

# State of Iowa Nursing Trends Report

Academic Years 2018-2019; 2019-2020; 2020-2021

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## INTRODUCTION

According to the United States Bureau of Labor Statistics, the job outlook for registered nurses and licensed practical nurses projects growth of 9% from 2020 to 2030. This is higher than the national average growth for all occupations at 8%. It is also projected that advanced practice nurses, including nurse anesthetists, nurse midwives, and nurse practitioner jobs will grow much faster at a rate of 45% (U.S. Bureau of Labor Statistics, 2022). The 2020-2030 State of Iowa Occupational Projections reports the growth for registered nurses will grow at an annual rate of 1.2% from 2020-2030, with the largest projected increase of need in the nurse practitioner group at 5.8%. Other projected needs include the annual growth rate of licensed practical nurses at 1.9% (2020-2030 State of Iowa Occupational Projections).

## PURPOSE AND METHODS

The purpose of this report is to assess trends in the Iowa nursing workforce data from 2018-2021. The Iowa Center for Nursing Workforce is under the umbrella of the Iowa Board of Nursing and produces the Nursing Trends Report using licensure survey data. Since November 2012, Iowa nurses have been providing workforce information aligned with the Nursing Supply Minimum Dataset, ratified by the National Forum of State Nursing Workforce Centers. During the licensure renewal process, nurses answer survey questions about race, ethnicity, gender, original level of nursing degree credential, highest level of education, employment location setting, and work status (full-time, part-time, unemployed). Every three years, Iowa's nurses supply their demographic workforce information.

The methods and considerations of data in this report include:

- Data is based on active Iowa nurse licensees
- Licensees' employment may or may not be in Iowa
- An analysis of trends in workforce and available nursing education programs in Iowa
- Unless otherwise noted, data reports for 10 years (2011-2021)
- Nursing education programs count separately by site and type
  - Sharing administration, a common philosophy, curriculum, and faculty
- Charts compare the most recent years
  - Data is available in its entirety from 1986
- Licensees are not required to update workforce information between renewals
- Licensees may hold a license but no longer practice
- Licensees may hold a registered nurse (RN) license and a licensed practical nurse (LPN) concurrently

## References:

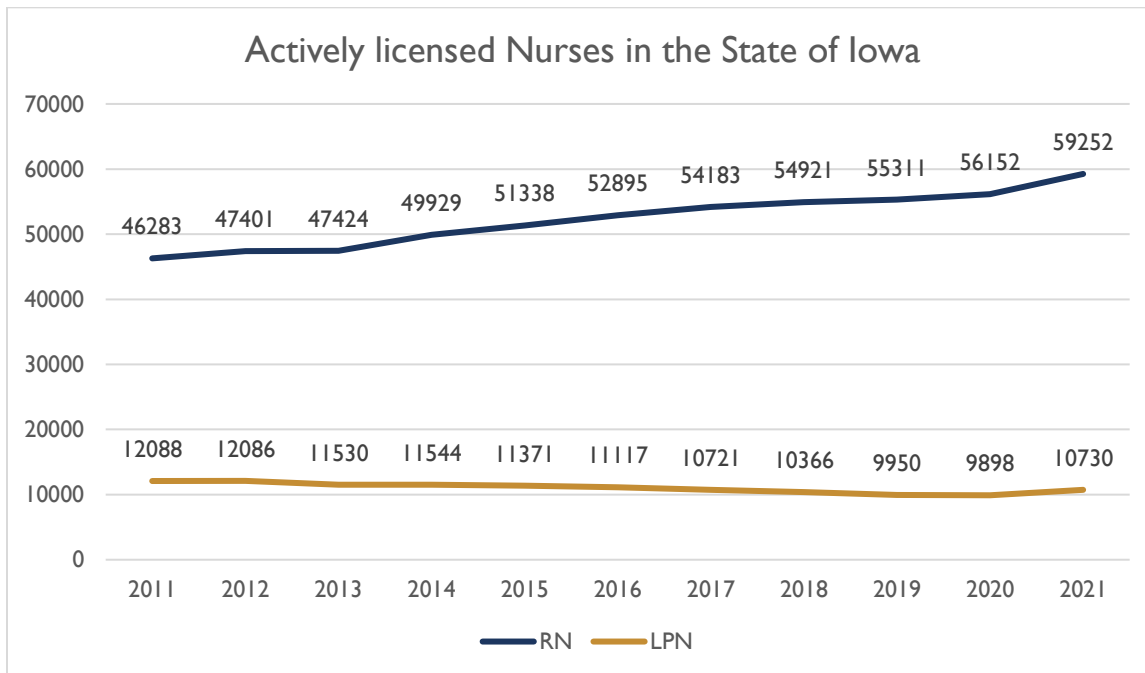
Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Registered Nurses, retrieved from: <https://www.bls.gov/ooh/healthcare/registered-nurses.htm>;  
<https://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm> (August 11, 2022).

2020-2030 State of Iowa Occupational Projections from Bureau Chief Research & Analysis Bureau, Labor Market Information Division Iowa Workforce Development.

## NURSING SUPPLY- ACTIVE LICENSES

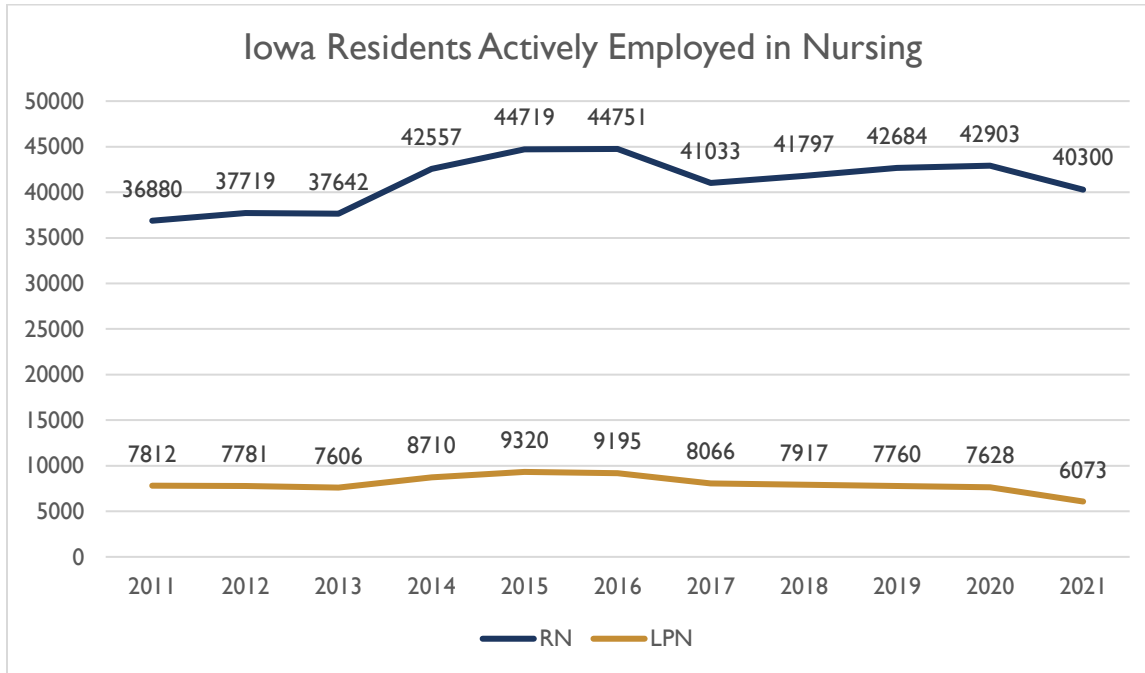
The number of active licensed RNs in Iowa increased from 46,283 in 2011 to 59,252 in 2021, resulting in an overall growth of 28.0%, or a net gain of 12,969.

The number of active LPNs decreased from 12,088 in 2011 to 10,730 in 2021, a net loss of 1,358. This represented an 11.2% decline of active licensed practical nurses. Yet, between 2020 and 2021, there was an uptick of 832 active licensees.



