

**A Brief Review of Nursing Workforce Research
from The Oregon Center for Nursing
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Because Oregon's Health
Depends On It.

In 2001, the Oregon Nursing Leadership Council (ONLC), comprised of the major statewide nursing leadership organizations, released its comprehensive strategic plan that set forth an agenda for addressing Oregon's nursing shortage. The Oregon Center for Nursing (OCN) was established to carry out ONLC's strategic plan. In 2005, OCN published an assessment of Oregon's registered nurse workforce titled *When, Not If...A Report on Oregon's Registered Nurse Workforce*. Key findings included:

- Nursing education programs were expanding to double enrollment as planned. Between 2001 and 2004, the number of graduates from RN education programs increased by 45 percent.
- Oregon had a large pool of qualified nursing school applicants, two to three times more than educational capacity.
- More new RN licenses were issued annually to experienced nurses moving to the state than to recent nursing school graduates.
- Nearly one-half of Oregon's RNs were 50 years of age or older. The proportion of nurses over 50 had more than doubled over the past 20 years.
- An exodus of retiring nurses was underway. By 2025, 41 percent of currently licensed RNs were expected to retire.
- Demand for RNs would continue to grow steadily. An additional 15,700 RN job openings were expected statewide over the next 15 years.
- The age distribution of Oregon's population would change dramatically over the next 20 years. The number of Oregonians 65 years of age or older was set to exceed one million by 2025, accounting for nearly 25 percent of all Oregon residents.

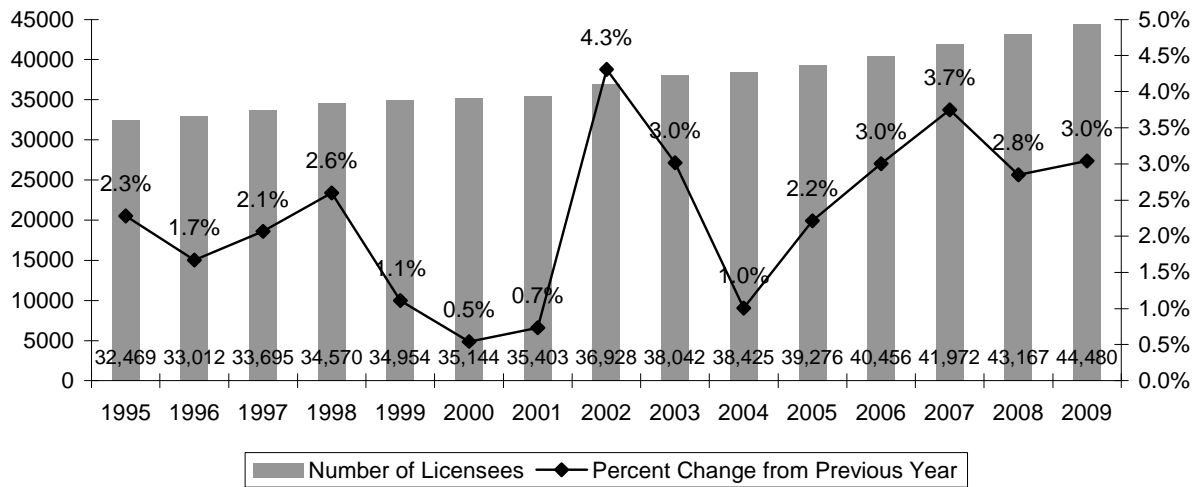
Specific recommendations derived from the study were:

- Implement strategies to retain nurses currently working in Oregon.
- Continue aggressive efforts to increase educational supply.
- Transform the work, roles, and work environments of professional nurses.
- Support nurses to practice autonomously, and to deliver the full scope of nursing care services for which they are licensed.
- Recruit nurses to, or back home to, Oregon.
- Improve representation of ethnic minorities and males in the nursing workforce.
- Encourage nurses who have left the workforce to return.
- Fund advanced nursing education.
- Expand nurse workforce research efforts.

