

NURSING TRENDS

NURSE LICENSEES AND NURSING EDUCATION IN IOWA

ACADEMIC YEARS 2015-2016, 2016-2017 & 2017-2018

RELEASED JULY 2019



A publication of:



IOWA CENTER FOR
NURSING
WORKFORCE

A Publication of:



MISSION STATEMENT

The Iowa Center for Nursing Workforce exists to support a dynamic, well-prepared and diverse nurse workforce to meet the health and wellness needs of Iowans.



MISSION STATEMENT

The mission of the board is to protect the public health, safety and welfare by regulating the licensure of nurses, the practice of nurses, nursing education and continuing education.

For more information contact:

Iowa Center for Nursing Workforce

Laura Hudson, MSN, RN
Associate Director—Workforce
515.201.2509
laura.hudson@iowa.gov

<https://nursing.iowa.gov/home/iowa-center-nursing-workforce>

Iowa Board of Nursing

Kathy Weinberg
Executive Director
515.281.3256
kathy.weinberg@iowa.gov

<https://nursing.iowa.gov>

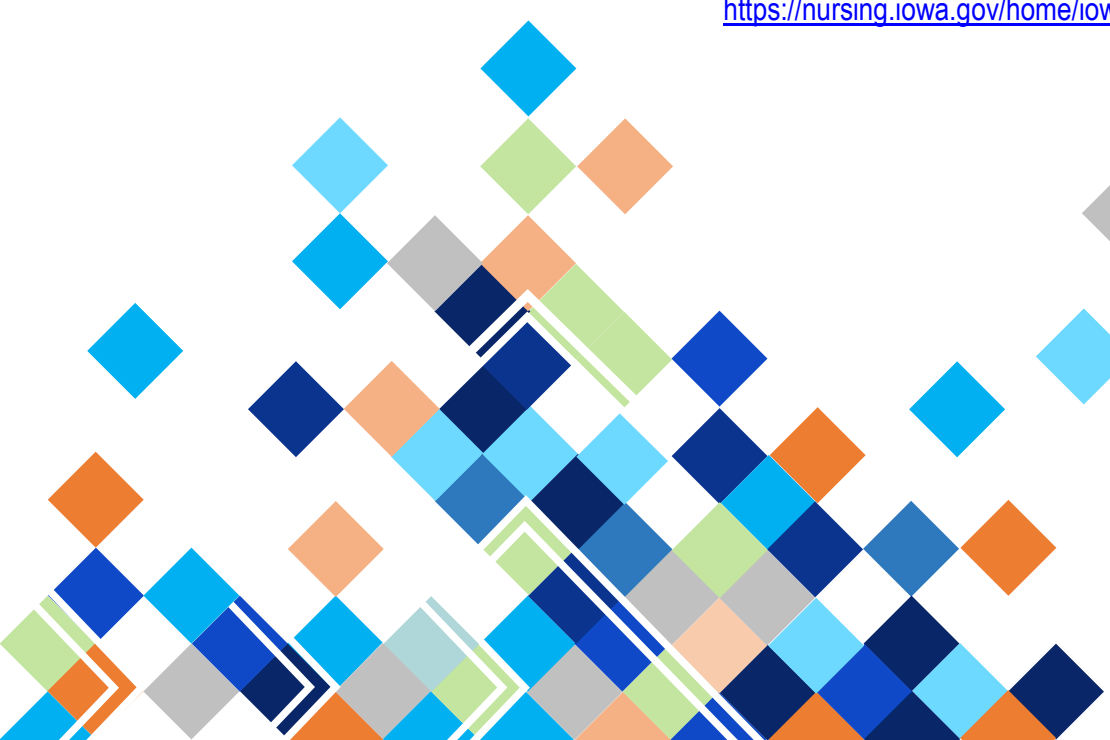
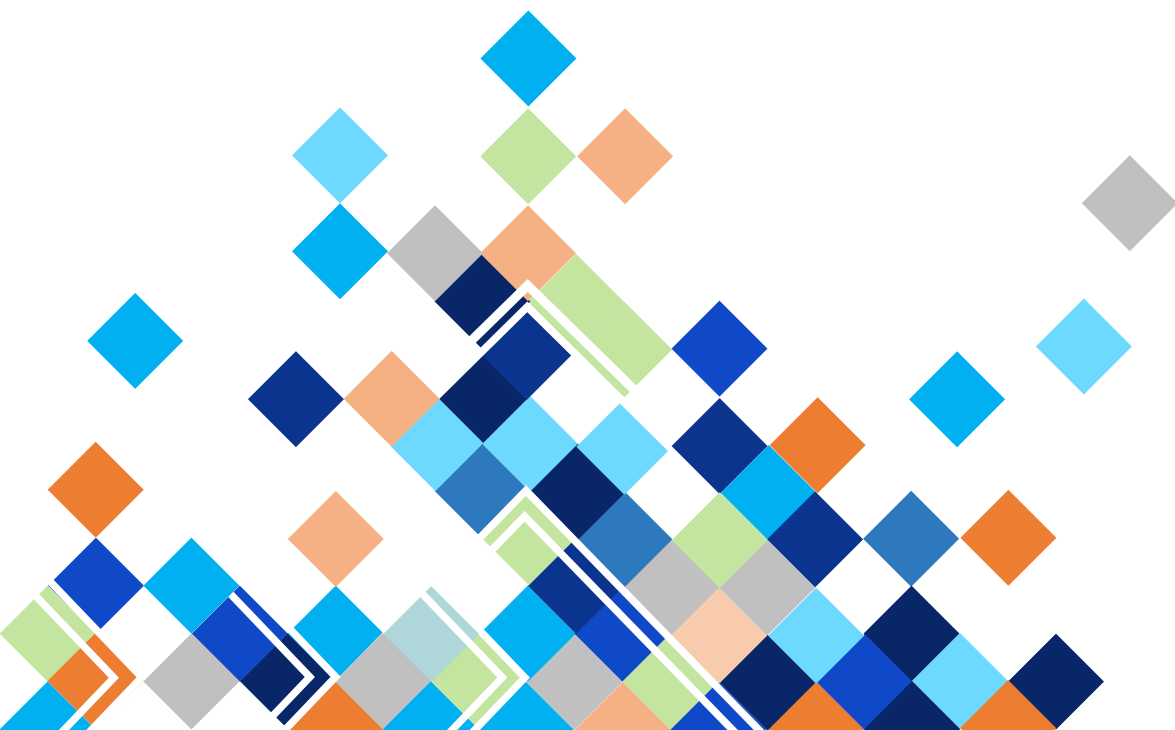


