	0.0	0.0	100.0	--	25.0	--	40.0	100.0	100.0
Financial Advisor	1	0.0	0.0	100.0	--	25.0	--	40.0	100.0	100.0
Sub-Totals	11	0.0	20.4**	79.5**	--	24.3**	--	44.7**	54.5**	18.2**
2. Managers & Administrators										
General Manager	51	23.5	0.0	76.5	20-35	31.1	40-60	48.7	76.4	76.4
Office Manager	13	9.1	9.1	81.8	20-35	27.1	30-60	50.0	76.9	69.2
Sales Manager	10	10.0	30.0	60.0	21-32	26.0	35-65	50.6	53.8	61.5
Plant Manager	7	42.9	0.0	57.1	18-40	28.2	50-60	55.0	57.1	28.6
Credit Manager	2	0.0	0.0	100.0	25-32	28.5	45-60	52.5	100.0	100.0
Sub-Totals	83	20.7**	5.0**	74.3**	--	29.5**	--	50.0**	72.7**	70.0**
3. Supervisory Occupations										
Shop Foreman	5	20.0	0.0	80.0	21-30	25.2	45-60	52.2	80.0	100.0
Ranch Foreman	3	100.0	0.0	0.0	--	25.0	40-45	43.3	50.0	50.0
Slaughterhouse Superintendent	2	0.0	0.0	100.0	21-25	23.0	40-50	45.0	50.0	50.0
Sales Yard Superintendent	1	0.0	0.0	100.0	--	20.0	--	65.0	100.0	0.0
Plant or Mill Superintendent	16	7.2	0.0	92.8	20-35	26.9	40-60	47.5	78.6	92.9
Sub-Totals	27	19.1**	0.0	80.9**	--	25.9**	--	48.4**	74.3**	82.8**
4. Technical Occupations										
Laboratory Technician	6	16.7	16.7	66.6	18-25	20.8	40-65	53.0	100.0	40.0
Artificial Inseminator	2	100.0	0.0	0.0	15-20	17.5	60-70	65.0	50.0	0.0
Sub-Totals	8	37.5**	12.5**	50.0**	--	20.0**	--	56.0**	87.5**	30.0**
5. Sales Occupations										
General Salesman	17	11.8	17.6	70.6	20-25	22.4	30-70	48.7	20.0	18.3
Driver Salesman	11	0.0	9.1	90.9	20-30	22.6	33-50	44.8	36.3	27.3
Store--Display Salesman	2	0.0	0.0	100.0	--	20.0	--	45.0	0.0	0.0
Sub-Totals	30	6.7**	13.3**	80.0**	--	22.3**	--	47.0**	24.6**	20.4**

TABLE 5.3 (Continued)

Level of Employment Job Titles**	No. Firms With Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)		
		Farm	Urban	Range	Mean			Range	Mean
6. Clerical Occupations									
Bookkeeper	21	5.5	11.1	18-40	24.7	40-70	55.3	72.2	61.1
General Secretary	23	4.8	9.5	16-40	22.2	30-65	46.8	57.1	33.3
Sub-Totals	44	5.1	10.3		23.4**		50.8**	64.3**	46.6**
7. Skilled Occupations									
Dairy Plant Processor	6	16.7	0.0	20-30	23.5	40-65	52.5	0.0	33.3
Milk Driver--Bulk Tank	4	50.0	0.0	21-25	23.7	32-50	43.0	33.3	22.2
Mill Operator	1	100.0	0.0	---	25.0	---	45.0	0.0	0.0
Dairy Plant Maintenance	7	14.3	14.3	18-30	22.6	40-60	50.0	100.0	85.8
Meat Firm--Spec. Equip. Operator	2	100.0	0.0	---	21.0	---	50.0	50.0	0.0
Meat Cutter	16	12.5	0.0	17-30	21.7	35-65	48.7	68.7	75.0
Apprentice--Meat Cutter	6	16.7	0.0	18-21	18.8	25-55	35.0	50.0	33.3
Butcher	3	33.3	0.0	21-22	21.5	40-45	43.0	66.6	66.6
General Mechanic	9	12.5	0.0	22-40	27.1	40-65	50.0	62.5	75.0
Cattle Truck Driver--Diesel	6	66.7	0.0	23-30	26.0	50-60	56.7	100.0	100.0
Sub-Totals	60	26.9**	1.7**		23.1**		48.2**	61.6**	52.6**
8. Semi-Skilled or Service Workers									
Truck Driver	16	26.7	6.6	18-25	20.5	30-65	50.0	53.3	46.7
Slaughterhouse Employee	3	33.3	0.0	18-21	19.6	40-65	51.6	33.3	0.0
Warehouseman	11	0.0	9.1	18-25	21.3	35-50	45.5	45.4	45.4
Veterinary Animal Care	8	12.5	12.5	14-22	17.5	45-70	56.0	0.0	12.5
Janitor	6	0.0	0.0	16-30	20.0	20-70	53.3	0.0	0.0
Ranch Maintenance	3	0.0	0.0	---	20.0	---	55.0	33.3	66.6
Horse Wrangler & Cowboy	3	100.0	0.0	18-25	20.6	50-60	56.6	66.6	100.0
General Laborer	15	50.0	7.2	17-25	19.0	40-70	52.0	50.0	50.0
Sub-Totals	65	25.8**	6.4**		19.8**		51.3**	38.5**	40.0**
TOTAL	328	19.0*	6.4*		24.2*		49.6*	58.2*	51.5*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title divided by Total Firms.

***All similar job titles in all categories under each heading as listed on Table 2.

TABLE 15.4 COMPILED OPINIONS OF EMPLOYERS OF NINETY-NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF BUSINESSES: FINANCE, AGRICULTURAL SUPPLY, SERVICES AS TO DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE; RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING, AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles***	No. Firms With	Background (Percentage)			Age for Employment		Training Needed (Percent)	Experience Necessary (Percent)			
		Job Title	Farm	Urban	None	Minimum			Maximum		
						Range			Mean		
1. Professional Occupations											
Ranch Appraiser	2	100.0	0.0	0.0	0.0	21-25	23.0	40-50	46.7	75.0	25.0
Water Engineer	1	0.0	0.0	100.0	0.0	--	24.0	--	50.0	100.0	100.0
Sub-Totals	3	66.7**		33.3**			23.3**		47.8**	83.3**	50.0**
2. Managers & Administrators											
Real Estate & Insurance - Gen. Mgr.	17	35.3	0.0	64.7	0.0	21-35	27.2	40-65	50.0	80.0	80.0
Feed Stores & Supplies - Gen. Mgr.	15	73.3	0.0	26.7	0.0	21-35	28.2	45-65	47.5	62.5	75.0
Petroleum Distributor - Gen. Mgr.	9	22.2	0.0	77.8	0.0	--	25.0	35-38	36.5	20.0	80.0
Bank credit & loan manager	6	50.0	16.7	33.3	0.0	21-30	24.2	50-55	51.2	66.7	50.0
Food Market - General Manager	15	20.0	20.0	60.0	0.0	20-30	24.7	35-60	52.0	33.3	60.0
Food Market - Meat Dept. Mgr.	2	100.0	0.0	0.0	0.0	20-24	22.0	35-40	37.5	100.0	100.0
Food Market - Produce Mgr.	4	50.0	0.0	50.0	0.0	18-30	22.2	25-55	41.2	75.0	100.0
Office & Credit Manager	12	33.3	0.0	66.7	0.0	21-35	25.1	37-50	45.9	81.8	63.6
Dept. & Assistant Mgr.	4	25.0	0.0	75.0	0.0	21-25	23.0	40-55	51.2	50.0	50.0
Sub-Totals	84	40.5**	4.8**	54.8**			25.6**		47.3**	60.2**	71.0**
3. Supervisory Occupations											
Food Market - Produce Dept. Supr.	17	11.8	0.0	88.2	0.0	18-28	22.5	25-55	48.9	86.7	100.0
Food Market - Meat Dept. Supr.	17	11.8	0.0	88.2	0.0	21-35	24.4	35-60	47.8	70.6	94.1
Plant Superintendent	6	33.3	0.0	66.7	0.0	21-40	28.7	38-65	51.3	83.3	83.3
Rural Electric Line Supervisor	1	100.0	0.0	0.0	0.0	--	30.0	--	35.0	100.0	100.0
Shop &/or Ranch Supervisor	2	100.0	0.0	0.0	0.0	--	30.0	--	60.0	50.0	100.0
Sub-Totals	43	20.9**		79.0**			24.6**		49.0**	78.5**	95.3**
4. Technical Occupations											
Food Market - Produce Buyer	2	50.0**		50.0**		18-30	24.0**	25-55	40.0**	50.0**	100.0**

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms x total figure in each column for each job title ÷ Total Firms.

***All similar job titles in all categories under each heading as listed on Table 2.

Table 15.4 (Continued)

Level of Employment Job Titles***	No. Firms With	Background (Percentage)		Age for Employment		Training Needed (Percent)	Experience Necessary (Percent)			
		Farm	Urban	None	Minimum			Maximum		
					Range			Mean		
5. Sales Occupations										
Farm Supply Salesman	3	0.0	0.0	100.0	20-21	20.3	45-50	48.3	33.3	33.3
Rural Petroleum Salesman	7	14.3	0.0	85.7	18-25	22.0	35-38	36.5	14.3	85.7
Plumbing & Heating Salesman	1	0.0	0.0	100.0	--	18.0	--	50.0	100.0	100.0
Nursery Salesman	6	0.0	0.0	100.0	18-22	20.3	45-55	50.8	83.3	66.7
Insurance Salesman	10	20.0	10.0	70.0	17-28	22.2	30-65	48.9	80.0	40.0
Real Estate Salesman	8	62.5	12.5	25.0	21-35	25.5	40-65	51.6	100.0	0.0
General Salesman	5	40.0	0.0	60.0	20-35	25.4	30-65	48.0	60.0	40.0
Driver Salesman	6	16.7	0.0	83.3	21-25	22.0	35-50	42.0	33.3	50.0
Feed Salesman	3	66.7	33.3	0.0	20-30	25.0	30-50	41.7	0.0	33.3
Clerk - Store or Business	7	57.1	14.3	28.6	18-25	20.8	35-65	50.0	28.6	57.1
Sub-Totals	56	30.3**	7.1**	62.5**		22.5**		46.8**	55.3**	46.4**
6. Clerical Occupations										
Bookkeeper	10	28.6	0.0	71.4	17-25	21.1	30-65	51.8	71.4	42.8
General Secretary	23	9.1	0.0	90.9	16-35	21.0	35-65	47.4	86.4	36.4
Sub-Totals	33	15.0**		85.0**		21.0**		48.7**	81.8**	38.3**
7. Skilled Occupations										
Water Estimator	1	0.0	0.0	100.0	--	30.0	--	45.0	100.0	100.0
Mechanic & Maintenance	2	50.0	0.0	50.0	20-25	22.5	40-50	45.0	50.0	50.0
Mill Operator	2	100.0	0.0	0.0	21-25	23.0	45-50	47.5	0.0	0.0
Market Meat Cutter	20	20.0	0.0	80.0	18-35	22.3	20-65	48.6	85.0	80.0
Market Produce Dept. Worker	12	8.3	0.0	91.7	16-25	19.5	25-65	48.7	50.0	50.0
Rural Electric Lineman	2	50.0	0.0	50.0	--	18.0	--	30.0	50.0	0.0
Gasoline Bulk Tank Driver	8	12.5	0.0	87.5	21-30	24.1	35-60	43.9	25.0	62.5
Sub-Totals	47	21.3**		78.7**		21.9**		46.7**	59.6**	61.7**
8. Semi-skilled or Service Workers										
Apprentice Produce Worker	4	25.0	0.0	75.0	18-21	19.0	21-55	35.2	50.0	50.0
Apprentice Meat Cutter	6	16.7	0.0	83.3	16-21	19.0	25-55	40.8	0.0	0.0
Apprentice Market Manager	1	0.0	0.0	100.0	--	21.0	--	55.0	0.0	0.0
Meat Wrapper	6	16.7	0.0	83.3	17-24	20.0	40-60	50.0	66.7	66.7
Farm machinery worker	2	0.0	0.0	100.0	18-21	19.5	60-65	62.5	0.0	0.0
Warehouseman	6	50.0	0.0	50.0	18-30	22.7	35-65	52.5	16.7	33.3
Truck Driver	7	28.6	14.3	57.1	18-30	21.8	30-65	51.4	14.3	57.1
General Laborer	8	37.5	0.0	62.5	16-30	20.0	35-65	52.8	28.6	57.1
Sub-Totals	40	27.5**	2.5**	70.0**		20.5**		49.1**	25.7**	41.4**
TOTAL	308	28.9*	3.2*	67.9*		23.1*		47.7*	59.8*	61.1*

