

Nursing Workforce Supply and Demand in Nevada, 2000 to 2020

John Packham, PhD

**A report from the
High Sierra Area Health Education
Center (AHEC)**

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Prepared by:

**John Packham, PhD
Executive Director
High Sierra Area Health Education Center (AHEC)
5250 Neil Road / Suite 302
Reno, Nevada 89502
(775) 827-2432 / FAX: (775) 827-0190
www.highsierraAHEC.org**

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The mission of the High Sierra AHEC is to enhance access to quality health care in medically underserved areas of rural and urban northwestern Nevada by improving the quality, supply, and distribution of health care professionals. The High Sierra AHEC is committed to undertaking health workforce research and analysis that (1) supports the center's health professions training, awareness and recruitment goals, and (2) informs the public policymaking process in Nevada.

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NURSING WORKFORCE SUPPLY and DEMAND in NEVADA, 2000 to 2020

Overview

This report describes the current and projected employment of nursing personnel in Nevada through the end of the decade. It also provides the best available estimate of the supply and demand of registered nurses in Nevada and neighboring states through the year 2020. As such, it updates and extends information previously presented in *Nursing Workforce and Nursing Education in Nevada* (Packham 2001). Data presented in this report are drawn from estimates prepared by the Nevada Department of Employment and Rehabilitation (DETR) and the National Center for Health Workforce Analysis, Health Resources and Services Administration (HRSA). Estimating the state's nursing workforce beyond the next couple of years is complicated by the state's rapid population growth, changes in the public and private financing of health care services, and uncertain state and federal commitment to health professions education and training. Nonetheless, data presented in this report confirm three trends in the state's nursing workforce that will impact the quality of health care and the public's health over the next two decades: (1) the steady growth in employment across all categories of nursing personnel will continue through the end of the decade; (2) the current RN shortage in Nevada will worsen dramatically over the next fifteen to twenty years; and (3) all states bordering Nevada are projected to experience substantial and growing nursing shortages through the year 2020.

Current and Projected Employment of Nursing Personnel in Nevada – 2000 to 2010

The first set of tables present information on the current and projected employment of the three major occupations comprising the state's nursing workforce from 2000 to projected 2010: registered nurses (RNs), licensed practical nurses (LPNs), and nursing assistants. Estimates are derived from DETR's *2000 Nevada OES Wage Survey* (DETR 2002). In some cases, estimates are provided in terms of the following regions of the state: Las Vegas, Reno, and rural and frontier counties.¹

Table 1 provides a general description of nursing workforce employment in Nevada through the year 2010. The information contained in this table provides a rough indicator of the growing demand for all categories of nursing personnel in Nevada. The number of RN positions is projected to increase by 38.6% or an additional 4,707 jobs through the end of the decade. The growth of LPNs and nursing assistants is not as great as RN employment growth. Nonetheless, population

growth and an aging population will fuel the creation of an estimated additional 691 LPN and 2,747 nursing assistant jobs in Nevada by the end of the decade.

Table 2 provides a more detailed description of projected employment change among RNs, LPNs, and nursing assistants across the three major regions of Nevada. This table reveals that the number and percentage rate of growth between 2000 and 2010 will be greatest in the Las Vegas area. Rapid population growth and an aging population in that region are fueling a proportionately large increase in health care utilization and employment in the Las Vegas region. The number of RN jobs will increase by 3,324 or approximately 41% through 2010 and the number of nursing assistants needed by Las Vegas employers will increase by nearly 2,000 during the same time period. Additionally, data contained in Table 2 indicate that employment growth among all three occupations of the nursing workforce will continue across all regions – urban as well as rural, northern as well as southern – through the year 2010.

Table 3 highlights average annual job growth of RNs in Nevada from 2000 to 2010. According to DETR estimates, Nevada will add an additional 716 new RN positions each year through the end of the decade. Approximately 470 positions or two-thirds of anticipated RN job growth is due to growing demand for health care, while one-third or an estimated 246 new positions will be needed to replace retiring RNs or those pursuing different employment. Table 3 also reveals that the bulk of the state's projected RN job growth will occur in the Las Vegas metropolitan area – indeed, through the year 2010, nearly 500 new RN jobs will be added in Las Vegas alone. However, the high and rising demand for registered nurses across all regions of the state is expected to continue through 2010.

