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ABSTRACT

A survey developed by the Occupational Education Division of Howard University to determine employee supply and demand in Howard County, Texas, involved both employees and employers. Employer data were compiled from interviews with 319 out of a possible 409 employers who employed three or more people. Conclusions and recommendations for the following occupational areas are presented on an individual basis: farm and ranch, industrial, office, health, technical, public service, distributive, home economics, agriculture, and home. General conclusions for employer data cover 27 items pertaining to training programs, educational requirements, employment opportunities, educational needs, and wages. Employee data, based upon surveys of 88 employed and 82 unemployed subjects, were considered too meager for generalized conclusions. Ten tables supplement the discussion. Fourteen brier statements comment on the outcome and knowledge gained from the pilot program and recommendations for improving the survey are listed. Literature in the area of manpower needs projection is reviewed and project related documents and survey forms are appended. (LH)

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ANALYSIS OF EMPLOYEE SUPPLY AND DEMAND
IN HOWARD COUNTY--A PILOT APPROACH

HOWARD COLLEGE AT BIG SPRING

May, 1974

Research Conducted and Report Prepared

by

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
INTRODUCTION	1
REVIEW OF LITERATURE	3
Introduction	3
Review of Literature	3
THE PROBLEM AND THE PROPOSED SOLUTION	22
METHODS	24
EMPLOYER DATA--FINDINGS	28
FARM AND RANCH OCCUPATIONS	33
Conclusions	33
Recommendations	33
INDUSTRIAL OCCUPATIONS	34
Conclusions	35
Recommendations	35
OFFICE OCCUPATIONS	36
Conclusions	36
Recommendations	37
HEALTH OCCUPATIONS	38
Occupations Requiring Less Than Two Years of Formal Post-High School Training	38
Conclusions	38
Recommendations	39
Occupations Requiring Two to Four Years of Formal Post-High School Training	40

TABLE OF CONTENTS (Continued)

	Page
Conclusions	40
Recommendations	40
RECOMMENDATIONS FOR ALL HEALTH OCCUPATIONS	40
TECHNICAL OCCUPATIONS	42
Conclusions	42
Recommendations	42
PUBLIC SERVICE OCCUPATIONS	43
Conclusions	43
Recommendations	43
DISTRIBUTIVE OCCUPATIONS	44
Conclusions	44
Recommendations	44
HOME ECONOMICS OCCUPATIONS	45
Conclusions	45
Recommendations	45
AGRICULTURAL OCCUPATIONS	46
Conclusions	46
Recommendations	46
HOME OCCUPATIONS	47
Conclusions	47
Recommendations	47
CONCLUSIONS--EMPLOYER DATA	51
EMPLOYEE DATA--FINDINGS	54
CONCLUSIONS--EMPLOYEE DATA	62
RECOMMENDATIONS	64
CONCLUSIONS--PILOT PROGRAM	66
RECOMMENDATIONS--PILOT PROGRAM	68

TABLE OF CONTENTS (Continued)

	Page
BIBLIOGRAPHY	70
APPENDIX	72
Appendix 1 - Introductory Letter	72
Appendix 2 - Employer Information Forms	74
Appendix 3 - Employee Form - Undertrained	87
Appendix 4 - Confidential Employment Information For Unemployed	89
Appendix 5 - Employee Form - Respondants to Study	92
Appendix 6 - Letter to Unemployed Residents	94
Appendix 7 - Handbill	96

LIST OF TABLES

Table	Page
1 Percentage of Types of Skills Needed to Fill Current and/or Future Jobs	30
2 Entry-Level Wages of 85 Firms in Howard County	31
3 Number of Current Employees in Occupational Categories	48
4 Graph of Percent Increase Projected for Occupational Categories	49
5 Number Currently Employed in Occupational Categories with Projected Employment Needs and Percent Increase	50
6 Number of Employees in Each Age Group	55
7 Distribution of Employed Persons by Length of Employment	56
8 Duration of Present Unemployment	57
9 Number of Jobs Held During Last 3 Years	58
10 Prior Jobs of Unemployed	61

INTRODUCTION

According to Dwight R. Crum (1971, p. 26), national employment projections provide little insight into local needs. An analysis of a specific area is necessary to provide relevant and realistic training for present and future employment needs in that area.

An earlier attempt was made to poll employers in Howard County which resulted in only 30 returns out of some 400 questionnaires. It provided an estimate of 430 present and future positions available.

Byrl R. Shoemake (1971, pp. 18-20) points out in his article that pre-employment retaining and upgrading programs for youth and adults must be a part of a total vocational education program. He states that "the purpose of education is to perpetuate and improve the society in which it exists. Our technological society requires that everyone receive the opportunity to earn an adequate living." (1971, p. 20)

Employers need to make known the knowledge, skills, and training required for entry-level employees and also on-the-job training needed for present employees. From this information present training courses may be updated and new programs implemented as desired.

Former Commissioner of Education Sidney P. Marland, Jr., wrote the following:

Right now, state training programs fill only half the jobs available each year. The other half are filled by job seekers with no occupational job training of any kind. We do better in some fields than others, of course, particularly production agriculture where we are able to come closer to meeting the total need because it is a relatively static job

market with little growth projected. About 70 percent of the demand in farm jobs will be met with trained help this year compared with only about 38 percent in the health occupations and 35 percent in various technical fields. This is nice if you happen to own a farm and not so nice if you run a hospital or laboratory. (Marland, 1971)

Lack of specific employee supply and demand information contributes to the lack of trained employees. This project was designed to tackle intently this phase of the problem.

REVIEW OF LITERATURE

Introduction

Many studies have been made and books and essays written about manpower in its various phases. In the specific area of manpower needs projections for a given geographic location, several studies have been made in Texas within the last decade.

Two surveys have been conducted by the Palestine Independent School District, one by the eight counties comprising the Houston-Gulf Coast Area, and another for the Austin area to mention a few. An occupational survey of business firms in Big Spring was made in 1969. The study was specifically concerned with entry-level requirements of beginning office workers.

In addition to these, a study was made to review the country's present manpower policy and attempt an evaluation of its effectiveness.

Other literature consulted for this project includes selected articles from magazines, professional journals, government publications, and books on the subject of manpower.

Review of Literature

In the preface to the report of an occupational survey of the Palestine area, it was stated that many people who enter high school neither complete the curriculum nor pursue education, occupational or academic, beyond high school. These people are forced to operate without training in a complex economic structure. (Palestine Independent

School District, 1965). The suggestion was made that education should be provided at the secondary level for occupational training to help meet the needs of those who could benefit from such a program.

With this as a purpose, a projection was made as to the quantity and types of jobs expected to become available and the training that would be needed in Anderson County in the following three years.

Results were obtained by personal interviews and other media. Sources of information included public school records, the Texas Almanac, and the United States Census of 1960. The study provided information concerning the number of workers employed at that time and projected immediate and future occupational opportunities for the area.

Major occupational categories were agricultural, distributive, health, home economics, office, and skilled occupations. Findings showed that agricultural occupations employed 47 residents of Anderson County, and two additional workers were needed immediately. Individuals employed in health occupations were counted at 283 with a three-year projected need of 82 vocational nurses and two physical therapy specialists. Distributive occupations would need 50 additional workers in the next three years. Most of these would be needed in retail trade and service occupations. Home economics showed 53 current employees with no projected need. Office occupations' projections included: 76 bookkeeping machine operators, 29 secretaries, 28 stenographer-typists, 11 bookkeepers, and 54 workers categorized as "other" office occupations.

Findings in skilled occupations revealed a need for 109 new workers including: 24 carpenters, 17 automobile mechanics, 12 metal workers, 11 machine operators, 6 electrical workers, and 6 air conditioning and refrigeration repairmen.

The survey found that 443 jobs would become available in the ensuing three years. With this data as a basis, the survey team suggested that the employment opportunities were sufficient in number to justify vocational education programs in several categories. Adult education programs recommended by employers and the survey team included: mathematics, supervision, salesmanship, bookkeeping, public relations, electricity, plant safety, and stenography.

An advisory committee was recommended to be composed of representatives from each occupational category to assist the superintendent of schools in the development of curricula for vocational education programs which might be considered as a result of this survey.

A later survey by the Palestine Independent School District (1967) was conducted to determine the need for expanding vocational education based on current and projected employment needs in the community.

The philosophy that many students who enter high school do not complete the academic requirements for graduation and that a large percentage of high school graduates do not enter college was the basis of the survey. For the secondary school to render maximum service to the community, programs of study leading to occupational competency should be provided along with the academic curriculum. Students may be better prepared for occupational competency if the projected employment needs of the community are known. (1967, p. 1)

The study was accomplished "by personal interviews and other media... Supplementary information included in the report was obtained from sources such as public school records, the Texas Almanac, and the United States Census of 1960" (1967, p. 1).

Included in the report of findings was information showing population shifts in both Anderson County and the city of Palestine. Also included was historical information regarding enrollment in the local secondary schools along with a five-year projected enrollment estimate. Employment projections were for a three-year future period.

At the time the study was made (1967) a total of 48.4% of all students in grades 9-12 were enrolled in the five vocational programs offered by the school district. The five vocational programs were agriculture, homemaking, distributive education, industrial education, and nursing. (1967, p. 5)

Data collected produced these employment projections:

1. Agricultural vocations were expected to provide 437 additional jobs within the period. At the time the study was made, there were 415 residents working in agricultural occupations.
2. Seasonal agricultural jobs provided employment for 52 residents in 1967 and were expected to produce 176 additional jobs by 1970.
3. In April, 1967, the distributive occupations employed 273 persons and were estimated to create 464 new jobs by the end of the projected period.
4. Health occupations employed 218 individuals and an additional 321 workers were anticipated to be needed.
5. Full- and part-time workers in home economics totalled 71 in 1967 with projections indicating an additional 76 new workers in this category.
6. Industrial occupations provided employment for the largest group of people in a single classification. In 1976 there were 1232 workers employed in these occupations, and it was estimated that 1482 new workers would find jobs in this area by 1970.

7. Office occupations positions were held by 311 persons with a projected increase to include 274 additional workers.

8. Technical occupations engaged 71 workers with an estimated increase of 79 employees.

9. There were 44 persons providing public services, expected to increase by 29 workers. (1967, pp. 8-27)

The survey revealed an estimated 3,162 jobs would become available by 1970, and recommendations were made to incorporate vocational educational programs in several occupational categories. Adult education and part-time cooperative training programs were also included in the recommendations. Areas in which adult education programs were recommended by employers were:

Air Conditioning	Dry Cleaning
Alterations	Safety
Automobile Mechanics	Salesmanship
Basic Electricity	Secretarial Training
Blueprint Reading	Sheet Metal and Welding
Woodworking and Carpentry	

An advisory committee from each occupational category was suggested to assist in the development of vocational programs. (1967, pp. 28-30)

A statement made in introducing a study of the Houston-Gulf Coast area in 1962 for which a five-year projection was made to forecast the labor needs for that region asserted:

If an industrial area is going to survive tomorrow's competition, it must know about today's foremost resource--skilled labor. An adequate supply of trained workers must be maintained to cope with the dynamic advances made by modern industry. A full and complete knowledge of the work force within the area is essential to present and future planning. (Houston-Gulf Coast, 1962, Preface)

The labor market in professional, skilled, and semiskilled occupations, as well as the unskilled occupations, was surveyed in the

eight-county Houston-Gulf Coast area. Shortages in professional, skilled, and semiskilled occupations were predicted, with a surplus of unskilled workers exceeding the demand for this type of labor. Unfilled professional jobs were expected to be as numerous as 1,000. The manpower shortage in the skilled occupations was expected to be 13,000 in the five succeeding years. More than 2,000 more jobs than workers for semiskilled occupations were expected to be available during the same period, but unskilled labor workers were expected to outnumber jobs available by as much as 2,000. (Houston-Gulf Coast, 1962, pp. 1-5)

Information for this survey was provided by reports from more than 5,500 sample firms, almost 50 percent of the area's total employment, and from almost every training agency in the area.

Nine industry groups were surveyed. Government, with 82.7%, had the largest percentage participation. Education, with 78.3%, and manufacturing, with 64.2%, followed.

There was a projected increase of 100,000 new jobs within the succeeding five years, and replacement estimated to provide 77,000 employment opportunities. It was estimated that by 1966 (the fifth year of the projection) trade, manufacturing, and service industries would show the largest numerical growth and employ more workers than all other industry groups combined. Nearly one-half of the total jobs in the area were expected to be in trade and manufacturing.

Education, Finance-Insurance-Real Estate, and Government were expected to show the largest percentage gains during the period. Finance-Insurance-Real Estate and Education would have more women than men employees, but men would outnumber women in all other industry groups.

Skilled workers would exceed all other groups numerically, but the clerical category would provide the largest number of new jobs. Jobs in the Semiprofessional, Sales, and Professional groups would show the largest percentage gains. Educators and teachers would lead in demand ahead of any other single occupation. The greatest shortage of trained workers was predicted to be in the Skilled occupations.

Recommendations made to community leaders included:

1. Widest possible dissemination of the results of the survey to assure that all residents would be aware of the workers needed.
2. Emphasize the need for and desirability of vocational training.
3. Publicizing apprenticeship training opportunities and gaining the interest of qualified high school and junior college graduates in these programs.
4. Assisting school officials and other training groups in gaining the interest and support of the general public and business community.
5. Make industry and training agencies aware of the magnitude of competition stemming from the European countries bound together as the Common Market. (Houston-Gulf Coast, 1962, pp. 1-7)

Recommendations made to employers:

1. Employers must anticipate their needs for trained personnel and project employment requirements on a regular basis.
2. Communication between school authorities and business community must be strengthened.
3. Adequate job descriptions should be prepared by employers, and the basic requirements and advancement possibilities for each job should be stated.

4. Students should be employed on a part-time basis and on summer jobs to add to the labor force and to aid in their training.