TABLE 15.5 COMPILED OPINIONS OF EMPLOYERS OF FORTY-THREE NON FARM BUSINESSES INTERVIEWED IN THE AREA OF HORTICULTURE: ORNAMENTAL, TURF (BEAUTIFICATION): AS TO DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE: RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles**	No. Firms With Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)
		Farm	Urban	Range	Mean		
1. Professional Occupations Landscape Architect Sub-Totals	$\frac{3}{3}$	0.0	0.0	25-35	$\frac{28.3}{28.3}^{**}$	45-60	$\frac{55.0}{55.0}^{**}$ $\frac{66.6}{66.6}^{**}$
2. Managers & Administrators General Manager Office & Sales Manager Sub-Totals	$\frac{27}{3}$ $\frac{30}{30}$	16.7 $\frac{0.0}{15.0}^{**}$	0.0 $\frac{33.3}{3.3}^{**}$	20-35 20-22	25.2 $\frac{20.7}{24.7}^{**}$	40-60 35-60	48.0 $\frac{46.7}{47.9}^{**}$ $\frac{83.3}{100.0}$ $\frac{85.0}{85.0}^{**}$
3. Supervisory Occupations Landscape & Sprinkler Foreman Golf Course Greens Supt. Grounds, Shop & Plant Supt. Sub-Totals	13 11 $\frac{3}{27}$	0.0 54.5 $\frac{33.3}{25.9}^{**}$	0.0 0.0 0.0	20-35 18-30 20-35	25.7 23.9 $\frac{25.0}{24.9}^{**}$	40-65 40-65 45-65	52.4 56.1 $\frac{56.7}{54.4}^{**}$ $\frac{100.0}{90.9}$ $\frac{66.7}{92.6}^{**}$
4. Technical Occupations Fieldman & or Estimator Sub-Totals	$\frac{6}{6}$	0.0	0.0	18-30	$\frac{23.8}{23.8}^{**}$	50-65	$\frac{57.5}{57.5}^{**}$ $\frac{100.0}{100.0}^{**}$ $\frac{100.0}{100.0}^{**}$
5. Sales Occupations Nursery Salesman Florist Clerk Sub-Totals	13 3 $\frac{4}{20}$	7.7 0.0 $\frac{25.0}{10.0}^{**}$	15.4 0.0 25.0 15.0**	16-25 20-21 18-25	20.4 20.3 $\frac{20.2}{20.3}^{**}$	40-65 45-60 45-65	52.9 50.0 $\frac{56.2}{53.1}^{**}$ $\frac{61.5}{100.0}$ $\frac{75.0}{70.0}^{**}$
6. Clerical Occupations General Secretary Sub-Totals	$\frac{10}{10}$	0.0	$\frac{10.0}{10.0}^{**}$	18-25	$\frac{21.9}{21.9}^{**}$	35-50	$\frac{44.4}{44.4}^{**}$ $\frac{100.0}{100.0}^{**}$ $\frac{70.0}{70.0}^{**}$

TABLE 15.5(Continued)

Level of Employment Job Titles***	No. Firms With Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)	
		Farm	Urban	None	Age for Employment			
					Range			Minimum
7. Skilled Occupations								
Tree Pruner	2	0.0	0.0	100.0	--	21.0	57.5	100.0
Special Equipment Operator	4	0.0	0.0	100.0	18-21	20.0	51.2	50.0
Mechanic	5	20.0	0.0	80.0	18-40	25.2	51.2	100.0
Plumber	1	0.0	0.0	100.0	--	20.0	50.0	100.0
Sub-Totals	12	8.3**	0.0	91.7**	--	22.3**	76.1**	83.3**
8. Semi-Skilled or Service Workers								
Landscape Contractor Employee	15	13.3	0.0	86.7	17-22	19.9	53.8	53.3
Golf Course Worker	15	46.7	0.0	53.3	16-25	19.5	52.5	26.7
Gardener	7	28.6	0.0	71.4	14-21	17.6	57.8	14.3
General Laborer	8	0.0	0.0	100.0	16-21	19.1	45.6	12.5
Sub-Totals	45	24.4**	0.0	75.5**	--	19.3**	52.5**	31.1**
TOTAL	153	16.6*	3.3*	80.0*	--	22.2*	53.6*	68.0*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title divided by Total Firms.

***All similar job titles in all categories under each heading as listed on Table 2.

TABLE 15.6 COMPILED OPINIONS OF EMPLOYERS OF TWENTY-SEVEN NON FARM BUSINESSES INTERVIEWED IN THE AREA OF PLANT INDUSTRY- CROPS, IRRIGATION, SOILS: DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles**	No. Firms With Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)		
		Farm	Urban	None	Range			Minimum	Maximum
1. Professional Occupations									
Water Engineer	2	0.0	0.0	100.0	--	23.0	62.5	100.0	0.0
Attorney	1	100.0	0.0	0.0	--	25.0	50.0	100.0	0.0
Sub-Totals	3	33.3**		66.7**		23.7**	58.3**	100.0**	0.0
2. Managers & Administrators									
General Manager	22	0.0	33.3	66.7	25-30	28.3	55.0	100.0	66.7
Office Manager	1	0.0	0.0	100.0	--	30.0	50.0	0.0	0.0
Sub-Totals	23	0.0	31.8**	68.1**		28.4**	54.8**	95.6**	63.8**
3. Supervisory Occupations									
Water Engineer Supervisor	2	50.0	0.0	50.0	25-30	27.5	50.0	50.0	100.0
Shop & Ranch Foreman	3	100.0	0.0	0.0	20-25	23.3	48.3	33.3	33.3
Insect Control Supervisor	1	0.0	100.0	0.0	21-25	23.0	52.5	100.0	100.0
Sub-Totals	6	66.7**	16.7**	16.7**		24.6**	49.6**	50.0**	66.6**
4. Technical Occupations									
Flight Instructor for Crop Duster	1	0.0	0.0	100.0	--	18.0	60.0	100.0	0.0
Draftsman	1	0.0	0.0	100.0	--	18.0	45.0	100.0	0.0
Crop Duster	1	0.0	0.0	100.0	--	21.0	55.0	100.0	100.0
Sub-Totals	3			100.0**		19.0**	53.3**	100.0**	33.3**
5. Sales Occupations									
Store Clerk	2	0.0**	0.0**	100.0**	21-25	23.0**	52.5**	50.0**	50.0**
6. Clerical Occupations									
Bookkeeper	4	25.0	0.0	75.0	18-35	19.0	55.0	100.0	25.0
General Secretary	10	16.7	16.7	66.6	18-21	19.4	54.0	66.7	50.0
Sub-Totals	14	19.1**	11.9**	69.0**		19.3**	54.3**	76.2**	42.8**

TABLE 15.6 (Continued)

Level of Employment Job Titles***	No. Firms With Job Title	Background (Percentage)		Age for Employment		Training Needed (Percent)	Ave. Experienc Necessar (Percent)
		Farm	Urban	Range	Mean		
7. Skilled Occupations							
Heavy Equipment Operator	11	63.6	0.0	17-30	22.2	45-65	51.2
Printer	1	0.0	100.0	--	18.0	--	65.0
Lineman	1	0.0	100.0	--	18.0	--	40.0
Power House Operator	1	0.0	100.0	--	20.0	--	45.0
Watermaster	2	100.0	0.0	21-40	30.5	60-65	62.5
Dam & Reservoir Maintenance	3	33.3	0.0	23-30	26.5	40-65	52.5
Sub-Totals	19	52.6**	47.4**		23.2**		52.4**
8. Semi-Skilled or Service Workers							
Insect Sprayer	6	20.0	20.0	16-25	20.2	50-66	59.0
Well Driller & Pump Employee	4	25.0	0.0	18-25	21.0	50-65	56.2
Truck Driver	1	0.0	100.0	--	20.0	--	45.0
Irrigator	1	100.0	0.0	--	25.0	--	45.0
Ditch-rider	5	80.0	0.0	21-25	23.0	40-65	55.0
Airplane Crop Duster Loader	1	0.0	100.0	18-23	20.5	55-60	57.5
General Laborer	7	42.9	57.1	15-21	18.3	40-65	51.7
Sub-Totals	25	40.8**	54.4**		20.5**		54.5**
TOTAL	95	16.1*	56.7*		24.6*		52.7*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title divided by Total Firms.

***All similar job titles in all categories under each heading as listed on Table 2.

TABLE 15.7 SUMMARY OF WEIGHTED AVERAGES FOR EACH LEVEL OF EMPLOYMENT IN FIVE OCCUPATIONAL DIVISIONS IN NON-FARM BUSINESSES AND GOVERNMENT AGENCIES: DESIRED CHARACTERISTICS OF FUTURE EMPLOYEES TO INCLUDE; RESIDENTIAL BACKGROUND, AGE FOR EMPLOYMENT, TRAINING AND EXPERIENCE NEEDED PRIOR TO EMPLOYMENT.

Level of Employment Job Titles	Residential Background (Percentage)			Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)
	Farm	Urban	None	Minimum Mean	Maximum Mean		
Professional Occupations							
Agricultural & Allied Mechanics	25.0	0.0	75.0	26.0	55.0	100.0	100.0
Animal Industry	0.0	20.4	79.5	24.3	44.7	54.5	18.2
Business--Economics, Finance	66.7	0.0	33.3	23.3	47.8	83.3	50.0
Horticulture--Ornamental, Turf	0.0	0.0	0.0	28.3	55.0	100.0	66.6
Plant Industry--Crops, Soils, etc.	33.3	0.0	66.7	23.7	58.3	100.0	0.0
Government Agencies	64.4	0.0	35.9	22.4	53.2	100.0	20.5
Managerial and Administrators							
Agricultural & Allied Mechanics	65.0	15.2	78.2	28.5	43.2	61.6	47.7
Animal Industry	20.7	5.0	74.3	29.5	50.0	72.7	70.0
Business--Economics, Finance	40.5	4.8	54.8	25.6	47.3	60.2	71.0
Horticulture--Ornamental, Turf	15.0	3.3	81.6	24.7	47.9	100.0	85.0
Plant Industry--Crops, Soils, etc.	0.0	31.8	68.1	28.4	54.8	95.6	63.8
Government Agencies	73.7	0.0	26.3	20.7	55.0	100.0	84.2
Supervisory Occupations							
Agricultural & Allied Mechanics	8.7	8.7	82.5	27.7	49.3	78.2	86.9
Animal Industry	19.1	0.0	80.9	25.9	48.4	74.3	82.8
Business--Economics, Finance	20.9	0.0	79.0	24.6	49.0	78.5	95.3
Horticulture--Ornamental, Turf	25.9	0.0	74.1	24.9	54.4	84.9	92.6
Plant Industry--Crops, Soils, etc.	66.7	16.7	16.7	24.6	49.6	50.0	66.6
Government Agencies	74.1	0.0	25.9	22.3	55.0	96.3	63.0
Technical Occupations							
Agricultural & Allied Mechanics	0.0	0.0	100.0	21.0	50.0	100.0	50.0
Animal Industry	37.5	12.5	50.0	20.0	56.0	87.5	30.0
Business--Economics, Finance	50.0	50.0	0.0	24.0	40.0	50.0	100.0
Horticulture--Ornamental, Turf	0.0	0.0	100.0	23.8	57.5	100.0	100.0
Plant Industry--Crops, Soils, etc.	0.0	0.0	100.0	19.0	53.3	100.0	33.3
Government Agencies	81.2	0.0	18.8	20.5	54.0	87.5	25.0

TABLE 15.7 (Continued)

