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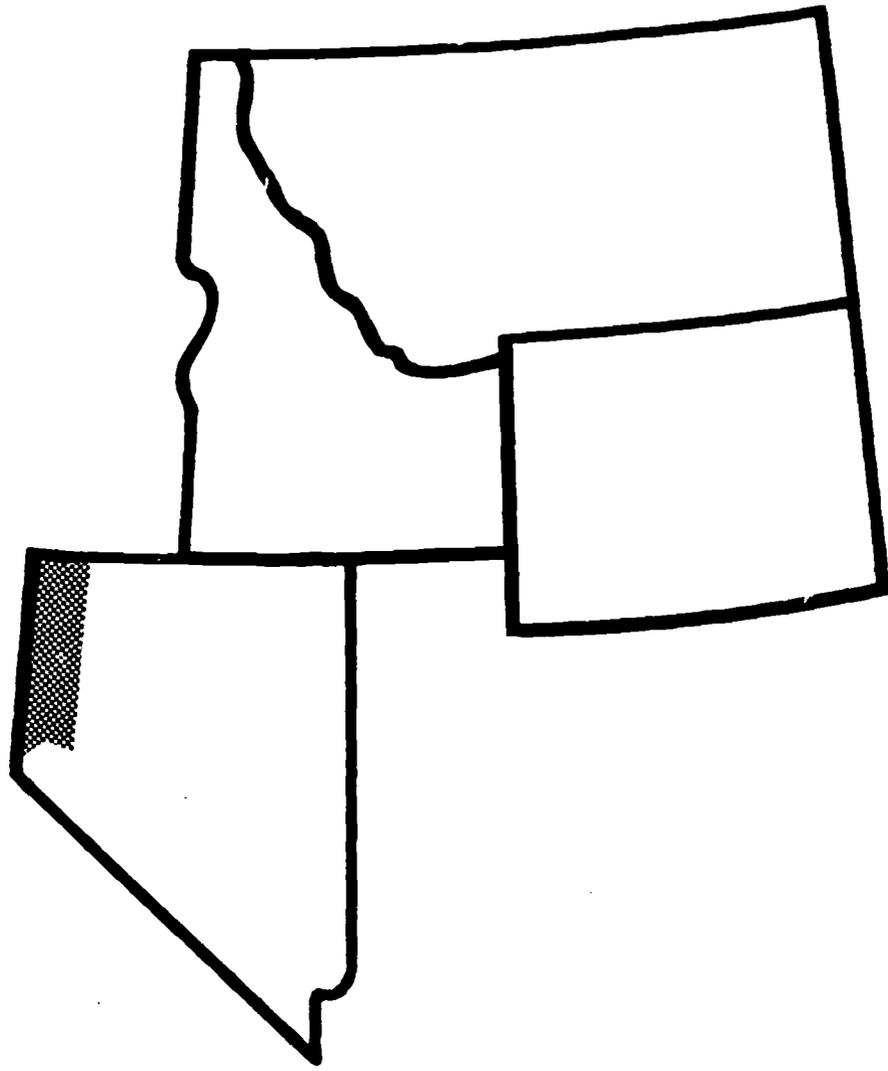
ABSTRACT

The profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for the Carson-Washoe County area of Nevada, one of seven surveyed in the Mountain States region (Idaho, Montana, Wyoming, and Nevada). The first section of the profile provides general population information, income distributions, and occupational groups of employed persons in the area surveyed. The second section lists the number of people employed in 103 categories of health occupations. The third section lists health education institutions which offer degree or certificate programs in the health field. It includes information about libraries in health related fields and the availability of video-tape equipment. The fourth section is an enumeration of health facilities in the area surveyed. Comparisons are made within the four States and to the United States in toto. Other regions covered are: Treasure Valley (CE 000 659), Albany-Laramie Counties (CE 000 660), Yellowstone County (CE 000 661), Missoula County (CE 000 662), Clark County (CE 000 663), and Sheridan County (CE 000 664). (AG)

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CARSON-WASHOE COUNTY HEALTH MANPOWER AND EDUCATION PROFILE

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1972 EDITION

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A PUBLICATION OF THE MOUNTAIN STATES REGIONAL MEDICAL PROGRAM

CARSON-WASHOE
HEALTH MANPOWER AND EDUCATION PROFILE

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PREFACE

The sparse population and the scattered population centers of the western states provide a unique set of problems in meeting the health needs of the people within this area. Further, three of the four states served by the Mountain States Regional Medical Program, Idaho, Montana, and Wyoming, do not have medical schools. The fourth state, Nevada, served by the Region has a two-year medical school.

During the summer of 1972, Mountain States RMP directed a concentrated effort toward describing in detail the numbers of health workers in seven community areas in the Region. Additionally, the numbers and kinds of health education occurring in the community were described, and a summary of economic and demographic characteristics of the areas was compiled. This firsthand, current assessment is necessary to plan effectively for programs which aim to increase needed health manpower supply and skill relevance at the community level. Numerous organizations, including the Mountain States Regional Medical Program in its "Health Training Network" activities, are currently approaching this complex problem. Essentially then, the profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for each of the seven community areas surveyed in the Mountain States region.

However, the information contained in this profile provides only the "what is" with regard to health manpower and education in the community area. To be used as an effective planning tool, the profile should be accompanied with statements of what "ought to be" with regard to the

distribution, supply, and skill relevance of the health manpower pool necessary to best serve the community area. Comparisons of the "real" and the "desirable" can provide a basis for planning increasingly relevant health education programs. This profile is intended, therefore, to be used by local groups concerned with health planning, by the Mountain States RMP, by educational institutions and state boards of education, by consumers, by health professionals and by other health organizations.

The compilation of the data presented has depended upon the assistance and energies of many persons too numerous to list; however, special acknowledgement is due to DeWitt C. Baldwin, Jr., M.D., University of Nevada at Reno, Thomas E. Wilson, Director Comprehensive Health Planning, State of Nevada; and to Mrs. June Geiger, Mrs. Martha Nichols and Mrs. Myrna Ferguson for their assistance in the preparation of this profile. Additional acknowledgement is due to the many persons who provided basic information for the profile; they are listed in Appendix 2.

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August 1972

INTRODUCTION

The data contained here are divided into four basic parts. First is the demographic data for the area with general population information, income distributions, and occupational groups of employed persons in the area surveyed. This information was obtained from the U.S. Bureau of the Census publications for the 1960 and the 1970 census.

In the second part, the number of persons working in health professions was tallied by the setting in which they are employed. Insomuch as there are some 103 categories of occupations of health workers listed, a set of brief occupational descriptions is given in the appendices to indicate what kinds of employment were included in a given category. Further, a listing of the specific institutions in which health personnel were surveyed is included; in this way, any discrepancies may be readily detected. The exception is private offices, the list of which is too lengthy to include. Importantly, only those health personnel who were employed were enumerated; thus, if a person is a medical technologist, for example, that person was counted only if he or she was currently practicing in the area. In this way a clear picture of the health manpower actually serving the area may be realized. In all cases, part-time employees counted as one-half; therefore, some numbers may have a "0.5" attached which accounts for part-time employees.

INTRODUCTION (Contd.)

Every attempt has been made to insure the accuracy of the data presented; it is conceivable, however, that some persons may not have been counted or that the information that we obtained was in error by passage of time or inaccurate records. Further, we attempted to gather as much information as possible by direct contact with the various work settings rather than through secondary sources. Thus, all data not directly annotated may be assumed to be primary data obtained by interview, telephone contact, questionnaire, etc. In a very few cases, an accurate count simply was not available within budget and time constraints. In these cases the quantity is clearly marked by an asterisk and noted to be an estimate, or was omitted.

The third section is a quantification and listing of the various health education resources and institutions within the area. This section lists the institutions which offer course work leading to a certificate or degree preparing graduates to practice in the health field. This section also contains information about libraries in health related fields and video-tape equipment available to health education and practicing personnel.

The fourth and final section is an enumeration of health facilities such as a number of hospitals, ambulances, pharmacies, and other facilities in the area surveyed.

The general order of presentation of any given set of data is one in which a brief introduction to the section is given describing the specific limitations and features of the data in that section; and a

INTRODUCTION (Contd.)

brief narrative description of the data is given in order to highlight the unusual quantities obtained in the survey. Secondly, a graphic comparison is made with the local quantities of the four state area of Idaho, Montana, Nevada, and Wyoming (Mountain States Region) and to the United States in toto, where such a visual demonstration of the information is deemed useful. Finally, the raw data for the given category is provided for those readers who wish a more detailed description.

Detailed information about procedures and raw data are available upon item-specific request made to:

Mountain States Regional Medical Program
Nevada Division
956 Willow Street
Reno, Nevada 89502

SECTION I: POPULATION CHARACTERISTICS

A. INTRODUCTION

This section provides a statistical description of the general demographic characteristics including totals, densities, rural-urban distributions, and age distributions; the economic characteristics of the area in terms of the per capita and family median incomes; and the occupational characteristics of the area in terms of the numbers of persons employed in various selected occupational groups.

Included here are comparison graphs indicating how the Carson-Washoe area compares with the Mountain States Region and the United States for given selected statistics from this section.