5. Employers should discard unrealistic, nonperformance requirements in hiring to permit utilization of all individuals possessing necessary skills.

6. Employers should initiate a formal on-the-job training program for their employees.

7. Industry should provide more scholarships for higher education for gifted students.

8. "Career Days" should be made an important part of every school year to emphasize the relationship of a student's education and his opportunities in industry. (Houston-Gulf Coast, 1962, pp. 8-9)

Recommendations for training agencies were:

1. More training to prepare students to make a living.

2. Students should be convinced that honest, productive work with the hands is rewarding, both financially and socially, and a job well done brings prestige and dignity.

3. Tests should be administered to determine aptitudes, interests, and potential skills of all students.

4. Counselors should utilize test results and encourage students not going to college to take subjects to prepare them for a particular trade or craft.

5. Educators should redesign curriculums where the need is indicated.

6. Teachers should be hired during summer months in jobs relating to their fields of instruction to keep them informed of new developments and to relate theory to practice. (Houston-Gulf Coast, 1962, p. 10)

In prefacing his work, Leonard Lecht (1969) states that modern technology, especially automation, has two related effects on manpower requirements. First, it permits the use of machines for essentially the same work previously done by labor; second, it permits the production of goods and the performances of services previously not done. (Lecht, 1969, p. xvii)

Lecht holds that a nation's goals can affect manpower requirements and employment opportunities. The impact of Medicare and Medicaid in enlarging needs in the health occupations, or the role of the space program, in the early 1960's, in increasing the demands for engineers and scientists, offer recent, and sometimes striking illustrations of this effect. (Lecht, 1969, p. 3)

This report analyzes manpower requirements for the future from a different standpoint than other agencies. The analysis is from the perspective of the manpower needed for achievement by 1975 of a set of national goals designed to provide over-all improvement in the American way of life. The findings were based on a study conducted by the National Planning Association's Center for Priority Analysis and undertaken for the Manpower Research Office of the Manpower Administration of the U. S. Department of Labor. (Lecht, 1969, p. 4)

In 1960 the President's Commission on National Goals issued a report listing a series of goals in 15 areas affecting most aspects of American life. This list was increased to sixteen with the addition of space exploration after the late President Kennedy proposed in 1961 that it become a national objective to put men on the moon and bring them back.

The sixteen areas for which goals have been defined are: agriculture, area redevelopment, consumer expenditures, education, health,

housing, international aid, manpower retraining, national defense, natural resources, private plant and equipment, research and development, social welfare, space, transportation, and urban development.

(Lecht, 1969, p. 7)

Conclusions of the study included the following:

1. Full achievement of the sixteen goals by the mid-1970's would require an employed civilian labor force of more than 100 million--10 million more than are expected to be in the civilian labor force in 1975.

2. Vigorous pursuit of these objectives in the next decade would probably be associated with an insufficiency, rather than a surplus of manpower. The resulting manpower problems are likely to focus on upgrading through education and training, making better use of existing manpower potentials, and improving mobility, rather than concentrating on the issues posed by a high rate of unemployment and underemployment.

3. Substantial progress toward achieving the goals considered could be a major factor in creating more and better job opportunities for the country's unutilized and underutilized human resources, especially nonwhites, women, older workers, and the handicapped.

4. The kinds of jobs the economy will need in the '70's will be significantly influenced by the nation's choice of priorities. Assigning a high priority to objectives in health or education would primarily increase the demand for white-collar workers. Emphasis on goals in urban development or transportation would largely increase the demand for blue-collar workers. (Lecht, 1969, pp. 10-11)

In considering the period from 1947 through 1964, it can be observed that the broad shifts in the distribution of employment by

occupational specialty accentuated the importance of formal schooling and job training and increased the economic disadvantages brought about by lack of sufficient education or job skills. These disadvantages are further emphasized by the relationship between educational attainment and unemployment. (Lecht, 1969, pp. 28-30)

The four goals of education, health, research and development, and transportation were projected for rapid growth. The increases anticipated for these four were in the 90 to 100 percent range. Over-all manpower requirements were projected at a 44 percent increase. Technical occupations, electrical or electronics technicians, for example, were also predicted to make rapid growth. A recommendation for apprenticeship programs was made, as well as more meaningful education for young people, in both rural and urban areas, who come from backgrounds of family poverty. (Lecht, 1969, p. 118)

Gerald Sommers (Ross, 1965) outlines the pros and cons of retraining and explores the true value of training in order to discover the worth of educational programs with regard to employment. The employment rate of Manpower Development and Training Act program graduates is 68.5% (Ross, 1965, p. 280). Some of these workers, however, were employed in lower echelon jobs before their retraining.

The percentage of employed graduates decreases as the age of the subject increases. For graduates under 19 years of age, employment is 74%; but this drops to 65.1% at age 45. Male graduates enjoy a higher success rate than female. Also, those persons unemployed for a short period of time are able to find jobs more easily than those unemployed for a great while. Thus it can be noted that age, sex, and length of unemployment are all important factors in retraining. (Ross, 1965, pp. 279-280)

Interestingly enough, it is shown in this report that, even though literacy is a factor, formal education is not especially important. "Indeed, the employment ratio (65%) of Completes (MDTA graduates) who had no more than eight years of education was respectively equal to and greater than that of non-applicants and other nontrainees who had more than twelve years of education." (Ross, 1965, p. 283)

In the foreword to Charles Brecher's (1972) study on upgrading blue collar and service workers, Eli Ginzberg states, "From one point of view all manpower programs aimed at improving the quality of the labor supply contain an upgrading component. In fact, since their primary objective is to add to the skills of workers with an aim of improving their job status and income, upgrading is the assence of manpower programming.

"However, legislators and administrators have employed the term in a narrower context. They have restricted the concept of upgrading to training and related programs that are aimed at enabling employed workers to advance up the job hierarchy, either with their present employers or with others in the same or a different industry. However, there is no reason that the concept cannot include programs for the unemployed persons who, as a result of training and other manpower services, will return to the labor force in a better position to get a better job." (Brecher, 1972, p. vii)

The most important factor in upgrading is the level of employment. Unless there are jobs for all who are able and willing to work, manpower efforts, especially those directed to the disadvantaged, will be wasted. (Brecher, 1972, p. xiii)

Brecher focused his investigation on the upgrading of blue collar and service workers in New York City in five major industries--apparel,

food, health, construction, and transit. These five industries account for approximately 20 percent of total employment in New York City and for 50 percent of all non-white-collar employment. His methods included industry studies, personal interviews with key leadership groups, and analysis of Social Security earnings data for relevant groups of workers.

Some of Brecher's more important findings follow. It should be noted that each of the propositions does not hold for every one of the five industries and surely not to the same extent.

1. None of the industries has any real difficulty in filling its skilled jobs. Mostly this is done through upgrading within the organization or by adding skilled employees. Over 75 percent of all workers earning above \$8,000 per year have been upgraded.

2. Formal training by employers for their more demanding positions is the exception rather than the rule.

3. Generally, high school vocational training is not adequate to enable young people to have a significant edge in obtaining employment and surely not for preferred access to skilled jobs.

4. Those who pursue a vocational curriculum in community colleges, particularly if they acquire an A. A. degree and pass the certification or licensing requirement, are in a preferred position to obtain skilled jobs.

5. Women and minority group members are discriminated against when it comes to promotion into skilled jobs or entrance into training programs that are a direct route to better jobs.

6. Upgrading of the work force remains relatively low on the agenda of most unions.

7. The pool of potential candidates for better jobs is limited to those who meet certain arbitrary standards of education and work experience. This places a constraint on upgrading.

8. There is a shortage of part-time (late afternoon, evening, and Saturday) training opportunities in public institutions for workers who seek to add to their skills. (Brecher, 1972, pp. ix-xi)

Brecher concludes that powerful technological and economic factors make a substantial increase in upgrading impractical. However, he does point out the following realistic and realizable goals: increase the pool of eligibles who are considered for upgrading, improve the selection mechanism for deciding on those to be included in the pool, and improve the wages and working conditions of employees at the lower end of the occupational hierarchy. (Brecher, 1972, pp. ix-xi)

In an unpublished report on manpower policy, Jerry Don Stevens (Texas Technological College, 1969) stated his purpose was to explore some of the areas of unemployment and to review the country's present manpower policy to establish an idea of its effectiveness.

The method used was secondary research. Books, periodicals, conference reports, etc., were researched to determine the current United States manpower policy to find what has been done and is planned for the future in providing men and women for jobs.

Stevens analyzed the following divisions of people:

1. Educationally disadvantaged--a large number are school drop-outs, come from very large and very poor families; their fathers were not educated beyond grade school. This group also includes the uneducated older worker.

2. Youth--16 to 19 years of age; has one of the highest rates of unemployment of any group. Unemployment is also a problem among older youths of 20 to 24 years of age.

3. The unskilled--the rate of unemployment of this group is almost double that of the national average.

4. The older worker--defined for this paper to be 60 years of age and over. The member of this group has trouble finding work once he becomes unemployed.

5. Minority groups--Negro, Mexican-American, Indians, Puerto Rican.

6. Handicapped workers--Mentally and physically handicapped. Stevens summarized the elements which make up the manpower policy as being (a) Manpower Balance Sheet--development of training programs based on job definition, (b) Manpower Development--education and training programs sponsored by the government, and (c) Manpower Mobility. He also reviewed the existing manpower policies determined by federal agencies and programs. From these sources, his recommendations were drawn and included the following:

1. A cooperative federal, state, local, and industrial program for community development.
2. A comprehensive program for employing hard-core unemployed.
3. Increase in work-study programs for young people.
4. Programs to provide for a bridge between employment and retirement for older workers.
5. Federal fair employment law to ease job discrimination.
6. Guarantee a broad, general high school education with specialized skill and technical training for youth of America.

7. Apprenticeship and on-the-job training programs should be encouraged.

8. Continuing adult education should be made available.

(Stevens, 1969, pp. 42-45)

In 1972 the Austin Independent School District made an extensive area skills survey of Travis County. The survey was approached from three directions: an employment survey, a student-parent survey, and a training institutions survey. (Austin, 1972)

The employment survey stated as its purpose "to identify local employment needs through 1975 and to determine education and experience requirements for various occupations." (Austin, 1972, pp. 72-73)

Students in grades 6, 8, and 12 were surveyed to determine their present career interests and educational intentions. A sampling of parents of participating students were asked to indicate preferences for careers for their children.

Training institutions were surveyed to provide information pertaining to enrollment, graduates, and contributions to the local labor force with projections for 1973 and 1975. Information in anticipation of program revision was requested along with a listing of occupations for which graduates were trained and qualified to work. (Austin, 1972, pp. 87-88)

Employers were contacted by mail, in person, and by telephone. Information about individual jobs and educational and experience requirements was requested. They were asked to "comment on employment shortages and overages, to estimate annual turnover rates, and to predict occupational needs for 1973 and 1975." (Austin, 1972, p. 72)

Students were surveyed personally by staff members of the project. Survey forms with letters requesting their cooperation were mailed to parents. Due to inadequate response, telephone calls were made; and a second mailing was made in an effort to obtain responses from all parents.

Letters to acquaint them with the survey were mailed to all training facilities in the area. After an appropriate period, a personal interview was requested of and given by each institution. The survey form was left at the 18 institutions and returns were made by 15 of them.

The employment report was organized and presented under these major classifications: Professional, Semi-Professional, and Technical Fields; Sales Fields; Clerical Fields; Managerial Fields; Service Fields; and Trades and Crafts.

Almost 1700 Travis County firms representing 70 percent of total employment participated in the survey, and Austin businessmen predicted almost 20,000 new jobs by 1975. At the time the study was made, Trades and Crafts accounted for the greatest shortage of trained workers. Due to the high educational attainment found in Austin, employers may require more education than would normally be expected for certain jobs. Approximately one-fourth of the total working population, semi-professional, and technical field. These were the two largest employment groupings in Travis County. (Austin, 1972, p. 1)

Over 6,000 students and almost 450 parents were included in the student-parent career interest phase of the study. Over 80 percent of the parents wanted their children to complete college. Most of the career choices of students and parents were in overcrowded or highly

competitive fields. The teaching profession was the first choice of all career preferences listed by students and parents. (Austin, 1972, p. 1)

Enrollments in private training institutions were on the increase with projections for continued growth. Over 90 percent of their graduates remained in the local labor force, and placement of graduates was reported as highly successful. (Austin, 1972, p. 1)

The occupational survey of business firms in Big Spring, Texas, made by Judith Ann Blick was limited to analyzing information relating only to office occupations. (Blick, 1969)

The problem of the study was to determine opportunities and requirements for beginning office workers and to determine implications for curriculum revision at the local high school. The purposes of the study were to determine the types of jobs available; employee turnover of office workers; if applicants for jobs were given pre-employment tests; reasons office employees leave a position; qualifications required of beginning office workers; the knowledge and skills required by office workers.

Information was collected on questionnaires mailed to 120 businesses which represented a stratified random sample of a list of approximately 500 local businesses. Follow-up letters were sent to businesses from whom no reply had been received after a period of approximately six weeks. One week later, telephone calls were made to those who still had not replied. A total of 70 percent of the firms surveyed returned their questionnaires.

Findings and conclusions of the study included the following:

1. There were ample opportunities for beginning office workers in Big Spring. Most businesses hired high school graduates and inexperienced workers. Bookkeepers and tellers were the only occupations for which experience was necessary.