Level of Employment Job Titles	Residential Background (Percentage)			Age for Employment		Training Needed (Percent)	Ave. Experience Necessary (Percent)
	Farm	Urban	None	Minimum Mean	Maximum Mean		
Sales Occupations							
Agricultural & Allied Mechanics	10.9	4.1	84.9	23.3	46.7	28.7	43.8
Animal Industry	6.7	13.3	80.0	22.3	47.0	24.6	20.4
Business--Economics, Finance	30.3	7.1	62.5	22.5	46.8	55.3	46.4
Horticulture--Ornamental, Turf	10.0	15.0	75.0	20.3	53.1	40.0	70.0
Plant Industry--Crops, Soils, etc.	0.0	0.0	100.0	23.0	52.5	50.0	50.0
Government Agencies	--	--	--	--	--	--	--
Clerical Occupations							
Agricultural & Allied Mechanics	3.7	3.7	92.5	19.3	48.0	64.1	35.8
Animal Industry	5.1	10.3	84.5	23.4	50.8	64.3	46.6
Business--Economics, Finance	15.0	0.0	85.0	21.0	48.7	81.8	38.3
Horticulture--Ornamental, Turf	0.0	10.0	90.0	21.9	44.4	100.0	70.0
Plant Industry--Crops, Soils, etc.	19.1	11.9	69.0	19.3	54.3	76.2	42.8
Government Agencies	11.1	0.0	88.9	19.1	53.4	100.0	5.5
Skilled Occupations							
Agricultural & Allied Mechanics	10.2	10.0	79.7	21.8	49.2	73.7	78.6
Animal Industry	26.9	1.7	71.4	23.1	48.2	61.6	52.6
Business--Economics, Finance	21.3	0.0	78.7	21.9	46.7	59.6	61.7
Horticulture--Ornamental, Turf	8.3	0.0	91.7	22.3	76.1	83.3	83.3
Plant Industry--Crops, Soils, etc.	52.6	0.0	47.4	23.2	52.4	52.6	42.1
Government Agencies	48.4	0.0	51.6	22.6	50.7	87.5	71.4
Semi-Skilled or Service Workers							
Agricultural & Allied Mechanics	11.3	5.9	82.7	20.2	49.3	36.2	41.6
Animal Industry	25.8	6.4	67.8	19.8	51.3	38.5	40.0
Business--Economics, Finance	27.5	2.5	70.0	20.5	49.1	25.7	41.4
Horticulture--Ornamental, Turf	24.4	0.0	75.5	19.3	52.5	31.1	28.9
Plant Industry--Crops, Soils, etc.	40.8	4.8	54.4	20.5	54.5	22.4	32.8
Government Agencies	45.4	3.0	51.6	17.8	54.7	54.5	30.3

Table 16.1 COMPILED OPINIONS OF THIRTY-NINE DEPARTMENT HEADS OF AGRICULTURAL AGENCIES INTERVIEWED AS TO EDUCATIONAL REQUIREMENTS DESIRED OF FUTURE EMPLOYEES: STARTING WAGE SCALE PER WEEK BY RANGE AND MEAN

Level of Employment Job Titles	No. Depts. With Job Titles	Less H.S.	H.S. Gr.	Post H.S.	2-Year College	Advanced Degrees			Wage, * Weekly Range Mean	
						B.S.	M.S.	Ph.D.		
						Percentage				
1. Professional Occupations										
Veterinarian	4	0:0	0:0	0:0	0:0	0.0	100.0	0:0	5-7	6.5
Financial Advisor	4	0:0	0:0	0:0	0:0	25.0	75.0	0.0	5-7	6.5
Research	2	0:0	0:0	0:0	0:0	50.0	0.0	50.0	5	5.0
Teaching - College, H.S.	2	0:0	0:0	0:0	0:0	100.0	0.0	0.0	4-5	4.5
Extension	1	0:0	0:0	0:0	0:0	100.0	0.0	0.0	6	6.0
Home Extension Agent	1	0:0	0:0	0:0	0:0	100.0	0.0	0.0	6	6.0
Pathologist	1	0:0	0:0	0:0	0:0	100.0	0.0	0.0	7	7.0
Entomologist	1	0:0	0:0	0:0	0:0	100.0	0.0	0.0	7	7.0
Chemist, Biologist, Botanist, Soil Scientist	6	0:0	0:0	0:0	0:0	83.3	16.7	0:0	4-7	5.0
2. Managers & Administrators										
Public Relations - Newspaper, TV, Agriculturist	2	0:0	0:0	0:0	0:0	100.0	0.0	0:0	5-6	5.5
Teaching & Research	5	0:0	0:0	0:0	0:0	0.0	40.0	60.0	5-7	6.2
Forester	2	0:0	0:0	0:0	0:0	100.0	0.0	0.0	4-5	4.5
Extension Specialist	3	0:0	0:0	0:0	0:0	33.3	66.7	0.0	7	7.0
Graduate Assistant	5	0:0	0:0	0:0	0:0	100.0	0.0	0.0	4-7	5.2
Sub-Totals	39					58.9**	30.8**	10.3**		5.8**
3. Supervisory Occupations										
District Supt. or Supervisor	14	0:0	0.0	0.0	0.0	42.9	50.0	7.1	5-8	7.4
Assistant Supervisor	5	0:0	0:0	0:0	0.0	40.0	60.0	0.0	4-8	6.2
Foremen	2	100.0	0:0	0:0	0:0	42.1**	52.7**	5.2**		7.1**
Sub-Totals	19									
3. Supervisory Occupations										
District Supt. or Supervisor	16	0:0	12.5	0:0	6.3	43.7	37.5	0:0	4-7	6.6
Assistant Supervisor	9	11.1	22.2	0:0	11.1	55.6	0.0	0:0	4-7	5.1
Foremen	2	100.0	0:0	0:0	0:0	0.0	0.0	0:0	4-5	4.5
Sub-Totals	27	11.1**	14.8**	0:0	7.4**	44.5**	22.2**	0:0		5.9**

Table 16.1 (Continued)

Level of Employment Job Titles	No. Depts with Job Title	Percentage				Advanced Degrees			Wage*, Range	Weekly Mean
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S.	Ph.D.		
4. Technical Occupations										
Fieldman - general	9	11.1	22.2	11.1	44.5	11.1	0.0	0.0	3-4	4.5
Inspector	2	0.0	100.0	0.0	0.0	0.0	0.0	0.0	4-5	4.5
Laboratory technician	4	0.0	25.0	50.0	0.0	25.0	0.0	0.0	3-4	3.8
Pest control - rodents	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	4.0
Sub-totals	<u>16</u>		<u>37.5**</u>	<u>18.7**</u>	<u>25.1**</u>	<u>12.5**</u>				<u>4.3**</u>
5. Clerical Occupations										
Secretary	14	0.0	100.0	0.0	0.0	0.0	0.0	0.0	3-6	3.6
Helper	4	0.0	66.7	33.3	0.0	0.0	0.0	0.0	3-4	3.3
Sub-totals	<u>18</u>		<u>92.6**</u>	<u>7.4**</u>						<u>3.5**</u>
6. Skilled Occupations										
Special Equipment Operator	2	0.0	50.0	50.0	0.0	0.0	0.0	0.0	4-6	5.0
Maintenance - Spec. Equip.	1	0.0	0.0	0.0	100.0	0.0	0.0	0.0	--	5.0
Greens Keeper	5	0.0	40.0	40.0	0.0	20.0	0.0	0.0	5-7	5.6
Sub-totals	<u>8</u>		<u>37.5**</u>	<u>37.5**</u>	<u>12.5**</u>	<u>12.5**</u>				<u>5.4**</u>
7. Semi-skilled or Service Workers										
Landscape - propagation, shrubs, lawns, grounds maintenance	12	16.7	75.0	0.0	8.3	0.0	0.0	0.0	3-5	4.0
Pest control - weeds, insects	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	4.0
Unskilled part-time help	5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2-4	3.9
Truck Driver	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	4.0
General construction worker	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	4.0
Farmer	3	33.3	66.7	0.0	0.0	0.0	0.0	0.0	3-6	4.7
Trainee	7	14.3	28.6	0.0	57.1	0.0	0.0	0.0	2-6	3.3
Reporter of Data	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	4.0
Farm hand	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	--	3.5
Sub-totals	<u>33</u>	<u>33.4**</u>	<u>51.5**</u>	<u>0.0</u>	<u>15.1**</u>					<u>3.7**</u>
TOTALS	160	9.3**	29.2**	4.6**	7.5**	28.7**	17.6**	3.1**		5.1**

*Weekly Wage Scale: 2 = \$41-60, 3 = \$61-80, 4 = \$81-100, 5 = \$101-120, 6 = \$121-140, 7 = \$141-200, 8 = over \$200.

**Weighted = Nc. Depts. With Job Titles X percent or mean divided by total No. Dept.

Table 16.2 COMPILED OPINIONS OF EIGHTY-FOUR EMPLOYERS INTERVIEWED IN NON-FARM BUSINESSES IN AGRICULTURE AND ALLIED MECHANICS AS TO EDUCATIONAL REQUIREMENTS DESIRED OF FUTURE EMPLOYEES: STARTING WAGE SCALE PER WEEK BY RANGE AND MEAN

Level of Employment Job Titles ***	No. Firms With Job Title	Percentage				Advanced Degrees		Wage Weekly** Range Mean
		Less H.S.	H.S. Grad.	Post H.S. College	2-Year College	B.S.	M.S. Ph.D.	
1. Professional Occupations Public Accountant	3	0.0	0.0	0.0	0.0	100.0	0.0	7-8 7.5
2. Managers & Administrators General Manager	47	0.0	45.0	0.0	25.0	30.0	0.0	5-8 7.4
Office Manager	13	10.0	20.0	0.0	40.0	30.0	0.0	4-8 6.5
Sales Manager	10	0.0	50.0	12.5	12.5	25.0	0.0	5-8 6.8
Parts Manager	8	0.0	66.6	0.0	0.0	33.3	0.0	4-8 6.5
Service Manager	10	0.0	100.0	0.0	0.0	0.0	0.0	2-8 6.6
Plant Manager	4	0.0	50.0	0.0	50.0	0.0	0.0	7-8 7.2
Purchasing Manager	4	0.0	75.0	0.0	25.0	0.0	0.0	6-8 6.7
Credit Manager	2	0.0	100.0	0.0	0.0	0.0	0.0	--- 7.0
Advertising Manager	2	0.0	0.0	0.0	100.0	0.0	0.0	5-6 5.5
Sub-Totals	100	1.3**	51.1**	1.2**	23.2**	23.2**	0.0	7.0**
3. Supervisory Occupations Shop Foreman	18	0.0	88.8	0.0	11.1	0.0	0.0	4-8 6.2
Plant Superintendent	5	20.0	60.0	0.0	0.0	20.0	0.0	5-8 6.4
Sub-Totals	23	4.3**	82.5**	8.7**	8.7**	4.3**	0.0	6.2**
4. Technical Occupations Draftsman	1	0.0	0.0	0.0	100.0	0.0	0.0	--- 7.0
Estimator Engineer	1	0.0	100.0	0.0	0.0	0.0	0.0	--- 7.0
Sub-Totals	2	0.0	50.0**	50.0**	50.0**	0.0	0.0	7.0**
5. Sales Occupations General Salesman	25	13.0	60.8	13.0	13.0	0.0	0.0	2-7 5.5
Machinery Salesman	9	22.2	44.4	11.1	11.1	11.1	0.0	4-8 6.5
Driver Salesman	4	0.0	50.0	25.0	25.0	0.0	0.0	4-7 5.7
Partsman	20	5.2	89.5	5.2	0.0	0.0	0.0	3-7 4.7
Job Write-Up Salesman	3	33.3	66.6	0.0	0.0	0.0	0.0	5-7 5.7
Clerks	12	9.1	90.9	0.0	0.0	0.0	0.0	2-6 3.7
Sub-Totals	73	11.5**	71.2**	8.6**	7.2**	1.4**	0.0	5.1**

Table 16.2 (continued)

Level of Employment Job Titles***	No. Firms With Job Title	Percentage								Wage Weekly*** Range Mean
		Less H.S.		H.S. Grad.		Post H.S. College		Advanced Degrees		
		H.S.	H.S. Grad.	H.S.	College	B.S.	M.S.	Ph.D.	Mean	
6. Clerical Occupations	19	0.0	42.8	21.4	35.7	0.0	0.0	0.0	2-7	4.0
Bookkeeper	34	3.2	61.4	16.1	19.3	0.0	0.0	0.0	2-6	3.8
General Secretary	53	2.1**	54.7**	18.0**	25.2**					3.9**
Sub-Totals										
7. Skilled Occupations	35	25.2	68.0	3.2	3.2	0.0	0.0	0.0	3-8	5.4
Automobile & Gen. Mec.										
Diesel & Automotive &/or heavy equip.	7	28.5	71.4	0.0	0.0	0.0	0.0	0.0	3-3	5.8
Steel Worker	4	25.0	50.0	25.0	0.0	0.0	0.0	0.0	2-8	6.0
Welder	13	53.8	37.7	7.7	0.0	0.0	0.0	0.0	2-7	5.4
Equip. & Plant Operator	5	25.0	50.0	25.0	0.0	0.0	0.0	0.0	4-7	5.0
Sheet Metal Worker	5	20.0	80.0	0.0	0.0	0.0	0.0	0.0	2-8	5.8
General Repair	6	33.3	66.6	0.0	0.0	0.0	0.0	0.0	4-8	5.5
Machinist	4	25.0	25.0	50.0	0.0	0.0	0.0	0.0	5-7	5.5
Metal Fab Layout Man	2	0.0	50.0	0.0	50.0	0.0	0.0	0.0	6-7	6.5
Ornamental Iron Worker	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	---	7.0
Electric Motor Winding	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	---	5.0
Sub-Totals	83	29.0**	60.5**	7.7**	2.5**					5.5**
8. Semi-Skilled or Service										
Truck Driver	12	10.0	80.0	10.0	0.0	0.0	0.0	0.0	2-7	5.2
General Construction	5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4-7	5.0
Shipping, Receiving	4	25.0	75.0	0.0	0.0	0.0	0.0	0.0	3-5	3.7
Warehouseman	4	25.0	75.0	0.0	0.0	0.0	0.0	0.0	---	5.0
General Laborer	8	42.8	42.8	14.3	0.0	0.0	0.0	0.0	2-5	3.2
Janitor	4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2-5	3.5
Sub-Totals	37	42.2**	51.4**	6.3**	12.5*	7.5*	0.0*	0.0*		5.5*
TOTAL	374	13.8*	59.2*	6.2*						

* Weighted averages in eight levels of employment

** Weighted Computations = Number of Firms X percentage of mean for each job title ÷ Total Firms

*** Weekly Wage Scale: 2 = \$41-60; 3 = \$61-80; 4 = \$81-100; 5 = \$101-120; 6 = \$121-140; 7 = \$141-200; 8 = over \$200

**** Same job titles as listed on Table



TABLE 16.3 COMPILED FROM SURVEYS OF EMPLOYERS OF SIXTY-SIX NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF ANIMAL INDUSTRY AS TO EDUCATIONAL REQUIREMENTS DESIRED OF FUTURE EMPLOYEES AS COMPARED TO STARTING WAGE SCALE PER WEEK.