The following charts and tables illustrate some important facts about Oregon’s nurse workforce.

Figure 1 shows the annual increase in the number of actively licensed RNs in Oregon over the past 15 years. The number of active Oregon RN licenses has grown by 37 percent since 1995. On average, the number of licensees increases by 600 RNs annually.

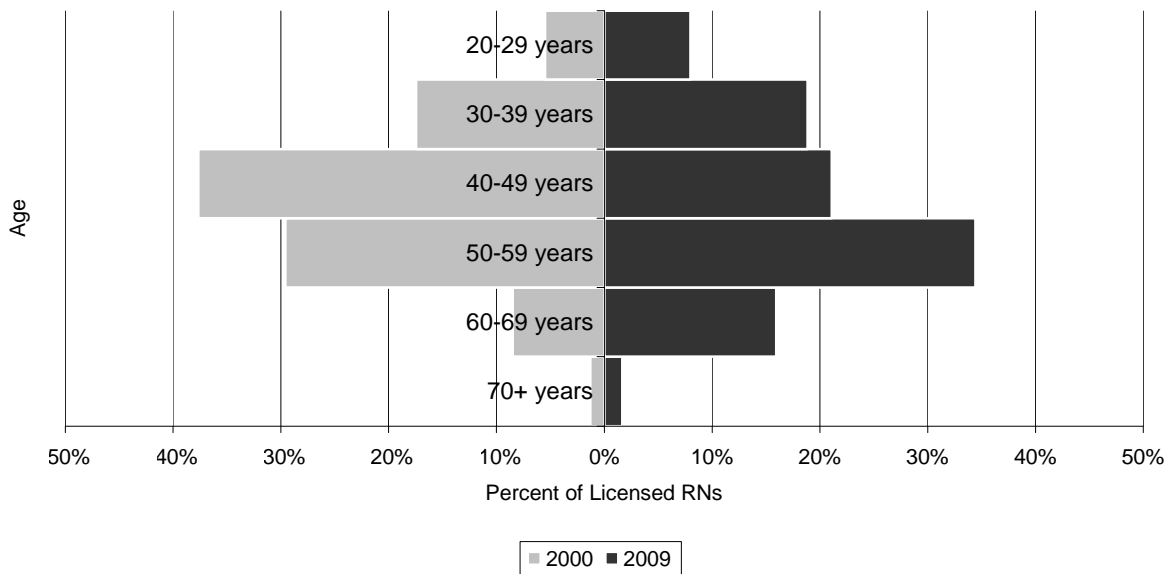
Figure 1. Registered Nurses Actively Licensed in Oregon, 1995-2009



Source: Oregon State Board of Nursing.

Figure 2 shows the age distribution of the nurse workforce in Oregon. More than one-half of Oregon’s nurses are over 50. The 20-29 and 30-39 year age cohorts are expanding while the 40-49 year age cohort is shrinking.

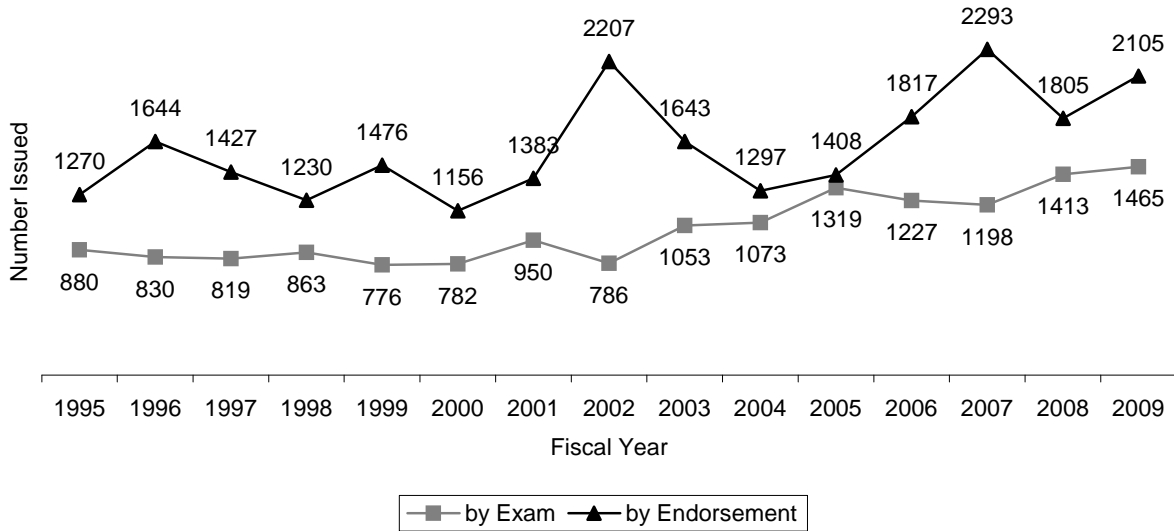
Figure 2. Oregon’s Licensed Registered Nurses by Age Cohort, 2000 and 2009