2. Office occupations opportunities were open to both men and women.

3. The labor market was fairly mobile, but most of the employees hired within the preceding year were replacements.

4. Personal interviews and not tests were the deciding factor in hiring office workers.

5. The educational requirement was a high school diploma.

6. Some machine skills were needed, including the typewriter, the ten-key adding machine, and copy machines.

Recommendations made were to provide specific training for specific jobs which could be achieved through an office education block program or simulated work program. Business education courses should include instruction and practice in applying for a job. Due to the availability of opportunities for men in office work, courses should be expanded and adapted to be more appropriate for boys. Research should be repeatedly undertaken to determine changes in the local labor market, and follow-up studies of local high school graduates should be made to determine the labor market in which they are working and the requirements for that market. (Blick, 1969, pp. 75-83)

THE PROBLEM AND THE PROPOSED SOLUTION

The Occupational Education Division of Howard College at Big Spring wished to design a survey of employee supply and demand that could be used for specific areas throughout the state. The research was needed to provide relevant job training for the particular area. Information obtained from Howard County, the area selected for the sample survey, will provide guidance for developing training to help match people with jobs. The following information was needed:

1. What employment positions exist now and will exist in the next three years?
2. What persons are available and will be available for training for the existing and future employment positions?
3. What knowledge, skills, and training are needed for present and future employees?

This project was needed to poll employers for a complete estimate of the number and types of positions to be available. Persons who are either unemployed or who wish to obtain better or different positions needed to be identified.

The objectives to be achieved by this project were:

1. To determine the number of currently unfilled positions and to provide an estimate of the number of employees needed during the next three years.
2. To determine the names of persons who are unemployed or interested in a different job.
3. To determine the knowledge, skills, and types of training needed by prospective and present employees for business, industry, and specialized occupations.

4. To make the results of this survey available for regional and statewide employment data.
5. To develop a survey plan as a pilot program to be used by other areas in the state.

The result of this project was an estimate of the number and kind of employees needed in Howard County now and during the next three years; the knowledge, skills, and training needed by these employees; and the persons available for the positions and interested in training provided by Howard College at Big Spring. This information will be used as a guide to the development of new programs and updating of present training programs. The plan for the survey will be made available for use in other specific areas in Texas.

METHODS

Prior to the official beginning of the survey on October 1, steps were taken to plan methods of research. Preliminary requirements such as a list of employers, a letter of introduction to employers, and a need to publicize the study were discussed.

Prospective field workers were interviewed. A group of five Howard College students were hired and oriented in the aims and methods of the research program.

A definition of the term "employer" was established. It was decided to limit the survey of employers to those having five or more employees. However, the small number of employers found to employ five or more persons prompted the reconsideration of the size of business to be included in the study. As a result, "employer" was re-defined as one employing three or more persons. Two reasons were the basis for this definition. First, businesses with only one or two employees were so numerous that they would tend to weight the findings; and second, the tendency toward frequent turnovers is less where fewer employees are found.

A mailing list of Howard County employers was compiled from information supplied by the Big Spring Chamber of Commerce, the Texas Employment Commission, the United Fund, the city directory, and the yellow pages of the local telephone book.

A letter introducing the study to Howard County employers was composed, and questionnaires for the employer and undertrained

employee were designed. Letters were mailed to 409 employers. (Appendix 1, 2, and 3.)

A master list of employers was compiled. Index cards for each employer were made. Data included on the card consisted of the name of the business, type of business, address, telephone number, and number of employees as of December 31, 1972, where this information was available. Cards were then paired with addressed envelopes and divided into groups according to the various types of businesses. Appropriate occupational category forms, along with the original index card, title page, employer information page, and forms for the undertrained employee were included in the packet to be used for employer interviews. Interview packets were then grouped according to the location of the businesses in the county, and polling was organized geographically to conserve time and resources.

While these preparations were being made, the community was informed of the project through radio interviews, newspaper articles, and visits paid to local service clubs and other organizations. The support and cooperation of residents of Howard County were requested. Interviews were begun.

Since the interviewing period was to extend through the Christmas season, consideration was given to those business firms affected by a Christmas rush, and they were contacted first. Most of these employers had been surveyed by December 1, at which time polling of this group was suspended until after the first of January. Surveys of other firms continued through December 20 when all interviews were suspended until after the holidays.

Throughout the study the original list of employers was supplemented in order to insure that all employers would be contacted. A

total of 319 employers participated and constitute the population of employers for the study.

Reasons for non-participation in the study included: (1) business no longer in operation, (2) change of address with no forwarding address available, (3) reduction in number of employees to fewer than three, (4) unwilling to give information, (5) not allowed to give information, and (6) apathy.

Where permitted by the management, employees needing further training were polled along with their employers. The questionnaire used for these employees was briefer than the one used when interviewing unemployed residents seeking employment. (Appendix 3) It was felt that the information requested would provide data indicating the employee's interest in and/or need for further training without causing the employer to feel the survey was encouraging dissatisfaction with his present job.

A questionnaire for polling unemployed residents of Howard County was designed, and the form to be filled in by employed persons was extended. The extended form was used to collect data from employed persons who responded to the invitation to participate in the study extended through the letters and other means to acquaint the employee group of the research and their part in it. (Appendix 4 and 5)

Approximately three months after the beginning of the project, interviews of residents seeking employment or further training were begun. These included both unemployed residents and those seeking other jobs or desiring training. A mailing list of over 200 names was compiled from the active files supplied by the Texas Employment Commission. Letters were sent requesting personal interviews at the

commission office. (Appendix 6) Three weeks were spent there, this interval being extended from the projected two weeks due to lack of response. Interviews were continued on the Howard College campus for another six weeks. Both personal interviews and telephone interviews were taken.

While interviews were being taken, radio spots and newspaper advertisements soliciting contacts from prospective employees were written and distributed to the media. Three hundred handbills were printed and posted at various Howard County businesses. (Appendix 7) Referrals were requested from the Salvation Army, the Big Spring Employment Agency, the Vocational Rehabilitation Center, several local ministers, and the Financial Aids Director at Howard College. A telephone list was prepared from the lists of secondary school dropouts provided by high schools in Coahoma, Forsan, and Big Spring. Additional names were obtained from the Howard County Welfare Office. Over 700 telephone calls were made during the six weeks spent at Howard College in an attempt to reach interested persons and to obtain interviews. Where persons were unavailable during the day, calls were made in the evening. A total of 170 persons participated in this phase of the study and make up the population of prospective employees for the study.

Information was transferred from original data sheets to punched cards. Processing was done in the Computer Science Department of Howard College at Big Spring.

EMPLOYER DATA--FINDINGS

Contacting 319 employers, it was found that 171 (53.7%) have an established training program for beginning employees. Twenty-three (13.4%) have no training program, and 125 (32.9%) did not respond to the question. Fifty employers require a high school diploma as a prerequisite for employment, while two indicated that a college degree is mandatory. Twenty employers require their employees to have other types of training. The majority, 247 (77.4%), have no established pre-employment educational standards.

Training programs which employers feel would contribute to the success of the business and its present employees are:

Auto front end alignment	Safety practices
Basics of electricity	Office manager
Wookwork	Merchandising
Business machines	Jewelry repair
Chemistry	Dietitian
Refrigeration	Cash register operator
Cooking	Art
Sales	Plumbing
Baggage sales	Mid-management
Heavy machine operator	Bar tending
Creative writing	Meat cutter
Supervisory management	Nurse, R. N.
Sewing machine operator	Business courses
Butcher	Machine shop
Auto mechanics	Insurance
Bookkeeping	Speech
Building maintenance	Carpet mechanics
Cosmotology	Checking
Waitress	

It was found that there are 414 current job vacancies within the 319 firms, representing 1.3 jobs per employer interviewed. There are 63 firms with openings which employers are unable to fill from within

the organization due to lack of personnel with adequate training. In 219 firms lack of trained personnel is not the reason for failing to fill positions from within the organization.

When asked if additional employees are going to be hired within the next three years, a projection of 764 new jobs was made. This represents 2.4 jobs per employer interviewed. Of the 319 firms, 161 (50.5%) will require trained personnel to fill future positions. Untrained workers will be hired by 128 firms (40.1%). Thirty employers failed to respond to the question.

Types of training employers indicated as needed for both current and future job vacancies are:

- Automobile mechanic
- Machine operator, other than machinist
- Bookkeeping machine operator
- Hotel-motel aide, housekeeper
- Plumber and steam fitter
- Radio and television repair
- Bookkeeper
- Stenographer-typist
- Medical laboratory assistant
- Deliveryman
- Secretary
- Nurse, R. N.
- Cashier
- Office clerk, general
- Stockworker
- Air conditioning and refrigeration maintenance and repair

Current job vacancies for which training is needed but not included in projections for the next three years are:

- Beauty operator
- Carpenter-woodworker
- Meat cutter
- Metal worker-welder
- Maintenance mechanic, general
- Physical therapist assistant
- Salesperson
- Physical therapist, R.P.T.

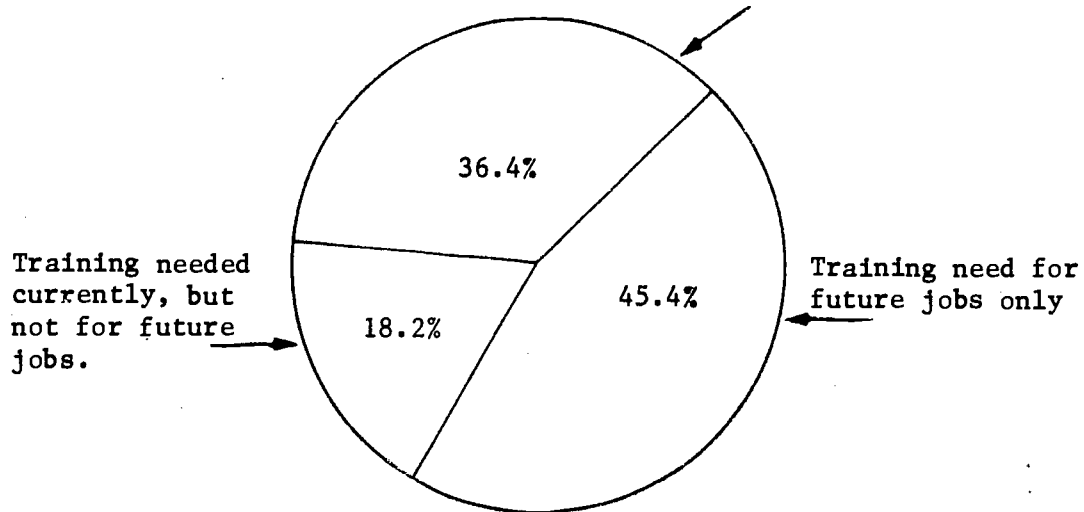
Job vacancies requiring trained personnel in the projected three-year period but not at the present time are:

Electrical worker
 Cook
 Painter
 Printer
 Office machine operator
 Data processing peripheral equipment operator
 Statistical clerk
 Dental assistant
 Dietary aide
 Medical assistant, doctor's office
 Medical records technician
 Nurses' aide
 Nurse, L.V.N.
 Nurse, management assistant
 Dental hygienist
 Medical technologist
 Engineering technician
 Fireman
 Buyer
 Warehouseman

TABLE 1

Percentage of Types of Skills Needed
to Fill Current and/or Future Jobs

Training needed for jobs currently available
and to become available in the future.



Vocational training suggested by employers which is needed for current jobs, or current and future jobs, or future jobs only.

When asked if employees need further training for their present positions, 85 (26.6%) employers replied in the affirmative; and 199 (62.4%) stated that none is needed.

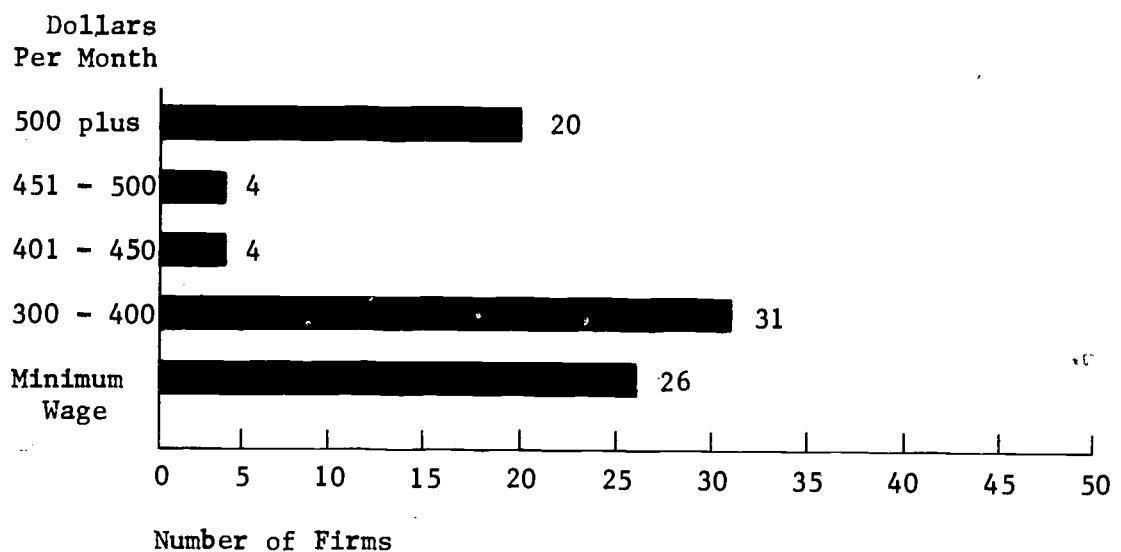
There were 144 employers who indicated that they would encourage their employees to seek training in specified areas. When asked if they would help pay tuition expenses for their employees, 86 said they would; 51 would not; and 182 did not respond to this question. Fifty-one employers indicated that additional training would not help their employees, and 124 gave no response. Twenty employers suggested that night classes would be most convenient for their employees, while two indicated that day classes were preferable.

A high rate of turnover in personnel at the entry level was indicated by 92 employers (29%), while 206 (64%) stated that their turnover rate was not high; 21 (7%) gave no response.

Entry-level wages ranged from the minimum to above \$500 per month in the 85 firms responding to this question. See Table 2.