Level of Employment Job Titles***	No. Firms	Less H.S.		H.S.		Post H.S.	Percentage			Advanced Degrees		Wage, Weekly** Range Mean
		H.S.	Gr.	H.S.	Gr.		2-Year College	B.S.	M.S.	Ph.D.		
1. Professional Occupations												
Veterinarian	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.5	12.5	6-8	7.1
Attorney for Livestock Firm	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	--	8.0
Financial Advisor	1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	--	8.0
Sub-Totals	11							9.1**	71.6**	19.3**		7.3**
2. Managers & Administrators												
General Manager	51	0.0	45.0	5.0	0.0	20.0	25.0	5.0	0.0	0.0	4-8	6.9
Office Manager	13	0.0	30.0	0.0	0.0	20.0	50.0	0.0	0.0	0.0	3-8	6.7
Sales Manager	10	0.0	80.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	5-8	7.1
Plant Manager	7	0.0	28.6	14.3	0.0	14.3	42.8	0.0	0.0	0.0	4-8	6.4
Credit Manager	2	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	6-7	6.5
Sub-Totals	83		45.6**	4.3**		19.0**	28.0**	3.1**				6.8**
3. Supervisory Occupations												
Shop foreman	5	20.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6-7	6.8
Ranch foreman	3	0.0	66.7	0.0	0.0	0.0	33.3	0.0	0.0	0.0	4-6	5.0
Slaughterhouse Superintendent	2	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4-5	4.5
Sales Yard Superintendent	1	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	--	5.0
Plant or Mill Superintendent	16	7.1	64.3	0.0	0.0	14.3	14.3	0.0	0.0	0.0	4-7	6.6
Sub-Totals	27	7.9**	67.7**			8.5**	15.9**					6.2**
4. Technical Occupations												
Laboratory Technician	6	0.0	33.3	0.0	0.0	50.0	16.7	0.0	0.0	0.0	3-7	5.0
Artificial Inseminator	2	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3-5	4.0
Sub-Totals	8		50.0**			37.5**	12.5**					4.7**
5. Sales Occupations												
General Salesman	17	6.3	68.7	0.0	0.0	0.0	25.0	0.0	0.0	0.0	1-7	5.2
Driver Salesman	11	0.0	81.8	18.2	0.0	0.0	0.0	0.0	0.0	0.0	4-7	5.7
Store--display Salesman	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	3.0
Sub-Totals	30	10.2**	68.9**	6.7**		0.0	14.2**					5.2**

TABLE 16.3 (Continued)

Level of Employment Job Titles****	No. Firms	Percentage				Advanced Degrees			Wage, Weekly*** Range Mean	
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S.	Ph.D.		
6. Clerical Occupations	21	0.0	38.9	11.1	33.3	16.7	0.0	0.0	3-7	4.5
Bookkeeper	23	5.0	90.0	5.0	0.0	0.0	0.0	0.0	2-6	3.6
General Secretary	44	2.6**	65.6**	7.9**	15.9**	8.0**				4.0**
Sub-Totals										
7. Skilled Occupations	6	0.0	83.3	0.0	16.7	0.0	0.0	0.0	4-6	4.6
Dairy Plant Processor	4	0.0	100.0	0.0	0.0	0.0	0.0	0.0	5-6	5.7
Milk Driver--Bulk Tank	1	0.0	0.0	50.0	50.0	0.0	0.0	0.0	--	6.0
Mill Operator	7	0.0	100.0	0.0	0.0	0.0	0.0	0.0	5-7	5.7
Dairy Plant Maintenance	2	0.0	50.0	50.0	0.0	0.0	0.0	0.0	--	6.0
Meat Firm--Spec. Equip. Operator	16	38.5	53.8	7.7	0.0	0.0	0.0	0.0	3-7	5.7
Meat Cutter	6	50.0	50.0	0.0	0.0	0.0	0.0	0.0	4-6	4.8
Apprentice--Meat Cutter	3	33.3	66.7	0.0	0.0	0.0	0.0	0.0	--	4.0
Butcher	9	0.0	100.0	0.0	0.0	0.0	0.0	0.0	5-7	5.7
General Mechanics	6	0.0	33.3	33.3	33.3	0.0	0.0	0.0	4-7	5.7
Cattle Truck Driver--Diesel	60	16.9**	69.3**	7.9**	58.3**					5.4**
Sub-Totals										
8. Semi-skilled or Service Workers	16	14.3	85.7	0.0	0.0	0.0	0.0	0.0	3-6	4.5
Truck Driver	3	0.0	100.0	0.0	0.0	0.0	0.0	0.0	4-5	4.6
Slaughterhouse Employee	11	27.3	72.7	0.0	0.0	0.0	0.0	0.0	4-6	5.0
Warehouseman	8	25.0	75.0	0.0	0.0	0.0	0.0	0.0	3-4	3.7
Veterinary Animal Care	6	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2-5	3.3
Janitor	3	33.3	66.7	0.0	0.0	0.0	0.0	0.0	3-6	4.3
Ranch Maintenance	3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	3-5	3.6
Horse Wrangler & Cowboy	15	46.2	53.8	0.0	0.0	0.0	0.0	0.0	2-6	3.8
General Laborer	65	37.3**	62.7**							4.2**
Sub-Totals										
Total	328	12.4*	58.5*	4.2*	19.2*	11.4*	3.2*	0.6*		5.4*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title + Total Firms.

***Weekly Wage Scale: 2 = \$41-60, 3 = \$61-80, 4 = \$81-100, 5 = \$101-200, 6 = \$21-140, 7 = \$141-200, 8 = over \$200.

***All similar job titles in all categories under each heading as listed on Table 2.

TABLE 16.4 COMPILED OPINIONS OF NUMBER OF EMPLOYERS OF VARIOUS NON-INDUSTRIAL BUSINESSES AS TO EDUCATION REQUIREMENTS DESIRED OF FUTURE OF BUSINESS: FINANCE, AGRICULTURAL SUPPLY, SERVICES AS TO EDUCATION REQUIREMENTS DESIRED OF FUTURE EMPLOYEES AS COMPARED TO STARTING WAGE SCALE PER WEEK.

Level of Employee Job Titles***	No. Firms with Job Title	Percentage				Advanced Degrees		Wage, Weekly Range Mean	
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S. Ph.D.		
1. Professional Occupations									
Ranch Appraiser & Accountant	2	0.0	25.0	0.0	25.0	50.0	0.0	4-6	5.3
Water Engineer	1	0.0	0.0	0.0	0.0	100.0	0.0	--	7.0
Sub-Totals	3	-16.7**	-16.7**	0.0	-16.7**	66.7**	0.0	--	-5.9**
2. Managers & Administrators									
Real Estate & Insurance Gen. Mgr.	17	0.0	0.0	0.0	20.0	80.0	0.0	7-8	7.5
Feed Stores & Supplies-Gen. Mgr.	15	0.0	14.2	0.0	42.9	42.9	0.0	4-8	6.5
Petroleum Distributor-Gen. Mgr.	9	0.0	20.0	0.0	40.0	40.0	0.0	7-8	7.8
Bank credit & loan manager	6	0.0	16.7	0.0	0.0	83.3	0.0	3-8	5.6
Food Market-Gen. Mgr.	15	11.1	77.8	0.0	11.1	0.0	0.0	7-8	7.6
Food Market-Meat Dept. Mgr.	2	0.0	50.0	0.0	0.0	50.0	0.0	7-8	7.5
Food Market-Produce Mgr.	4	0.0	75.0	0.0	0.0	25.0	0.0	--	8.0
Office & Credit Manager	12	0.0	18.2	9.1	63.6	9.1	0.0	4-8	5.8
Dept. & Assistant Mgr.	4	0.0	66.7	0.0	33.3	0.0	0.0	6-8	7.0
Sub-Totals	84	-2.0**	-30.3**	-1.3**	-28.6**	-37.8**	0.0	--	-7.0**
3. Supervisory Occupations									
Food Market-Produce Dept. Supr.	17	25.0	68.7	0.0	6.3	0.0	0.0	4-8	6.4
Food Market-Meat Dept. Supr.	17	25.0	50.0	6.2	12.5	6.2	0.0	5-8	6.7
Plant Superintendent	6	0.0	50.0	0.0	50.0	0.0	0.0	5-8	6.0
Rural Electric Line Supervisor	1	0.0	0.0	0.0	0.0	0.0	0.0	--	7.0
Shop &/or Ranch Supervisor	2	0.0	100.0	0.0	0.0	0.0	0.0	--	5.0
Sub-Totals	43	-19.8**	58.5**	-2.4**	-14.4**	-2.4**	0.0	--	-6.4**
4. Technical Occupations									
Food Market-Produce Buyer	2	0.0	50.0	0.0	50.0	0.0	0.0	--	8.0**
5. Sales Occupations									
Farm Supply Salesmen	3	0.0	100.0	0.0	0.0	0.0	0.0	--	3.0
Rural Petroleum Salesmen	7	0.0	14.3	0.0	0.0	85.7	0.0	6-8	6.8
Plumbing & Heating Salesmen	1	0.0	100.0	0.0	0.0	0.0	0.0	--	6.0
Nursery Salesmen	6	0.0	83.3	16.7	0.0	0.0	0.0	3-6	4.2
Insurance Salesmen	10	0.0	60.0	10.0	0.0	30.0	0.0	2-8	5.0

TABLE 16.4 (Continued)

Level of Employment Job Titles***	No. Firms with Job Title	Percentage				Advanced Degrees		Wage, Weekly** Range Mean
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S. Ph.D.	
5. Sales Occupations (continued)								
Real Estate Salesmen	8	0.0	37.5	12.5	25.0	25.0	0.0	4-8 6.0
General Salesmen	5	20.0	60.0	0.0	0.0	20.0	0.0	5-7 5.8
Driver Salesmen	6	0.0	83.3	0.0	0.0	16.7	0.0	4-6 5.0
Feed Salesmen	3	0.0	100.0	0.0	0.0	0.0	0.0	4-5 4.3
Clerks - Store or Business	7	28.6	71.4	0.0	0.0	0.1	0.0	4.2
Sub-Totals	56	5.4**	62.5**	5.4**	3.6**	23.2**	0.0	5.1**
6. Clerical Occupations								
Bookkeepers	10	0.6	57.1	0.0	28.6	14.3	0.0	2-5 3.5
General Secretaries	23	4.6	68.2	13.6	13.6	0.0	0.0	2-6 3.3
Sub-Totals	33	3.2**	64.8**	9.5**	18.1**	4.3**	0.0	3.4**
7. Skilled Occupations								
Water Estimators	1	0.0	100.0	0.0	0.0	0.0	0.0	-- 5.0
Mechanics & Maintenance	2	0.0	50.0	50.0	0.0	0.0	0.0	4-6 5.0
Mill Operators	2	0.0	100.0	0.0	0.0	0.0	0.0	-- 3.0
Market Meat Cutters	20	26.3	73.7	0.0	0.0	0.0	0.0	4-7 5.7
Market Produce Dept. Workers	12	41.7	58.3	0.0	0.0	0.0	0.0	3-7 5.5
Rural Electric Linemen	2	0.0	100.0	0.0	0.0	0.0	0.0	-- 5.0
Gasoline Bulk Tank Drivers	8	0.0	100.0	0.0	0.0	0.0	0.0	4-7 5.2
Sub-Totals	47	21.8**	76.0**	2.1**	0.0	0.0	0.0	5.4**
8. Semi-skilled or Service Workers								
Apprentice Produce Worker	4	25.0	75.0	0.0	0.0	0.0	0.0	3-5 3.5
Apprentice Meat Cutter	6	33.3	66.7	0.0	0.0	0.0	0.0	4-5 4.3
Apprentice Market Managers	1	0.0	100.0	0.0	0.0	0.0	0.0	-- 4.0
Meat Wrappers	6	33.3	66.7	0.0	0.0	0.0	0.0	4-5 4.8
Farm machinery Workers	2	50.0	50.0	0.0	0.0	0.0	0.0	-- 3.0
Warehousesmen	6	83.3	16.7	0.0	0.0	0.0	0.0	3-6 4.2
Truck Drivers	7	14.3	85.7	0.0	0.0	0.0	0.0	4-6 4.4
General Laborers	8	87.5	12.5	0.0	0.0	0.0	0.0	3-7 4.7
Sub-Totals	40	47.5**	52.5**	0.0	0.0	0.0	0.0	4.3**
Total	308	14.1*	53.6*	3.0*	12.9*	16.0*	0.0*	5.6*

*Weighted ave ages in eight levels of employment.