B. NARRATIVE SUMMARY

1. POPULATION DENSITY:

The population density for the Carson-Washoe area is markedly higher than that of the Mountain States Region. This density, however, is still considerably less than the National figure of some fifty-seven persons per square mile. (see Figure 1)

2. GROWTH RATE:

The rate of growth of the Carson-Washoe area from 1960 to 1970 is perhaps the most noticeable features of the demographic data here. This area has grown at a rate of almost four times that of either the Region or the Nation. (see Figure 2)

3. AGE DISTRIBUTION:

There seems to be no major deviation of age distribution in comparison to the Region or the Nation for any age group.

There is, however, a moderate deviation with less than the National percentage of persons in the four to fourteen range and slightly more than the National distribution in the twenty-four to forty-four range.

4. FAMILY MEDIAN INCOME:

The per capita income figure for Carson-Washoe is comparable to that for the Nation and slightly less than that of the Region. The family median income figure is approximately one-tenth higher than that of the Nation and approximately one-fifth higher than that of the Region. (see Figure 3)

5. OCCUPATIONAL CHARACTERISTICS:

According to the U.S. Census Bureau counts, Carson-Washoe exhibits approximately one-fourth less Medical, Dental, and Other Health Workers per thousand population than does the Nation.

The rate of increase of this ratio is considerably higher than the National rate, however, with an increase of almost one-hundred and forty per cent. The National increase rate has been approximately forty per cent. (see Figure 4)

C. DEMOGRAPHIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Carson-Washoe

Population: 1960 89,906¹ 1970 136,536¹ Per Cent Change 51.9¹

Geographic Area: 6,516 Square Miles¹

Population Density: 21.0 Pers/Sq. Mi.¹

*Rural Population: 1960 14,544¹ 1970 21,381¹

Urban Population: 1960 75,352¹ 1970 115,155¹

Age Distribution (1970):²

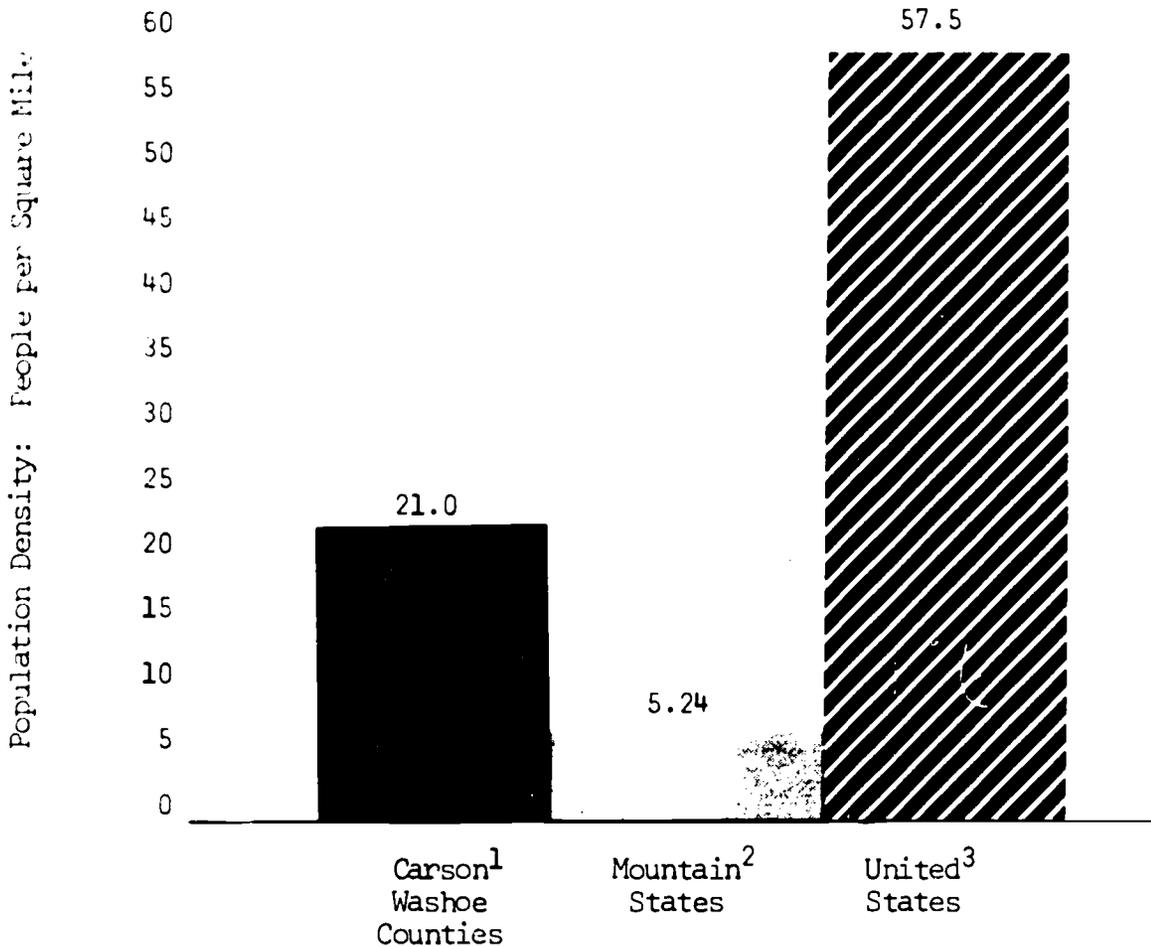
0-4 <u>10,876</u>	45-49 <u>9,337</u>
5-9 <u>12,887</u>	50-54 <u>8,351</u>
10-14 <u>12,974</u>	55-59 <u>7,255</u>
15-19 <u>11,657</u>	60-64 <u>5,540</u>
20-24 <u>11,184</u>	65-69 <u>4,018</u>
25-29 <u>9,894</u>	70-74 <u>2,792</u>
30-34 <u>8,829</u>	75-79 <u>1,899</u>
35-39 <u>8,325</u>	80-84 <u>1,079</u>
40-44 <u>8,904</u>	85+ <u>735</u>

* Rural Population: Less than 2500
Urban Population: 2501 and over

¹ U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report. PC (1)-30A Nevada. U.S. Government Printing Office, Washington, D.C., 1971. Table 9.

² U.S. Bureau of Census. U.S. Census of Population: 1970. General Population Characteristics. Final Report PC (1)-30B Nevada. U.S. Government Printing Office, Washington, D.C., 1971. Table 35.

FIGURE 1: Population Density

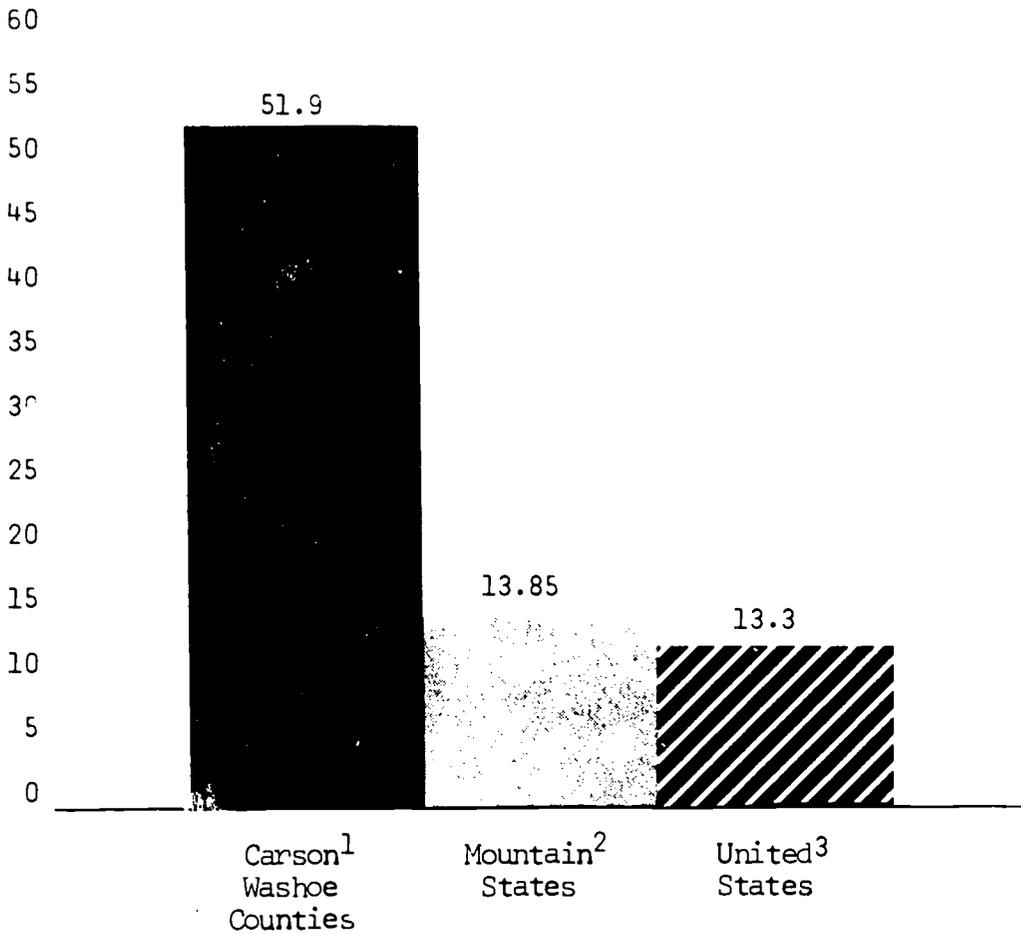


¹ U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC(1)-30A. U.S. Government Printing Office, Washington, D.C., 1971. Table 9.