TABLE 2

Entry-Level Wages of 85 Firms in Howard County



The following tabulations present information obtained from employers relating to number of current employees with projections of additional employees to be needed for a three-year future period. Employees are tabulated according to the occupational category of the jobs in which they are currently employed. Most of the tabulations designate current employees as male or female with the exceptions of Farm and Ranch Occupations (full-time, seasonal), Home Economics (full-time, part-time), and Home Occupations (full-time, part-time).

FARM AND RANCH OCCUPATIONS

	Present Employees		Imme- diate		12 Mos.		24 Mos.		36 Mos.	
	F	S	F	S	F	S	F	S	F	S
Farm and Ranch Foreman	1	0	0	0	0	0	0	0	0	0
General Farm Worker	1	0	0	0	0	0	0	0	0	0
Tractor & Machinery Opr.	5	0	0	0	0	0	0	0	0	0
Farm Mechanic	1		0	0	0	0	0	0	0	0
Irrigation Worker	3	0	0	0	0	0	0	0	0	0
Others	0	20	0	0	0	0	0	0	0	0
Totals	<u>11 20</u>		<u>0 0</u>		<u>0 0</u>		<u>0 0</u>		<u>0 0</u>	

Conclusions:

1. Most farm workers are employed on the seasonal basis.
2. Very few farms and ranches employ three or more employees. This is suggested from the relatively small participation as compared to the large number of farms and ranches in Howard County.
3. The greatest number of full-time farm and ranch occupations employees operate machinery.
4. There is no projected increase in the number of jobs available in these occupations within the next three years.

Recommendations:

1. No additional programs for training farm and ranch employees are needed.
2. Machine operation and repair for farm equipment should be added to present farm and ranch curriculum.

INDUSTRIAL OCCUPATIONS

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Air Conditioning & Refrig. Maintenance & Repair	15	0	3	2	1	1
Appliance Repairman	7	0	0	0	0	0
Auto Body & Trim Worker	5	0	0	0	0	0
Auto Mechanic	36	0	2	3	0	1
Beauty Operator	3	46	3	0	0	0
Carpenter-Woodworker	14	0	1	0	1	1
Cleaner-Presser	1	2	0	0	0	0
Cook	29	20	0	3	6	9
Electrical Worker	175	1	0	0	1	2
Machine Operator, Other than Machinist	28	0	3	0	0	6
Machinist	35	0	1	2	0	0
Maint. Mechanic, General	136	0	1	0	0	0
Masonry Worker	8	0	0	0	0	0
Meat Cutter	10	0	2	0	0	0
Metal Worker-Welder	44	0	2	0	0	0
Office Machine Repairman	3	0	0	0	0	0
Painter	22	0	0	1	1	1
Plumber-Steam Fitter	25	0	2	1	0	0
Printer & Printing Machine Operator	27	2	0	0	0	4
Radio & TV Repairman	8	0	2	1	0	0
Upholsterer	1	0	0	0	0	0
Other Industrial Occupa- tions	<u>645</u>	<u>53</u>	<u>3</u>	<u>4</u>	<u>6</u>	<u>43</u>
Totals	1277	124	25	17	16	68

Conclusions:

1. Industrial occupations, with a total of 1401 employees, provide the second largest number of jobs for residents of Howard County.
2. The largest number of men are employed as electrical workers, and the second largest group are maintenance mechanics.
3. The largest number of women workers are beauty operators.
4. More than half the total number of men are employed in jobs not specifically identified on the questionnaire. This group, "Other Industrial Occupations," accounted for the greatest number of projected positions.
5. Of the occupations specifically identified, the highest projected needs were for cooks and machine operators.
6. A total increase in industrial occupations of 9% is predicted for the next three years.

Recommendations:

1. Existing training programs for industrial occupations should be evaluated and expanded to coincide with needs of employers.
2. Industrial occupations category needs to be more specifically defined as to types of jobs included in classification, "Other Industrial Occupations."

OFFICE OCCUPATIONS

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Bookkeeper	110	151	4	6	5	9
Bookkeeping Mach. Oper.	1	7	1	1	5	1
Data Processing Peripheral Equipment Operator	2	15	0	1	0	0
Office Clerk, General	23	235	2	3	15	6
Office Machine Oper.	8	3	0	0	8	0
Postal Clerk	21	12	0	0	0	0
Secretary	5	184	1	4	9	12
Statistical Clerk	2	8	0	0	2	1
Stenographer-Typist	0	95	4	19	23	17
Transportation Clerk	100	6	0	0	0	0
Other Office Occupations	<u>760</u>	<u>254</u>	<u>17</u>	<u>9</u>	<u>10</u>	<u>9</u>
Totals	1032	970	29	43	77	55

Conclusions:

1. With 2002 workers, office occupations employ the greatest number of Howard County residents.
2. The male-female ratio is almost equal with 51.5% and 48.5%, respectively.
3. Most women work as general office clerks, bookkeepers, and secretaries.
4. Most men are transportation clerks and bookkeepers.
5. "Other Office Occupations" category contains over half of the total number of employees in this field.
6. The highest projected increase is in the stenographer-typist group.

7. The percentage increase is predicted to be 10.2% for the next three years.

Recommendations:

1. Continue to offer instruction in office occupations.
2. Conduct a survey of office occupations in Howard County to determine changes in local labor market and the need to revise curriculum.
3. Conduct a follow-up study of graduates of Howard College at Big Spring in office occupations to determine effectiveness of present curriculum as preparation for current labor market and to determine need for revision of curriculum.
4. Identify jobs included in "Other Office Occupations."

HEALTH OCCUPATIONS

Occupations Requiring Less Than Two Years of Formal Post-High School Training

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Dental Assistant	5	9	0	4	2	2
Dietary Aide ^a	6	42	0	28	0	0
Medical Assistant, Doctor's Office	3	7	0	0	0	3
Medical Lab Assist.	3	5	3	4	0	1
Medical Records Technician	0	5	0	4	0	0
Nurse Aide or Orderly	12	95	0	106	50	1
Physical Therapist Assistant	0	3	1	0	0	0
Vocational Nurse L.V.N.	20	128	0	0	80	10
Nursing Unit Ward Clerk Management Assistant	1	15	0	10	2	2
X-Ray Technician Assistant	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	53	309	4	156	134	19

Conclusions:

1. The occupations provide more jobs for women than for men.
2. Employment in these areas is expected to increase 86.5% within the next three years. This is the highest rate of increase found for any occupational division in this study.
3. The majority of people are employed as L.V.N.'s and nurses' aides or orderlies.
4. The greatest future demands are expected to be in these positions also.

47

Recommendations:

1. Continue to provide opportunities for training in health occupations requiring less than two years post-high school instruction.
2. Expand curriculum to provide training for dietary aides, dental assistants, nursing ward clerk management assistants, and others as the need arises.

HEALTH OCCUPATIONS

Occupations Requiring Two to Four Years of Formal Post-High School Training

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Dental Hygienist	0	1	0	1	0	0
Medical Records Librarian (R.R.L.)	0	2	0	0	0	0
Medical Technologist (M.T., ASCP)	3	11	0	0	0	4
Nurse, Registered (R. N.)	2	117	1	54	1	53
Physical Therapist (R.P.T.)	0	2	2	0	0	0
Radiologic Technologist (R.T. or X.R.T.)	3	5	0	0	0	2
Other	<u>12</u>	<u>29</u>	<u>0</u>	<u>7</u>	<u>0</u>	<u>6</u>
Totals	20	167	3	62	1	65

Conclusions:

1. The largest projected need is for registered nurses.
2. The percent increase for the category is 70.1%.

Recommendations:

1. Provide training for registered nurses.
2. Identify jobs in "Other" category.

RECOMMENDATIONS FOR ALL HEALTH OCCUPATIONS

1. Periodically, surveys of local hospitals should be made to determine changes and advancements in procedures, skills, and equipment with implications for revisions in curriculum.
2. Periodically, follow-up studies of graduates in health-care programs offered at Howard College should be made to determine

the effectiveness and efficiency of training received at Howard College.

3. When need is evidenced, provide specialized training in specific skills and procedures for graduates of health-care programs.

TECHNICAL OCCUPATIONS

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Commercial Artist- Illustrator	4	9	0	0	0	0
Design Technician	2	0	0	0	0	0
Draftsman	4	0	0	0	0	0
Electronic Technician	7	0	0	0	0	0
Engineering Technician, All Classifications	23	0	0	1	0	1
Inspector, All Classifications	10	0	0	0	0	0
Instrumentation Technician	11	0	0	0	0	0
Production & Quality Control Technician	15	0	0	0	0	0
Programmer, Data Processing	2	2	0	0	0	0
Technical Writer	2	1	0	0	0	0
Other Technical Occupations	<u>173</u>	<u>32</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	253	44	0	1	0	1

Conclusions:

1. Most employees in technical occupations are men.
2. Engineering technicians, all classifications, provide employment for the largest group besides "Other Technical Occupations."
3. Less than 1% increase in number of jobs developing within the next three years is projected.

Recommendations:

1. More specific categorization of technical occupations to determine types of jobs included in "Other Technical Occupations."

PUBLIC SERVICE OCCUPATIONS

	Total Employee		Imme- diate	12	24	36
	M	F		Mos.	Mos.	Mos.
Fireman	78	0	0	2	2	2
Policeman	71	2	0	0	0	0
Other non-Professional Public Service Occupations not Elsewhere Classified	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	150	3	0	2	2	2

Conclusions:

1. Most jobs in these occupations are filled by men.
2. There are almost an equal number of jobs for firemen and policemen.
3. There is a .04% projected increase in the number of firemen for the three year period.

Recommendations:

1. Since persons in this field must keep up with advances in techniques, changes in laws, and are encouraged to attend periodic refresher courses, classes for these purposes should be offered.

DISTRIBUTIVE OCCUPATIONS
(Occupations Not Listed On Other Tables)

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Advertising Copywriter	9	6	0	0	0	0
Buyer	18	6	0	0	2	0
Cashier	30	59	3	5	6	13
Credit Worker	8	6	0	0	0	0
Deliveryman	129	40	5	4	0	1
Display Worker	13	7	0	0	0	0
Salesperson	257	212	6	18	12	17
Stockworker	68	9	2	8	7	12
Sales Promoter	17	0	0	0	0	0
Warehouseman	42	3	2	10	0	0
Banking	152	0	0	0	0	0
Insurance	1	1	0	0	0	0
Other	<u>151</u>	<u>53</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>
Totals	895	402	18	49	27	43

Conclusions:

1. These occupations provide employment for the third largest group of people in the survey.
2. More than twice as many men work in distributive occupations.
3. A 10.5% increase in the number employed is projected for this group.

Recommendations:

1. Training programs for cashiers, salespersons, and retail store operations are needed to prepare employees for future jobs in the distributive occupations.

HOME ECONOMICS OCCUPATIONS

	Full Time	Part Time	Imme- diate	12 Mos.	24 Mos.	36 Mos.
Alteration Worker	4	6	0	0	0	0
Dietitian Aide in Hospital Home for Children or Elderly Citizens	5	2	0	0	0	0
Food Service in Public Non-Commercial Institutions School Lunch	102	71	0	0	0	0
Hotel and Motel Aide, As Cleaner, Housekeeper	9	1	1	4	8	12
Seamstress	181	57	70	20	0	0
Other	<u>20</u>	<u>34</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	321	171	72	24	8	12

Conclusions:

1. Two groups, public food service and seamstress, provide the largest number of jobs.
2. The total percentage of the two groups is 88.2%, with 31.8% employed in food service jobs and 56.4% in seamstress jobs.
3. These two categories also provide the most part-time jobs.
4. The largest number of projected new employees are in seamstress work and hotel-motel aide group.

Recommendations:

1. Provide training in commercial sewing techniques.

AGRICULTURAL OCCUPATIONS

	Total Employee		Imme- diate	12 Mos.	24 Mos.	36 Mos.
	M	F				
Farm Equipment Partsman	2	0	0	0	0	0
Farm Equipment Service and Repairman	10	0	0	0	0	0
Farm Equipment Service Supervisor, Feed, Seed, Fertilizer, Farm Chemical, Sales and Serviceman	1	0	0	0	0	0
Groundskeeper	3	0	0	0	0	0
Meat Processing Plant Employee	9	0	0	0	0	0
Other	<u>83</u>	<u>0</u>	<u>8</u>	<u>4</u>	<u>0</u>	<u>0</u>
Totals	108	0	8	4	0	0

Conclusions:

1. There are no women presently employed in these occupations in firms employing three or more people.
2. The majority of workers were in "Other" agricultural occupations.
3. There is a projected increase of 12 employees within the next three years, representing an 11.1% increase.
4. A relatively large number of people in agricultural occupations work with equipment and are repairmen for these implements.

Recommendations:

1. There is a need to identify more specifically those jobs included in "Other" category.
2. Include the repair of farm equipment in courses where mechanics are taught to provide training in this area.

HOME OCCUPATIONS

	Full Time	Part Time	Imme- diate	12 Mos.	24 Mos.	36 Mos.
Household Employee, General	<u>14</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	14	0	0	0	0	0

Conclusions:

1. Only one group in the Home Occupations category reported employees.
2. No part-time employees were reported in this category.
3. There were no projected increases for employment within the next three years.
4. Very few Home Occupations employees work in firms with three or more employees.