**Weighted ave wages in eight levels of employment. Number of Firms X total figure in each column for each job title ÷ Total Firms.

***Weekly Wage Scale: 2 = \$41-60, 3 = \$61-80, 4 = \$81-100, 5 = \$101-120, 6 = \$121-140, 7 = \$141-200, 8 = over \$200.

****All figures are percentages in all categories unless otherwise specified.

TABLE 16.5 COMPILED FROM SURVEY OF EMPLOYERS OF FORTY-THREE LANDSCAPE BUSINESS CONCERNS OPERATING IN THE AREA OF HORTICULTURE: ORNAMENTAL, TURF (BEAUTIFICATION); AS TO EDUCATION REQUIREMENTS DESIRED OF FUTURE EMPLOYEES AS COMPARED TO STARTING WAGE SCALE PER WEEK.

Level of Employment Job Titles***	No. Firms with Job Title	Percentage				Advanced Degrees		Wage, Weekly** Range Mean
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S. Ph.D.	
1. Professional Landscape Architect Sub-Totals	$\frac{3}{3}$	0.0	0.0	0.0	0.0	$\frac{100.0}{100.0}$ **	0.0	6-8 - 7.0**
2. Managers & Administrators General Manager Office & Sales Manager Sub-Totals	$\frac{27}{3}$ $\frac{30}{30}$	16.7 - 0.0	0.0 - 33.3**	16.7 - 33.3	50.0 - 48.3**	16.6 - 0.0	0.0 - 0.0	4-8 4-7 - 5.3 - 6.1**
3. Supervisory Occupations Landscape & Sprinkler Foreman Golf Course greens Supervisor Grounds, Shop & Plant Supervisor Sub-Totals	$\frac{13}{11}$ $\frac{3}{27}$	0.0 18.2 - 0.0	33.3 36.3 - 66.7**	8.3 18.2 - 0.0	41.7 9.1 - 33.3	16.7 0.0 - 0.0	0.0 0.0 - 0.0	4-7 4-8 5-6 - 5.7 - 6.0**
4. Technical Occupations Fieldman & or Estimator Sub-Totals	$\frac{6}{6}$	16.7 - 16.7**	0.0	33.3 - 33.3**	33.3 - 33.3**	16.7 - 16.7**	0.0	5-7 - 6.0**
5. Sales Occupations Nursery salesman Florist Clerk Sub-Totals	$\frac{13}{3}$ $\frac{4}{20}$	15.4 0.0 - 0.0	76.9 33.3 - 100.0**	0.0 66.7 - 0.0	7.7 0.0 - 0.0	0.0 0.0 - 0.0	0.0 0.0 - 0.0	3-5 3-5 2-4 - 3.3 - 3.5**
6. Clerical Occupations General Secretary Sub-Totals	$\frac{10}{10}$	10.0 - 10.0**	40.0 - 40.0**	10.0 - 10.0**	40.0 - 40.0**	0.0	0.0	3-5 - 3.4 - 3.4**

TABLE 16.5 (Continued)

Level of Employment Job Titles***	No. Firms with Job Title	Less H.S.		Post H.S.	Percentage		Advanced Degrees			Wage, Weekly*** Range Mean	
		H.S.	Gr.		2-Year College	B.S.	M.S.	Ph.D.			
7. Skilled Occupations											
Tree Pruner	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4-6	5.0
Special Equipment Operator	4	50.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	4-7	5.2
Mechanic	5	60.0	20.0	20.0	0.0	0.0	0.0	0.0	0.0	5-7	5.6
Plumber	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	--	8.0
Sub-Totals	12	58.3**	16.7**	16.7**	8.3**	0.0	0.0	0.0	0.0	--	5.6**
8. Semi-skilled or Service Workers											
Landscape Contractor Employee	15	26.7	53.3	0.0	20.0	0.0	0.0	0.0	0.0	3-7	4.4
Golf Course Worker	15	42.9	42.9	7.1	7.1	0.0	0.0	0.0	0.0	3-7	4.8
Gardener	7	85.8	14.2	0.0	0.0	0.0	0.0	0.0	0.0	2-5	3.1
General Laborer	8	75.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	2-5	3.6
Sub-Totals	45	49.9**	38.7**	2.4**	9.0**	0.0	0.0	0.0	0.0	--	4.2**
Total	153	26.1*	32.5*	10.9*	22.2*	6.9*	0.0*	0.0*	0.0*	--	5.0*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title + Total Firms.

***Weekly Wage Scale: 2 = \$41-60, 3 = \$61-80, 4 = \$81-100, 5 = \$101-120, 6 = \$121-140, 7 = \$141-200, 8 = over \$200.

****All similar job titles in all categories under each heading as listed on Table 2.

TABLE 16.6 COMPILED OPINIONS OF EMPLOYERS OF TWENTY-SEVEN NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF PLANT INDUSTRY--CROPS, IRRIGATION, SOIL; EDUCATIONAL REQUIREMENTS DESIRED OF FUTURE EMPLOYEES AS COMPARED TO STARTING WAGE SCALE PER WEEK.

Level of Employment Job Titles***	No. Firms with Job Title	Less H.S.	H.S. Gr.	Post H.S.	Percentage			Wage, Weekly** Range Mean
					2-Year College	B.S. M.S.	Advanced Degrees Ph.D.	
1. Professional Occupations								
Water Enginer	2	0.0	0.0	0.0	0.0	100.0	0.0	--
Attorney	$\frac{1}{3}$	0.0	0.0	0.0	0.0	$\frac{0.0}{66.7^{**}}$	$\frac{100.0}{33.3^{**}}$	--
Sub-Totals								$\frac{7.0}{7.0^{**}}$
2. Managers & Administrators								
General Manager	22	0.0	0.0	0.0	33.3	33.3	0.0	6-7
Office Manager	$\frac{1}{23}$	0.0	0.0	0.0	$\frac{0.0}{31.8^{**}}$	$\frac{100.0}{36.2^{**}}$	$\frac{0.0}{31.8^{**}}$	--
Sub-Totals								$\frac{6.0}{6.3^{**}}$
3. Supervisory Occupations								
Water Enginer Supervisor	2	0.0	71.4	0.0	0.0	28.6	0.0	5-6
Shop & Ranch Foreman	3	0.0	100.0	0.0	0.0	0.0	0.0	5-6
Insect Control Supervisor	$\frac{1}{6}$	0.0	$\frac{100.0}{90.5^{**}}$	0.0	0.0	$\frac{0.0}{9.5^{**}}$	0.0	--
Sub-Totals								$\frac{5.0}{5.3^{**}}$
4. Technical Occupations								
Flight Instructor for Crop Duster	1	0.0	100.0	0.0	0.0	0.0	0.0	--
Draftsman	1	0.0	100.0	0.0	0.0	0.0	0.0	--
Crop Duster	$\frac{1}{3}$	0.0	$\frac{100.0}{100.0^{**}}$	0.0	0.0	0.0	0.0	--
Sub-Totals								$\frac{7.0}{5.7^{**}}$
5. Sales Occupations								
Store Clerk	2	0.0	100.0	0.0	0.0	0.0	0.0	--
Sub-Totals								4.0**
6. Clerical Occupations								
Bookkeeper	4	0.0	50.0	25.0	25.0	0.0	0.0	3-5
General Secretary	$\frac{10}{14}$	$\frac{16.7}{11.9^{**}}$	$\frac{83.3}{73.8^{**}}$	$\frac{0.0}{7.1^{**}}$	$\frac{0.0}{7.1^{**}}$	0.0	0.0	3-4
Sub-Totals								$\frac{4.0}{3.6^{**}}$

TABLE 16.6 (Continued)

Level of Employment Job Titles***	No. Firms with Job Title	Percentage				Advanced Degrees			Wage, Weekly*** Range Mean
		Less H.S.	H.S. Gr.	Post H.S.	2-Year College	B.S.	M.S.	Ph.D.	
7. Skilled Occupations									
Heavy Equipment Operator	11	9.1	90.9	0.0	0.0	0.0	0.0	0.0	3-7 4.8
Printer	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	-- 6.0
Lineman	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	-- 4.0
Power House Operator	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0	-- 6.0
Watermaster	2	0.0	0.0	100.0	0.0	0.0	0.0	0.0	5-6 5.5
Dam & Reservoir Maintenance	3	0.0	0.0	100.0	0.0	0.0	0.0	0.0	4-5 4.7
Sub-Totals	19	5.3**	52.6**	42.1**					
8. Semi-skilled or Service Workers									
Insect Sprayer	6	20.0	80.0	0.0	0.0	0.0	0.0	0.0	3-4 3.8
Well Driller & Pump Employee	4	50.0	50.0	0.0	0.0	0.0	0.0	0.0	3-5 4.2
Truck Driver	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	-- 4.0
Irrigator	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	-- 4.0
Ditch-rider	5	60.0	40.0	0.0	0.0	0.0	0.0	0.0	3-5 4.0
Airplane crop duster loader	1	60.0	40.0	0.0	0.0	0.0	0.0	0.0	-- 3.0
General Laborer	7	85.7	14.3	0.0	0.0	0.0	0.0	0.0	3-5 3.8
Sub-Totals	25	51.2**	48.8**						
Total	95	16.3*	40.3*	9.5*	8.7*	11.5*	8.7*	0.0*	6.4*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title + Total Firms.

***Weekly Wage Scale: 2 = \$41-60, 3 = \$61-80, 4 = \$81-100, 5 = \$101-120, 6 = \$121-140, 7 = \$141-200, 8 = over \$200.

****All similar job titles in all categories under each heading as listed in Table 2.

TABLE 16.7 SUMMARY OF WEIGHTED AVERAGES FOR EACH LEVEL OF EMPLOYMENT IN FIVE OCCUPATIONAL DIVISIONS IN NON-FARM BUSINESS AND GOVERNMENT AGENCIES; EDUCATIONAL REQUIREMENTS DESIRED OF FUTURE EMPLOYEES; STARTING WAGE SCALE PER WEEK.