² U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants, (Combined Data from Idaho, Montana, Nevada and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

³ U.S. Bureau of Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

FIGURE 2: Growth Rate



¹ U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC(1)-30A. U.S. Government Printing Office, Washington, D.C., 1971. Table 9.

² U.S. Bureau of Census. U.S. Census of Population: 1970. Number of Inhabitants, (Combined data from Idaho, Montana, Nevada, and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

³ U.S. Bureau of Census. Statistical Abstract of the United States: 1960 and 1971 (Combined Data) U.S. Government Printing Office, Washington, D.C.

D. ECONOMIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Carson-Washoe Counties

County	Per Capita Income		Family Median Income	
	1960 ¹	1970 ²	1960 ¹	1970 ²
Carson	\$2,095	\$3,645	\$6,383	\$11,324
Clark*	2,423	3,546	7,010	10,870
Washoe	2,637	3,898	7,197	11,152
.....				
				3
Mountain States Region	2,084	3,375	5,628	8,943
United States	2,217	3,910	5,351	9,867

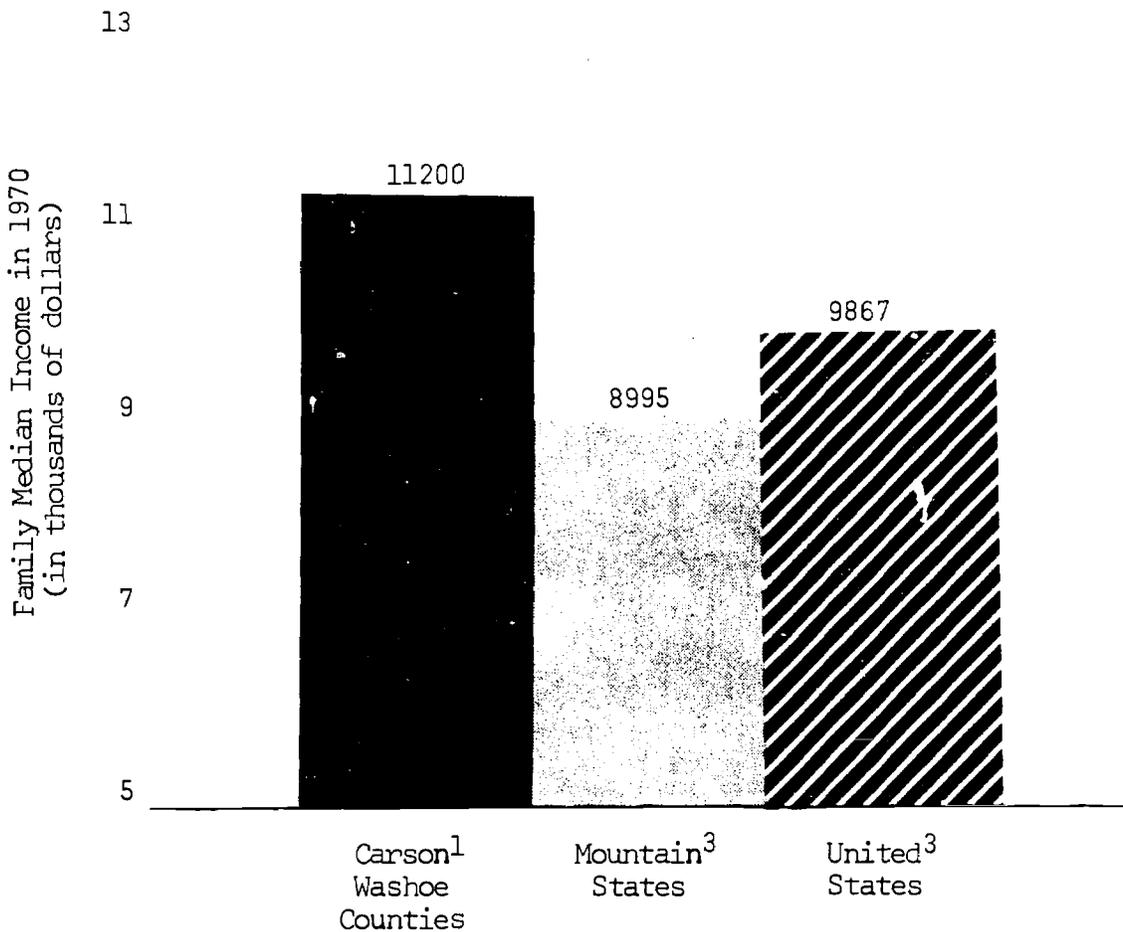
*Included to offer comparison of another Nevada County

¹ U.S. Bureau of Census. Per Capita and Median Family Money Income in 1959 for States, SMA's and Counties. PC (S1)-48. U.S. Government Printing Office, Washington, D.C., 1960. p. 40.

² U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-32C Nevada. U.S. Government Printing Office, Washington, D.C., 1971. Table 124.

³ All United States and Mountain States data were obtained from the 1966 and 1971 Statistical Abstracts for the U.S. U.S. Government Printing Office, Washington, D.C.

FIGURE 3: Family Median Income



¹ U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC(1)-30C Nevada. U.S. Government Printing Office, Washington, D.C., 1971. Table 124.

² U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, (Combined data from Idaho, Montana, Nevada and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

³ U.S. Bureau of Census. Current Population Reports, Consumer Income. Series P-60, No. 78. U.S. Government Printing Office, Washington, D.C., 1971. p. 4.

E. OCCUPATIONAL CHARACTERISTICS: STATISTICAL SUMMARY

Selected Occupational Group of Employed Persons

Area Surveyed Carson-Washoe Counties

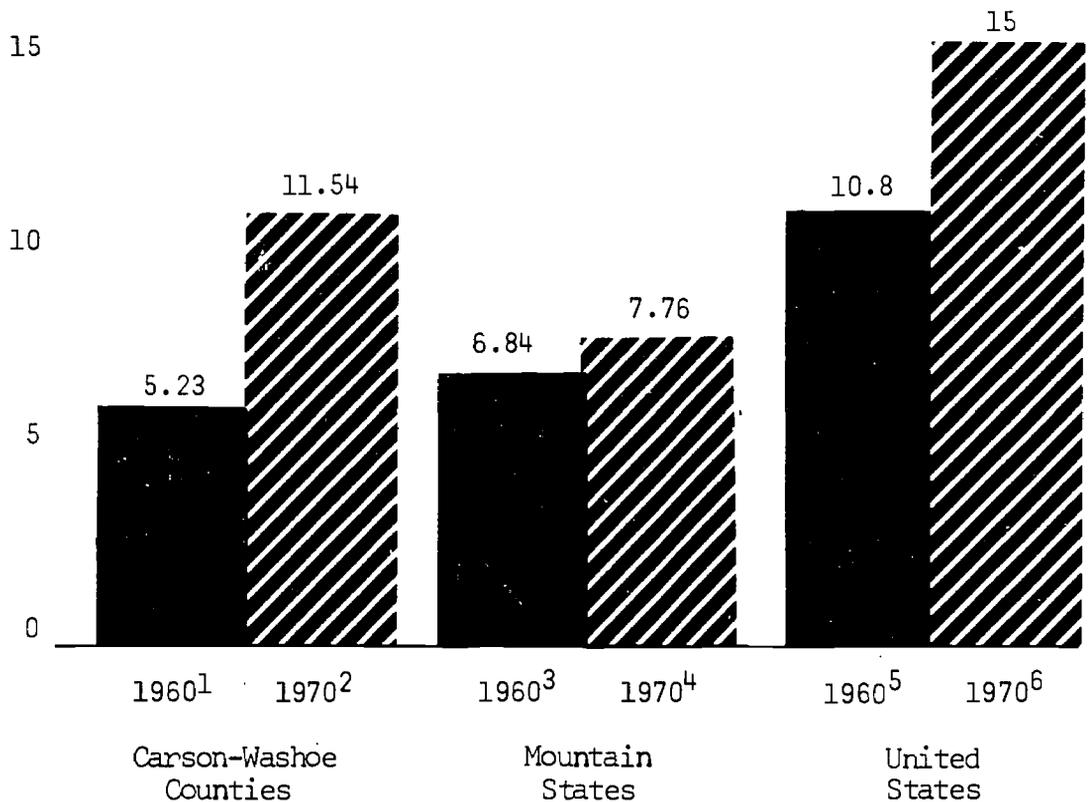
	1960 ²	1970 ³
1. <i>TOTAL Professional, Technical and Kindred Workers</i>	<u>4,743</u>	<u>9,347</u>
a. <i>Medical, Dental and Other Health Workers</i>	<u>470</u>	<u>1,575</u>
b. <i>Salaried Medical and Health Workers (1960 only)</i>	<u>190</u>	
c. <i>Self-employed Medical and Health Workers (1960 only)</i>	<u>280</u>	
2. <i>Farmers and Farm Managers</i>	<u>230</u>	<u>233</u>
3. <i>Manager, Officials, Proprietors</i>	<u>4,765</u>	<u>6,910</u>
4. <i>Clerical, Kindred Sales</i>	<u>8,563</u>	<u>15,454</u>
5. <i>Craftsmen; Foremen and Kindred Workers</i>	<u>4,987</u>	<u>6,905</u>
6. <i>Operative and Kindred Workers including Transport</i>	<u>3,672</u>	<u>4,972</u>
7. <i>Service Workers</i>	<u>6,840</u>	<u>12,597</u>
8. <i>Farm Laborers and Foremen</i>	<u>240</u>	<u>242</u>
9. <i>Laborers except Farm</i>	<u>1,336</u>	<u>1,906</u>

¹ This is not intended as a complete enumeration of the labor force in Carson-Washoe Counties.