Tables 4 and 5 document the estimated annual job growth of LPNs and nursing assistants across Nevada. As one would expect, the greatest growth will occur in the Las Vegas metropolitan area. Each year, employers in Las Vegas will need an additional 97 LPNs and an additional 180 nursing assistants to meet the growing demand for health services and to replace those in the nursing workforce who are expected to retire or change jobs in the current decade. Again, while the projected statewide demand for LPNs and nursing assistants is modest compared to that projected for RNs, these projections are noteworthy because such growth will place additional demands on state nursing programs already hard pressed to meet the current RN needs of Nevada.

Table 6 provides the most current trend data on RN program graduates from UCCSN nursing programs (AY 1998-99 to AY 2000-2001). The state's six RN programs are a major source of the supply of RNs in Nevada. Over the past three academic years, an average of 281 students each year have completed RN degree requirements. Of this total, associate RN degree programs have produced an annual average of 159 RN-prepared graduates (56.6%) and bachelor's RN degree programs have produced an annual average of 122 RN-prepared graduates (43.4%).

Table 7 examines recent RN program completion trends in UCCSN RN degree programs against the backdrop of estimated annual demand for RNs in Nevada. It explores a number of RN program-expansion scenarios, ranging from a hypothetical expansion of RN programs from 25% to 175% of current levels. Presently, the average number of students completing RN degree programs in Nevada is well short of the current annual demand for RNs in Nevada – to be precise, the demand exceeds the supply produced by state programs by 435 RNs. To meet the estimated annual demand for RNs in Nevada, the average annual number of RN program completions would have to increase by 155%. Recent proposals to double the number of RN graduates (i.e., increase program completions by 100%) would still leave an estimated annual shortfall of 154 RNs. Moreover, this simple model makes the unlikely assumption that all Nevada graduates stay in-state, when in fact, it is recognized that significant portion of Nevada graduates ultimately seek employment in hospitals and other health care organizations in California, Arizona, and other states in the region.

In summary, the employment estimates presented in this section are sobering. These data indicate that steady growth in employment across all categories of nursing personnel will continue through the end of the decade. The most pressing concern facing hospitals and other health care employers in Nevada is the projected demand for registered nurses – according to DETR estimates, Nevada will need nearly 5,000 additional RNs by the end of the decade. The most dramatic employment growth is projected to occur in southern Nevada. Nonetheless, projected job growth in all nursing occupations in northern and rural regions of the state – however modest in comparison to the Las Vegas area – will increasingly pit all Nevada health care employers against one another in order to meet the growing nursing needs of the state, and will place added demands on the state’s nursing education programs.

Supply and Demand of Registered Nurses in Nevada and Neighboring States – 2000 to 2020

Tables 8 through 17 provide estimates of registered nursing supply and demand in Nevada and neighboring states through 2020. Most of the data presented in this section are derived from the “National Sample Survey of Registered Nurses” conducted by the federal Bureau of Health Professions in March 2002 (Spratley, et al., 2001) and analysis prepared by the National Center for Health Workforce Analysis (2002). Data presented in these tables represent the best available estimates of state and regional supply and demand for RNs.²

Table 8 provides data on the total employed RN population per 100,000 population in Nevada and each state bordering Nevada. Among all US states and the District of Columbia, Nevada ranks 51st – that is, the poorest – in terms of employed RNs per capita. Additionally, most of Nevada’s

neighbors are stationed near the bottom of the same rankings. Notably, Nevada is geographically sandwiched between Utah and California, which rank, respectively, 49th and 50th in the US in RNs per capita. Table 8 also provides data on the average annual wage of RNS in the same set of states. Salary data in this table suggests that the low per capita numbers of RNs in western US states bear little correlation with the average wage received by registered nurses.

Table 9 provides estimates of the total employed RN population in Nevada and bordering states, including the number employed full-time versus part-time. Table 9 also provides estimates of the full-time equivalent (FTE) RN population in each state. In 2000, there were an estimated 10,384 licensed RNs employed in nursing in Nevada and an estimated 9,320 RN FTE. Approximately 4 of 5 employed RNs in Nevada are employed full-time – a figure well above the national average of 71.6% and higher than every state in the region. Among other things, Nevada’s high percentage of full-time RNs suggests that little of the state’s high demand for RNs will be addressed by enticing already low numbers of part-time employed RNS into full-time employment.