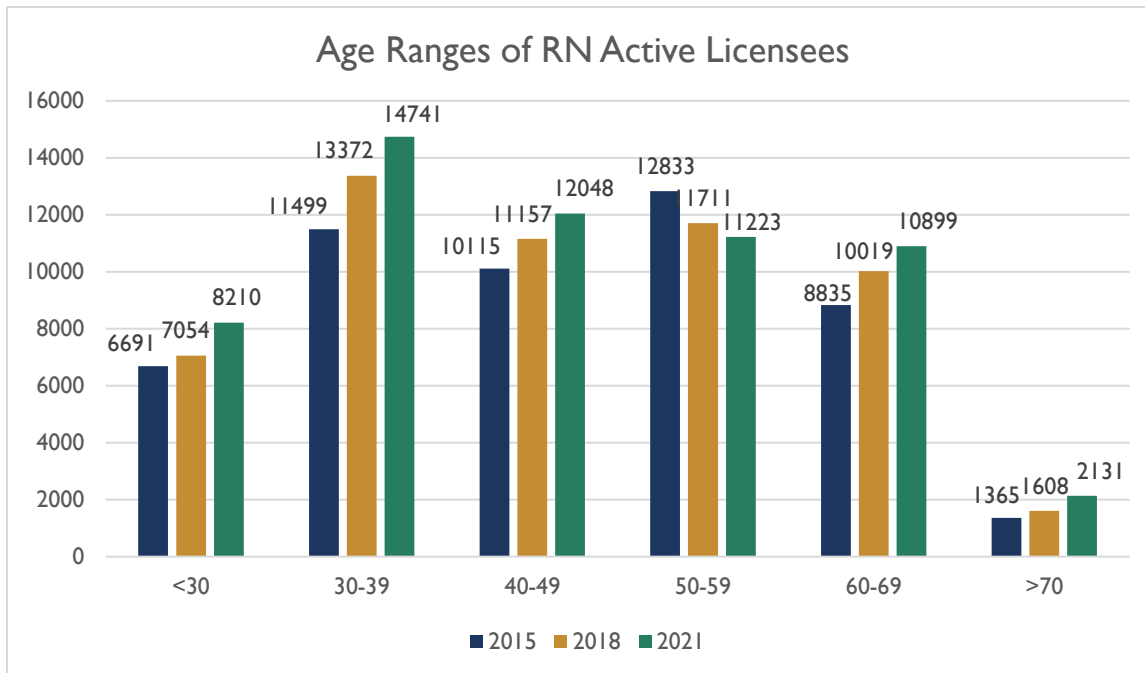
## ACTIVELY EMPLOYED POPULATION

The number of Iowa residents licensed as an RN employed in nursing has demonstrated a 9.8% increase between the years of 2011 and 2021. During the time period of 2011 to 2021, the total number of actively employed LPN residents has experienced a 22.3% decline.



## AGE RANGE OF RN LICENSEES

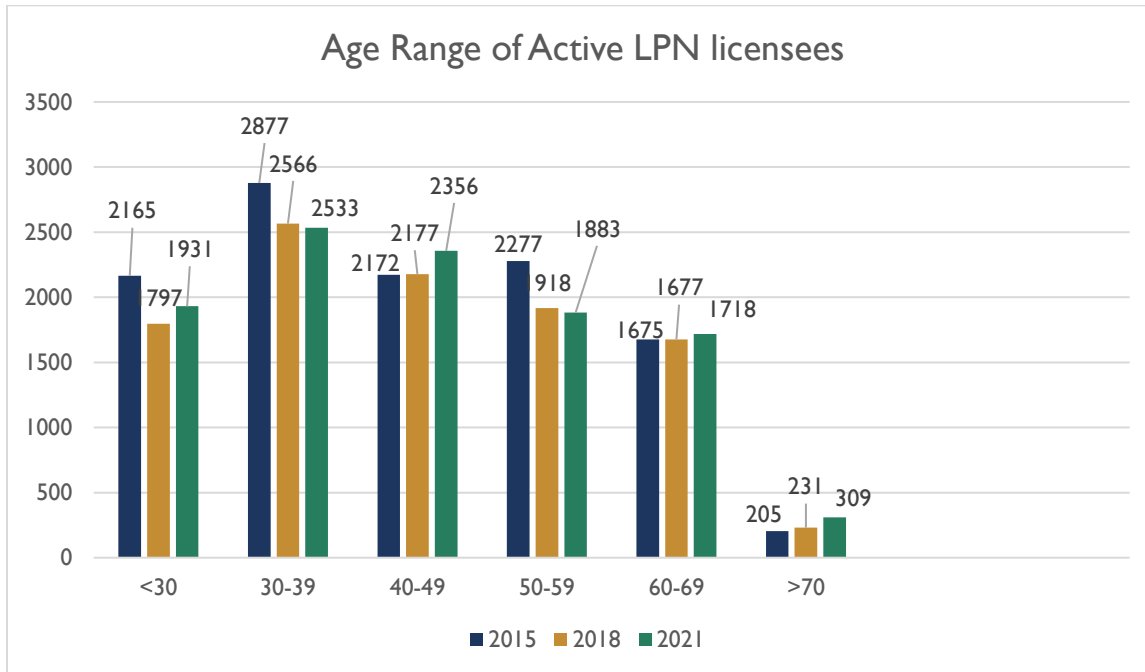
Licensees renew every three years, therefore the age range data takes a snapshot of the licensee distribution in 2015, 2018, and 2021. The total number of RN licensees by age range has seen a steady increase in the group 30-39 years of age with an average of 24.6% increase. In 2018, the greatest distribution of licensees was within the two age groups of 40-49 and 50-59 at 41.6%.



Age Range Groups	RN Percentage of total licensees		
	2015	2018	2021
<30	13.0	12.8	13.9
30-39	22.4	24.3	24.9
40-49	19.7	20.3	20.3
50-59	25.0	21.3	18.9
60-69	17.2	18.2	18.4
>70	2.7	2.9	3.6

## AGE RANGE OF LPN LICENSEES

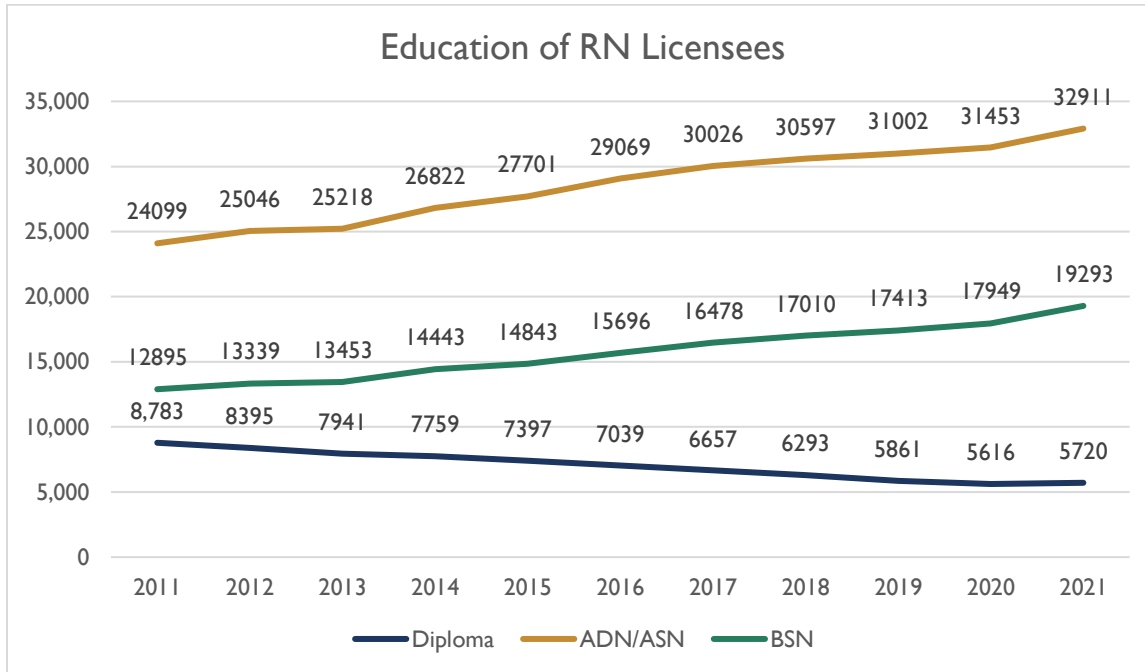
Licensees renew every three years, thus the age range data takes a snapshot of the licensee distribution in 2015, 2018, and 2021. The age range of 30 year old group that makes up 18.1% of this population has seen a steady decline. The largest group is the 30-39 years of age with an average of 24.6% of total licensees.



Age Range Groups	LPN Percentage of total licensees		
	2015	2018	2021
<30	19.0	17.3	18.0
30-39	25.3	24.8	23.6
40-49	19.1	21.0	22.0
50-59	20.0	18.5	17.5
60-69	14.7	16.2	16.0
>70	1.8	2.2	2.9

## Education of Licensees

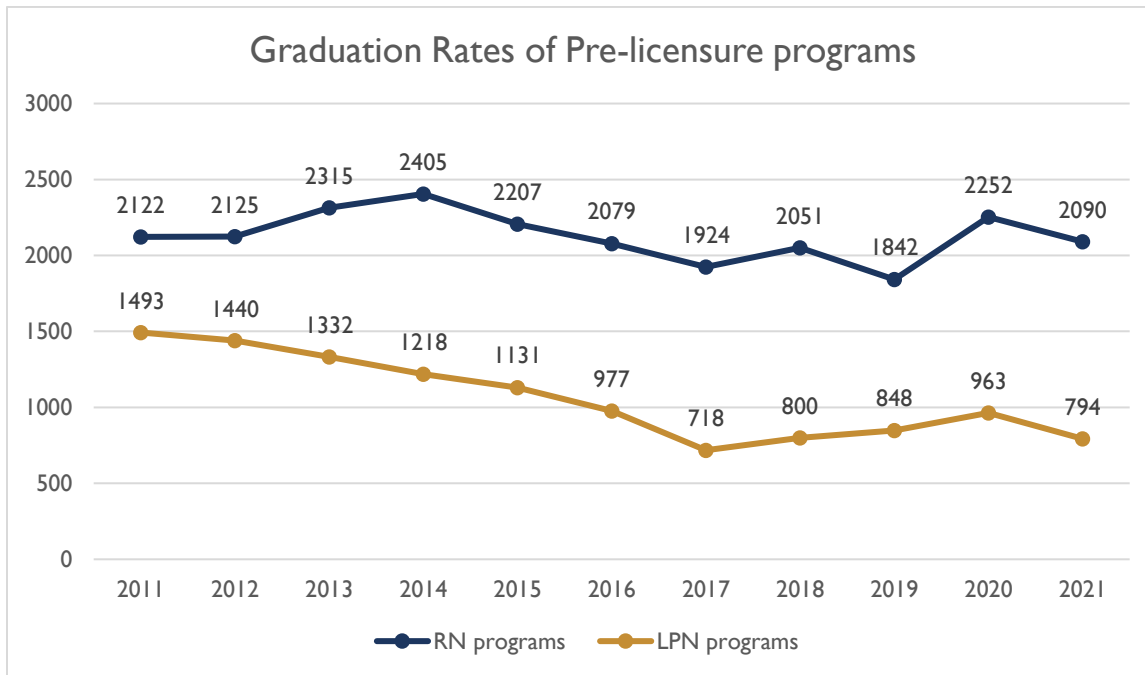
Prospective registered nurses have options when choosing their path of education. Options include diploma programs, practical nursing to associate degree (ADN/ASN), stand-alone associate degree (ADN/ASN), and baccalaurate programs (BSN). This chart illustrates the distribution of original education for the RN licensees, and at present, Iowa does not have an active diploma program, but other states may have diploma programs. The path to becoming an LPN has one entry point, but options are available for career advancement.