Level of Employment	Percentage							Wage Weekly Mean
	Less H.S.	H.S. Gr.	Post H.S.	2-Year College	Advanced Degrees			
					B.S.	M.S.	Ph.D.	
1. Professional Occupations	0.0	0.0	0.0	0.0	100.0	0.0	0.0	7.5
Agricultural & Allied Mechanics	0.0	0.0	0.0	0.0	9.1	19.3	0.0	7.3
Animal Industry	0.0	16.7	0.0	16.7	66.7	0.0	0.0	5.9
Business - Economics, Finance	0.0	0.0	0.0	0.0	100.0	0.0	0.0	7.0
Horticulture - Ornamental, Turf	0.0	0.0	0.0	0.0	66.7	33.3	0.0	7.0
Plant Industry - Crops, Soils, Etc.	0.0	0.0	0.0	0.0	58.9	30.8	10.3	5.8
Government Agencies								
2. Managerial and Administrators	1.3	51.1	1.2	23.2	23.2	0.0	0.0	7.0
Agricultural & Allied Mechanics	0.0	45.6	4.3	19.0	28.0	3.1	0.0	6.8
Animal Industry	2.0	30.3	1.3	28.6	37.8	0.0	0.0	7.0
Business - Economics, Finance	15.0	3.3	18.4	48.3	14.9	0.0	0.0	6.1
Horticulture - Ornamental, Turf	0.0	0.0	0.0	31.8	36.2	31.8	0.0	6.3
Plant Industry - Crops, Soils, Etc.	0.0	0.0	0.0	0.0	42.1	52.7	5.2	7.1
Government Agencies								
3. Supervisory Occupations	4.3	82.5	0.0	8.7	4.3	0.0	0.0	6.2
Agricultural & Allied Mechanics	7.9	67.7	0.0	8.5	15.9	0.0	0.0	6.2
Animal Industry	19.8	58.5	2.4	14.4	2.4	0.0	0.0	6.4
Business - Economic, Finance	7.4	38.2	11.4	27.5	8.0	0.0	0.0	6.0
Horticulture - Ornamental, Turf	0.0	90.5	0.0	0.0	9.5	0.0	0.0	5.3
Plant Industry - Crops, Soils, Etc.	11.1	14.8	0.0	7.4	44.5	22.2	0.0	5.9
Government Agencies								
4. Technical Occupations	0.0	50.0	0.0	50.0	0.0	0.0	0.0	7.0
Agricultural & Allied Mechanics	0.0	50.0	0.0	37.5	12.5	0.0	0.0	4.7
Animal Industry	0.0	50.0	0.0	50.0	0.0	0.0	0.0	8.0
Business - Economics, Finance	16.7	0.0	33.3	33.3	16.7	0.0	0.0	6.0
Horticulture - Ornamental, Turf	0.0	100.0	0.0	0.0	0.0	0.0	0.0	5.7
Plant Industry - Crops, Soils, Etc.	6.2	37.5	18.7	25.1	12.5	0.0	0.0	4.3
Government Agencies								

TABLE 16.7 (Continued)

Level of Employment	Percentage						Wage Weekly Mean	
	Less H.S.	H.S. Gr.	Post H.S.	2-Year College	Advanced Degrees			
					B.S.	M.S.		Ph.D.
5. Sales Occupations	11.5	71.2	5.3	7.2	1.4	0.0	5.1	
Agricultural & Allied Mechanics	10.2	68.9	6.7	0.0	14.2	0.0	5.2	
Animal Industry	5.4	62.5	5.4	3.6	23.2	0.0	5.1	
Business - Economics, Finance	10.0	75.0	10.0	5.0	0.0	0.0	3.5	
Horticulture - Ornamental, Turf	0.0	100.0	0.0	0.0	0.0	0.0	4.0	
Plant Industry - Crops, Soils, Etc.	--	--	--	--	--	--	--	
Government Agencies								
16. Clerical Occupations	2.1	54.7	18.0	25.2	0.0	0.0	3.9	
Agricultural & Allied Mechanics	2.6	65.6	7.9	15.9	8.0	0.0	4.0	
Animal Industry	3.2	64.8	9.5	18.1	4.3	0.0	3.4	
Business - Economics, Finance	10.0	40.0	10.0	40.0	0.0	0.0	3.4	
Horticulture - Ornamental, Turf	11.9	73.8	7.1	7.1	0.0	0.0	3.6	
Plant Industry - Crops, Soils, Etc.	0.0	92.6	7.4	0.0	0.0	0.0	3.5	
Government Agencies								
7. Skilled Occupations	29.0	60.5	7.7	2.5	0.0	0.0	5.5	
Agricultural & Allied Mechanics	16.9	69.3	7.9	58.3	0.0	0.0	5.4	
Animal Industry	21.8	76.0	2.1	0.0	0.0	0.0	5.4	
Business - Economics, Finance	58.3	16.7	16.7	8.3	0.0	0.0	5.6	
Horticulture - Ornamental, Turf	5.3	52.6	42.1	0.0	0.0	0.0	4.9	
Plant Industry - Crops, Soils, Etc.	0.0	37.5	37.5	12.5	12.5	0.0	5.4	
Government Agencies								
8. Semi-Skilled or Service Workers	42.2	51.4	6.3	0.0	0.0	0.0	4.4	
Agricultural & Allied Mechanics	37.3	62.7	0.0	0.0	0.0	0.0	4.2	
Animal Industry	47.5	52.5	0.0	0.0	0.0	0.0	4.3	
Business - Economics, Finance	49.9	38.7	2.4	9.0	0.0	0.0	4.2	
Horticulture - Ornamental, Turf	51.2	48.8	0.0	0.0	0.0	0.0	3.9	
Plant Industry - Crops, Soils, Etc.	33.4	51.5	0.0	15.1	0.0	0.0	3.7	
Government Agencies								

Table 17.1 COMPILED OPINIONS OF THIRTY-NINE DEPARTMENT HEADS IN AGRICULTURAL GOVERNMENT AGENCIES INTERVIEWED AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES: THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles	No. Depts. With Job Title	Training by Employer - %		Type of School to Best Train Employees - %	
		On-the-job Training	Specialized Courses	H.S. Voc.	Post H.S. 2-Year Tech. N/A*
1. Professional Occupations					
Veterinarian	4	75.0	0.0	0.0	0.0
Financial Advisor	4	75.0	0.0	0.0	0.0
Research	2	0.0	0.0	0.0	0.0
Teaching - College, H.S.	2	50.0	0.0	0.0	0.0
Extension	1	0.0	0.0	0.0	0.0
Home Extension Agent	1	0.0	0.0	0.0	0.0
Pathologist	1	100.0	0.0	0.0	0.0
Entomologist	1	100.0	0.0	0.0	0.0
Chemist, Biologist, Botanist, Soil Scientist	6	83.3	0.0	0.0	0.0
Public relations - Newspaper, TV, Agriculturist	2	100.0	0.0	0.0	0.0
Teaching & Research	5	0.0	0.0	0.0	0.0
Forester	2	100.0	0.0	0.0	0.0
Extension Specialist	3	0.0	0.0	0.0	0.0
Graduate Assistant	5	20.0	0.0	0.0	0.0
Sub-Totals	39	56.4**			100.0**
2. Managers & Administrators					
Administrator	14	54.3	0.0	0.0	0.0
Administrative Assistant	5	80.0	20.0	0.0	0.0
Sub-Totals	19	68.4**	5.3**		100.0**
3. Supervisory Occupations					
Dist. Supt. or Supervisor	16	75.0	0.0	0.0	12.5
Assistant Supervisor	9	66.7	0.0	0.0	22.2
Foreman	2	50.0	0.0	0.0	0.0
Sub-Totals	27	70.4**		18.5**	66.7**
4. Technical Occupations					
Fieldman - general	9	100.0	0.0	0.0	50.0
Inspector	2	100.0	50.0	0.0	100.0
Laboratory technician	4	50.0	0.0	0.0	75.0
Pest control - rodents	1	100.0	0.0	0.0	0.0
Sub-Totals	16	87.5**	6.2**	25.0**	59.4**

Table 17.1 (Continued)

Level of Employment Job Titles	No. Depts. With Job Title	Training by Employer - %		Type of School to Best Train Employees - %		N/A*
		On-the-job Training	Specialized Courses	H.S. Voc.	Post H.S. 2-Year Tech.	
5. Clerical Occupations	14	50.0	7.1	80.0	20.0	0.0
Secretary	4	50.0	50.0	100.0	0.0	0.0
Helper	18	50.0**	16.6**	84.4**	15.6**	
Sub-Totals						
6. Skilled Occupations	2	100.0	50.0	0.0	50.0	0.0
Special Equipment Operator	1	0.0	0.0	0.0	0.0	0.0
Maintenance - Spec. Equip.	5	80.0	0.0	20.0	60.0	20.0
Greens Keeper	8	75.0**	12.5**	12.5**	50.0**	12.5**
Sub-Totals						
7. Semi-skilled or Service Workers	12	75.0	25.0	50.0	25.0	0.0
Landscape - propagation, shrubs, lawns, grounds maintenance	1	100.0	0.0	100.0	0.0	0.0
Pest control - weeds, insects	5	80.0	20.0	100.0	0.0	0.0
Unskilled part-time help	1	100.0	0.0	100.0	0.0	0.0
Truck Driver	1	100.0	0.0	100.0	0.0	0.0
General construction worker	3	100.0	0.0	33.3	33.4	0.0
Farmer	7	85.7	0.0	33.3	66.7	0.0
Trainee	1	0.0	0.0	100.0	0.0	0.0
Reporter of Data	2	100.0	0.0	100.0	0.0	0.0
Farm hand	33	81.8**	12.1**	61.7**	26.2**	0.0
Sub-Totals	160	68.7**	6.2**	28.5**	18.1**	49.7**
TOTAL						

*Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of schools would provide training for the job.

**Weighted = Number of Depts. With Job Title X per cent training by employer or type school + Total No. Depts.

TABLE 17.2 COMPILED OPINIONS OF EIGHTY-FOUR EMPLOYERS INTERVIEWED IN NON-FARM BUSINESSES IN AGRICULTURE AND ALLIED MECHANICS AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES: THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles***	No. Firms With Job Titles	Training by the Employer %		Type of School to Best Train Employees %		N/A***
		On-the-Job Training	Specialized Courses	H.S. Voc.	Post H.S. 2-Year Tech.	
1. Professional Occupations	3	0.0	0.0	0.0	0.0	100.0
Public Accountant						
2. Managers & Administrators	47	89.4	73.6	5.2	15.8	36.8
General Manager	13	54.5	27.3	0.0	27.2	36.3
Office Manager	10	62.5	25.0	12.5	27.5	12.5
Sales Manager	8	20.0	80.0	57.1	0.0	14.2
Parts Manager	10	40.0	50.0	12.5	37.5	0.0
Service Manager	4	50.0	50.0	0.0	0.0	25.0
Plant Manager	4	75.0	0.0	0.0	25.0	25.0
Purchasing Manager	2	0.0	0.0	0.0	50.0	50.0
Credit Manager	2	100.0	0.0	0.0	50.0	0.0
Advertising Manager	2	67.9**	54.0**	9.5**	20.5**	27.4**
Sub-Totals	100					
3. Supervisory Occupations	18	55.5	55.5	16.6	33.2	8.3
Shop Foreman	5	60.0	0.0	0.0	20.0	40.0
Plant Superintendent	23	49.2**	43.4**	13.0**	30.3**	15.2**
Sub-Totals						
4. Technical Occupations	1	0.0	0.0	0.0	0.0	0.0
Draftsman	1	0.0	0.0	0.0	0.0	0.0
Estimator Engineer	2					
Sub-Totals						
5. Sales Occupations	25	68.0	44.0	36.0	28.0	8.0
General Salesman	9	66.6	77.7	33.3	33.3	0.0
Machinery Salesman	4	75.0	25.0	50.0	0.0	25.0
Driver Salesman	20	75.0	35.0	25.0	30.0	15.0
Partsman	3	100.0	33.0	66.6	33.3	0.0
Job Write-Up Salesman	12	91.7	8.3	50.0	16.6	16.7
Clerk	73	75.3**	36.5**	37.0**	24.6**	11.0**
Sub-Totals						

TABLE 17.2 (Continued)

Level of Employment Job Titles***	No. Firms With Job Titles	Training by the Employer % On-the-Job Training	Type of School to Be Attended		2-Year Tech.	N/A***
			H.S. Voc.	Post H.S.		
6. Clerical Occupations	19	47.4	10.5	21.0	36.8	31.6
Bookkeeper	34	44.1	35.2	26.4	23.5	14.7
General Secretary	53	45.3**	26.3**	26.3**	24.5**	20.7**
Sub-Totals						
7. Skilled Occupations	35	35.4	38.7	22.6	38.7	0.0
Automobile & Gen. Mech.						
Diesel & Automotive and/or heavy equip.	7	71.5	42.8	28.5	28.5	0.0
Steel Worker	4	0.0	50.0	50.0	0.0	0.0
Welder	13	15.3	46.1	30.7	23.0	0.0
Equip. & Plant Operator	5	75.0	25.0	25.0	50.0	0.0
Sheet Metal Worker	5	60.0	40.0	0.0	40.0	20.0
General Repair	6	66.0	50.0	33.3	16.7	0.0
Machinist	4	0.0	0.0	25.0	75.0	0.0
Metal Fab Layout Man	2	0.0	0.0	50.0	0.0	50.0
Ornamental Iron Worker	1	0.0	0.0	0.0	100.0	0.0
Electric Motor Winding	1	100.0	0.0	100.0	0.0	0.0
Sub-Totals	83	37.5**	37.7**	25.5**	35.0**	1.2**
8. Semi-Skilled or Service						
Truck Driver	12	40.0	50.0	30.0	20.0	0.0
General Construction	5	60.0	100.0	0.0	0.0	0.0
Shipping & Receiving	4	25.0	100.0	0.0	0.0	0.0
Warehouseman	4	50.0	75.0	0.0	25.0	0.0
General Laborer	8	50.0	37.5	12.5	25.0	25.0
Janitor	4	0.0	50.0	0.0	0.0	50.0
Sub-Totals	37	40.0**	62.2**	12.4**	14.6**	10.8**
Total	374	54.6*	31.7*	22.5*	32.6*	15.5*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X percentage for each job title - Total Firms.

***Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of schools would provide training for the job.

****Same Job Titles as listed on Table 2.

TABLE 17.3 COMPILED : OPINIONS OF EMPLOYERS OF SIXTY-SIX NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF ANIMAL INDUSTRY AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEE, AND THEIR OPINIONS AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles***	No. Firms with Job Titles	Training by Employer - %		Type of School to Best Train Employees - %		N/A***
		On-the-job Training	Specialized Courses	H.S. Voc.	Post 2-Year Tech.	
1. Professional Occupations						
Veterinarian	9	33.3	11.1	0.0	0.0	100.0
Attorney for Livestock Firm	1	0.0	0.0	0.0	0.0	100.0
Financial Advisor	1	0.0	0.0	0.0	0.0	100.0
Sub-Totals	11	27.2**	9.1**	0.0	0.0	100.0**
2. Managers & Administrators						
General Manager	51	29.4	11.7	11.8	11.8	29.4
Office Manager	13	54.5	9.0	18.3	9.1	36.3
Sales Manager	10	50.0	20.0	0.0	10.0	10.0
Plant Manager	7	28.5	1.4	28.6	14.3	42.8
Credit Manager	2	100.0	50.0	0.0	0.0	50.0
Sub-Totals	83	37.4**	12.3**	12.5**	11.1**	29.8**
3. Supervisory Occupations						
Shop foreman	5	40.0	20.0	60.0	20.0	0.0
Ranch foreman	3	100.0	0.0	0.0	0.0	50.0
Slaughterhouse Superintendent	2	50.0	0.0	50.0	0.0	0.0
Sales Yard Superintendent	1	0.0	0.0	0.0	0.0	0.0
Plant or Mill Superintendent	16	42.9	7.1	28.6	14.3	21.4
Sub-Totals	27	47.6**	7.9**	31.8**	12.2**	18.2**
4. Technical Occupations						
Laboratory Technician	6	83.3	16.6	0.0	16.7	16.7
Artificial Inseminator	2	100.0	50.0	50.0	0.0	50.0
Sub-Totals	8	87.5**	24.9**	12.5**	12.5**	25.0**
5. Sales Occupations						
General Salesman	17	52.9	11.7	23.5	17.7	23.5
Driver Salesman	11	63.6	0.0	36.4	9.1	9.1
Store--display Salesman	2	100.0	0.0	50.0	0.0	0.0
Sub-Totals	30	60.0**	6.6**	30.0**	13.4**	16.6**

TABLE 17.3 (Continued)

Level of Employment Job Titles****	No. Firms with Job Titles	Training by Employer - %		Type of School to Best Train Employees - %		2-Year Tech.	N/A***
		On-the-Job Training	Specialized Courses	H.S. Voc.	Post H.S.		
6. Clerical Occupations							
Bookkeeper	21	61.1	0.0	5.6	11.1	55.6	27.7
General Secretary	23	65.2	0.0	42.9	28.6	23.8	4.7
Sub-Totals	44	63.2**		25.1**	20.2**	39.0**	15.7**
7. Skilled Occupations							
Dairy Plant Processor	6	100.0	0.0	50.0	0.0	33.3	16.7
Milk Driver--Bulk Tank	4	100.0	0.0	50.0	25.0	0.0	25.0
Mill Operator	1	100.0	0.0	0.0	0.0	100.0	0.0
Dairy Plant Maintenance	7	28.6	14.2	28.6	28.6	28.6	14.2
Meat Firm--Spec. Equip. Operator	2	100.0	0.0	0.0	100.0	0.0	0.0
Meat Cutter	16	37.5	6.2	43.7	25.0	18.7	12.6
Apprentice--Meat Cutter	6	50.0	0.0	66.6	16.7	16.7	16.7
Butcher	3	66.7	0.0	66.7	33.3	0.0	0.0
General Mechanic	9	25.0	0.0	0.0	37.5	37.5	25.0
Cattle Truck Driver--Diesel	6	33.3	0.0	33.3	0.0	33.3	33.4
Sub-Totals	60	50.4**	3.3**	36.6**	24.0**	23.9**	17.1**
8. Semi-skilled or Service Workers							
Truck Driver	16	60.0	6.7	80.0	6.7	0.0	13.3
Slaughterhouse Employee	3	33.3	0.0	66.7	0.0	0.0	33.3
Warehouseman	11	90.9	0.0	72.7	9.1	0.0	18.2
Veterinary Animal Care	8	87.5	12.5	50.0	25.0	0.0	25.0
Janitors	6	50.0	0.0	50.0	0.0	0.0	50.0
Ranch Maintenance	3	100.0	0.0	33.3	33.3	0.0	33.4
Horse Wrangler & Cowboy	3	0.0	0.0	0.0	0.0	0.0	100.0
General Laborer	15	57.1	0.0	50.0	0.0	0.0	50.0
Sub-Totals	65	64.9**	3.1**	58.9**	7.8**	0.0	33.3**
Total	328	52.2*	6.5*	30.6*	16.4*	26.9*	26.3*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title ÷ Total Firms.

***Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of school would provide training for the job.

****All similar job titles in all categories under each heading as listed on Table 2.

Table 17.4 COMPILED OPINIONS OF EMPLOYERS OF NINETY NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF BUSINESS: FINANCE, AGRICULTURAL SUPPLY, SERVICE AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES, AND THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles***	No. Firms With Job Title	Training by Employer - %		Type of School to Best Train Employees			
		On-the-job Training	Specialized Courses	H.S. Voc.	Post H.S. Tech.	2-Year Tech.	N/A***
1. Professional Occupations							
Ranch Appraiser & Accountant	2	50.0	25.0	0.0	0.0	50.0	50.0
Water Engineer	1	100.0	100.0	0.0	0.0	0.0	100.0
Sub-Totals	3	66.7**	50.0**			33.3**	66.7**
2. Managers & Administrators							
Real Estate & Insurance - Gen. Mgr.	17	13.3	20.0	0.0	6.7	0.0	93.3
Feed Stores & Supplies - Gen. Mgr.	15	40.0	33.3	6.7	13.3	13.3	66.7
Petroleum Distribution - Gen. Mgr.	9	22.2	22.2	11.1	0.0	22.2	66.7
Bank credit & loan manager	6	50.0	50.0	33.3	0.0	16.7	50.0
Food Market - Gen. Mgr.	15	20.0	6.7	13.3	6.7	40.0	40.0
Food Market - Meat Dept. Mgr.	2	50.0	0.0	0.0	50.0	50.0	0.0
Food Market - Produce Mgr.	4	25.0	0.0	50.0	0.0	50.0	0.0
Office & Credit Manager	12	54.5	36.4	0.0	45.4	36.4	18.2
Dept. & Assistant Mgr.	4	75.0	0.0	0.0	0.0	75.0	25.0
Sub-Totals	84	33.4**	22.3**	9.5**	12.6**	25.4**	52.4**
3. Supervisory Occupations							
Food Market - Produce Dept. Supr.	17	52.9	47.0	58.8	5.9	23.5	11.8
Food Market - Meat Dept. Supr.	17	35.3	0.0	35.3	23.5	29.4	11.8
Plant Superintendent	6	66.7	33.3	33.3	0.0	50.0	16.7
Rural Electric Line Supervisor	1	100.0	100.0	0.0	0.0	100.0	0.0
Shop &/or Ranch Supervisor	2	100.0	0.0	100.0	0.0	0.0	0.0
Sub-Totals	43	51.1**	25.5**	46.5**	11.6**	30.2**	11.7**
4. Technical Occupations							
Food Market - Produce Buyer	2	100.0**	0.0	50.0	0.0	50.0**	0.0

*Weighted averages in eight levels of employment.

**Weighted Computations - Number of Firms x total figure in each column for each job title ÷ Total Firms.

***Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of schools would provide training for the job.

or none of the types of schools would provide training for the job.

Table 17.4 (Continued)

Level of Employment Job Titles	No. Firms With Job Title	Training by Employer - %		Type of School to Best Train Employees - %	
		On-the-job Training	Specialized Courses	H.S. Voc.	2-Year Tech. H.S.
5. Sales Occupations					
Farm Supply Salesman	3	0.0	33.3	0.0	100.0
Rural Petroleum Salesman	7	50.0	50.0	14.3	71.4
Plumbing & Heating Salesman	1	0.0	0.0	0.0	0.0
Nursery Salesman	6	16.7	33.3	50.0	50.0
Insurance Salesman	10	60.0	50.0	10.0	40.0
Real Estate Salesman	8	62.5	25.0	0.0	87.5
General Salesman	5	20.0	0.0	20.0	20.0
Driver Salesman	6	33.3	16.7	50.0	16.7
Feed Salesman	3	100.0	33.3	0.0	66.7
Clerk - Store or Business	7	28.6	28.6	0.0	28.6
Sub-Totals	56	42.0**	31.2**	16.1**	50.0**
6. Clerical Occupations					
Bookkeeper	10	71.4	0.0	28.6	28.6
General Secretary	23	63.6	13.6	18.2	36.4
Sub-Totals	33	66.0**	9.5**	21.3**	34.0**
7. Skilled Occupations					
Water Estimator	1	100.0	100.0	0.0	100.0
Mechanics & Maintenance	2	50.0	0.0	0.0	50.0
Mill Operator	2	100.0	0.0	0.0	0.0
Market Meat Cutter	20	35.0	0.0	20.0	10.0
Market Produce Dept. Worker	12	66.7	0.0	8.3	16.7
Rural Electric Lineman	2	50.0	50.0	0.0	50.0
Gasoline Bulk Tank Driver	8	62.5	12.5	0.0	37.5
Sub-Totals	47	53.2**	6.4**	10.6**	46.8**
8. Semi-skilled or Service Workers					
Apprentice Produce Worker	4	75.0	0.0	0.0	0.0
Apprentice Meat Cutter	6	100.0	0.0	16.7	0.0
Apprentice Market Manager	1	100.0	0.0	0.0	100.0
Meat Wrapper	6	33.3	0.0	0.0	0.0
Farm machinery worker	2	100.0	0.0	0.0	0.0
Warehouseman	6	50.0	0.0	16.7	0.0
Truck Driver	7	42.8	14.3	0.0	0.0
General Laborer:	8	25.0	0.0	0.0	0.0
Sub-Totals	40	55.0**	2.5**	5.0**	2.5**

TABLE 17.5 COMPILED OPINIONS OF EMPLOYERS OF FORTY-THREE NON-FARM BUSINESSES INTERVIEWED IN THE AREA OF HORTICULTURE: ORNAMENTAL, TURF (BEAUTIFICATION); AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES, AND THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles***	No. Firms with Job Titles	Training by Employer - %		Type of School to Best Train Employees - %			N/A***
		On-the-job Training	Specialized Courses	H.S. Voc.	Post H.S.	2-Year Tech.	
1. Professional Occupations Landscape Architect Sub-Totals	$\frac{3}{3}$	$\frac{33.3}{33.3**}$	$\frac{33.3}{33.3**}$	0.0	0.0	0.0	$\frac{100.0}{100.0}$
2. Manager & Administrators General Manager Office & Sales Manager Sub-Totals	$\frac{27}{3}$ $\frac{30}{30}$	33.3 $\frac{33.3}{33.3**}$	0.0 0.0	0.0 0.0	16.7 $\frac{0.0}{15.0**}$	50.0 $\frac{100.0}{55.0**}$	33.3 $\frac{0.0}{30.0**}$
3. Supervisory Occupations Landscape & Sprinkler Foreman Golf Course greens Supervisor Grounds, Shop & Plant Supervisor Sub-Totals	13 11 $\frac{3}{27}$	33.3 27.3 $\frac{33.3}{30.8**}$	8.3 18.2 $\frac{0.0}{11.4**}$	8.3 9.0 $\frac{0.0}{7.7**}$	16.7 36.4 $\frac{33.3}{26.6**}$	41.7 36.4 $\frac{66.7}{42.3**}$	33.3 18.2 $\frac{0.0}{23.4**}$
4. Technical Occupations Fieldman & or Estimator Sub-Totals	$\frac{6}{6}$	$\frac{25.0}{25.0**}$	0.0	0.0	$\frac{33.3}{33.3**}$	$\frac{33.3}{33.3**}$	$\frac{33.3}{33.3**}$
5. Sales Occupations Nursery salesman Florist Clerk Sub-Totals	13 3 $\frac{4}{20}$	46.1 0.0 $\frac{100.0}{50.0**}$	0.0 0.0 0.0	30.8 0.0 $\frac{75.0}{35.0**}$	30.8 100.0 $\frac{0.0}{35.0**}$	30.8 0.0 $\frac{25.0}{25.0**}$	7.6 0.0 $\frac{0.0}{4.9**}$
6. Clerical Occupations General Secretary Sub-Totals	$\frac{10}{10}$	$\frac{50.0}{50.0**}$	0.0	$\frac{40.0}{40.0**}$	0.0	$\frac{40.0}{40.0**}$	$\frac{20.0}{20.0**}$