Tables 10 through 14 provide detailed estimates of the supply and demand of registered nurses in Nevada and neighboring states at five year intervals through the year 2020. These tables are summarized in Tables 15 and 16. Table 15 reveals that the shortage of RNs in Nevada – that is, the difference between the estimated supply of RN FTE and the estimated demand for RN FTE – will grow steadily through the year 2020. According to these estimates, Nevada is already experiencing a shortage of RN FTE of -1,141 or 11% of the current demand. By the year 2020, the state will be short 4,486 RN FTE or nearly 30% of the projected demand.

Tables 16 and 17 summarize the magnitude of the nursing shortage in Nevada and each of its neighbors through the year 2020. Currently, four of the five states bordering Nevada are experiencing a shortage of RNs (Idaho is the exception). By the year 2020, each neighboring state is projected to possess a shortage greater than Nevada. Some of these projections are staggering. For instance, California alone is projected to be short 120,695 RN FTE by 2020. The shortage in Arizona is projected to exceed 21,000 RN FTE or five times that of Nevada by 2020. Throughout the next fifteen to twenty years, every state in the western region of the US will experience a growing shortage of registered nurses. All things being equal, these data indicate that employers in Nevada will simply be unable to recruit nursing graduates and employed RNs from neighboring states as they have done for the past decade – states that are each projected to experience severe shortages for foreseeable future.

Conclusions

The estimates and projections presented in this report confirm three trends in the state's nursing workforce that will impact the quality of health care and the public's health over the next two decades. First, employment projections prepared by the Nevada Department of Employment, Training, and Rehabilitation (DETR) project a steady growth in employment across all categories of nursing personnel that will continue through the end of the decade. Indeed, these data likely underestimate the magnitude of employment growth in nursing personnel – particularly, registered nurses and nursing assistants – when one considers that Las Vegas alone is expected to add at least 5 new hospitals or 1,500 new hospital beds in the next five years. Second, data prepared by the National Center for Health Workforce Analysis indicates that the current RN shortage in Nevada will worsen dramatically over the next fifteen to twenty years. Third, the most alarming trend facing Nevada health care providers and educators is that all states bordering Nevada are projected to experience substantial and growing nursing shortages through the year 2020.

**Table 1: Estimated Employment of Nursing Personnel
in Nevada – 2000 and Projected 2010***

NURSING OCCUPATION	ESTIMATED EMPLOYMENT			EMPLOYMENT CHANGE – 2000 TO 2010	
	2000	2002	2010	Number	Percent
Registered Nurses	12,199	13,159	16,906	4,707	38.6%
Licensed Practical Nurses	2,523	2,663	3,214	691	27.4%
Nursing Assistants	7,369	7,929	10,116	2,747	37.3%
Total – All Nursing Occupations	22,091	23,751	30,236	8,145	36.9%

*Source: Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation 2002. *2000 Nevada OES Wage Survey*. Carson City NV: DETR.

**Table 2: Estimated Employment of Nursing Personnel
in Nevada by Region – 2000 to 2010***

NURSING OCCUPATION	ESTIMATED EMPLOYMENT			EMPLOYMENT CHANGE – 2000 to 2010	
	2000	2002	2010	Number	Percent
REGISTERED NURSES					
C Las Vegas MSA	8,134	8,812	11,458	3,324	40.9%
C Reno MSA	2,943	3,120	3,815	872	29.6%
C Rural and Frontier Counties	1,122	1,227	1,633	511	45.5%
TOTAL – NEVADA	12,199	13,159	16,906	4,707	38.6%
LICENSED PRACTICAL NURSES					
C Las Vegas MSA	1,814	1,916	2,318	504	27.8%
C Reno MSA	361	378	445	84	23.3%
C Rural and Frontier Counties	348	369	451	103	29.6%
TOTAL – NEVADA	2,523	2,663	3,214	691	27.4%
NURSING ASSISTANTS					
C Las Vegas MSA	4,907	5,299	6,831	1,924	39.2%
C Reno MSA	1,646	1,745	2,132	486	29.5%
C Rural and Frontier Counties	816	885	1,153	337	41.3%
TOTAL – NEVADA	7,369	7,929	10,116	2,747	37.3%

*Source: Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation 2002. *2000 Nevada OES Wage Survey*. Carson City NV: DETR.