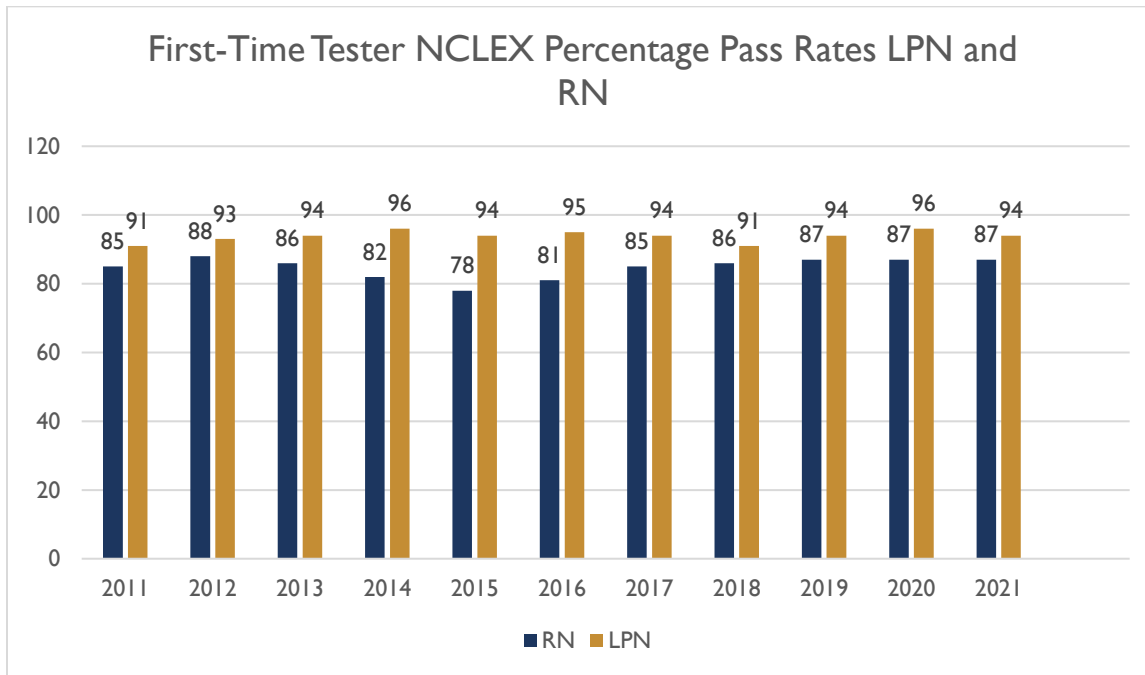
## Graduation Rates Pre-licensure programs

Graduation rates of RN programs have seen a 1.5% decrease over the past ten years. There is a noted 22.3% uptick of RN graduates from year 2019 to 2020. Graduation rates of LPN programs have also seen a 46.8% decrease over the past ten years. There is a noted 34.1% increase between years 2017 to 2020.



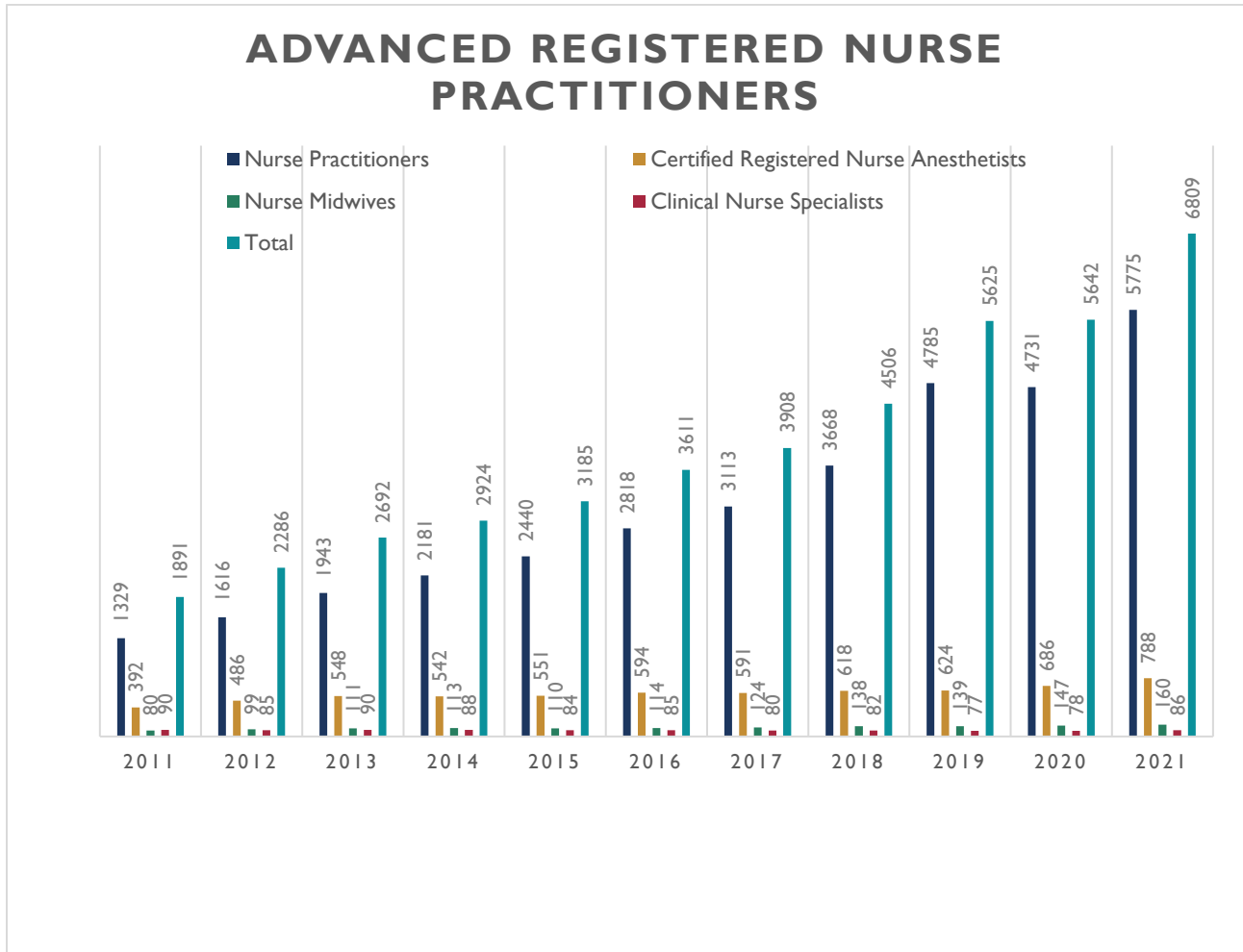
## Education Programs – NCLEX Pass Rates

Once a student has passed their educational program, they are eligible to take the NCLEX exam to become a licensed practical or registered nurse, depending upon their educational program. The chart below illustrates the first-time tester passing rates among Iowa nursing program graduates over a ten-year period. The LPN NCLEX remains strong with an average of 93.8%, and the RN NCLEX pass rates average 84.7% over this ten year time period.