Source: Oregon State Board of Nursing.

Figure 3 shows the number of RN licenses issued in Oregon over the past 15 years. More nurses are licensed by endorsement (experienced nurses moving here from another state) than by exam (new nursing program graduates seeking initial licensure).

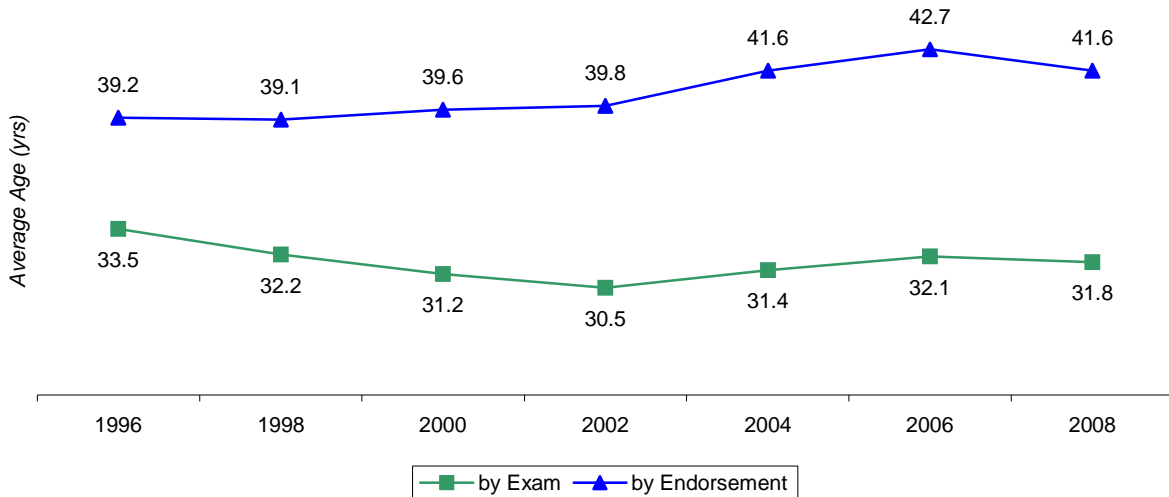
Figure 3. Registered Nurse Licenses Issued in Oregon, 1995-2009



Source: Oregon State Board of Nursing.

Figure 4 depicts the age of nurses when they receive their Oregon RN license. On average, those licensed by exam are in their early thirties while those licensed by endorsement are in their early 40s.

Figure 4. Average Age of Oregon RNs at Time of Licensure, 1996-2008



Source: Oregon State Board of Nursing.