TABLE 17.5 (Continued)

Level of Employment Job Titles***	No. Firms with Job Titles	Training by Employer - % On-the-job Training	Type of School to Best Train Employees - %		N/A***
			H.S. Voc.	Post H.S. 2-Year Tech.	
7. Skilled Occupations					
Tree Pruner	2	100.0	0.0	50.0	50.0
Special Equipment Operator	4	25.0	25.0	0.0	25.0
Mechanic	5	20.0	0.0	40.0	20.0
Plumber	1	0.0	0.0	0.0	0.0
Sub-Totals	12	33.3**	8.3**	33.3**	25.0**
8. Semi-skilled or Service Workers					
Landscape Contractor Employee	15	66.7	26.7	46.7	6.6
Golf Course Worker	15	86.7	33.3	33.3	6.7
Gardener	7	71.4	57.1	28.6	0.0
General Laborer	8	37.5	25.0	12.5	62.5
Sub-Totals	45	68.9**	33.3**	33.3**	15.5**
Total	153	46.3*	19.0*	25.9*	21.7*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title ÷ Total Firms.

***Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of schools would provide training for the job.

****All similar job titles in all categories under each heading as listed on Table 2.

TABLE 17.6 COMPILED OPINIONS OF EMPLOYERS OF TWENTY-SEVEN NON-FARM BUSINESSES. INTERVIEWED IN THE AREA OF PLANT INDUSTRY--CROPS, IRRIGATION, SOIL; AS TO TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES; AND THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles****	No. Firms with Job Title	Training by Employer - %		Type of School to Best Train Employees - %			N/A***
		On-the-job Training	Specialized Courses	H.S. Voc.	Post H.S.	2-Year Tech.	
1. Professional Occupations							
Water Engineer	2	0.0	0.0	0.0	0.0	0.0	100.0
Attorney	$\frac{1}{3}$	$\frac{100.0}{33.3**}$	0.0	0.0	0.0	0.0	$\frac{100.0}{100.0**}$
Sub-Totals							
2. Managers & Administrators							
General Manager	22	0.0	0.0	0.0	0.0	33.3	66.7
Office Manager	$\frac{1}{23}$	0.0	0.0	0.0	0.0	$\frac{0.0}{31.8**}$	$\frac{100.0}{68.1**}$
Sub-Totals							
3. Supervisory Occupations							
Water Engineer Supervisor	2	50.0	0.0	0.0	0.0	50.0	50.0
Shop & Ranch Foreman	3	66.7	0.0	0.0	33.3	33.3	33.3
Insect Control Supervisor	1	100.0	0.0	0.0	100.0	0.0	0.0
Sub-Totals	6	66.7**			33.3**	33.3**	33.3**
4. Technical Occupations							
Flight Instructor for Crop Duster	1	0.0	100.0	100.0	0.0	0.0	0.0
Draftsman	1	0.0	0.0	0.0	0.0	100.0	0.0
Crop Duster	$\frac{1}{3}$	0.0	$\frac{100.0}{66.7**}$	$\frac{100.0}{66.7**}$	0.0	$\frac{0.0}{33.3**}$	0.0
Sub-Totals							
5. Sales Occupations							
Store Clerk	2	100.0**	50.0**	50.0**	50.0**	0.0**	0.0**
6. Clerical Occupations							
Bookkeeper	4	75.0	0.0	75.0	0.0	25.0	0.0
General Secretary	$\frac{10}{14}$	$\frac{50.0}{57.1**}$	0.0	$\frac{33.3}{45.2**}$	$\frac{16.7}{11.9**}$	$\frac{50.0}{42.8**}$	0.0
Sub-Totals							

TABLE 17.6 (Continued)

Level of Employment Job Titles***	No. Firms with Job Title	Training by Employer - % On-the-job Training	Type of School to Best Train Employees - %				N/A***
			H.S. Voc.	Post H.S.	2-Year Tech.		
7. Skilled Occupations							
Heavy Equipment Operator	11	72.9	63.6	0.0	27.3	9.1	9.1
Printer	1	0.0	0.0	100.0	0.0	0.0	0.0
Lineman	1	0.0	0.0	0.0	0.0	100.0	100.0
Power House Operator	1	0.0	0.0	0.0	0.0	0.0	0.0
Watermaster	2	50.0	100.0	0.0	0.0	0.0	0.0
Dam & Reservoir Maintenance	3	100.0	66.7	0.0	33.3	0.0	0.0
Sub-Totals	19	63.2**	57.9**	5.0**	26.3**	10.5**	10.5**
8. Semi-skilled or Service Workers							
Insect Sprayer	6	100.0	60.0	0.0	40.0	0.0	0.0
Well Driller & Pump Employee	4	75.0	75.0	25.0	0.0	0.0	0.0
Truck Driver	1	0.0	0.0	0.0	0.0	0.0	100.0
Irrigator	1	0.0	0.0	0.0	0.0	0.0	100.0
Ditch-rider	5	40.0	60.0	0.0	0.0	0.0	20.0
Airplane crop duster loader	1	0.0	0.0	0.0	0.0	0.0	100.0
General Laborer	7	57.1	42.9	14.2	0.0	0.0	42.9
Sub-Totals	25	60.0**	50.4**	8.0**	9.6**	28.0**	28.0**
TOTAL	95	42.1*	34.6*	6.1*	23.1*	31.2*	31.2*

*Weighted averages in eight levels of employment.

**Weighted Computations = Number of Firms X total figure in each column for each job title + Total Firms.

***Included are responses of employers who indicated job titles requiring a B.S. degree or higher education or none of the types of schools would provide training for the job.

****All similar job titles in all categories under each heading as list on Table 2.

TABLE 17.7 SUMMARY OF WEIGHTED AVERAGES FOR EACH LEVEL OF EMPLOYMENT IN FIVE OCCUPATIONAL DIVISIONS IN NON-FARM BUSINESS AND GOVERNMENT AGENCIES; TRAINING PROVIDED BY THE EMPLOYER FOR NEW EMPLOYEES, AND THEIR OPINION AS TO WHICH OF THE THREE TYPES OF SCHOOLS COULD BEST MEET THE NEEDS OF THEIR EMPLOYEES.

Level of Employment Job Titles	Training by the Employer %		Type of School to Best Train Employees %			N/A
	On-the-Job Training	Specialized Courses	H.S. Voc.	Post H.S.	2-Year Tech.	
Professional Occupations	0.0	0.0	0.0	0.0	0.0	100.0
Agricultural & Allied Mechanics	27.2	9.1	0.0	0.0	0.0	100.0
Animal Industry	66.7	50.0	0.0	0.0	33.3	66.7
Business--Economics, Finance	33.3	33.3	0.0	0.0	0.0	100.0
Horticulture--Ornamental, Turf	33.3	0.0	0.0	0.0	0.0	100.0
Plant Industry--Crops, Soils, etc. Government Agencies	56.4	0.0	0.0	0.0	0.0	100.0
Managerial and Administrators	67.9	54.0	9.5	20.5	40.5	27.4
Agricultural & Allied Mechanics	37.4	12.3	12.5	11.1	46.6	29.8
Animal Industry	33.4	22.3	9.5	12.6	25.4	52.4
Business--Economics, Finance	33.3	0.0	0.0	15.0	55.0	30.0
Horticulture--Ornamental, Turf	0.0	0.0	0.0	0.0	31.8	68.1
Plant Industry--Crops, Soils, etc. Government Agencies	68.4	5.3	0.0	0.0	0.0	100.0
Supervisory Occupations	49.2	43.4	13.0	30.3	43.4	15.2
Agricultural & Allied Mechanics	47.6	7.9	31.8	12.2	37.8	18.2
Animal Industry	51.1	25.5	46.5	11.6	30.2	11.7
Business--Economics, Finance	30.8	11.4	7.7	26.6	42.3	23.4
Horticulture--Ornamental, Turf	66.7	0.0	0.0	33.3	33.3	33.3
Plant Industry--Crops, Soils, etc. Government Agencies	70.4	0.0	18.5	0.0	14.8	66.7
Technical Occupations	0.0	0.0	0.0	0.0	100.0	0.0
Agricultural & Allied Mechanics	87.5	24.9	12.5	12.5	49.9	25.0
Animal Industry	100.0	0.0	50.0	0.0	50.0	0.0
Business--Economics, Finance	25.0	0.0	0.0	33.3	33.3	33.3
Horticulture--Ornamental, Turf	0.0	66.7	66.7	0.0	33.3	0.0
Plant Industry--Crops, Soils, etc. Government Agencies	87.5	6.2	25.0	0.0	59.4	15.6

TABLE 17.7(Continued)

Level of Employment Job Titles	Training by the Employer %		Type of School to Best Train Employees %			2-Year Tech.	N/A
	On-the-Job Training	Specialized Courses	H.S. Voc.	Post H.S.	H.S.		
Sales Occupations							
Agricultural & Allied Mechanics	75.3	36.5	37.0	24.6	27.4	11.0	
Animal Industry	60.0	6.6	30.0	40.0	13.4	16.6	
Business--Economics, Finance	42.0	31.2	21.4	16.1	50.0	10.7	
Horticulture--Ornamental, Turf	50.0	0.0	35.0	35.0	25.0	4.9	
Plant Industry--Crops, Soils, etc.	100.0	50.0	50.0	50.0	0.0	0.0	
Government Agencies	--	--	--	--	--	--	
Clerical Occupations							
Agricultural & Allied Mechanics	45.3	3.8	26.3	26.3	24.5	20.7	
Animal Industry	63.2	0.0	25.1	20.2	39.0	15.7	
Business--Economics, Finance	66.0	9.5	40.3	21.3	34.0	4.3	
Horticulture--Ornamental, Turf	50.0	0.0	40.0	0.0	40.0	20.0	
Plant Industry--Crops, Soils, etc.	57.1	0.0	45.2	11.9	42.8	0.0	
Government Agencies	50.0	16.6	84.4	0.0	15.6	0.0	
Skilled Occupations							
Agricultural & Allied Mechanics	37.5	27.3	37.7	25.5	35.0	1.2	
Animal Industry	50.4	3.3	36.6	24.0	23.9	17.1	
Business--Economics, Finance	53.2	6.4	59.6	10.6	46.8	8.5	
Horticulture--Ornamental, Turf	33.3	0.0	8.3	33.3	33.3	25.0	
Plant Industry--Crops, Soils, etc.	63.2	15.8	57.9	5.0	26.3	10.5	
Government Agencies	75.0	12.5	12.5	25.0	50.0	12.5	
Semi-Skilled or Service Workers							
Agricultural & Allied Mechanics	40.0	8.6	62.2	12.4	14.6	10.8	
Animal Industry	64.9	3.1	58.9	7.8	0.0	33.3	
Business--Economics, Finance	55.0	2.5	70.0	5.0	2.5	22.5	
Horticulture--Ornamental, Turf	68.9	2.2	33.3	33.3	17.8	15.5	
Plant Industry--Crops, Soils, etc.	60.0	0.0	50.4	8.0	9.6	28.0	
Government Agencies	81.8	12.1	61.7	12.1	26.2	0.0	

Chart II

BREAKDOWN OF THE NUMBER OF COMPLETED INTERVIEWS BY CITIES AND TOWNS
IN NEVADA FOR NON-FARM BUSINESSES

Town	Number of Interviews
Las Vegas & North Las Vegas	104
Reno & Sparks	99
Fallon	35
Elko	24
Carson City	12
Winnemucca, McDermitt, & Orovada	12
Lovelock	11
Overton, Logandale, & Glendale	11
Ely, McGill	9
Henderson	9
Minden, Gardnerville, Lake Tahoe	8
Panaca, Pioche, Caliente	8
Hawthorne	7
Yerington & Smith Valley	5
Mesquite	4
Wells & Deeth	4
Pahrump	<u>1</u>
TOTAL	363

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