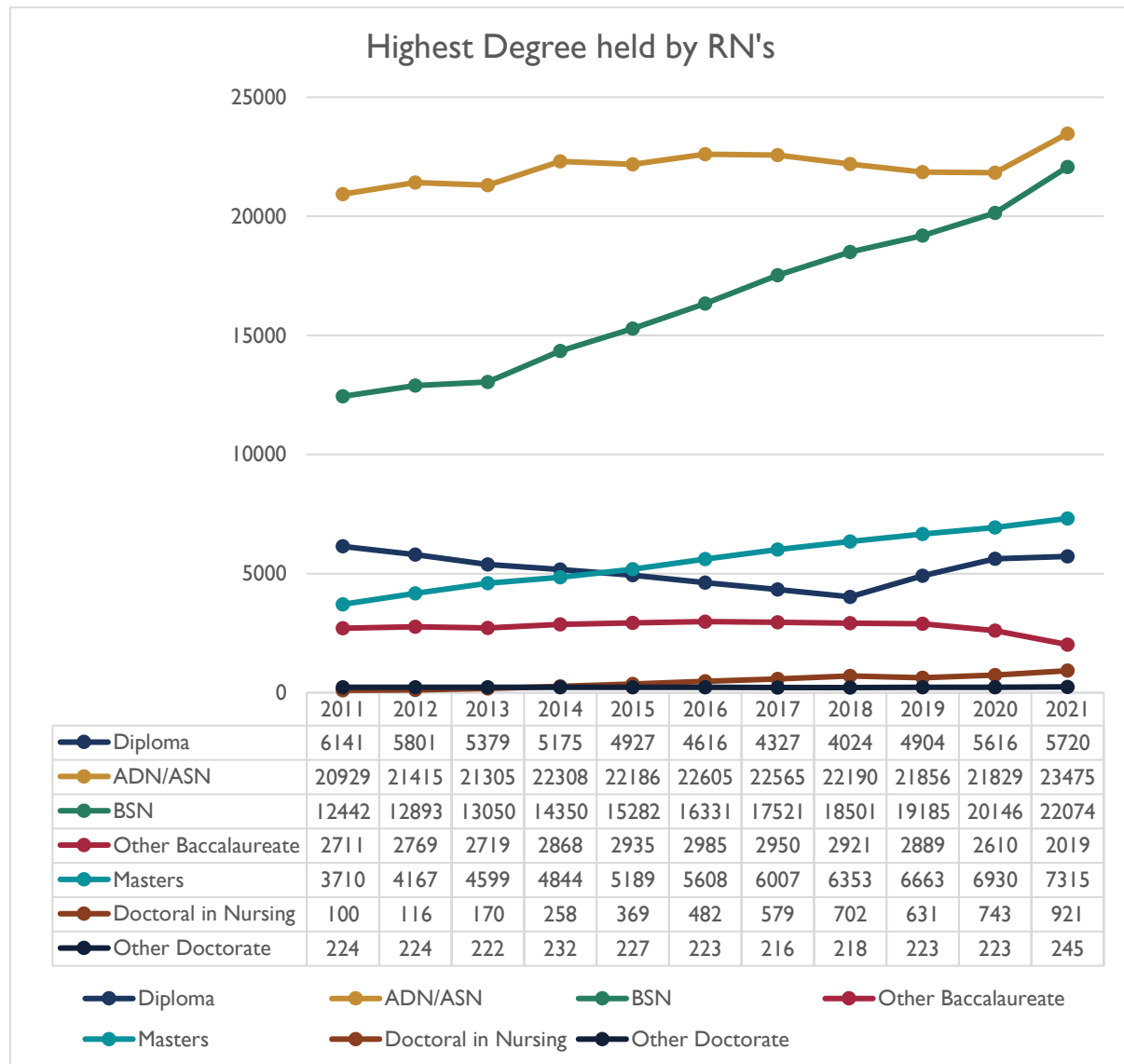
## Advanced Registered Nurse Practitioners Data

Between 2011 and 2021, the total number of Advanced Registered Nurse Practitioners has increased by 260% with the category of Nurse Practitioners quadrupling, Certified Registered Nurse Anesthetists doubling, Nurse Midwives doubling, and Nurse Midwives doubling, as well. Clinical Nurse Specialists have remained consistent at an average number of 84.



## Highest Degree Held by Active Licensed RN's

Between 2011 and 2021, the highest degree held by nurses increased in all categories except “other baccalaureate” degree. The largest percent increase noted is in the Doctoral in nursing category at 800%, and the largest percent decrease in Diploma degrees at 6.9%. At this time, there are no diploma programs in the state of Iowa, but active licensees may have received a diploma education in another state.



## Nursing Education

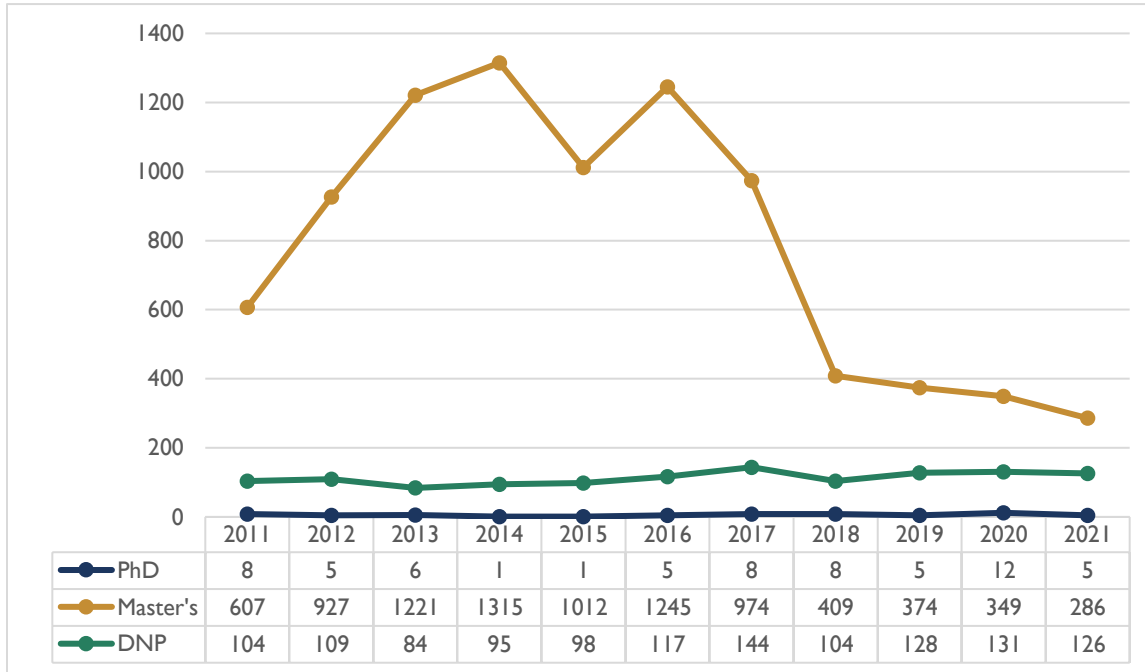
### Number of Programs and Type

Since 2011, the total number of nursing programs ranges 97-109. The number of DNP programs saw the greatest increase among all program levels during this time frame.

Program	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
PhD in Nursing	1	1	1	1	1	1	1	1	1	1	1
DNP	3	4	4	6	6	6	6	6	5	5	7
Post Master's	5	6	6	5	5	4	6	6	5	5	5
Master's	9	9	9	8	8	7	8	8	7	7	7
BSN	19	19	19	20	20	20	20	20	19	21	21
ADN/ASN	31	36	36	36	36	33	34	34	34	34	34
Practical Nursing	33	34	34	31	31	30	28	26	26	26	26
Total	101	109	109	107	107	101	103	101	97	99	101

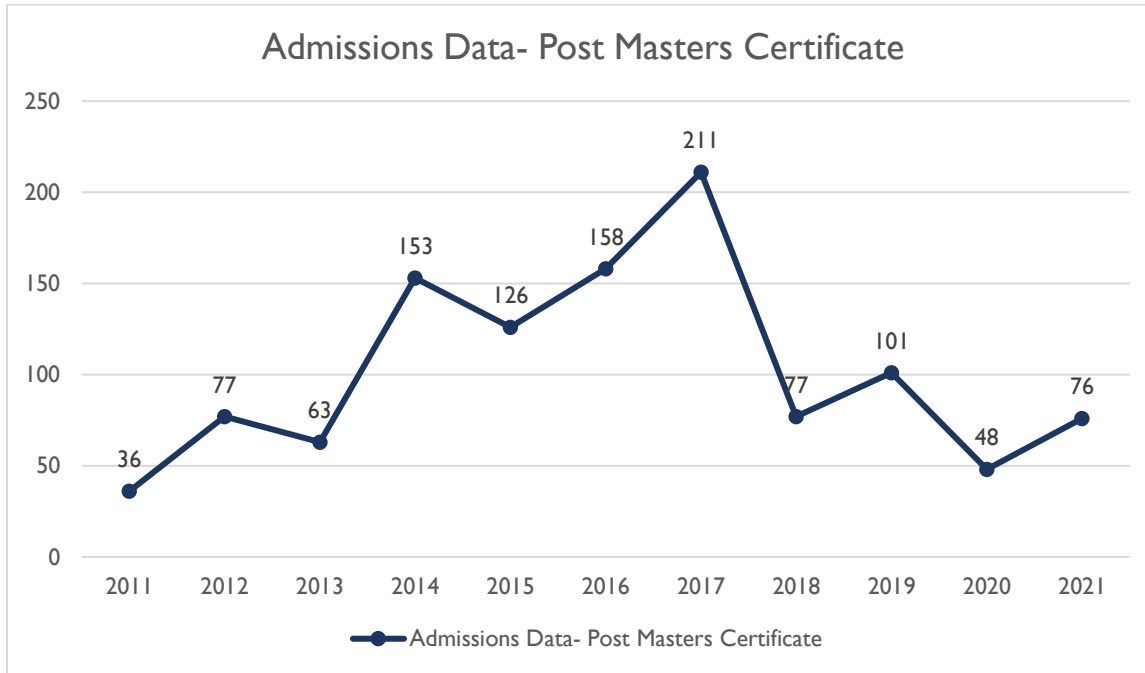
## Admissions Data- Graduate Nursing Programs

Admissions data reports on students meeting the program admissions criteria and taking nursing courses the first day of classes. The number of graduate students admitted declined in all school categories from 2020 to 2021.