² U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics. Final Report PC (1)-30C Nevada. U.S. Government Printing Office, Washington, D.C., 1961. Table 84.

³ U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-30B Nevada. U.S. Government Printing Office, Washington, D.C., 1971. Table 122.

FIGURE 4: Medical, Dental, and Other Health Workers



- ¹ U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics. Final Report PC(1)-30C Nevada. U.S. Government Printing Office, Washington, D.C., 1961. Table 84.
- ² U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics. Final Report PC(1)-52C Wyoming. U.S. Government Printing Office, Washington, D.C., 1971. Table 122.
- ³ U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming), U.S. Government Printing Office, Washington, D.C., 1961.
- ⁴ U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming), U.S. Government Printing Office, Washington, D.C., 1971.
- ⁵ U.S. Bureau of Census. Statistical Abstract of the United States: 1962. U.S. Government Printing Office, Washington, D.C., 1962. p. 823.
- ⁶ U.S. Bureau of Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. Table 90.

SECTION II: HEALTH MANPOWER

A. INTRODUCTION

This section deals with the number of persons employed in the Carson-Washoe area in the health professions. In our search of the literature, we found no current enumeration of health professionals in Carson-Washoe Counties; consequently, the following data was obtained from primary sources by means of interview, questionnaire, etc., except where noted otherwise.

It is our intent here to provide the reader with a current and accurate statistical picture of the health manpower situation in the Carson-Washoe area. Thus, the raw data is ordered in a rather cumbersome, but necessary, nineteen by one-hundred-and-three matrix. The horizontal axis provides the work setting in which the health professionals in the Carson-Washoe area are employed; the vertical axis indicates the various health occupations which were surveyed. (For the working definitions of these health occupations, see Appendix I.)

The reader will note that many of the occupational categories in various work settings are blank. Rather than omit these, the research team felt that noting the absence of certain categories of health professionals was perhaps an important set of information for the reader.

B. NARRATIVE SUMMARY

The research team selected six health professions to offer comparisons to the Carson-Washoe area. In noting the graphic display of these comparisons, Carson-Washoe exhibits a higher ratio of physicians,

licensed practical nurses, and practicing psychologists than either the Region or the Nation. The ratio of veterinarians is less than that of the Region, but somewhat higher than that of the Nation. (see Figure 5)

C. HEALTH MANPOWER: STATISTICAL SUMMARY

Employment Settings *

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
1. Administration																				
a. Hospital Administration				12	4			4	21				6					2		49
b. Nursing Home Administration												6								6
2. Dentistry	113					2			5				1							121
a. Dentists																				
1) Endodontists																				
2) Oral Pathologists																				
3) Oral Surgeons	2																			2
4) Orthodontists	9																			9
5) Pedodontists	4																			4
6) Periodontists	1																			1
7) Prosthodontists																				
8) Public Health Dentists									4	1										5
9) General Dentistry	97					2			1											100
b. Dental Hygienists																				
c. Dental Laboratory Technicians																				

*Legend

- 1 -Private Office
- 2a-Diagnostic Clinic
- 2b-Treatment Clinic
- 2c-Diagnostic/Treatment Clinic
- 3a-Community Hospital
- 3b-V.A. Hospital
- 3c-Military Installation
- 4a-Community Health Service
- 4b-County Health Service
- 4c-State Health Service
- 4d-Federal Health Service
- 5 -Nursing Home
- 6a-Mental Hospital
- 6b-Mental Health Center
- 7 -Business and Industry
- 8a-Educational Institution: Practicing
- 8b-Educational Institution: Teaching
- 8c-Educational Institution: Teaching and Practicing
- 9 -Health Planning and Development Organizations

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
3. <u>Dietetic and Nutritional Services</u>																				
a. <u>Dietitians</u>					9	2														11
b. <u>Nutritionists</u>								1	1											2
4. <u>Emergency Health Services</u>																				
a. <u>Emergency/Ambulance Attendants</u>	14				16															40
5. <u>Environmental Health Services</u>																				
a. <u>Health Physicists</u>																				
b. <u>Industrial Hygienists</u>										7										7
c. <u>Environmental Scientists</u>										3										3
d. <u>Sanitarians</u>								10	8											18
e. <u>Public Health Engineers</u>								5	5											10
6. <u>Health Education</u>																				
a. <u>Public Health Educators</u>																		1		1
b. <u>School Health Educators</u>																				
c. <u>Health Science Educators</u>						1							3					1		5
7. <u>Health Planning</u>																				
a. <u>Patient Care Analysts</u>																				
b. <u>Health Care Planners</u>								1	15										2	18
c. <u>Bio-statisticians</u>										1									1	2
8. <u>Medical Librarians</u>						1	1													2

*Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
9. Medical Records Services																				
a. Medical Record Librarians					3								1							4
b. Record Technicians					5	12														17
c. Record Clerks					40	8				1			6							55
10. Medical Technology																				
a. Medical Technologists					67	2				1										70
b. Medical Technicians					25	3				7			1					5		41
c. Certified Lab Technicians					3	4				2										9
d. Cytology/Tissue Technicians																				
e. Laboratory Assistants					4					3										7
11. Medicine and Osteopathy																				
a. Physicians	197					23		15		4			6					6		251
Allergist	2																			2
Anesthesiologist	13																			13
Aviation Medicine Spec.																				
Cardiovascular Dis. Spec.	3																			3
Colon-Rectal Surg. (Proc.)																				1
Dermatologist	3																			3
Emergency Specialist																				
Endocrinologist						1														1
Gastroenterologist																				
General Practitioner	43					8				2			1							54
Gynecologist/Obstetrician	7							11												18
Internist	14					4														18
Manipulative Therapy Spec.																				
Neurological Surgeon	5																			5
Neurologist	1																			1
Occupational Med. Spec.																				
Ophthalmologist	13																			13
Orthopedic Surgeon	11					1														12

*Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
a. Physicians (continued)																				
Otolaryngologist	13																			13
Pathologist	9																	2		11
Pediatrician	8																	1		9
Physiatrist																				
Plastic Surgeon	3																			3
Preventive Med. Spec.																				
Psychiatrist	1									2			5					1		9
Public Health Physician																		1		1
Pulmonary Disease Spec.						1														1
Radiologist	13																			13
Surgeon	23					5		2										1		31
Thoracic Surgeon	1					1														2
Urologist	6							2												8
Intern																				
Resident						1														1
b. Osteopathic Physicians	5																			5
12. Nursing and Related Services																				
a. Registered Nurses					273	56		1	17			25	26					23		421
b. Licensed Practical Nurses					175	18			1			33	16							243
c. Nurse Aides/Orderlies					316	20			3			122	147							608
d. Ward Clerks					50	8						1								59
e. Surgical Technicians					27	3														30
13. Pharmacy																				
a. Pharmacists	115				12	2							1							130
b. Pharmacy Aides					6	1														7
c. Pharmacy Interns																				

*Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
14. <u>Clinioproductors</u>	19																			19
15. <u>Radiologic Technology</u>																				
a. <u>Technologists</u>			22															1		23
b. <u>Technicians</u>					13	3							1							17
16. <u>Medical Secretarial/Office Personnel</u>								1	20	11		12	21					16	2	265
17. <u>Psycho-Social Health Services</u>	8																			
a. <u>Psychologists (CA & PhD)</u>													1					6		15
b. <u>Social Service Workers</u>					3	2			1	31			6					1		44
c. <u>Vocational Rehabilitation Counseling</u>						1				32			1							34
18. <u>Therapists</u>																				
a. <u>Speech Pathology Therapists</u>					1															1
b. <u>Audiologists</u>																				
c. <u>Physical Therapists</u>					6	2				1		2	1							12
d. <u>Occupational Therapists</u>					2	1						4	6							13
e. <u>Inhalation Therapists</u>					20	2														22
f. <u>Orthotists-Prosthetists</u>														1						1
g. <u>Manual Arts Therapists</u>																				
h. <u>Recreational Therapists</u>																			4	4
19. <u>Veterinarians</u>	24																			24