Recommendations:

1. No action is recommended for occupations in this group.

TABLE 3

Number of Current Employees in Occupational Categories

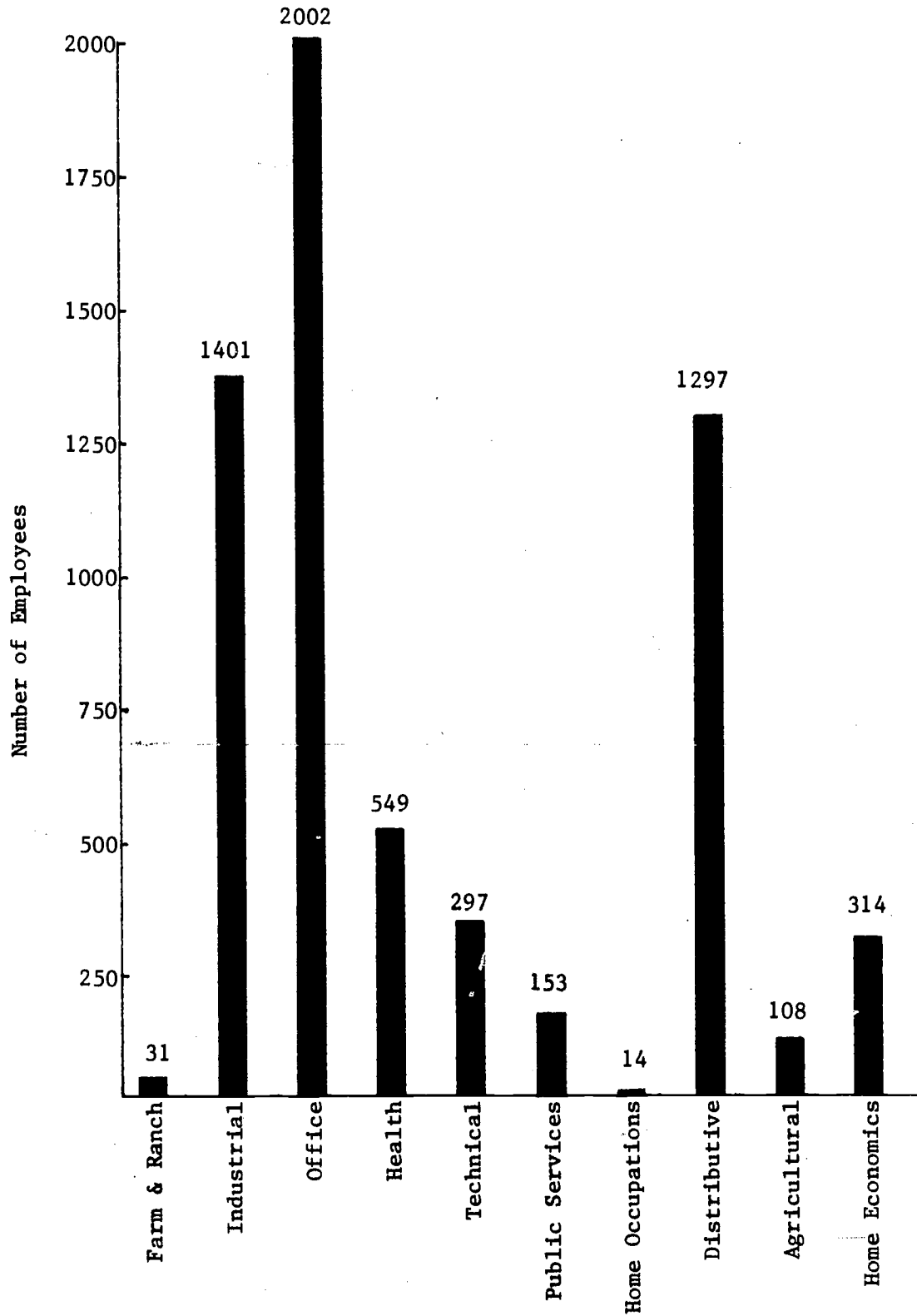
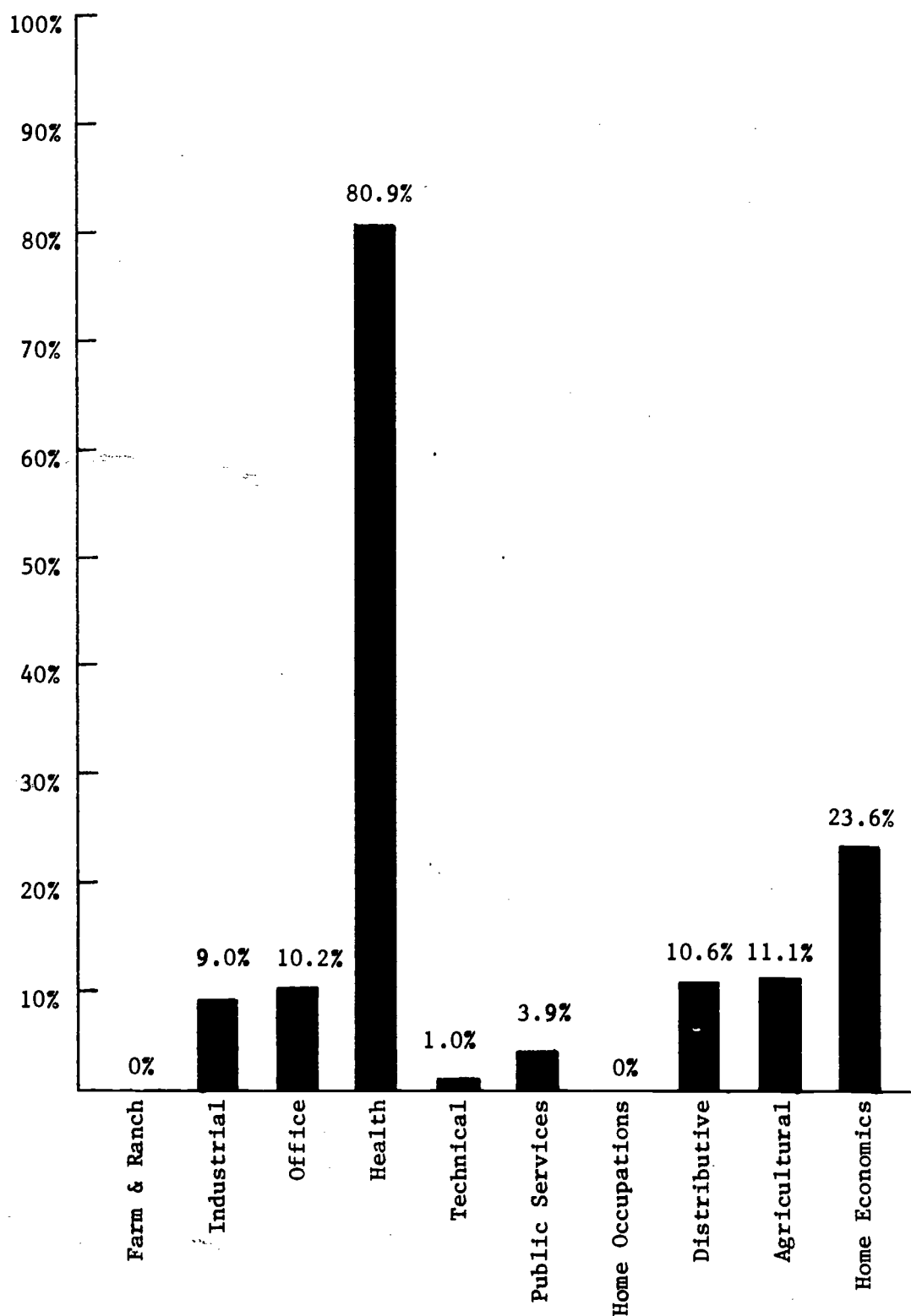


TABLE 4

Graph of Percent Increases Projected
for Occupational Categories



58

TABLE 5

Number Currently Employed in Occupational Categories with
Projected Employment Needs and Percent Increase

Job Category	Total Presently Emp.	Future Emp.	% Increase
Office	2002	204	10.2%
Industrial	1401	126	9.0%
Distributive	1297	137	10.6%
Health	549	444	80.9%
Home Economics	492	116	23.6%
Technical	297	2	1.0%
Public Service	153	6	3.9%
Agriculture	108	12	11.1%
Farm & Ranch	31	0	0.0%
Home Occupations	14	0	0.0%

CONCLUSIONS--EMPLOYER DATA

1. Approximately one-half of the firms in Howard County have training programs for beginning employees.
2. Over three-fourths of Howard County's employers have no mandatory educational requirements for new employees.
3. Where there is an educational requirement, the high school diploma is the standard in most firms.
4. The large number of employers choosing not to respond to questions concerning mandatory or desirable educational requirements could indicate a hesitancy to set educational limitations.
5. Employers place emphasis on factors other than educational attainment when considering applicants for entry-level positions.
6. An overwhelming majority of employers do not consider academic achievement as the most important factor in hiring entry-level employees.
7. Training programs which employers feel would contribute to the success of the business and its present employees tend to indicate that vocational training is needed more than academic training.
8. The 414 current job vacancies show that there are employment opportunities at the present time in Howard County.
9. Lack of trained personnel is not a significant cause for failing to fill job openings from within the organization.

10. The projected 764 future job vacancies within 319 firms indicate that there should be ample opportunity for employment in Howard County in the next three years.
11. In the opinion of the employers polled in this study, 44 types of training are needed by persons filling current or future job vacancies.
12. Of these 44, 16 types (36.4%) are needed for jobs both currently available and to become available in the projected period.
13. Eight types (18.2%) are needed to fill current jobs but not projected vacancies.
14. Twenty types (45.4%) are needed for future jobs only.
15. These findings indicate that a variety of skills and knowledge which are currently in demand will be demanded in the future, and a large percentage of future jobs will be in skills areas.
16. In analyzing types of employment projected for the future, marked increases in health-care related jobs is evident. This increased demand could be primarily due to the construction of a large hospital at the present time.
17. Increases in numbers of health-care jobs contributes significantly to the increase in demand for trained personnel.
18. The emphasis on and need for trained personnel will become the dominant factor in hiring new employees in the projected period.
19. In the future more people will have to have prior training in order to meet employment requirements at the entry level.
20. In the opinion of their employers, a significant percentage (62.4%) of current employees need no further training for their present jobs.

21. Almost one-half of the employers polled would encourage their employees to attend training classes.
22. Most employers consider evening classes to be the most convenient.
23. Of the group of employers who would encourage employees to seek further training, 59.7% would be willing to pay tuition costs. (This represents 26.9% of the employers in the population.)
24. The majority of employers indicated a low rate of turnover for entry-level employees.
25. Employers generally were reluctant to discuss entry-level wages.
26. When asked about entry-level wages, the percentage response of employers was so small that no conclusion as to the standard scale can be drawn.
27. A wide range of entry-level wages are paid by Howard County employers.

EMPLOYEE DATA--FINDINGS

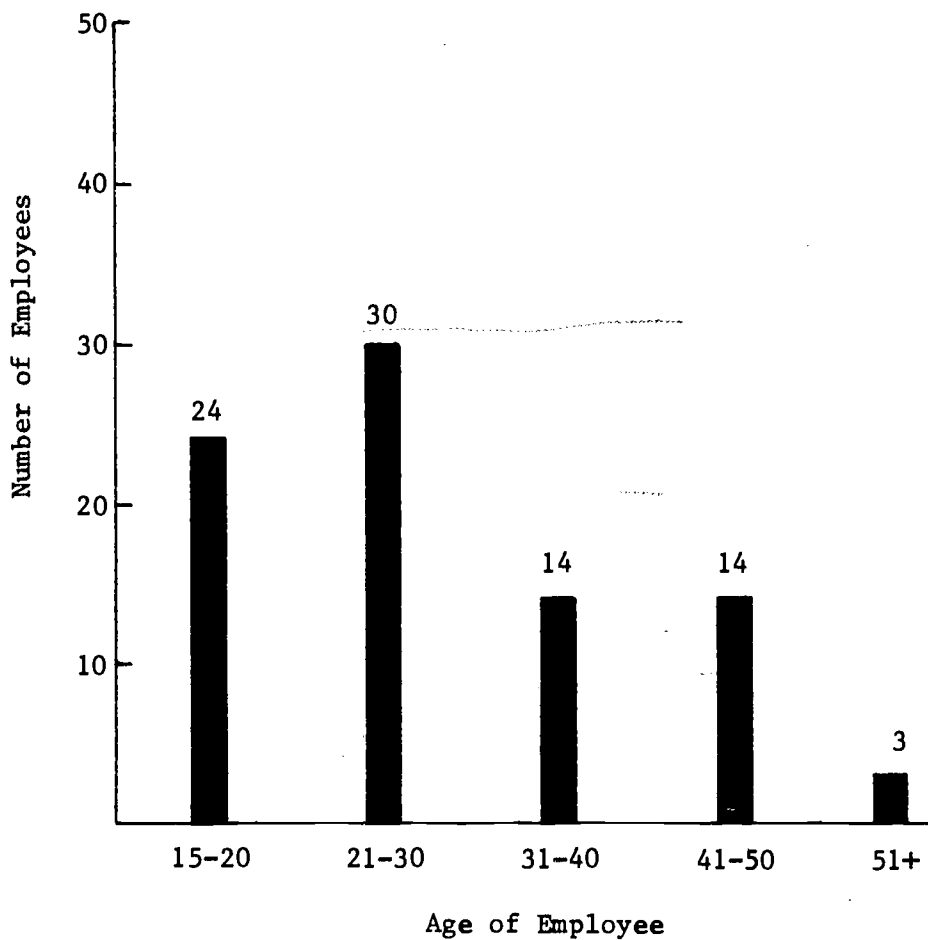
The employee group is comprised of employees contacted on the job with the permission of their employers; persons, both employed and unemployed, responding to requests for participation in the study; and those persons, both employed and unemployed, contacted by telephone by the polling group. There are 88 employed and 82 unemployed making a total of 170 people constituting the employee population of the study. When referring to the entire group, they will be called "employees." The two parts will be called individually "employed" and "unemployed."

Employed persons were found to be currently working in the following jobs:

Auto mechanic	Counter clerk
Communication equipment worker	Clerk, water department
Sheet metal worker	Presser
Mechanic, heavy equipment	Manufacturing
Secretary	Nurses' aide
Veterinarian assistant	Maintenance man
Salesperson	Collection agent
Bookkeeper	Equipment assembling
Radiator repair	Hospital attendant
Respiratory therapist	Laundry attendant
Finance	Food service
Sales and office secretarial	Elevator operator
Carpenter	Car wash attendant
Rewinding motors	Cook
Seed delinting and maintenance	Truck driver
Mobile home servicemen	Nurse, L.V.N.
Ticket agent	Deliveryman
General office manager	Civil engineer
Parts manager, auto	Switchman
Office, general	Janitor
Barber	Carpet layer
Air conditioning and refrigeration maintenance and repair	Auto jobber sales represent- ative

Most employees (30) fall into the age group between 21 and 30 years. The second largest area of response was in the 15 to 20 year group with 24 responses. See Table 6.