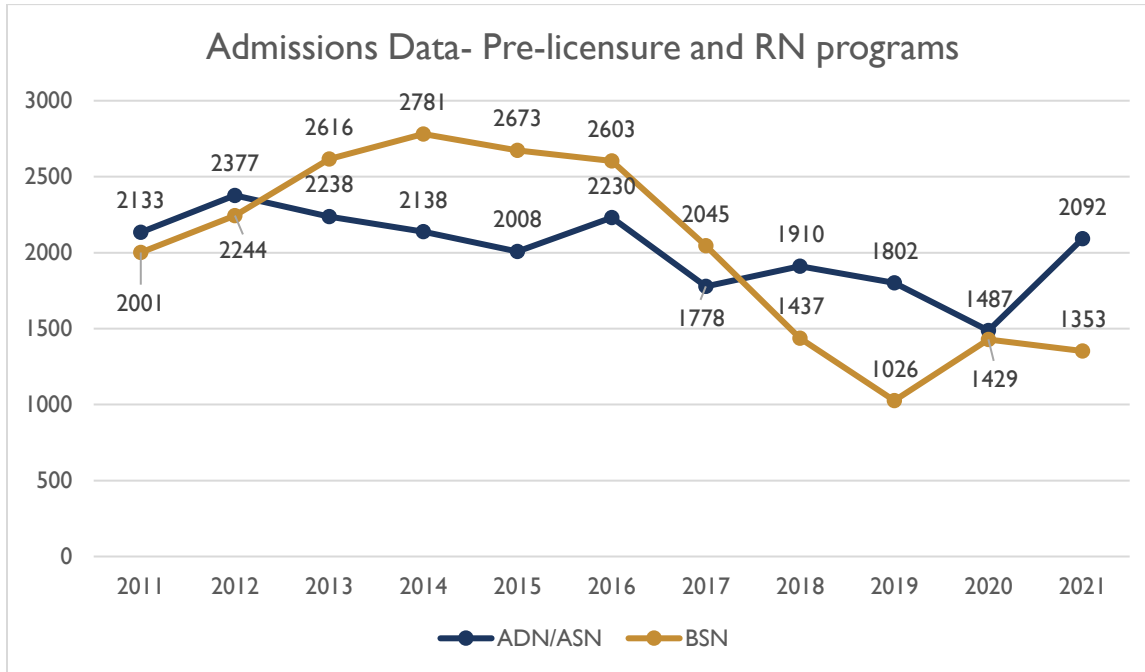
## Admissions Data- Post Masters Certificate

Post-master's certificate programs allow master's-prepared nurses to expand their practice role and obtain an advanced practice certification. There is a noted peak in admissions in 2017 of 211 students. Between 2019 and 2020, there was a 52.5% decrease in admissions.



## Admissions Data- Pre-licensure RN programs

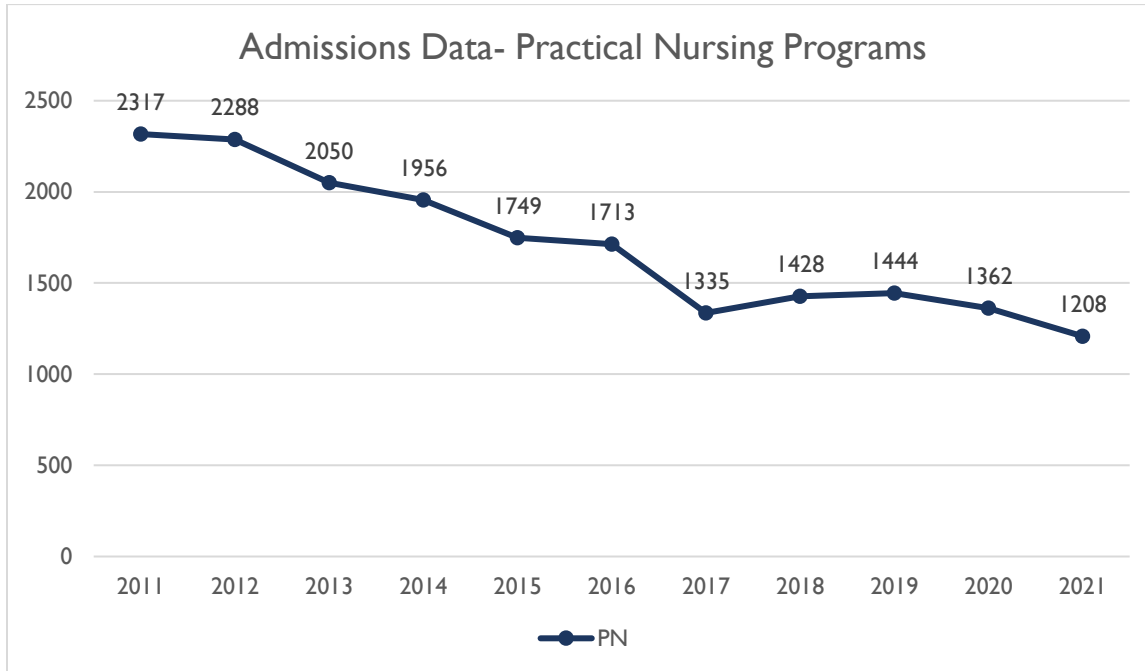
Pre-licensure RN programs during 2011-2021 fluctuated in admissions. There was a decrease in admissions of ADN/ASN programs of 1.9% and a 32.3% decrease in BSN programs. Many factors impact this data such as: global pandemic, economic factors, ladder versus stand-alone programs, and the Future of Nursing report encouraging BSN degrees.





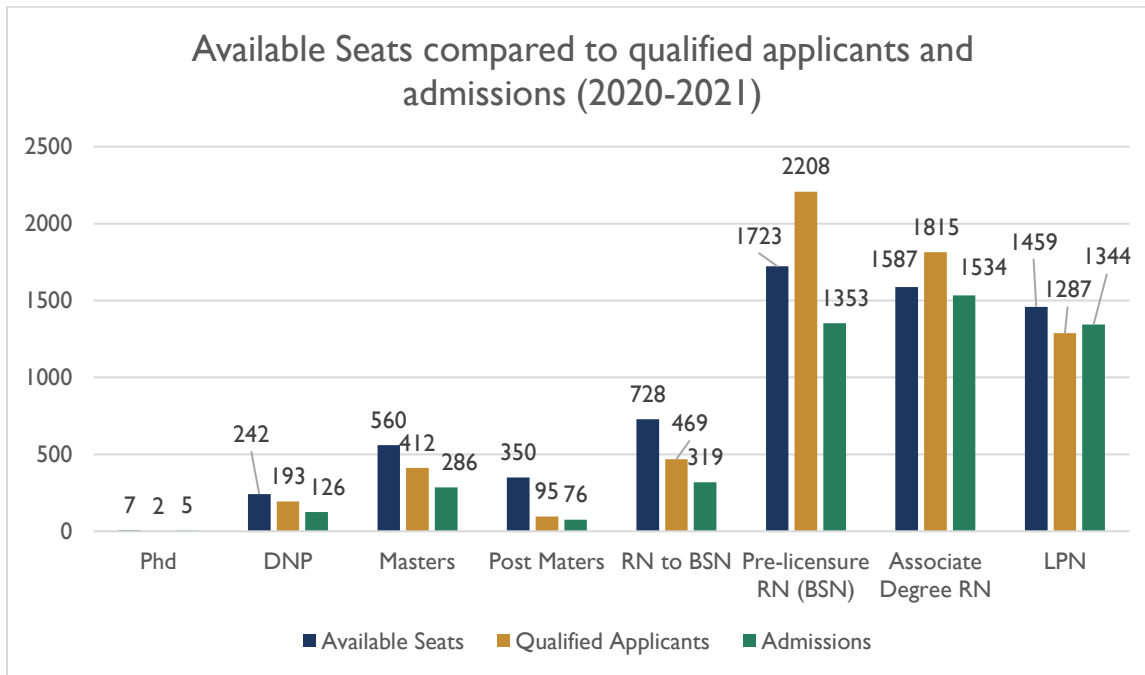
## Admissions Data- Practical Nursing Programs

Practical Nursing programs admissions during 2011-2021 have experienced a 41.2% decrease. Many factors impact this data such as: global pandemic, economic factors, and ladder versus stand-alone programs.