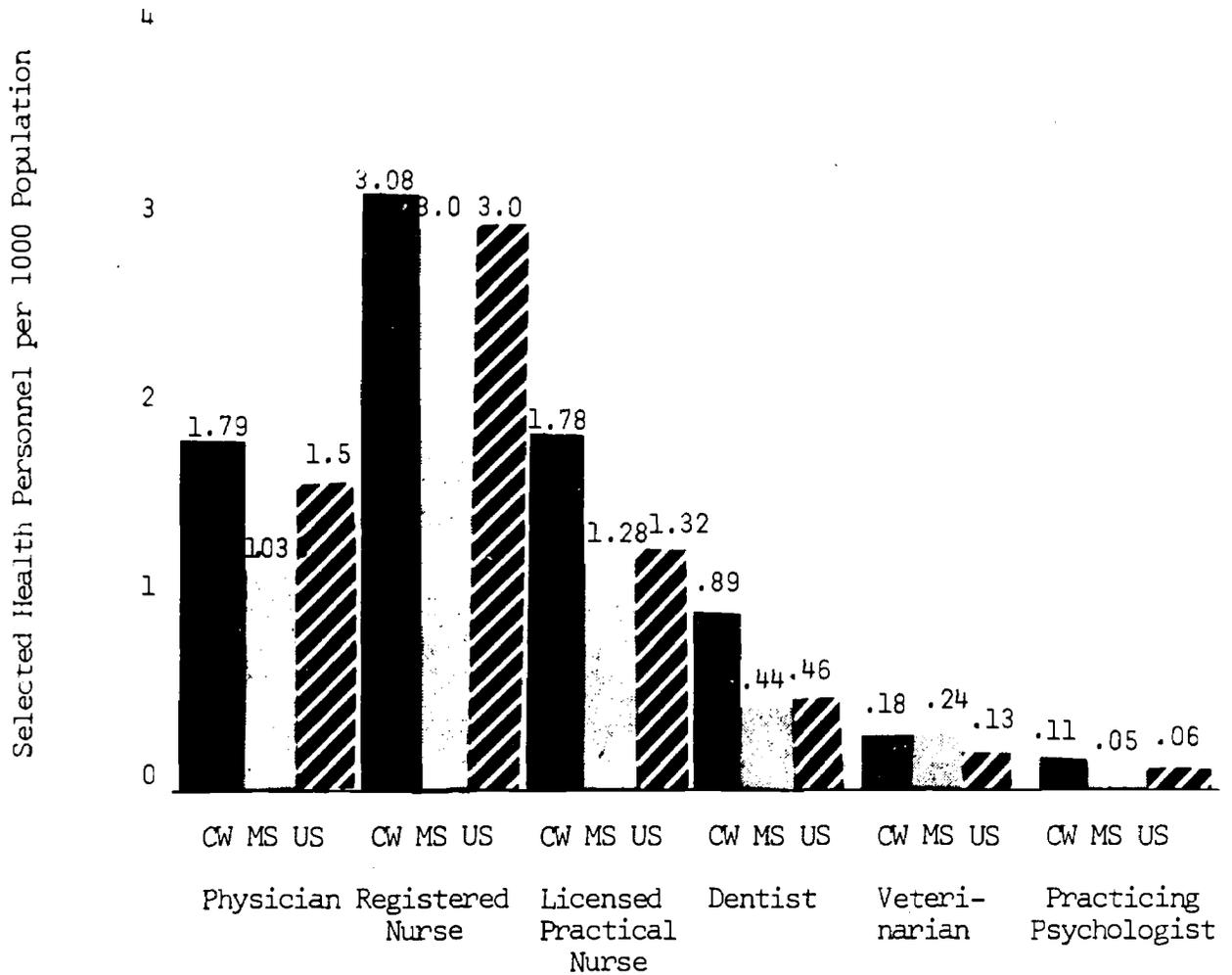
*Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
20. Physician Support Personnel																					
a. Physician's Assistants																					
b. Nurse Clinicians																					
c. Nurse Anesthetists																					
21. Other																					1
a. Bio-Engineering																		1			
b. ECG Technicians					14	3															17
c. EEG Technicians					3																3
d. Optometrists	20																				20
e. Orthoptists																					
f. Podiatrists	8																				8

*Legend: Refer to first page of this summary.

FIGURE 5: Selected Health Personnel



CW = Carson-Washoe Counties
 MS = Mountain States
 US = United States

¹ All Mountain States and U.S. data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

SECTION III: EDUCATION OF HEALTH MANPOWER

A. INTRODUCTION

This section is divided into three sets of information concerning the educational facilities which train persons to work in the health professions. The first portion of this section is a listing of the various institutions, and programs within those institutions, which provide original training for the health professions in Carson-Washoe. This listing includes the time required for certification for a given program as well as the number of persons who have been enrolled and who have graduated in the last three years, where such information was available. A blank space in the "enrollee-graduate" section indicates that this information was not available at the time of this publication or that the program was not operative at that time.

The second portion lists all the other institutions, and programs within those institutions which train health professionals in the State of Nevada outside of Carson-Washoe Counties. Here only a simple listing of such programs is given without the inclusion of training time or enrollee-graduate information.

The third portion of this section is an itemization of "health facility libraries" including the number of books and periodicals in those libraries in the Carson-Washoe area; and the location and type of video-tape equipment on hand in health facilities in the Carson-Washoe area.

The research team has not provided comparison data here for the relative ratios of graduates in the health professions for two

major reasons. First, the location of training institutions would provide an obviously higher concentration of graduates to population than would be expected over a normal distribution including areas which do not have training programs for health professionals. Secondly, the number of graduates in a given health training program seems not to be an accurate indicator of the availability of these newly trained health workers for that area; e.g., the fact that University of Nevada produced 22 graduates in their nursing program in 1972 does not necessarily mean that there are 22 newly trained nurses available to work in the Reno area this year. Some of these persons will obviously seek work elsewhere; others will not be employed, etc. Consequently, we felt that such comparison data to Regional or National ratios would be more misleading than helpful.

B. EDUCATION OF HEALTH MANPOWER: ORIGINAL EDUCATION PROGRAMS

Area Surveyed Carson-Washoe Counties

Institutions Certifying Health Personnel

1. Hospitals

A. Washoe Medical Center
(Name)

1) <u>ECG Technician</u> (Type of Program)	<u>12 Hours</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees*	<u> </u>	<u>25</u>	<u>45</u>
b. Graduates**	<u> </u>	<u>20</u>	<u>40</u>

2. Technical Institutes

A. Washoe County School District Adult Vocational Training
(Name)

1) <u>Licensed Practical Nurse¹</u> (Type of Program)	<u>12 Months</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>19</u>	<u>23</u>	<u>20</u>
b. Graduates	<u>12</u>	<u>18</u>	<u>17</u>

2) <u>Licensed Practical Nurse²</u> (Type of Program)	<u>12 Months</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>17</u>	<u>21</u>	<u>21</u>
b. Graduates	<u>17</u>	<u>19</u>	<u>19</u>

* Data for "Enrollees" is for September of that year

**Data for "Graduates" is for June of that year

¹ In conjunction with St. Mary's Hospital

² In conjunction with Washoe-Western School of Practical Nursing at Washoe Medical Center

3) <u>Operating Room Technician³</u> (Type of Program)	<u>1048 Hours</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>8</u> <u>8</u> <u>8</u>
b. Graduates	<u>6</u> <u>6</u> <u>7</u>
4) <u>Medical Assistant</u> (Type of Program)	<u>24 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>35</u> <u>125</u> <u>110</u>

The students are not necessarily working toward a degree. In the past 3 years, 2 people have completed the total of courses and have been granted a degree.

3. Community Colleges

A. Western Nevada Community College
(Name)

1) <u>Registered Nurse</u> (Type of Program)	<u>24 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>20</u> _____ <u>20</u>
b. Graduates	_____ _____ <u>17</u>
2) <u>Radiologic Technology</u> (Type of Program)	<u>30 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>10</u> <u>14</u> <u>10</u>
b. Graduates	_____ _____ <u>8</u>

³ In conjunction with Washoe Medical Center

4. Universities

A. University of Nevada at Reno, School of Medical Sciences
(Name)

1) <u>B.S. Medical Technology¹</u> (Type of Program)	<u>12 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>6</u> <u>6</u> <u>6</u>
b. Graduates	<u>6</u> <u>6</u> <u>6</u>
2) <u>B.S. Medical Technology³</u> (Type of Program)	<u>24 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>6</u> <u>6</u> <u>6</u>
b. Graduates	<u>6</u> <u>6</u> <u>6</u>
3) <u>Radiologic Technology</u> (Type of Program)	<u>24 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>11</u> <u> </u> <u> </u>
b. Graduates	<u>10</u> <u>11</u> <u>11</u>
4) <u>Two Year Medical Program</u> (Type of Program)	<u>24 Months</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u> </u> <u>32</u> <u>42</u>
b. Graduates	<u> </u> <u> </u> <u> </u>
5) <u>B.S. Health Education</u> (Type of Program)	<u>4 Years</u> (Time for Certification)
	1970 1971 1972
a. Enrollees	<u>1</u> <u> </u> <u> </u>
b. Graduates	<u> </u> <u> </u> <u>2</u>

B. University of Nevada at Reno, Orvis School of Nursing
 (Name)

1) <u>B.A. Nursing</u> (Type of Program)	<u>4 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>184</u>	<u>242</u>	<u>270</u>
b. Graduates	<u>10</u>	<u>37</u>	<u>22</u>

c. University of Nevada at Reno
 (Name)

1) <u>Psychology (M.A. and Ph.D.)</u> (Type of Program)	<u>1 to 4 Years</u> (Time for Certification)		
	1970	1971	1972
a. Enrollees	<u>55</u>	<u>55</u>	<u>55</u>
b. Graduates	<u>6</u>	<u>12</u>	<u>6</u>

C. HEALTH EDUCATION PROGRAMS: ORIGINAL EDUCATION OUTSIDE AREA AND IN-STATE

Area Surveyed Nevada

Original Education Centers (Name and Location)	Personnel Categories Trained
Lyon County Health Center Yerington	Licensed Practical Nurse
Elko Community College Elko	Licensed Practical Nurse
Professional Rescue Instructors of Nevada Las Vegas	Emergency Service Personnel

1000

D. HEALTH EDUCATION RESOURCES

Area Surveyed CARSON/WASHOE

	Number of Books	Number of Periodicals
1. Health Science Libraries		
a. Health Facility libraries		
(List) Names and Addresses		
State of Nevada-Div. of Health Health Education Library Carson City, Nevada 89701	200	40
Nevada State Hospital Reno, Nevada 89505	2,500	110
St. Mary's Hospital Max C. Fleischmann Medical Library Reno, Nevada 89503	820	
Washoe Medical Center Reno, Nevada 89502	553	194
University of Nevada Life and Health Sciences Library Reno, Nevada 89507	39,625	723
Veterans Administration Hospital Health Library Reno, Nevada 89502	1,000	55

HEALTH EDUCATION RESOURCES (Contd.)