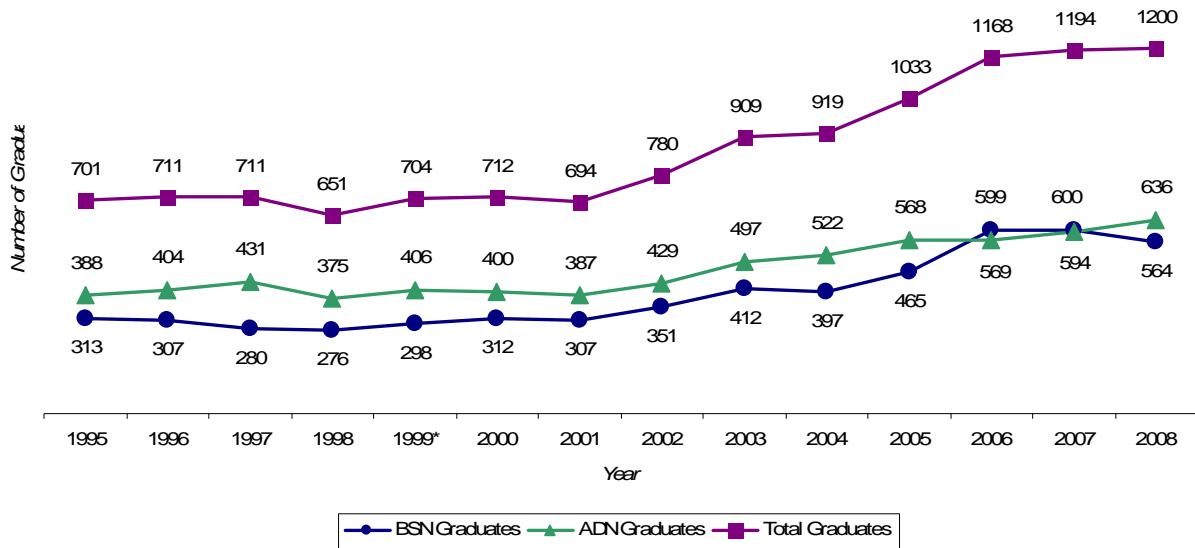
Table 1 and Figure 5 describe Oregon’s pre-licensure RN education programs, the supply pipeline of nursing students, and the number of nursing program graduates. Note the increase in number of graduates since 2001.

Table 1. Description of ADN and BSN Nursing Education Programs in Oregon

	Associate Degree (ADN)	Baccalaureate Degree (BSN)
Number of programs	15	6*
Where offered	Community colleges	Colleges and Universities
Number of enrolled students (2008)	1,387	1,752
Number of graduates (2008)	613	564
Increase in graduations since 2001	58%	84%

* The Oregon Health & Science University School of Nursing offers programs in five locations.
 Source: Oregon State Board of Nursing.

Figure 5. Graduations from Associate and Baccalaureate Degree Nursing Programs in Oregon, 1995-2008



Source: Oregon State Board of Nursing.

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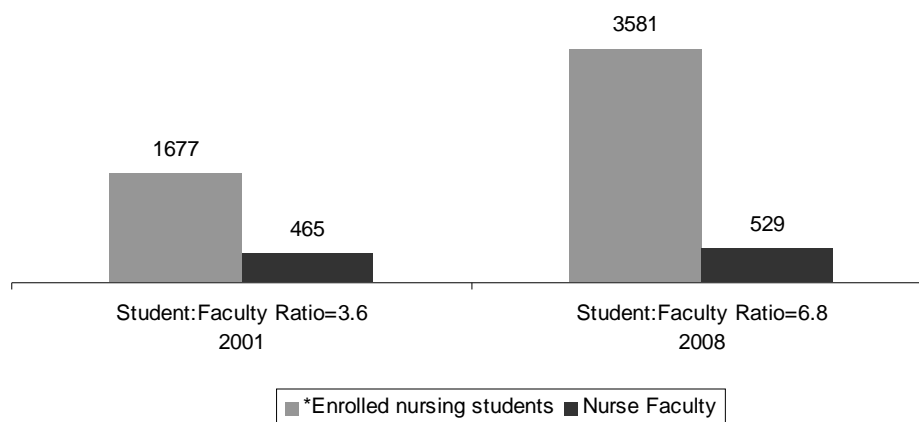
In 2009, the Oregon Center for Nursing published two additional studies. *Who Gets In? Pilot Year Data from the Nursing Student Admissions Database Pilot Project* examines the actual number of applicants to Oregon’s nursing programs, accounting for redundant applicants, and reveals Oregon’s nursing programs accept almost half of all applicants (see Table 2).