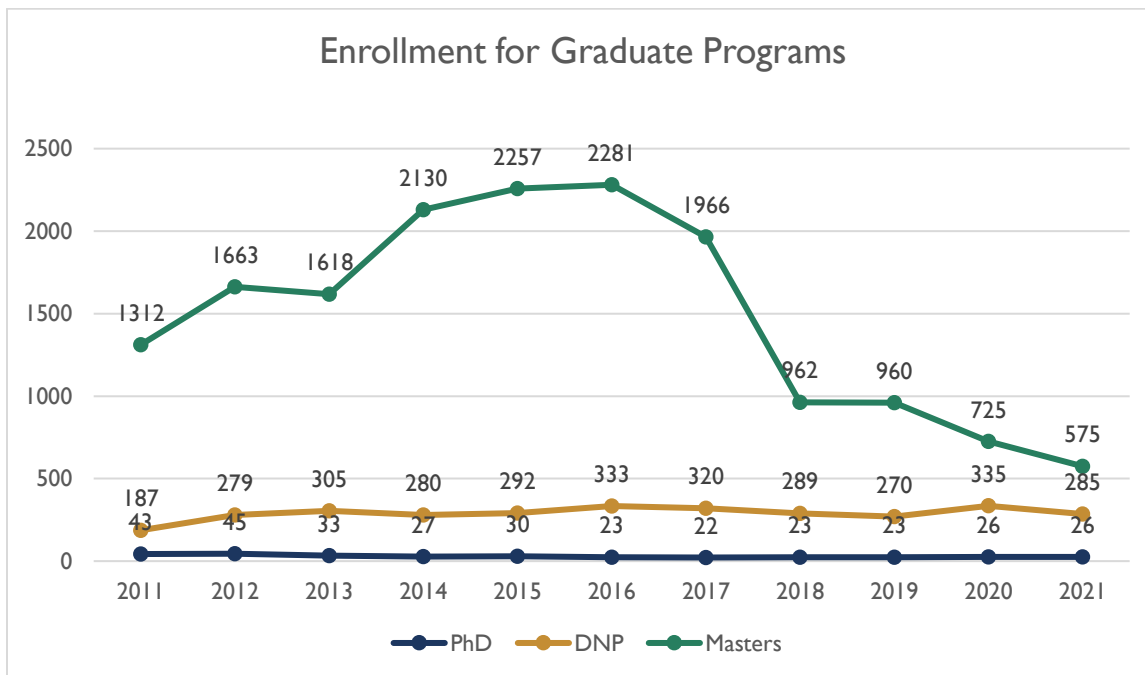
## Available Seats compared to qualified applicants and admissions

Available seats, qualified applicants, and admissions measure the capacity of the nursing programs in the state of Iowa to accommodate prospective nursing students. In the past, this was referred to as a “waitlist”. The data indicates that Iowa has available seats in all programs compared to admissions, with the exceptions of Pre-licensure RN and Associate Degree programs. Factors that impact these numbers include clinical site availability, faculty numbers, and population density.



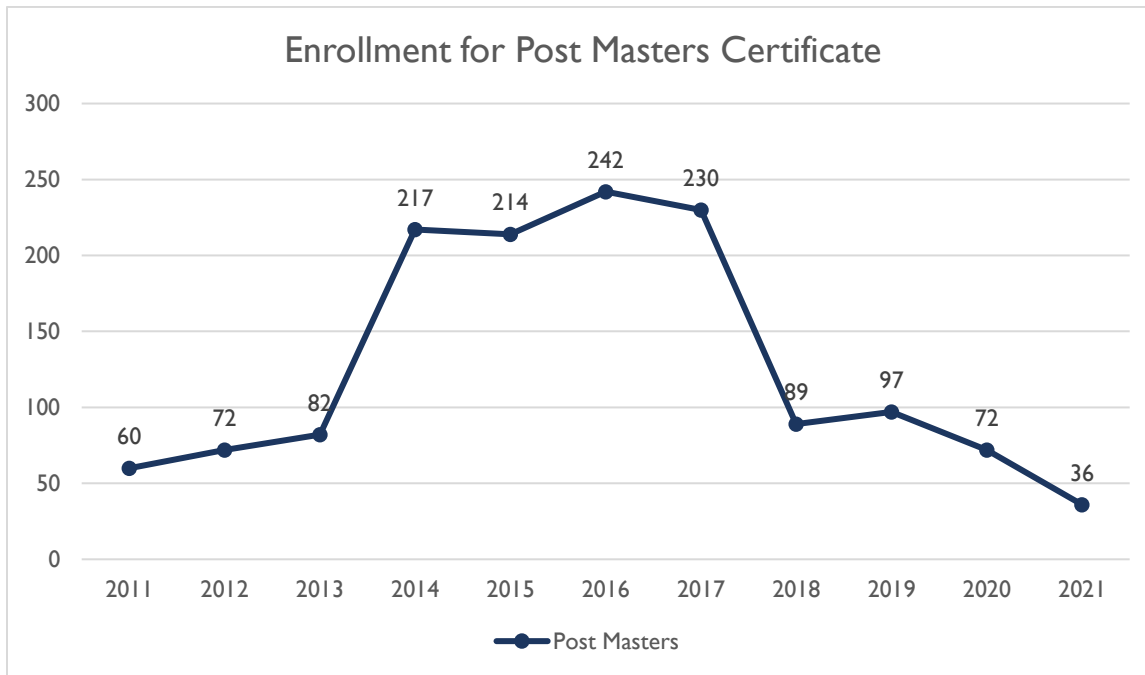
## Enrollment for graduate programs

Enrollment data shows the number of students that have met admission requirements, been accepted into the program, and are taking nursing courses as of October 15<sup>th</sup> of the reporting year. Graduate program enrollment has fluctuated in numbers, and master's programs show the largest decrease. In 2018, there was a change in the reporting methods, and schools based outside of Iowa no longer report this data to the Iowa Board of Nursing, but report to their state of residence.



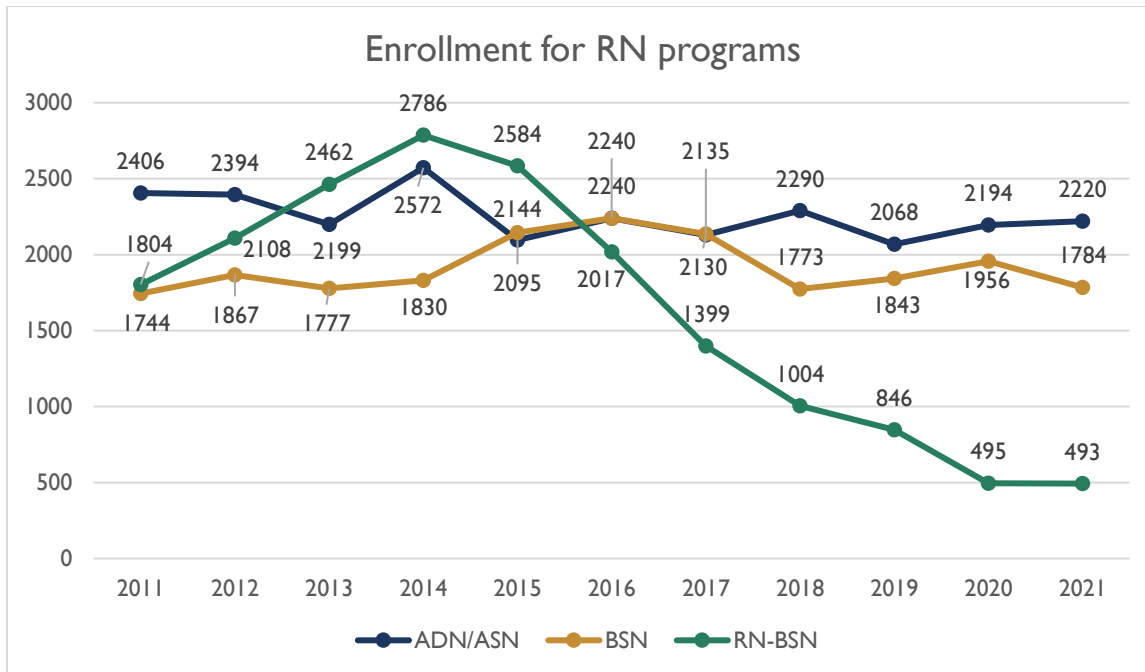
## Enrollment for post masters Certificate

Enrollment data for a post-masters certificate fluctuated in numbers with the largest percent decrease of 61.3% from 2017 to 2018. In 2018, there was a change in the reporting methods and schools based outside of Iowa no longer report this data to the Iowa Board of Nursing, but report to their state of residence.



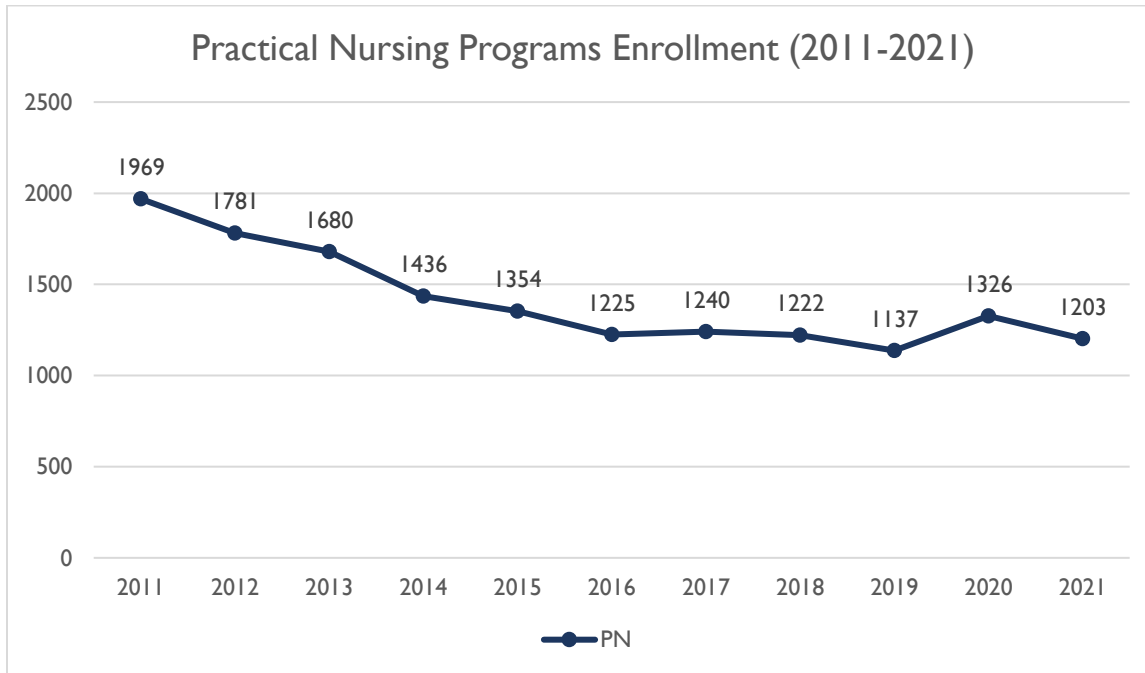
## Enrollment for RN programs

During the 2020-2021 school year, 4,497 students were enrolled in Iowa's RN programs, with a noted 24.5% decrease since 2011. In 2016, there were equal amounts of ADN/ASN students and BSN students. Since 2016, enrollment in BSN programs has seen a 20.3% decrease, with an upswing between 2019 and 2020.