Table 3: Average Annual Job Growth of Registered Nurses (RNs) in Nevada – 2000 to 2010*

REGION	AVERAGE ANNUAL NUMBER OF JOB OPENINGS			AVERAGE ANNUAL JOB GROWTH RATE
	Due to Growth	Due to Replacement	Total	
Las Vegas MSA	332	164	496	4.1%
Reno MSA	87	59	146	3.0%
Rural and Frontier Counties	51	23	74	4.6%
Total – Nevada	470	246	716	3.8%

*Source: Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation 2002. *2000 Nevada OES Wage Survey*. Carson City NV: DETR.

Table 4: Average Annual Job Growth of Licensed Practical Nurses (LPNs) in Nevada – 2000 to 2010*

REGION	AVERAGE ANNUAL NUMBER OF JOB OPENINGS			AVERAGE ANNUAL JOB GROWTH RATE
	Due to Growth	Due to Replacement	Total	
Las Vegas MSA	50	47	97	2.8%
Reno MSA	8	9	17	2.3%
Rural and Frontier Counties	10	9	19	3.0%
Total – Nevada	68	65	133	2.7%

*Source: Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation 2002. *2000 Nevada OES Wage Survey*. Carson City NV: DETR.

Table 5: Average Annual Job Growth of Nursing Assistants in Nevada – 2000 to 2010*

REGION	AVERAGE ANNUAL NUMBER OF JOB OPENINGS			AVERAGE ANNUAL JOB GROWTH RATE
	Due to Growth	Due to Replacement	Total	
Las Vegas MSA	136	44	180	3.9%
Reno MSA	31	14	45	2.8%
Rural and Frontier Counties	22	7	29	3.9%
Total – Nevada	189	65	254	3.6%

*Source: Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation 2002. *2000 Nevada OES Wage Survey*. Carson City NV: DETR.

Table 6: Number of RN Program Completions from UCCSN Nursing Programs – Academic Year 1998-1999 to 2000-2001*

UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF NEVADA (UCCSN) NURSING PROGRAM	RN PROGRAM COMPLETIONS			
	AY 1998-1999	AY 1999-2000	AY 2000-2001	Three-Year Average
<i>UCCSN Community Colleges (ADN Degree Completions)</i>				
Community College of Southern Nevada	94	82	82	86
Great Basin College	14	13	17	15
Truckee Meadows Community College	37	22	34	31
Western Nevada Community College	29	22	29	27
<i>UCCSN Universities (BSN Degree Completions)</i>				
University of Nevada, Las Vegas	103	73	56	77
University of Nevada, Reno	49	41	46	45
TOTAL	326	253	264	281

*Source: Unpublished RN program completion data from the University and Community College System of Nevada System. Average figures have been rounded.

**Table 7: Current Number of UCCSN RN Program Graduates
and Hypothetical UCCSN RN Program Expansion***

CURRENT AND HYPOTHETICAL UCCSN RN PROGRAM GRADUATES	NUMBER of RN GRADUATES	SHORTAGE (-) or EXCESS (+) of RN GRADUATES in NEVADA*
<i>CURRENT UCCSN RN PROGRAM</i>		
Annual Average AY 1998/99–AY 2000/01	281	– 435
<i>HYPOTHETICAL PROGRAM EXPANSION</i>		
Annual Average AY 1998/99–AY 2000/01 + 25%	351	– 365
Annual Average AY 1998/99–AY 2000/01 + 50%	422	– 294
Annual Average AY 1998/99–AY 2000/01 + 75%	492	– 224
Annual Average AY 1998/99–AY 2000/01 + 100%	562	– 154
Annual Average AY 1998/99–AY 2000/01 + 125%	632	– 84
Annual Average AY 1998/99–AY 2000/01 + 150%	703	– 13
Annual Average AY 1998/99–AY 2000/01 + 155%	716	0
Annual Average AY 1998/99–AY 2000/01 + 175%	773	+ 57

*Figures in this column equal the number of UCCSN RN Program Graduates minus the average annual number of new RN positions created in Nevada from 2000 to 2010.

Table 8: Supply of Registered Nurses and Average Annual Wage in Nevada and Neighboring US States – 2000*

STATE	TOTAL EMPLOYED RN POPULATION	RN POPULATION PER 100,000 POPULATION		AVERAGE RN SALARIES		
		Number	US Rank**	Average Hourly Wage	Average Annual Wage	US Rank**
Nevada	10,384	520	51	\$24.62	\$51,200	7
Arizona	32,222	628	47	\$22.63	\$47,070	17
California	184,329	544	50	\$26.99	\$56,140	1
Idaho	8,230	636	45	\$21.00	\$43,680	26
Oregon	27,121	793	29	\$23.66	\$49,210	14
Utah	13,229	592	49	\$21.00	\$43,680	26
United States	2,201,813	782	—	\$21.38	\$46,410	—

*Source: Spratley, E., et al. 2001. *The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses, March 2000*. Rockville MD: Division of Nursing, Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS); Bureau of Labor Statistics, US Department of Labor.