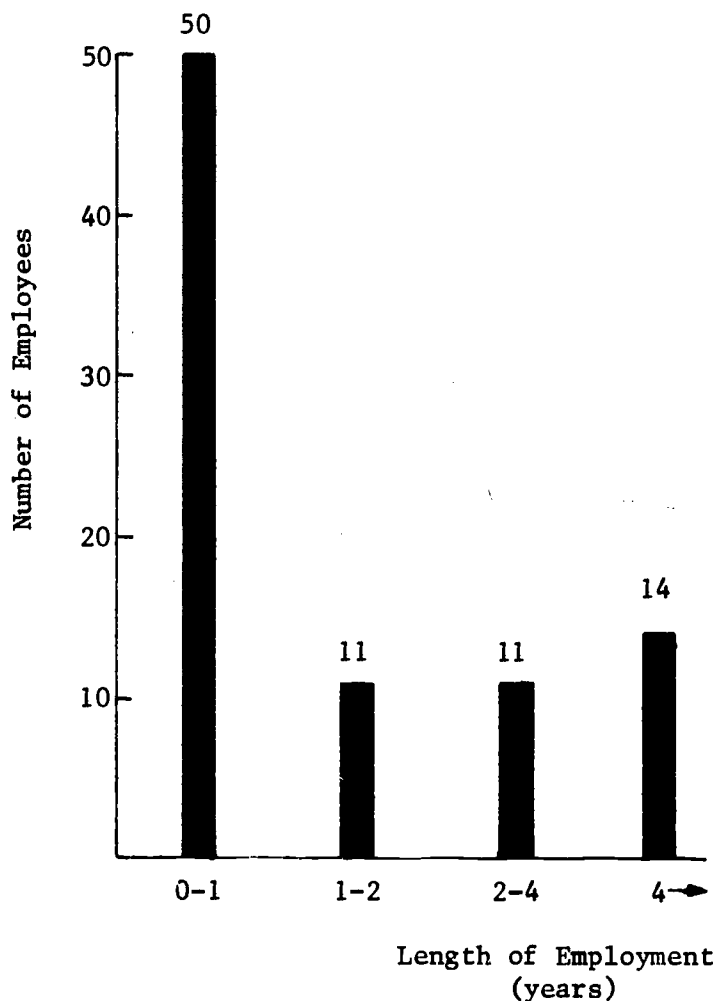
TABLE 6
Number of Employees in Each Age Group



Most employed persons surveyed have held their present jobs for less than one year. See Table 7.

TABLE 7

Distribution of Employed Persons
by Length of Employment

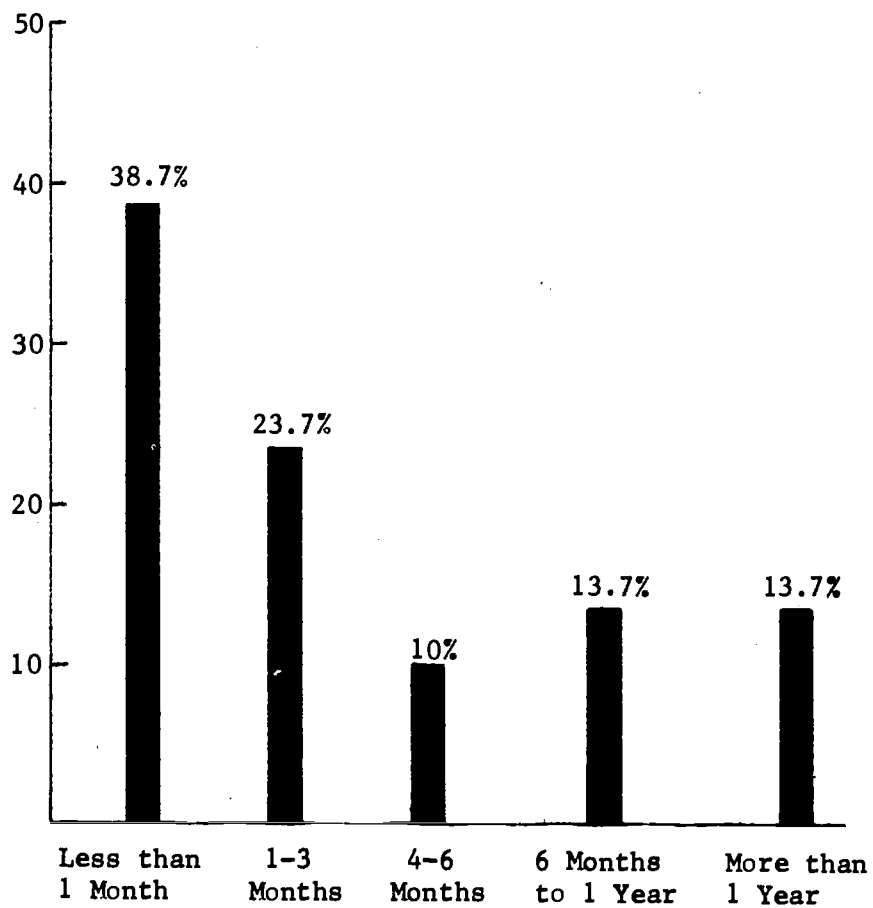


The number employed who were willing to take courses to upgrade their training needs and abilities was 59 (67.0%) of the 88. Ten were not willing (11.4%), and 19 (21.6%) did not respond. Fifty-eight employees (65.9%) were willing to pay their own tuition; 14 (15.9%) were not willing; and 16 (18.2%) did not respond.

The unemployed sector of employees showed that many persons (38.7%) were currently unemployed for less than one month. Those unemployed

from one to three months totaled 23.7%; four to six months, 10.0%; six months to one year, 13.7%; and longer than one year, 13.7%. See Table 8.

TABLE 8
Duration of Present Unemployment



The types of work performed by unemployed persons on previous jobs are listed below.

General office
Selling
Mechanical

Bus driver
Oil field worker
Deck hand

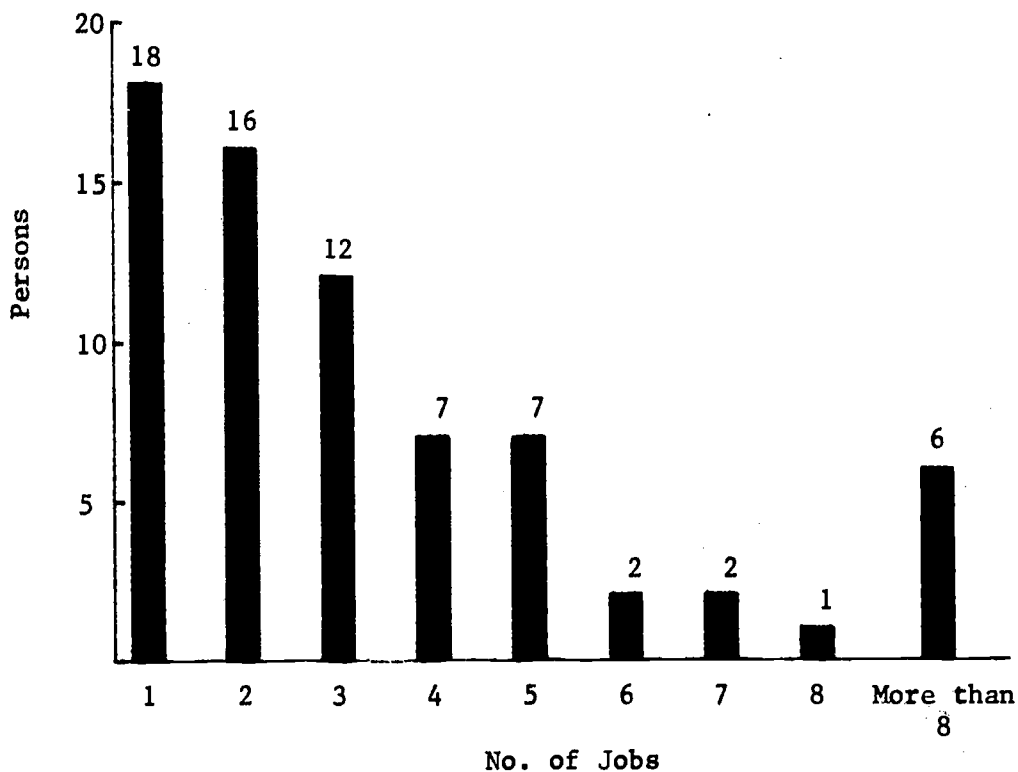
Agricultural
 Electrician helper
 Plumbing helper
 Construction helper
 Service work
 Manual labor
 Car wash attendant
 Gift wrapper
 Nurses' aide
 Dental technician
 Supervisor dress factory
 Advertising

Diesel mechanic
 Heavy equipment worker
 Welding
 Meat cutter
 Body work
 Bar tender
 Transcripts clerk
 Truck driver
 Well service
 Merchandiser
 Seamstress

The largest number of unemployed persons (18) were found to have held one job during the last three years. Sixteen persons held two jobs, 12 held 3 jobs, 7 held 4 jobs, 7 held 5 jobs, 2 held 6 jobs, 2 held 7 jobs, 1 held 8 jobs, and 6 persons held more than 8 jobs. See Table 9.

TABLE 9

Number of Jobs Held During Last 3 Years



The minimum time of employment in any one job was one-to-six months for 65% of those persons responding to this question. Of these, 75% resigned from their last job. Reasons for termination of employment are included in the following list.

- Pay inadequate for work performed
- Too little responsibility
- Illness or other physical limitations
- Inadequate training for job
- Pay inadequate to meet economic needs
- Disinterest in job
- Frequent absences
- Personality conflict with employer
- Personality conflict with other employees
- Fired
- No seniority
- Not enough hours available to work
- Finished contract job
- No time off
- Seasonal job finished
- Dependent ill
- Energy shortage
- No baby sitter
- Too far to commute
- Business failed

Illness or other physical limitations was the most commonly cited reason for job termination, followed by inadequate pay.

The level of formal education attained by 49.4% of unemployed persons surveyed was three years or less of high school. A high school diploma or equivalent was held by 24.7%, and 17.5% acquired academic instruction beyond the secondary level. Only 9.3% of the unemployed group had received vocational instruction.

Unemployed persons were found to be interested in those areas of study listed below.

Office occupations	Electrician
Auto mechanics	Welding
Agriculture	Drafting
Electronic data processing	Selling
Carpentry	Management
Air conditioning and heating repair	Allied health occupations
Vocational nursing	Nursing assistant

68

Office occupations and auto mechanics were the most requested areas of study by unemployed persons, with 47 (57.3%) and 35 (42.7%) respectively. Office occupations were further divided into typing, with 17 requests (36.2%); shorthand, 6 (12.8%); accounting, 9 (19.1%); general business subjects, 6 (12.8%); office practices, 6 (12.8%); and office management, 3 (6.4%). Auto mechanics was also divided with 15 (42.9%) requesting motor tune-up; 10 (28.6%) requesting motor repair; and 10 (28.6%) requesting transmission repair.

When unemployed persons were asked if they would enroll in classes offering vocational training, 93% said they would. Howard College was a convenient place for 98% of the people to attend classes. Transportation was not a deterrent for 90% of persons interviewed. If transportation was provided, 92% of the people would make use of it. Most persons (39%) preferred night classes if offered; 26% preferred day classes; and 35% said that time of day was unimportant.

Of the 45 who responded to the question, only 7 (15%) had dependent children who would keep the unemployed persons from attending school. The larger percentage (84%) of unemployed persons who had children stated that their dependent children would not hinder their attendance. Thirty-seven persons interviewed did not have dependent children.

Approximately one-half of the 21 responding (52%) stated that they would attend school if care was provided for their children. Ten (47%) said that care for their children would not free them to attend school. Those not responding numbered 61.

A wide variety of jobs have been held by persons currently unemployed. Many have worked at several different types of occupations.

Occupations, number formerly employed in that occupation, and percentage of total unemployed (88) and total employees (170) are presented in Table 10.

TABLE 10
Prior Jobs of Unemployed

Occupational Category	No. Employed In Each	% of 82 Unemployed	% of 170 Employees
General Office	19	23.2%	11.2%
Service Occupations	13	15.9%	7.6%
Selling	12	14.6%	7.1%
Manual Labor	7	8.5%	4.1%
Mechanical Work	6	7.3%	3.5%
Construction Help	6	7.3%	3.5%
Nurses' Aide	6	7.3%	3.5%
Oil Field Worker	5	6.1%	2.9%
Agricultural Worker	3	3.7%	1.8%
Electrical Worker	3	3.7%	1.8%

CONCLUSIONS--EMPLOYEE DATA

1. Most persons interviewed had been unemployed for less than six months.
2. Only 34.4% had been out of work for over one year.
3. Other surveys have shown that recently unemployed persons are more susceptible to training than hard-core unemployables. This would seem to be a positive note.
4. The unemployed persons had worked at a variety of different jobs.
5. Dissatisfaction with job was listed by 67% of those interviewed as the cause for termination of employment. This indicates a desire for change which could be directly linked to lack of training.
6. Most persons polled indicated a desire for further training.
7. Most indicated that they could attend classes at Howard College.
8. Most employees indicated an interest in training programs currently in existence at Howard College.
9. Dependent children are not keeping the majority of unemployed from attending school.
10. Most employees responded in the affirmative when asked if they were interested in vocational training.
11. Since most persons interviewed indicated they had their own transportation, none will need to be provided.
12. Persons responding of their own volition expressed an interest in further training.