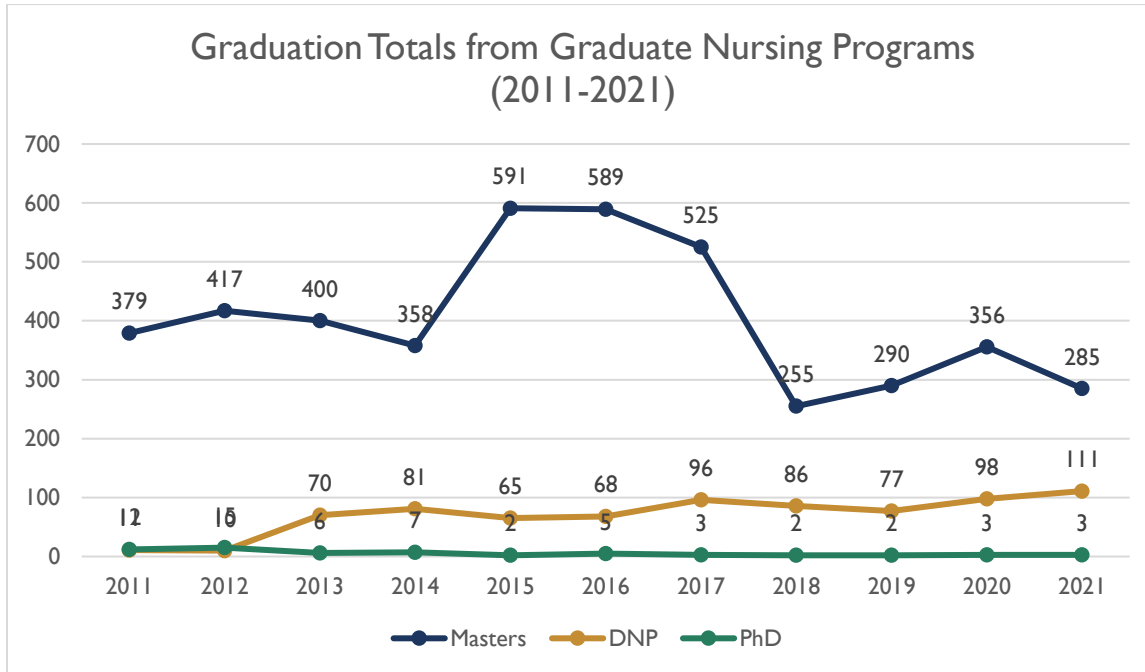
## Enrollment for PN

Practical nursing programs in Iowa saw a 38.9% decrease in enrollment since 2011. There was a noted 16.6% increase in enrollments from 2019 to 2020.



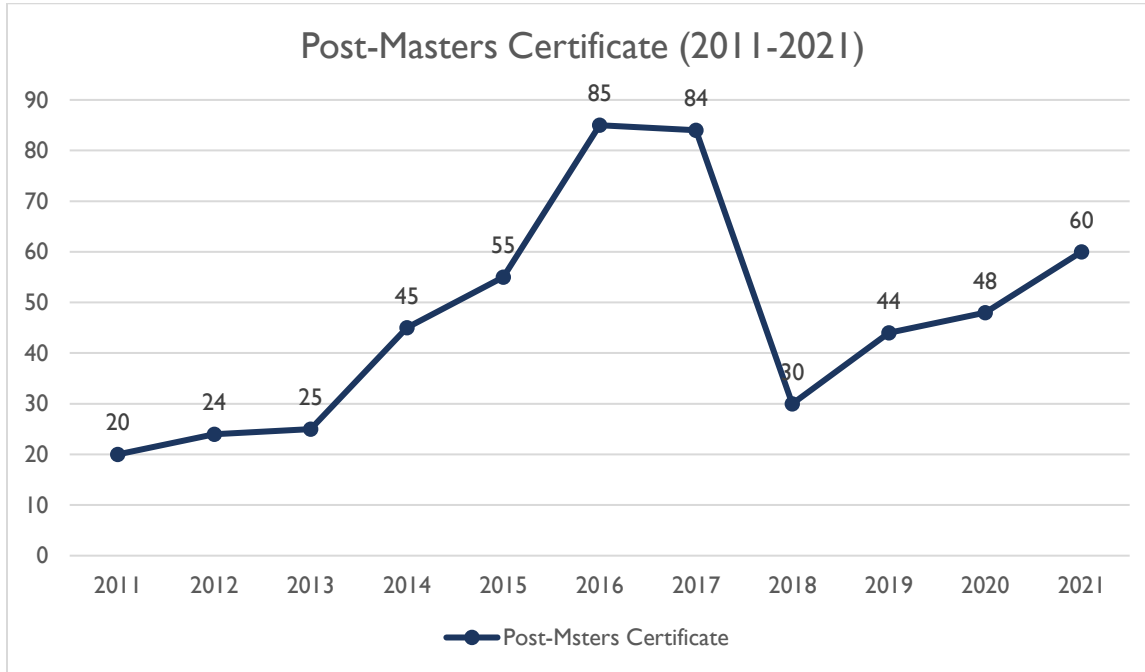
## Graduation totals from graduate programs

Over the past ten years there have been fluctuations in the graduation rates of graduate programs. The most significant changes were from 2014 to 2015 with a 65.1% increase, and then in 2017 to 2018, a 51.4% decrease. Overall, there was a 24.8% decrease in graduation rates.



## Graduate- Post Master's certificate

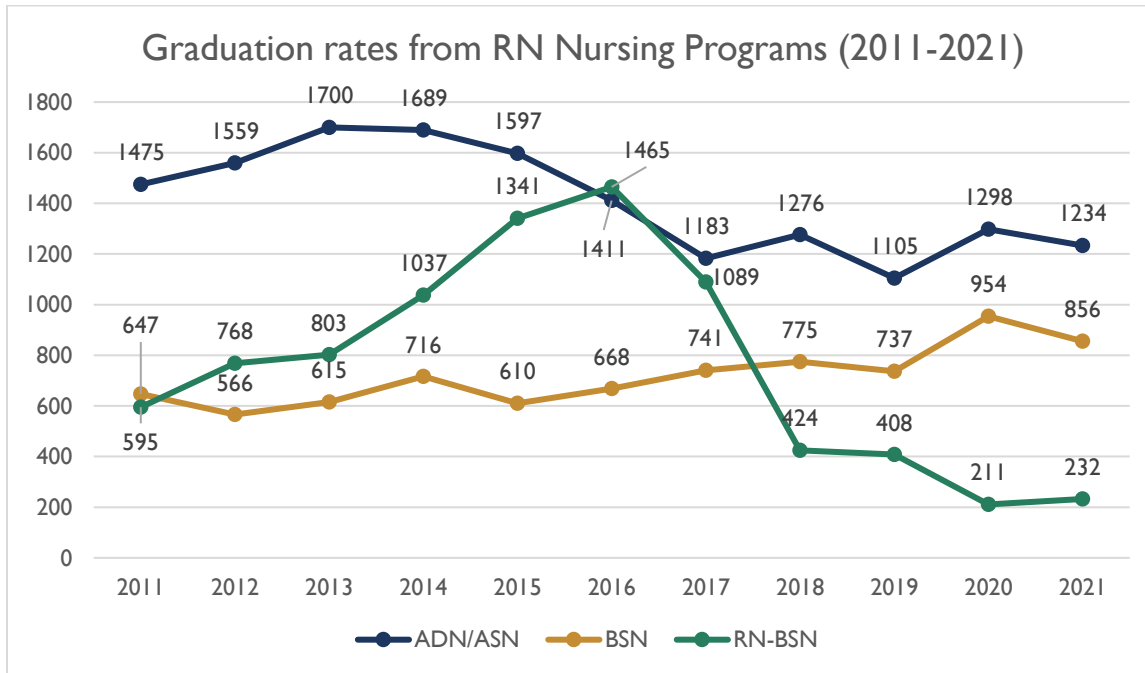
Post master's certificate programs allow nurses with advanced degrees to expand their skill set. Overall, there was a noted 200% increase in graduates, with the largest between 2015 and 2016 at 54.5%. The largest decrease happened between 2017 and 2018 at 64.3%.