**Rank among all 50 US States and the District of Columbia.

Table 9: Supply of Registered Nurses According to Full- versus Part-Time Employment Status in Nevada and Neighboring US States – 2000*

STATE	TOTAL EMPLOYED RN POPULATION	RN POPULATION EMPLOYED FULL-TIME		RN POPULATION EMPLOYED PART-TIME		ESTIMATED FULL-TIME EQUIVALENT (FTE) RNs
		Number	Percent	Number	Percent	
Nevada	10,384	8,256	79.5%	2,128	20.5%	9,320
Arizona	32,222	24,928	77.4%	7,294	22.6%	28,575
California	184,329	123,675	67.1%	60,654	32.9%	154,002
Idaho	8,230	5,299	64.4%	2,931	35.6%	6,765
Oregon	27,121	15,876	58.5%	11,245	41.5%	21,498
Utah	13,229	8,650	65.4%	4,579	34.6%	10,940
United States	2,201,813	1,576,675	71.6%	625,139	28.4%	1,889,244

*Source: Spratley, E., et al. 2001. *The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses, March 2000*. Rockville MD: Division of Nursing, Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 10: Estimated Supply versus Demand for FTE Registered Nurses in Nevada and Neighboring US States – 2000*

STATE	RN SUPPLY – FTE in 2000	RN DEMAND – FTE in 2000	EXCESS (+) or SHORTAGE (-) in 2000	PERCENT SHORTAGE in 2000
Nevada	9,320	10,461	- 1,141	- 11%
Arizona	28,575	34,559	- 5,984	- 17%
California	154,002	166,665	- 12,663	- 8%
Idaho	6,765	6,235	530	No Shortage
Oregon	21,498	22,347	- 849	- 4%
Utah	10,940	11,900	- 960	- 8%
United States	1,889,243	1,999,950	- 110,707	- 6%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 11: Estimated Supply versus Demand for FTE Registered Nurses in Nevada and Neighboring US States – 2005*

STATE	RN SUPPLY – FTE in 2005	RN DEMAND – FTE in 2005	EXCESS (+) or SHORTAGE (-) in 2005	PERCENT SHORTAGE in 2005
Nevada	10,424	12,275	- 1,851	- 15%
Arizona	31,395	39,507	- 8,112	- 21%
California	162,645	181,054	- 18,409	- 10%
Idaho	5,772	7,246	- 1,474	- 20%
Oregon	22,433	25,116	- 2,683	- 11%
Utah	12,088	13,766	- 1,678	- 12%
United States	2,012,444	2,161,831	- 149,387	- 7%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 12: Estimated Supply versus Demand for FTE Registered Nurses in Nevada and Neighboring US States – 2010*

STATE	RN SUPPLY – FTE in 2010	RN DEMAND – FTE in 2010	EXCESS (+) or SHORTAGE (–) in 2010	PERCENT SHORTAGE in 2010
Nevada	10,931	13,493	– 2,562	– 19%
Arizona	33,030	44,054	– 11,024	– 25%
California	161,337	203,511	– 42,174	– 21%
Idaho	5,168	8,140	– 2,972	– 37%
Oregon	21,872	28,071	– 6,199	– 22%
Utah	12,617	15,508	– 2,891	– 19%
United States	2,069,369	2,344,584	– 275,215	– 12%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 13: Estimated Supply versus Demand for FTE Registered Nurses in Nevada and Neighboring US States – 2015*

STATE	RN SUPPLY – FTE in 2015	RN DEMAND – FTE in 2015	EXCESS (+) or SHORTAGE (-) in 2015	PERCENT SHORTAGE in 2015
Nevada	11,426	14,798	- 3,372	- 23%
Arizona	33,792	49,348	- 15,556	- 32%
California	153,654	231,711	- 78,057	- 34%
Idaho	4,599	9,139	- 4,540	- 50%
Oregon	20,536	31,576	- 11,040	- 35%
Utah	12,679	17,312	- 4,633	- 27%
United States	2,055,491	2,562,554	- 507,063	- 20%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 14: Estimated Supply versus Demand for FTE Registered Nurses in Nevada and Neighboring US States – 2020*