13. Not all unemployed persons are interested in retraining.
14. The response received from employed and unemployed residents of Howard County when asked to participate in this survey was so meager and represented such a small percent of the total working population that no valid conclusions for all employed and unemployed residents of Howard County can be drawn from these findings.

RECOMMENDATIONS

1. Survey the local area for entry-level requirements in occupations where the most job opportunities are projected, health-care, office occupations, distributive, and industrial occupations.
2. Define standards for occupational competency at the entry level for occupational categories.
3. Implement training programs where a need is indicated and such programs are not currently available.
4. Plan curricula with the specific goal of preparing prospective employees for entry-level competency, and offer this preparation at Howard College.
5. Devise and administer competency tests to determine whether adequate training is being provided by vocational education curricula.
6. Test prospective students to determine levels of knowledge, skills, and training already attained and have students enter the program at the indicated level.
7. Counsel with and/or administer vocational aptitude and interest tests to all students enrolled or expressing an interest in enrolling in vocational education curricula at Howard College.
8. Continue to provide vocational counseling and encourage employers and prospective employees to make use of this service at Howard College.
9. Co-ordinate college vocational programs with those of area high schools so that students may progress from the high school

curriculum to the college without interruption or unnecessary repetition of subject matter.

10. Extend the curriculum in the various vocational areas to include training for advancement in the field beyond entry-level competency to upgrade the workers' knowledge and skills.
11. Encourage employers and employees to notify the college of deficiencies in educational fields with the possibility of initiating new training programs.
12. Secure the advice and aid of local businessmen in preparing curricula to provide entry-level competency and to upgrade existing skills.
13. Inform employers contacted in this study who indicated they had employees needing additional training of existing programs at Howard College.
14. Inform employees expressing a desire for additional training of existing programs offered by Howard College.
15. Poll employers having no established training program for new employees to determine if there is a need for one.
16. If a need is discovered and training programs are offered at Howard College, encourage employers to send employees for this training.
17. If such programs are not currently available at the college and the demand is great enough, they should be added to the curriculum.

CONCLUSIONS--PILOT PROGRAM

1. The majority of employers were cooperative with the study and answered most of the questions without hesitation.
2. The unemployed and employed persons contacted by field workers were sometimes unwilling to cooperate or not interested in participating in the study.
3. The unemployed and employed persons who responded to requests for participation were very cooperative.
4. Not enough people responded to requests to participate in the study.
5. Some employees were apprehensive about giving information to field workers.
6. Employers were usually hesitant to supply wage information to field workers.
7. Employers were generally cooperative in allowing field workers to interview their employees.
8. Employees were uncertain about what they wanted or needed in the way of training.
9. Employers as a group were very conservative in predicting future employment opportunities for their businesses.
10. Most opportunities for future employment seem to be in replacement rather than in growth of the business.
11. Many employers with three employees tend to have a low rate of employee turnover and generally anticipate minimum growth.

Therefore, businesses with five or more employees would have been a better source of occupational opportunity projections for future periods.

12. Occupational survey forms were inefficient, and some questions were subject to variations in interpretation.
13. The forms were not designed for facility in processing data using electric data processing equipment.
14. The Christmas-New Year holiday period interrupted the continuity of the study. Interviews were difficult to arrange, even with employers not affected by a rush at that season. Very little could be accomplished for several weeks during that time.

RECOMMENDATIONS--PILOT PROJECT

1. Expand orientation program to include data processing staff.
2. Have the programmer, systems analyst, field workers, and project director work together to design questionnaires. Care should be taken to insure that all parties understand the full meaning of each question.
3. All forms should be redesigned to provide for the types of occupations and businesses found in the area to be surveyed.
4. Eliminate "Other" category from forms. Provide space for listing specific jobs not included on the forms.
5. Replace Occupational Category forms with forms classifying types of businesses. List occupations which might be found in the operation of business. As an example, design forms for restaurants and list every type of job required in the operation of a restaurant, such as cook, cashier, waitress, waiter, busboy, dishwasher, janitor, dietitian, manager, bookkeeper, etc.
6. Use a letterhead with the title of the study for all correspondence.
7. Survey employers and prospective employees concurrently.
8. Schedule the study either to end before the Christmas holidays or wait until they are past to begin the project.
9. Organize employer interviews by type of business letting each field worker interview specific categories of business firms.

10. Whenever possible, interview employers by telephone.
11. Omit questions pertaining to entry-level wages.
12. Devise a question to determine the number of replacement opportunities and number of additional employees to be added in future period.
13. Special recommendations for firms with numerous employees:
 - a. Contact at the beginning of the study to allow ample time for completion of forms.
 - b. Secure the name of the person who will provide the information for the questionnaire, not necessarily the personnel manager.
14. To acquaint the public with the project, use the methods described in this study.
15. Additional methods for informing the public could include:
 - a. Providing leaflets for distribution to school children to acquaint parents with the survey and to encourage their participation.
 - b. Interview high school students who qualify as prospective trainees.
 - c. Secure the cooperation of local charitable organizations and request help in contacting persons to inform them of the goals of the study and encourage participation.
16. Define employer as one who hires five or more employees.
17. Dispense with surveying the employee group.

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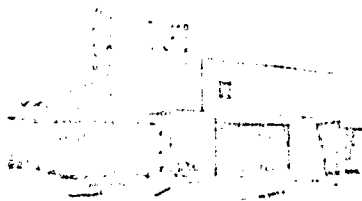
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Appendix 1

Introductory Letter



HOWARD COUNTY JUNIOR COLLEGE
BIG SPRING, TEXAS 79720

October 17, 1973

Howard County Employers:

We at Howard County Junior College are asking for your cooperation in a manpower study which we will be conducting for the next six months.

Due to encouragement from businessmen in the community and an expressed desire for new industry, the need for such a study became apparent. As a result, application was made for funds through the Occupational Research and Development Division of the Texas Education Agency to conduct an individual, personal survey.

The study is designed to provide information which will be beneficial to you in meeting present and future employee requirements. From information received from interviews with employers such as you, answers to the following questions will be found.

1. What employment positions exist now and will exist in the next three years?
2. What persons are available and will be available for training for existing and future employment positions?
3. What training is needed for present and future employees?

Through personally contacting employers in Howard County, we hope to determine the number of currently unfilled positions, estimate the number of employees needed during the next three years, and to determine the knowledge, skills, and types of training needed by present and prospective employees to fill these positions. We can only be successful in attaining these goals through your cooperation.

A group of six specially selected and trained college students will help collect the data for this project. One of these students will be contacting you during October or November requesting an interview at your convenience. The survey will take only 5 minutes of your time. We ask your cooperation with these students.

Very truly yours,

Mary L. Deats
Project Director

Appendix 2

Employer Information Forms

EMPLOYER IDENTIFICATION AND GENERAL DATA

C O N F I D E N T I A L I N F O R M A T I O N

CITY _____ SCHOOL DISTRICT _____

NAME OF BUSINESS _____

ADDRESS OF BUSINESS _____ TELEPHONE NO. _____

TYPE OF BUSINESS _____ NUMBER OF EMPLOYEES _____

INFORMANT _____ TITLE _____

INTERVIEWER _____ DATE _____

DOES BUSINESS HAVE A TRAINING PROGRAM FOR BEGINNERS?
YES NO

TYPE OF TRAINING PROGRAM _____

MANDATORY EDUCATION REQUIREMENTS FOR NEW EMPLOYEES _____

DESIRABLE EDUCATION REQUIREMENTS FOR NEW EMPLOYEES _____

PLEASE LIST TRAINING PROGRAMS WHICH EMPLOYER FEELS WOULD CONTRIBUTE TO THE SUCCESS OF THE BUSINESS AND ITS PRESENT EMPLOYEES. (EXAMPLES: SAFETY PRACTICES, BASIC ELECTRICITY, BLUEPRINT READING, SUPERVISOR-MANAGEMENT TRAINING, ETC.)

ADDITIONAL COMMENT: _____

EMPLOYER FORM

Confidential Information

1. Do you currently have a job opening that you have been unable to fill from within your organization due to lack of training? Yes ___ No ___ If so, how many___, and what is the type of training required? _____

2. Do you plan to hire additional employees in the next three years? Yes ___ No ___ If so, how many___, and what prior training would you require these employees to have? _____

May we use this information for our placement file? Yes ___ No ___

3. Do you currently have an employee or employees who need further training for their job? Yes ___ No ___ If so, how many___, and in what areas of further training would you be interested? _____

May we interview these employees? Yes ___ No ___

4. Would you send or encourage one of your employees to attend a course in the training areas you mentioned above if one were taught at a convenient time and place here in Howard County? Yes ___ No ___ If so, what do you consider a convenient time? _____

5. Would you be willing to help your employees meet the tuition expense? Yes ___ No ___

6. Do you have a high rate of turnover in your entry level employees? Yes ___ No ___ If so, do you feel that prior training in a certain field would prevent the turnover? Yes ___ No ___ What training would you recommend? _____

7. What do you think a trained employee in your field of employment should expect as an entry level wage? \$ _____ per month.

8. Comments: _____

SURVEY OF OCCUPATIONS ON FARMS AND RANCHES

Name and Address

Acres

1. Please check the occupation of each person presently working for you on your farm or ranch and indicate whether the employee is working full time or part time.
2. Report each employee in one occupation only. If you employ a worker in more than one of the occupations listed below, check the occupation the employee works a major portion of the time.
3. If you have immediate need for employees in any of the occupations listed below and/or anticipate the need for such employees in 12, 24, or 36 months, please list number needed.

Farm and Ranch Occupations	Present Employees		Additional Employees Needed - When							
	Full Time	Seasonal	Immediately		12 Months		24 Months		36 Months	
			Full Time	Seasonal	Full Time	Seasonal	Full Time	Seasonal	Full Time	Seasonal
Farm and Ranch Foreman										
General Farm Worker										
Tractor and Machinery Opr.										
Farm Mechanic										
Livestock Herdsman										
Dairy Herdsman										
Dairy Worker										
Poultry Worker										
Irrigation Worker										
Vegetable Farm Worker										
Fruit Farm Worker										
General Ranch Worker										
Swine Herdsman										
Forestry Worker										
Sheep Shearer										
Nursery Worker										
Others										

If youth and adults were trained for effective performance of jobs on your farm or ranch, would you be interested in employing them? Yes No
 (Revised April, 1966)

INDUSTRIAL OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
AIR COND. & REFRIG. MAINTENANCE & REPAIRMAN						
APPLIANCE REPAIRMAN						
AUTO BODY & TRIM WORKER						
AUTOMOBILE MECHANIC						
BEAUTY OPERATOR						
CAPRENTER-WOODWORKER						
CLEANER-PRESSER						
COOK						
ELECTRICAL WORKER						
MACHINE OPR., OTHER THAN MACHINIST						
MACHINIST						
MAINT. MECHANIC, GENERAL						
MASONRY WORKER						
MEAT CUTTER						
METAL WORKER-WELDER						
OFFICE MACHINE REPAIRMAN						
PAINTER						
PLUMBER-STEAM FITTER						
PRINTER AND PRINTING MACHINE OPERATOR						
RADIO & TV REPAIRMAN						
UPHOLSTERER						
OTHER INDUSTRIAL OCCUPATIONS						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

OFFICE OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
BOOKKEEPER						
BOOKKEEPING MACHINE OPR. DATA PROCESSING PERIPHERAL EQUIPMENT OPERATOR						
OFFICE CLERK, GENERAL						
OFFICE MACHINE OPERATOR						
POSTAL CLERK						
SECRETARY						
STATISTICAL CLERK						
STENOGRAPHER-TYPIST						
TRANSPORTATION CLERK						
OTHER OFFICE OCCUPATIONS						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

HEALTH OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
Occupations requiring less than two years of formal post-high school training						
DENTAL ASSISTANT						
DENTAL LABORATORY TECH.						
DIETARY AIDE						
MEDICAL ASST., DR'S OFFICE						
MEDICAL LABORATORY ASST.						
MEDICAL RECORDS TECH.						
NURSE AIDE OR ORDERLY						
PHYSICAL THERAPIST ASST.						
VOCATIONAL NURSE (L.V.N.) (Nuring Unit WARD CLERK Mgt. Asst.)						
X-RAY TECHICIAN ASST.						
TOTALS						
Occupations requiring two to four years of formal post-high school training						
DENTAL HYGIENIST						
MEDICAL RECORDS LIBRARIAN (R.R.L.)						
MEDICAL TECHNOLOGIST (M.T., ASCP)						
NURSE, REGISTERED (R.N.)						
PHYSICAL THERAPIST (R.P.T.)						
RADIOLOGIC TECHNOLOGIST (R.T. or X.R.T.)						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

TECHNICAL OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
COMMERCIAL ARTIST-ILLUSTRATOR						
CONSTRUCTION TECHNICIAN, ALL CALSSIFICATIONS						
DESIGN TECHICIAN						
DRAFTSMAN						
ELECTRONIC TECHNICIAN						
ENGINEERING TECHNICIAN, ALL CLASSIFICATIONS						
INSPECTOR, ALL CLASSIFICATIONS						
INSTRUMENTATION TECHNICIAN						
MORTICIAN						
PRODUCTION & QUALITY CONTROL TECHNICIAN						
PROGRAMMER, DATA PROCESSING						
TECHNICAL WRITER						
OTHER TECHNICAL OCCUPATIONS						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

PUBLIC SERVICE OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
FIREMAN						
POLICEMAN						
OTHER NON-PROFESSIONAL PUBLIC SERVICE OCCUPATIONS NOT ELSEWHERE CLASSIFIED						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

SURVEY OF OCCUPATIONS IN THE HOME

1. Please show the occupations of each person presently working for you in your home and indicate whether the employee is working full or part time.
2. Report each employee in one occupation only. If you employ the worker in more than one of the occupations listed below, select the occupation the employee works in most of the time.
3. If you have an immediate need for employees in any of these occupations and/or anticipate the need for such employees in 12, 24, or 36 months, please show the number of employees needed in columns 3, 4, 5, and 6.