Table 2. Application, Applicant, and Enrolled Student Pools: Oregon Pre-licensure Registered Nurse Education Programs, 2008-2009

	Oregon ADN Programs	Oregon BSN Programs	Oregon RN Programs
Applications* (% all Oregon program applications)	3,308 (53%)	2,878 (47%)	6,186 (100%)
Applicants* (% all Oregon program applicants)	2,343 (61%)	2,025 (53%)	3,821 (100%)
Multiple Program Applicants	38%	46%	34%
Unqualified Applicants	7%	19%	12%
Qualified Applicants	93%	81%	88%
Qualified Applicants Not Accepted	61%	43%	49%
Accepted Applicants (Selectivity Rate)	36%	46%	45%
Accepted Applicants Enrolled (Yield Rate)	81%	81%	85%
Available Seats	697	758	1,455
Qualified Applicants per Seat	3.1	2.2	2.3
<i>Source:</i> Oregon Center for Nursing, Nursing Student Admissions Database Pilot Project (2008-2009). Percentages are within group unless otherwise noted *Includes students pre-admitted as sophomores contingent upon passing grades in pre-requisite courses NOTE: Those applying to both ADN and BSN programs are included in both the ADN and BSN Programs columns as well as the Oregon RN Programs column.			

Oregon’s Nurse Faculty Workforce describes the status of Oregon’s nurse faculty. The report highlights the shortage of nurse faculty and the increase in faculty workload that has accompanied the doubling of enrollment in Oregon’s nursing programs.

Figure 6. Numbers of Nurse Faculty and Enrolled Nursing Students, 2001 & 2008



* Includes enrollees in Practical Nursing, Associate Degree, and Baccalaureate Degree programs.
Source: Oregon State Board of Nursing.

Addendum

The Oregon Health Workforce Project

The Oregon Health Workforce Project, a first-of-its-kind effort in Oregon to quantify the supply of health care professionals, was funded by the Northwest Health Foundation and carried out by Oregon Health & Science University's Oregon Area Health Education Centers (AHEC) Program. Together with key stakeholders representing a variety of constituencies interested in issues surrounding health workforce requirements, AHEC conducted surveys of Oregon's licensed health professionals in 2000 and 2002.¹

As a first step toward carrying out the project's mission, the Statewide AHEC Program convened a Health Workforce Interest Group in December 1998. Representatives from the following organizations, agencies, educational institutions and health professions licensing boards participated:

Oregon Board of Dentistry	OHSU School of Dentistry
Oregon Board of Medical Examiners	OHSU School of Medicine
Oregon Medical Association	OHSU School of Nursing
Oregon State Board of Nursing	Oregon Association of Hospitals and Health Systems
Oregon Department of Education	Oregon Dental Association
Oregon Employment Department	Oregon Dental Hygienists' Association
Oregon Health Division	Oregon Health Policy Institute
Oregon State Department of Labor	Oregon Nurses Association
Office of Community Colleges	Oregon Office of Rural Health
Office of Health Policy and Research	Oregon Society of Physician Assistants
OHSU Department of Family Medicine	Multnomah County School/Community Dental Health
OHSU Oregon AHEC Program	Salem Hospital
OHSU Physician Assistant Program	

Ultimately, the survey did not allow for the quantification of the supply of health care professionals in Oregon, but the descriptive profiles and lessons learned from this project were an important first step in improving our understanding of Oregon's health workforce information needs and estimating workforce shortfalls and excesses.

¹ The 2000 survey targeted registered nurses, nurse practitioners, physicians, physician assistants, dentists, and dental hygienists. The 2002 survey included the six aforementioned groups and pharmacists.