Area Surveyed CARSON-WASHOE

2. Video-Tape Capability

Locations	Brand	Quantity	Size
University of Nevada at Reno Div. of Educational Support and Communications	International Video	1	1 inch
	Ampex Quad	2	2 inches
	Sony	2	1/2 inch
	Ampex	2	1 inch
State of Nevada Educational Communications Div. Carson City	Sony (available in each County except Eureka and Esmeralda)		

3. Health Audio-Visual Specialists

Locations	Quantity
University of Nevada at Reno Div. of Educational Support and Communications	5

4. Medical Online Citation Retrieval Service (MEDLINE) TWX: 910-395-7084

University of Nevada
Life and Health Sciences Library
Reno

SECTION IV: HEALTH FACILITIES

A. INTRODUCTION

This fourth and final section contains a listing of the numbers of hospitals, nursing homes, medical clinics, dental facilities, clinical laboratories, mental health centers, pharmacies, and ambulances. Simply, this listing is intended to give a statistical picture of structural direct-care capability of the area without regard to the health professionals required to man these facilities.

The research team has provided graphic comparisons for the ratio of hospital beds, nursing home beds, pharmacists, and ambulances per thousand population to the Mountain States Region and to the United States in order to give the reader a basis for judging the relative concentration of these facilities in this particular area.

B. NARRATIVE SUMMARY

The Carson-Washoe area exhibits a somewhat higher ratio of hospital beds per thousand population than does the Region and a somewhat lower ratio than does the Nation. The ratio of nursing home beds is somewhat lower than either the Region or the Nation. (see Figure 6)

The ratios of pharmacists and of ambulances to one-thousand population is not substantially different from Carson-Washoe Counties to the comparison areas. (see Figure 7)

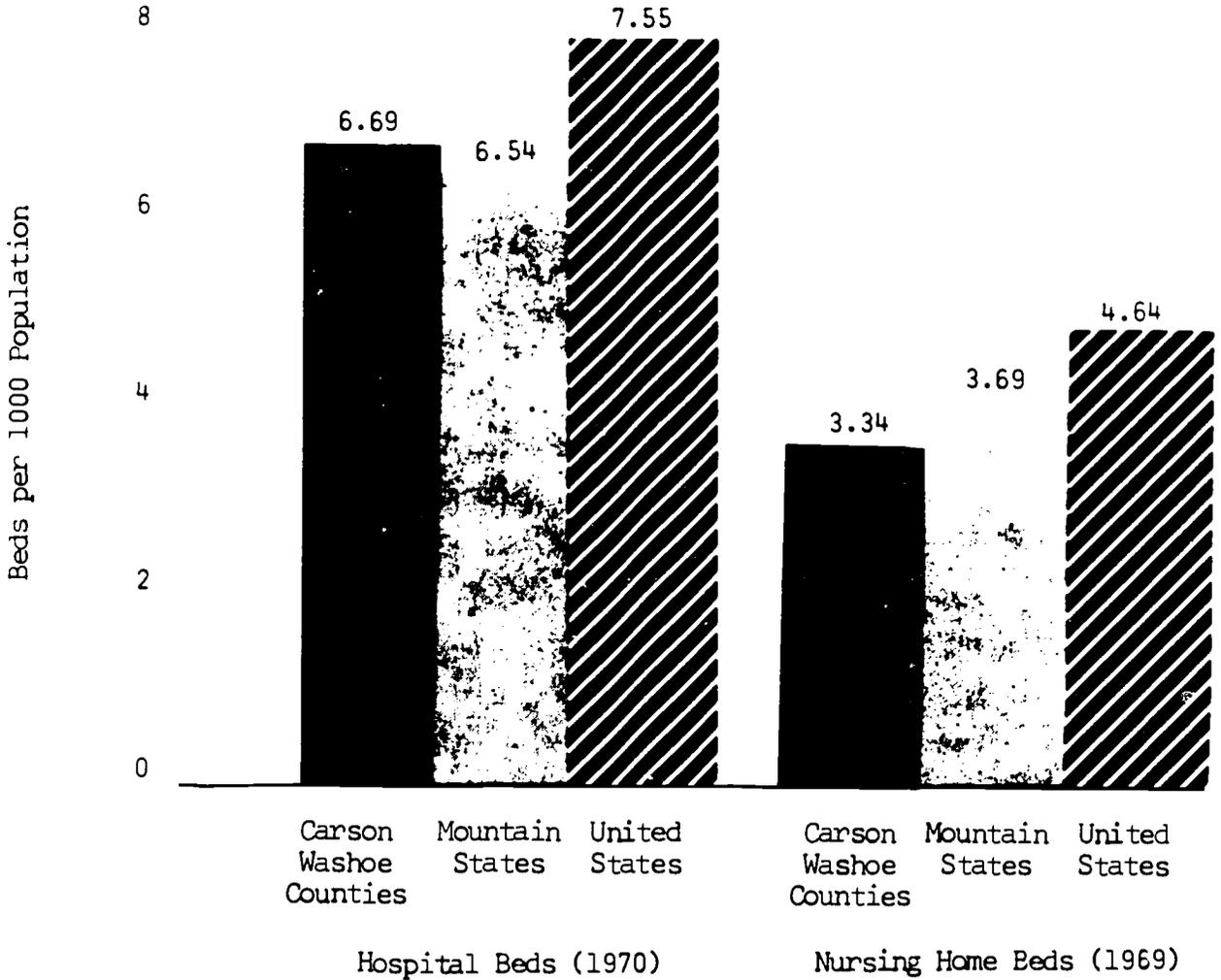
C. HEALTH FACILITIES: DATA SUMMARY

Area Surveyed Carson-Washoe Counties

INSTITUTIONS

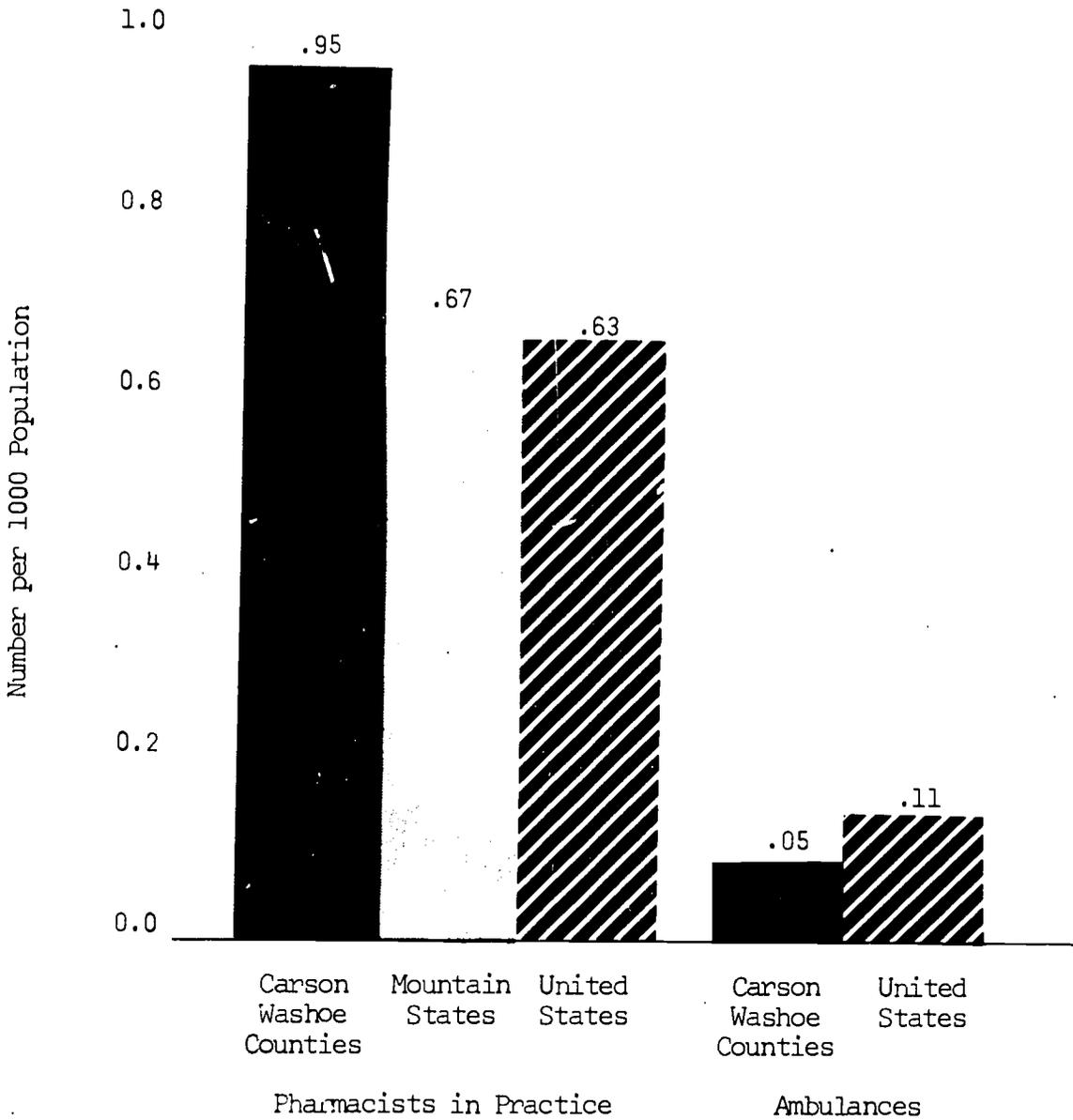
1. Hospitals	4
-----	-----
a. Number Beds	913
2. Nursing Homes	6
-----	-----
b. Number Beds	456
3. Medical (Clinics)	6
4. Dental Facilities	100
5. Clinical Laboratories	6
6. Mental Health Centers	6
7. Pharmacies	65
8. Ambulances	7