HOME OCCUPATIONS FOR GAINFUL EMPLOYMENT	Present Employee(s)		When is Employee Needed			
	1	2	3	4	5	6
	Regularly	Part-Time	Immediately	In 12 Months	In 24 Months	In 36 Months
Household Employee, General						
Home Child Care Worker						
Companion to Elderly or Handicapped Person						
Cook (special meals, parties, etc.)						
Seamstress						
Other Household Occupations						

If youth and adults were given effective training in these jobs for wage earnings, would you be interested in employing them? Yes _____ No _____

Do you know youth and adults in this community who might be interested in training for gainful employment?

Name _____ Address _____

DISTRIBUTIVE OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employers Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
	<u>RETAIL TRADE</u> - Some examples: Drug Stores, Food Stores, Service Stations (not me- chanics), General Mdse.					
ADVERTISING COPYWRITER						
BUYER						
CASHIER						
CREDIT WORKER						
DELIVERYMAN						
DISPLAY WORKER						
SALESPERSON						
STOCKWORKER						
<u>WHOLESALE TRADE</u> - Some ex- amples: Dry Goods, Grocery, Oil Jobbers, Distributors.						
DELIVERYMAN						
SALESPERSON						
SALES PROMOTER						
WAREHOUSEMAN						
<u>SERVICE AND OTHER DISTR.</u> <u>OCCUPATIONS</u> - Some examples: Banking, Insurance, Motels, Dry Cleaning, Theatres, Com- munications, Transportation, Storing & Warehousing.						
CASHIER						
SALESPERSON						
SALES PROMOTER						
WAREHOUSEMAN						
TOTALS						
USE THE LINES BELOW TO ENUMERATE EMPLOYEES IN ALL OTHER OCCUPATIONS INVOLVED IN THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE AND NOT REPORTED ELSEWHERE.						

AGRICULTURAL OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	M	F	Imme.	12 Mos.	24 Mos.	36 Mos.
DAIRY PRODUCTS EMPLOYEE						
FARM EQUIPMENT PARTSMAN						
FARM EQUIPMENT SERVICE & REPAIRMAN						
FARM EQUIP. SERV. SUPERVISOR						
FEED, SEED, FERTILIZER, FARM CHEMICAL SALES & SERVICEMAN						
FEED WAREHOUSE EMPLOYEE						
FORESTRY ASSISTANT						
FRUIT & VEGETABLE PACKING PLANT PROCESSOR						
GRAIN ELEVATOR EMPLOYEE						
GREENHOUSE WORKER						
GROUNDSKEEPER						
IRRIGATION EQUIP. SALESMAN						
IRRIGATION EQUIP. SERVICEMAN						
MEAT PROCESSING PLANT EMPL.						
NURSERY WORKER						
POULTRY HATCHERY EMPLOYEE						
POULTRY PRODUCTS EMPLOYEE						
VETERINARIAN'S ASSISTANT						
WILDLIFE CONSERVATION EMPLOYEE						
OTHER AGRICULTURAL OCCUPATIONS - IDENTIFY BY OCCUPA.:						
TOTALS						
USE THE LINES BELOW TO ENUMERATE ALL OTHER OCCUPATIONS EMPLOYED BY THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE.						

HOME ECONOMICS OCCUPATIONS

OCCUPATIONAL CATEGORY	Total Employees		Employees Needed (under existing conditions)			
	Full Time	Part Time	Imme.	12 Mos.	24 Mos.	36 Mos.
ALTERATION WORKER						
CHILD CARE WORKER IN <u>Child Care Center</u>						
<u>Nursery School</u>						
COMPANION TO ELDERLY OR HANDICAPPED PERSON						
DIETITIAN AIDE IN <u>Hospital</u>						
<u>Home for Children</u>						
<u>Elderly Citizens</u>						
FOOD SERVICE IN Public Non-Commercial <u>Institutions</u>						
<u>School Lunch</u>						
<u>Home for Elderly Citizens</u>						
<u>Children's Home</u>						
HOME FURNISHING AIDE						
HOTEL & MOTEL AIDE, AS <u>Cleaner</u>						
<u>Housekeeper</u>						
HOUSEHOLD EMPLOYEE IN <u>Home</u>						
<u>Business Establishment</u>						
MANAGEMENT AIDE, PUBLIC HOUSING						
MILLINERY AIDE						
SEAMSTRESS						
TESTER OF FOODS & EQUIP. WITH <u>Utility Company</u>						
<u>Gas Company</u>						
OTHER HOME ECO. OCCUP.						
TOTALS						
USE THE LINES BELOW TO ENUMERATE EMPLOYEES IN ALL OTHER OCCUPATIONS INVOLVED IN THIS BUSINESS BUT NOT CLASSIFIABLE IN THE OCCUPATIONAL CATEGORIES LISTED ABOVE AND NOT REPORTED ELSEWHERE.						

Appendix 3

Employee Form - Undertrained

EMPLOYEE FORM
Confidential Information

1. Type of Employment _____
2. Length of employment on present job 0-1yr _____ 1-2yrs _____ 2-4yrs _____
4 or more _____
3. Age employee 15-20 _____ 21-30 _____ 31-40 _____ 41-50 _____ 51 or over _____
4. If a course were offered to upgrade your abilities or training for your job, would you be willing to take the course? Yes _____ No _____
5. If your employer encouraged you to attend such a course, would you be willing to take it? Yes _____ No _____
6. Would you be willing to pay your own tuition? Yes _____ No _____

Appendix 4

Confidential Employment Information
For Unemployed

CONFIDENTIAL EMPLOYMENT INFORMATION

For Unemployed

Name _____

Mailing Address _____

Age _____ Sex _____ Number of dependents _____

Would your dependent children keep you from attending school? Yes ___ No ___

If you had someone to care for your children, would you attend school?

Yes ___ No ___

Duration of present unemployment:

Less than 1 mo ___ 1-3 mos ___ 4-6 mos ___ 6 mos-1yr ___ Over 1 yr ___

Type of work performed on jobs previously employed:

General office _____

Plumbing helper _____

Selling _____

Construction helper _____

Mechanical _____

Service work _____

Agricultural _____

Manual labor _____

Electrician helper _____

Other (list) _____

Number of jobs held during last 3 years _____

Maximum time employed on any one of these jobs _____

Minimum time employed on any one of these jobs _____

Did you resign from your last job? Yes ___ No ___

Reason for termination of last job:

Pay inadequate for work performed _____

Too little responsibility _____

Illness or other physical limitations _____

Inadequate training for job _____

Inability to perform satisfactorily _____

Pay inadequate to meet economic needs _____

Too much responsibility _____

Disinterest in job _____

Were you late to work often _____

Were you absent a lot _____

Personality conflict with employer _____

Personality conflict with other employees _____

Other (list) _____

Level of formal education attained:

Completed: Grammar school _____

1 yr high school _____

2 yr high school _____

3 yrs high school _____

High school diploma _____

Academic instruction beyond high school _____

Vocational training beyond high school _____

Other (list) _____

If available at a convenient time and place, would you enroll in classes offering vocational training? Yes ___ No ___

Could you attend classes offered on the HC campus? Yes ___ No ___

Do you have transportation to the campus? Yes ___ No ___
Would you attend if transportation were furnished? Yes ___ No ___

At which time would it be more convenient for you to attend class?
Day _____ Night _____ Either _____

In what areas of study are you most interested in securing vocational training?

Office:

Typing
Shorthand
Accounting
General business subjects
Office practice
Management

Drafting:

Selling:

Auto mechanics:

Motor tune-up
Motor repair
Transmission repair

Management:

Agriculture:

Agricultural business
Plant science/crop production
Farm and Ranch Management

Electronic Data Processing:

Key punch operator
Programming

Carpentry _____
Air Conditioning and heating repair _____
Allied health _____
Vocational nursing _____
Nursing assistant _____
Electrician _____
Welding _____

May we keep your name and address on file in order to contact you when training programs in your field of interest are made available at Howard College? Yes ___ No ___

Signed _____

Appendix 5

Employee Form - Respondants to Study

EMPLOYEE FORM

Confidential Information

Type of Employment _____

Length of employment on present job 0-1 yr ___ 1-2 yrs ___ 2-4yrs ___
4 or more ___ Age of employee _____

If a course were offered to upgrade your abilities or training for your job, would you be willing to take the course? Yes ___ No ___

If your employer encouraged you to attend such a course, would you be willing to pay your own tuition? Yes ___ No ___

Would you be willing to pay your own tuition? Yes ___ No ___

In what areas of study are you most interested in securing vocational training?

Office:

- Typing
- Shorthand
- Accounting
- General business subjects
- Office practice
- Management

Drafting:

Selling:

Management:

- Carpentry _____
- Air conditioning and heating repair _____
- Allied health _____
- Vocational nursing _____
- Nursing assistant _____
- Electrician _____
- Welding _____

Auto Mechanics:

- Motor tune-up
- Motor repair
- Transmission repair

Agriculture:

- Agricultural business
- Plant science/crop production
- Farm and ranch management

Electronic Data Processing:

- Key punch operator
- Programming

Name _____

Mailing address _____

Telephone Number _____

Sex _____

May we keep your name and address on file in order to contact you when training programs in your field of interest are made available at Howard College? Yes ___ No ___

Signed _____

Appendix 6

Letter to Unemployed Residents

TO: Unemployed Residents of Howard County

FROM: The Texas Employment Commission

The Texas Employment Commission in cooperation with Howard County Junior College is studying the present employment situation in Howard County and attempting a projection of the situation for a three-year future period. As an unemployed resident who has indicated an interest in future training and who is actively seeking employment at this time, we are asking for your cooperation.

The purpose of the study is to determine what jobs are now available and will be available in the county during the next three years and to locate employees to fill them. In addition, Howard County Junior College hopes to determine what knowledge and skills will be needed by employees seeking these positions and to make the necessary training available to interested persons.

Representatives of the college will be interviewing those residents responding to this letter at the TEC office at 406 Runnels in Big Spring beginning on January 7, 1974. Interviews will be conducted during regular office hours and will continue throughout the month of January.

This survey of county employers is almost completed, and their response has been overwhelmingly enthusiastic. However, if the study is to be successful in attaining its goals, the cooperation of every prospective employee must also be received.

We are asking you to come by the TEC office during January for a personal interview. Your cooperation will be appreciated, and it will take only a few minutes of your time.

Appendix 7

Handbill

NEED WORK? TRAINING?



**MANPOWER
NEED
STUDY**

CALL **267 6311**



9 AM 5 PM WEEKDAYS

ALL INFORMATION CONFIDENTIAL

NO OBLIGATION



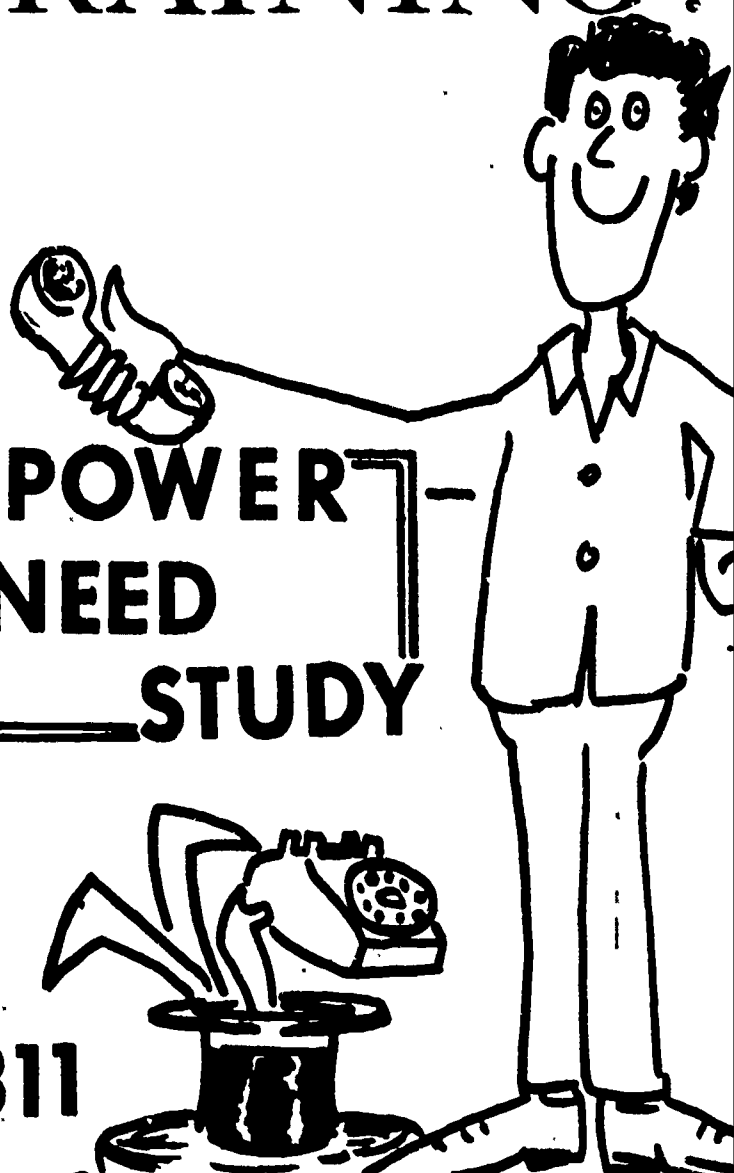
HOWARD COLLEGE AT BIG SPRING

9106

Appendix 7

Handbill

NEED WORK? TRAINING?



**MANPOWER
NEED
STUDY**

CALL 267 6311

9 AM 5 PM WEEKDAYS

ALL INFORMATION CONFIDENTIAL

NO OBLIGATION



HOWARD COLLEGE AT BIG SPRING

9706