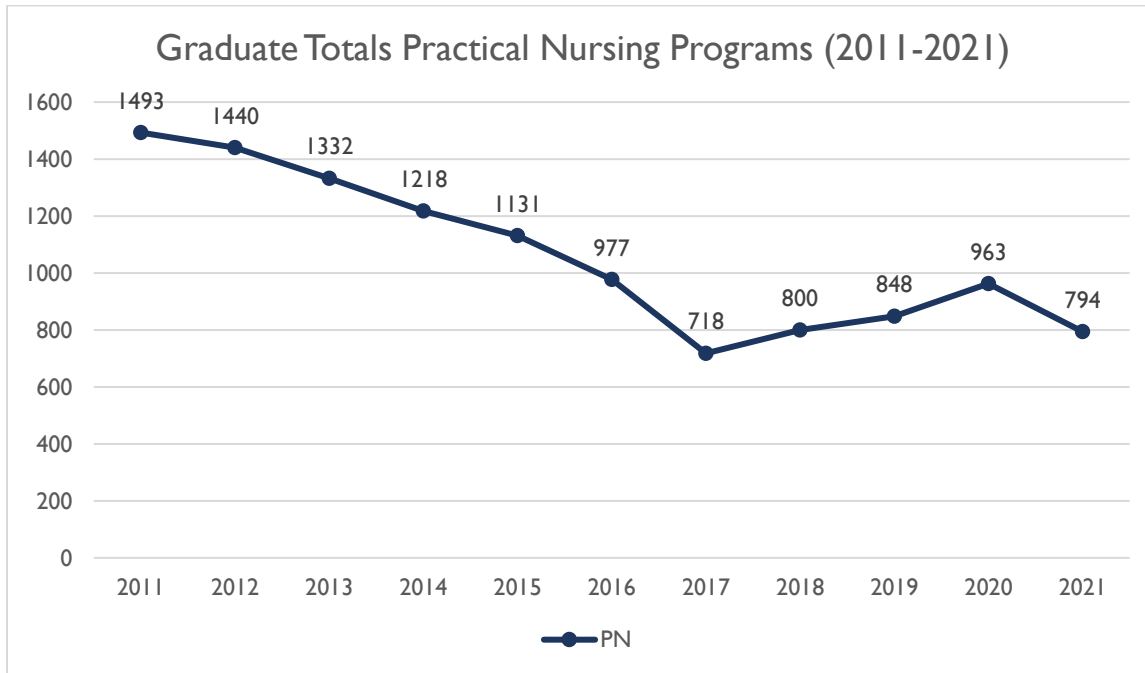
## Graduate totals pre-licensure RN

During the 2021 academic year, there were 2322 students that graduated from Iowa's RN programs. This represents a 34.5% decrease from 2015 of 3548, and 2021 of 2322 graduates.



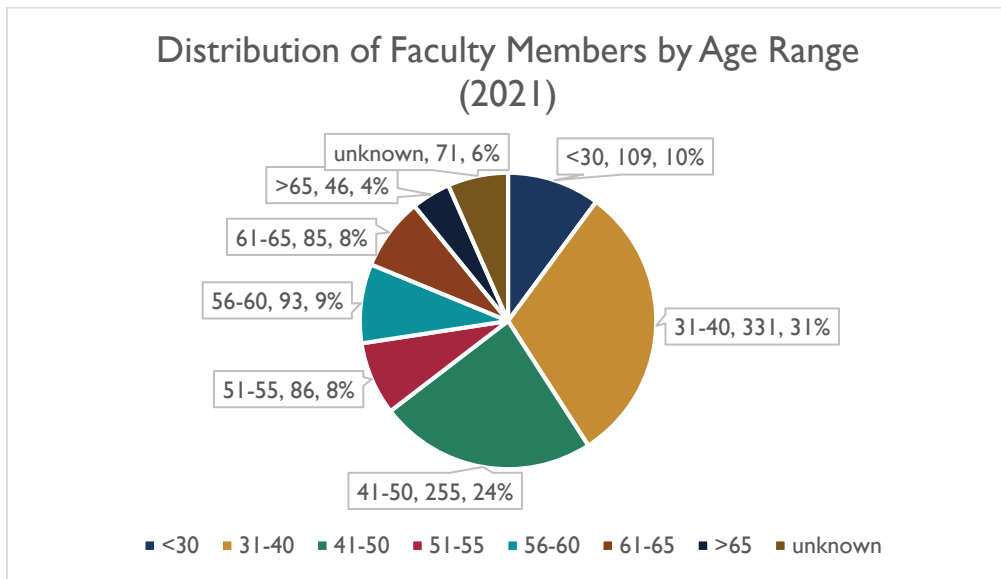
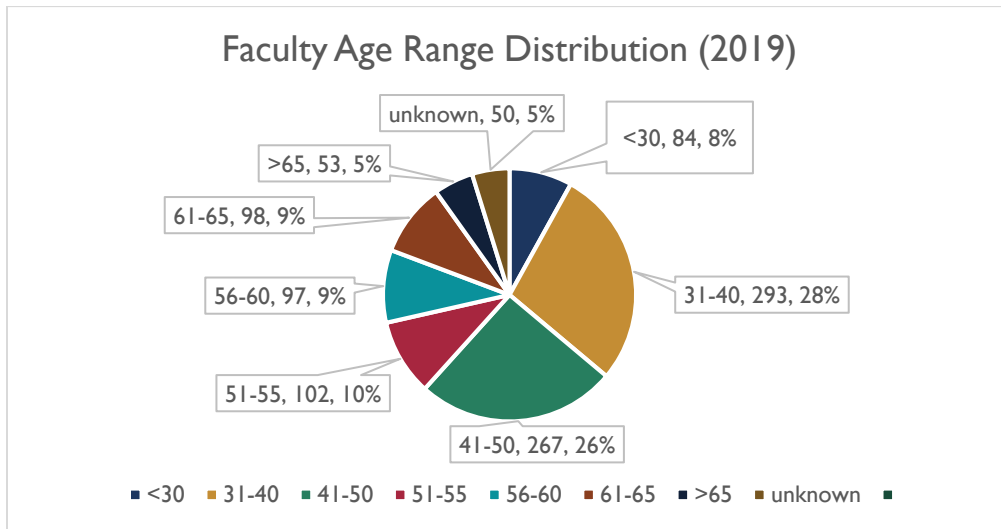
## Graduate totals PN programs

During the last ten years, there has been 46.8% decrease in the number of graduates from the practical nursing programs. There was a noted 13.6% increase between 2019 and 2020.



## Faculty age range distribution

In 2019, faculty members under the age of 50 years of age comprised 62% of the total number of faculty in Iowa's nursing programs. In 2021, there was a slight increase to 65% of faculty under the age of 50.



**Conclusion: State vs Nation (2019 – 2020 or otherwise noted)**

<b>Demographic Variables*</b>	<b>Iowa</b>	<b>Nation</b>
Total Active Nurse Licensees (RN & LPN)*	71,036	4,198,031
Registered Nurses per 100,000 Population**	1.86	1.55
Percent Change in Active RN licenses (2017-2019)*	+14.0%	+ 6.3%
Percent Change in Active LPN licenses (2017-2019)*	-20.2%	+2.6%
RNs 39 and Younger *, **	39.5%	27.9%
RNs 50 and Older*, **	40.4%	53%
LPNs 39 and Younger*, **	41%	25.6%
LPNs 50 and Older*, **	36.7%	52.9%

**References:**

\*Iowa Board of Nursing Annual Report July 2021 – June 2022 retrieved from: [https://nursing.iowa.gov/sites/default/files/2022\\_annual\\_report\\_final.pdf](https://nursing.iowa.gov/sites/default/files/2022_annual_report_final.pdf)

\*National Data: The 2020 National Nursing Workforce Survey, Journal of Nursing Regulation Vol. 12/supplement April 2021.

\*\*2018 National Sample Survey of Registered Nurses retrieved from: <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/state-profiles/iowa-2018.pdf>

\*\*Gooch, K., & Plescia, M. (2022). RN Population per capita, by State. Retrieved from: <https://www.beckershospitalreview.com/workforce/rn-population-per-capita-by-state.html>

## 2020-2021

Education Variables	Iowa	Nation
RNs with Baccalaureate Degree or Higher*, **	58.8%	65.2%
Passing Rate for First-Time Test Takers of NCLEX, RNs (2020) *, **	88.18%	87.07%
Passing Rate for First-Time Test Takers of NCLEX, LPNs (2020) *,**	95.6%	85.63%
Enrolled within any Baccalaureate Program*,***	78.3%	65.5%
Enrolled within any RN-BSN Program*,***	21.7%	34.5%
Enrolled within a Master's Program*,***	18.2%	26.3%
Enrolled within DNP Program*,***	9%	6.8%
Graduated from any Baccalaureate Program*,***	78.7%	54.3%
Graduated RN-BSN Program*,***	21.3%	45.7%
Graduated from a Master's Program*,***	19.2%	24.1%
Graduated from a DNP Program*,***	7.5%	4.3%

### References:

\*Iowa Board of Nursing Annual Report July 2021 – June 2022 retrieved from:  
[https://nursing.iowa.gov/sites/default/files/2022\\_annual\\_report\\_final.pdf](https://nursing.iowa.gov/sites/default/files/2022_annual_report_final.pdf)

\*National Data: The 2020 National Nursing Workforce Survey, Journal of Nursing Regulation Vol. 12/supplement April 2021.

\*\*July 2020 U.S. Census Data and National Council State Boards of Nursing, Nursys.

\*\*\*AACN National Report