FIGURE 6: Hospital and Nursing Home Beds



¹ All Mountain States and U.S. Data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

FIGURE 7: Pharmacists -- Ambulances



¹ All Mountain States and U.S. Data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

APPENDIX I

MS/RMP WORKING DEFINITIONS OF HEALTH OCCUPATIONS

1. Administration
 - a. Hospital Administrators and Assistant Administrators
Administer and coordinate activities of hospital personnel to promote care of sick and injured, furtherance of scientific knowledge, development of preventive medicine, advancement of medical and vocational rehabilitation, and participation in and promotion of community health and welfare.
 - b. Nursing Home Administrators and Assistant Administrators
Same as above, except in nursing homes.
2. Dentistry
 - a. Dentists
 - 1) Endodontists
Concerned with the etiology, prevention, diagnosis and treatment of diseases and injuries that affect the tooth pulp and apical periodontal tissues.
 - 2) Oral Pathologists
Examine and diagnose tumors and lesions of mouth.
 - 3) Oral Surgeons
Perform surgery on mouth and jaws.
 - 4) Orthodontists
Prevent, diagnose, and correct deviations from normal that occur in growth, development, and position of teeth and other dental-facial structures.
 - 5) Pedodontists
Treat children's teeth.
 - 6) Periodontists
Treat inflammatory and destructive diseases of investing and supporting tissue of teeth.
 - 7) Prosthodontists
Restore and maintain oral functions.
 - 8) Public Health Dentists
Participate in planning, organizing, and maintaining dental health program of public health agency.
 - 9) General Dentistry
Diagnose and treat diseases, injuries, and malformations of teeth and gums, and related oral structures.
 - b. Dental Hygienists
Perform dental prophylactic treatments and instruct groups and individuals in care of teeth and mouth.
 - c. Dental Laboratory Technicians
Make dentures, partials, etc., as needed by the dentist.
3. Dietetic and Nutritional Services
 - a. Dietitians
Plan and direct food service programs in hospitals, schools, restaurants, and other public or private institutions.

- b. Nutritionists
Organize, plan and conduct programs concerning nutrition to assist in promotion of health and control of disease.
- 4. Emergency Health Services
 - a. Emergency/Ambulance Attendants
Assist persons entering hospital through emergency entrances; and accompany and assist ambulance driver in transporting sick, injured, or convalescent persons.
- 5. Environmental Health Services
 - a. Health Physicists
Devise and direct research, training, and monitoring programs to protect plant and laboratory personnel from radiation hazards.
 - b. Industrial Hygienists
Conduct health program in industrial plant or similar organization to eliminate or control occupational health hazards and diseases.
 - c. Environmental Scientists
Perform research related to specific man-made or natural environmental hazards to health.
 - d. Sanitarians
Work with general environmental problems related to the control of food and drink, private water supplies and sewage disposal, and control of insects and rodents.
 - e. Public Health Engineers
Design, construct and maintain large engineering systems or programs and know how public health is affected by these systems.
- 6. Health Education
 - a. Public Health Educators
Plan, organize and direct health education programs for group and community needs.
 - b. School Health Educators
Plan, organize and direct health education programs in schools.
 - c. Health Science Educators
Provide health care and health prevention instruction through community, county, or state organizations.
- 7. Health Planning
 - a. Patient Care Analysts
Engage in analyzing the comprehensive care of in-patients in an institution, usually a hospital.
 - b. Health Care Planners
Analyze health needs and services, propose improvements and assist in the implementation of health care programs.
 - c. Bio-statisticians
Plan surveys, and collect, organize, interpret, summarize, and analyze numerical data on sampling or complete enumeration bases, applying statistical theory and methods to provide usable information in scientific and other fields.
- 8. Medical Librarians
Manage library or section containing specialized materials for hospitals.
- 9. Medical Records Services
 - a. Medical Record Librarians
Compile and maintain medical records of hospital and clinic patients.

- b. Record Technicians
Engaged in the formulation of and handling of medical data recording procedures.
 - c. Record Clerks
Classify medical records of hospital patients and compile statistics for use in reports and surveys.
10. Medical Technology
- a. Medical Technologists (usually a 4 year degree)
Perform chemical, microscopic, and bacteriologic tests to provide data for use in treatment and diagnosis of disease.
 - b. Medical Technicians (usually a 2 year degree)
Perform routine tests in medical laboratory for use in treatment and diagnosis of disease.
 - c. Certified Laboratory Technicians (usually train in 1 year or less)
Same as b.
 - d. Cytology/Tissue Technicians
Perform laboratory analysis on cell and tissue samples.
 - e. Laboratory Assistance to the above personnel in laboratory responsibilities.
11. Medicine and Osteopathy
- a. Physicians
 - 1) Allergists
Specialize in the diagnosis and treatment of allergic conditions.
 - 2) Anesthesiologists
Administer anesthetics to render patients insensible to pain during surgical, obstetrical and other medical procedures.
 - 3) Aviation Medicine Specialists
Administer general medicine to flight personnel only.
 - 4) Cardiovascular Disease Specialists
Specialize in the diagnosis and treatment of diseases of the heart and blood vessels.
 - 5) Colon and Rectal Surgeons (Proctologists)
Specialize in the treatment of the rectum and its diseases.
 - 6) Dermatologists
Diagnose and treat diseases of the human skin.
 - 7) Emergency Specialists
Physicians who work in hospital emergency rooms and handle emergency type cases.
 - 8) Endocrinologists
Skilled in the diagnosis and treatment of disorders of the glands of internal secretion.
 - 9) Gastroenterologists
Specialize in diseases of the stomach and intestine.
 - 10) General Practitioners
Attend to a variety of medical cases in general practice.
 - 11) Gynecologists/Obstetricians
Treat and diagnose diseases of the female generative organs; treat women during prenatal, natal, and postnatal periods.
 - 12) Internists
Specialize in the diagnosis and medical treatment of diseases and disorders of the internal structures of the human body.

- 13) Manipulative Therapy Specialists
Specialize in prescription and supervision of therapeutic administrations.
- 14) Neurological Surgeons
Specialize in surgery of the nervous system.
- 15) Neurologists
Diagnose and treat organic diseases and disorders of the nervous system.
- 16) Occupational Medicine Specialists
Specialize in diagnosis and care of individuals in specific occupations and settings.
- 17) Ophthalmologists
Diagnose and treat diseases and injuries of the eyes.
- 18) Orthopedic Surgeons
Preserve, restore, and develop form and function of the extremities, spine, and associated structures by medical, surgical, and physical methods.
- 19) Otolaryngologists
Diagnose and treat diseases of the ear, nose and throat.
- 20) Pathologists
Study nature, cause, and development of diseases, and structural and functional changes caused by them.
- 21) Pediatricians
Plan and carry out medical care program for children from birth through adolescence to aid in mental and physical growth and development.
- 22) Physiatrists
Specialize in clinical and diagnostic use of physical agents and exercises to provide physiotherapy for physical, mental and occupational rehabilitation of patients.
- 23) Plastic Surgeons
Specialize in skin grafts and bone and tissue transplants to restore or repair damaged, lost or deformed parts of the face and body.
- 24) Preventive Medicine Specialists
Specialize in prescribing practices which prevent physical subsumption and deterioration.
- 25) Psychiatrists
Study, diagnose and treat diseases and disorders of the mind.
- 26) Public Health Physicians
Generalists or specialists employed by the community, county, or state.
- 27) Pulmonary Disease Specialists
Specialize in treating diseases of the lung.
- 28) Radiologists
Diagnose and treat diseases of the human body, using X-rays and radio-active substances.
- 29) Surgeons
Perform surgery to correct deformities, repair injuries, prevent diseases, and improve function in patients.
- 30) Thoracic Surgeons
Perform surgery on the chest.