STATE	RN SUPPLY – FTE in 2020	RN DEMAND – FTE in 2020	EXCESS (+) or SHORTAGE (–) in 2020	PERCENT SHORTAGE in 2020
Nevada	11,847	16,333	– 4,486	– 28%
Arizona	33,780	55,519	– 21,739	– 39%
California	142,978	263,673	– 120,695	– 46%
Idaho	4,219	10,325	– 6,106	– 59%
Oregon	19,124	35,653	– 16,529	– 46%
Utah	12,407	19,332	– 6,952	– 36%
United States	2,001,998	2,810,414	– 808,416	– 29%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

**Table 15: Estimated Supply versus Demand for FTE
Registered Nurses in Nevada – 2000 to 2020***

YEAR	SUPPLY – RN FTE	DEMAND – RN FTE	EXCESS (+) or SHORTAGE (-)	PERCENT SHORTAGE
2000	9,320	10,461	- 1,141	- 11%
2005	10,424	12,275	- 1,851	- 15%
2010	10,931	13,493	- 2,562	- 19%
2015	11,426	14,798	- 3,372	- 23%
2020	11,847	16,333	- 4,486	- 28%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 16: The Nursing Shortage in Nevada and Neighboring States – 2000 to 2020*

STATE	RN SUPPLY FTE minus RN DEMAND FTE EXCESS (+) or SHORTAGE (-)				
	2000	2005	2010	2015	2020
Nevada	- 1,141	- 1,851	- 2,562	- 3,372	- 4,486
Arizona	- 5,984	- 8,112	- 11,024	- 15,556	- 21,739
California	- 12,663	- 18,409	- 42,174	- 78,057	- 120,695
Idaho	530	- 1,474	- 2,972	- 4,540	- 6,106
Oregon	- 849	- 2,683	- 6,199	- 11,040	- 16,529
Utah	- 960	- 1,678	- 2,891	- 4,633	- 6,952
United States	- 110,707	- 149,387	- 275,215	- 507,063	- 808,416

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

Table 17: Percent of RN Shortage in Nevada and Neighboring States – 2000 to 2020*

STATE	PERCENT SHORTAGE**				
	2000	2005	2010	2015	2020
Nevada	– 11%	– 15%	– 19%	– 23%	– 28%
Arizona	– 17%	– 21%	– 25%	– 32%	– 39%
California	– 8%	– 10%	– 21%	– 34%	– 46%
Idaho	No Shortage	– 20%	– 37%	– 50%	– 59%
Oregon	– 4%	– 11%	– 22%	– 35%	– 46%
Utah	– 8%	– 12%	– 19%	– 27%	– 36%
United States	– 6%	– 7%	– 12%	– 20%	– 29%

*Source: National Center for Health Workforce Analysis. *Projected Supply, Demand, and Shortages of Registered Nurses: 2000-2020*. Rockville MD: Health Resources and Services Administration (HRSA), US Department of Health and Human Services (DHHS).

**Notes: Percent shortage = RN Supply FTE – RN Demand FTE / RN Demand FTE.

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Endnotes

1. Employment estimates are prepared by DETR for three regions of Nevada: (1) Las Vegas MSA (Clark and Nye County NV, and Mohave County AZ); (2) Reno MSA (Washoe County), and (3) the “Balance of the State” (i.e., the remaining fourteen counties – one rural county, one urban county, and twelve frontier counties). Thus, data presented in this report for “Rural and Frontier Counties” include employment estimates for Carson City (officially designated as an urban county by the US Census Bureau) and exclude employment estimates for Nye County (officially designated as a frontier county by the Nevada Office of Rural Health).

2. HRSA analysts stress that supply and demand projections at the State level should be carefully assessed. Estimates of supply and demand by State are to some extent biased by national averages and arbitrary State boundaries. In particular, demand may be underestimated for States that are rural and mountainous, have higher than average elderly populations, and utilize more RNs than the national average in their health care systems. Because the model averages the nurse staffing across 50 States, the projected demand increases for those States may be underestimated. Conversely, for States that utilize lower RN staffing ratios than the national average, demand estimates may be overestimated. Finally, State boundaries may bias the demand and supply estimates. For example, hospitals in the Reno and Las Vegas serve California residents. Thus, estimating demand for RNs, based on current population in Nevada alone, may underestimate the demand for RNs there.