- 31) Urologists
Diagnose and treat diseases and disorders of the genito-urinary organs and tract.
 - 32) Interns
Perform medical duties while serving in hospital for specified length of time to gain practical experience immediately following graduation from medical school, as requirement for license to practice medicine.
 - 33) Residents
Graduate and licensed physicians resident in a hospital.
- b. Osteopathic Physicians
12. Nursing and Related Services
 - a. Registered Nurses
A term applied to persons meeting the educational, legal, and training requirements to practice as professional nurses, as required by a State board of nursing.
 - b. Licensed Practical Nurses
Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions.
 - c. Nurse Aides/Orderlies/Attendants
Assist in care of hospital patients, under direction of nursing and medical staff.
 - d. Ward Clerks
Prepare and compile records in hospital nursing unit, such as obstetrics, pediatrics or surgery.
 - e. Surgical Technicians
Health personnel trained specifically to work in an operating room.
 13. Pharmacy
 - a. Pharmacists
Compound and dispense medications, following prescriptions issued by physicians, dentists or other authorized medical practitioners.
 - b. Pharmacy Aides
Mix pharmaceutical preparations, under direction of pharmacist, issue medicine, label and store supplies, and clean equipment and work areas in hospital pharmacy.
 - c. Pharmacy Interns
Pharmacy students who work under the supervision of a registered pharmacist.
 14. Chiropractors
Adjust spinal column and other articulations of body to prevent disease and correct abnormalities of human body believed to be caused by interference with the nervous system.
 15. Radiologic Technology
 - a. Technologists (usually a 4 year degree)
Apply roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes.
 - b. Technicians (less than a 4 year degree)
Same as a.

16. Medical Secretarial/Office Personnel
Prepare medical charts and reports for doctor or hospital personnel, utilizing knowledge of medical terminology. May prepare and send bills to patients and record appointments and perform general secretarial and clerical services in a medical setting.
17. Psycho-Social Health Services
 - a. Psychologists (M.A. or Ph.D.)
Diagnose mental and emotional disorders of individuals and administer programs of treatment.
 - b. Social Service Workers
Counsel or otherwise assist persons for improved social adaptation, e.g., Social Workers, etc.
 - c. Vocational Rehabilitation Counseling
Persons engaged in counseling individuals and providing group educational and vocational guidance services.
18. Therapists
 - a. Speech Pathology Therapists
Examine and provide remedial services for patients with speech and language disorders.
 - b. Audiologists
Specialize in diagnostic evaluation, habilitative and rehabilitative services, and research related to hearing.
 - c. Physical Therapists
Treat patients with disabilities, disorders, and injuries to relieve pain, develop or restore function, and maintain maximum performance, using physical means such as exercise, massage, heat, water, light, and electricity as prescribed by physician.
 - d. Occupational Therapists
Plan, organize, and participate in medically oriented occupational program in hospital or similar institution to rehabilitate patients who are physically or mentally ill.
 - e. Inhalation Therapists
Set up and operate various types of oxygen equipment, such as iron lungs, oxygen tents, resuscitators and incubators to administer oxygen and other gases to patients.
 - f. Orthotists-Prosthetists
Write specifications for and fit artificial limbs, braces, and appliances for body deformities and disorders following prescription of physician or other qualified medical practitioner.
 - g. Manual Arts Therapists
Instruct patients in prescribed manual arts activities to prevent anatomical and physiological deconditioning, and to assist in maintaining, improving, or developing work skills.
 - h. Recreational Therapists
Plan, organize and direct medically approved recreation program for patients in hospitals and other institutions.
19. Veterinarians
Diagnose and treat diseases and disorders of animals.

20. Physician Support Personnel
 - a. Physician's Assistants
Assist physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician. Special academic-professional training of one to two years in classroom and clinical work.
 - b. Nurse Clinicians
Registered nurses who assist a physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician.
 - c. Nurse Anesthetists
Registered nurses trained and qualified to administer anesthetics.
21. Other
 - a. Bio-Engineering
Practice of design and innovation of mechanical/electrical devices for biological functioning.
 - b. ECG Technicians
Personnel trained to operate an electrocardiograph.
 - c. EEG Technicians
Personnel trained to operate an electroencephalograph.
 - d. Optometrists
Examine eyes to determine visual efficiency and performancy by means of instrumentation and observation, and prescribe corrective procedures.
 - e. Orthoptists
Teach persons with correctable focusing defects to develop and use binocular vision (focusing of both eyes).
 - f. Podiatrists
Diagnose and treat structural problems relating to the foot.

APPENDIX 2

PRIMARY DATA SOURCES

Area Surveyed Nevada

SOURCE	DATA TYPE
Beverly Manor Convalescent William Walts, Director Las Vegas, Nevada	Personnel and Educational Programs
Boulder City Hospital Mrs. Akers, Administrator	Same
Bureau of Health Facilities James Chambers	Same
Capitor Convalescent Max Faylor, Administrator	Same
Carson Tahoe Hospital Arthur Burns, Administrator	Same
Cedarbrook Lodge Joyce Rice, Assistant Administrator	Same
Clark County District Health Department Carol Lawton, Personnel	Same
Comprehensive Health Planning Dick Nutley, Director	Same
Comprehensive Health Planning J. McGuire, Statistician	Same
Comprehensive Health Planning Giles Rafsnider	Same

PRIMARY DATA SOURCE (Contd.)

SOURCE	DATA TYPE
Comprehensive Health Planning Tom Wilson, Director	Personnel and Educational Programs
Department of Health, Welfare and Rehabilitation (Alcoholism) Joseph Pritchard	Same
Department of Health, Welfare and Rehabilitation Mrs. Mund	Same
Department of Health, Welfare and Rehabilitation Melissa Cobb	Same
Department of Health, Welfare and Rehabilitation (Services to the Blind) Mervin Flande	Same
Economic Opportunities Board Bertha Mullins	Same
Economic Opportunities Board (Clark County) Dave Hogarth, Director	Same
Las Vegas Convalescent Mrs. Vonovick, Administrator	Same
Las Vegas Hospital and Clinic Mr. Edwards, Administrator	Same
Nellis Air Force Base Officer Merrill Management and Resources	Same

PRIMARA DATA SOURCES (Contd.)

SOURCE	DATA TYPE
Nevada Hospital Association John Mackavoy	Same
Nevada State Board of Nursing Jean Peavey, Administrator	Same
Nevada State Dental Hygienists Dr. McCusky, President	Same
Nevada State Board of Optometry Harold B. Clark	Same
Nevada State Hospital Suzanne Bryant, Education	Same
Nevada State Hospital Dorothy Bowman, Personnel	Same
Nevada State Hospital Mr. Neff, Director	Same
Planned Parenthood Dr. White	Same
Physicians' Hospital Mrs. Nimeh	Same
North Las Vegas Hospital Mr. Sage, Administrator	Same
Southern Nevada Comprehensive Mental Health Center Sue Wise, Personnel	Same
Southern Nevada Memorial Hospital Mrs. Flint, Education	Same

PRIMARY DATA SOURCES (Contd.)

SOURCE	DATA TYPE
Southern Nevada Memorial Hospital Clara Porter, Personnel	Personnel and Educational Programs
Southern Nevada Memorial Hospital Mrs. Deal, Education	Same
St. Mary's Hospital George Calder, Personnel	Same
University of Nevada at Reno School of Medicine DeWitt C. Baldwin, Jr.	Same
University of Nevada at Reno School of Medicine Sharon Kimball	Same
University of Nevada at Reno Orvis School of Nursing Mrs. Tillum	Same
University of Nevada at Reno Psychology Department Dean Wittmore	Same
University of Nevada at Reno School of Medical Sciences Dr. Cozell	Same
University of Nevada at Reno School of Medical Sciences Dr. D. Baldwin, Jr.	Same
Valley Hospital Jerry Long, Personnel	Same

PRIMARY DATA SOURCES (Contd.)

SOURCE	DATA TYPE
Vegas Valley Convalescent June Cook, Administrator	Same
Veterans' Administration Hospital Jack Callahan Management Analysis Officer	Same
Veterans' Administration Hospital Merle Allen, Administrator	Same
Washoe County Health Department Mrs. Clodfelter Director of Nursing	Same
Washoe County Health Department Mr. Clodfelter	Same
Washoe Medical Center Carroll Ogren, Administrator	Same
Washoe County Medical Society Mrs. Spencer	Same
Washoe County School District Adult Education George Taverna	Same
Washoe County School District Adult Education Esther Chalmers	Same
Washoe County School District Adult Education Mrs. Goff	Same
Washoe County School District High School Mr. Burnham	Same

APPENDIX 3

SECONDARY DATA SOURCES

SOURCE	DATA TYPE
Directory of Approved Allied Medical Educational Programs	Educational Programs
Health Manpower A County and Metropolitan Area Data Book, USDHEW Public Health Service Publication No. 2044	Health Manpower
Health Resources Statistics 1970, USDHEW Public Health Service Publication No. 1509	Allied Health Professions
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