TABLE OF CONTENTS

INTRODUCTION AND METHODOLOGY	3
NURSING SUPPLY	5
Active Licenses	5
Active Population	6
Age Range of Licensees	7
Education of Licensees	9
NURSING EDUCATION	14
Nursing Education Programs	14
Admission Data	15
Wait List Data	19
Enrollment Data	20
Graduation Data	24
Faculty Data	28
CONCLUSION	29





INTRODUCTION AND METHODOLOGY

According to the Health Workforce Simulation Model used by the Health Resources and Services Administration (HRSA) and released in their report titled “Supply and Demand Projections of the Nursing Workforce: 2014—2030,” from a national perspective HRSA states: “looking at each state’s 2030 RN supply minus their 2030 demand reveals both state-level shortages and surpluses” (U.S. Department of Health and Human Services, 2017, pg. 9). For Iowa and the Midwest region, in all but one state, the RN supply is projected to outpace demand (pg. 9). The LPN supply is projected to outpace demand in Iowa, although several other states in the Midwest show levels of inadequate supply by 2030. A limitation of the HRSA model is that it operates under the assumption that supply and demand are equal in the baseline year of 2014.

As of the distribution of this report, there are now widespread reported pockets of nursing workforce shortages in Iowa; though, there is no single source of demand data in the state to support these claims. Iowa’s *Nursing Trends* report focuses on the supply side of the equation, which shows that there are more actively licensed nurses in the State than at any other time in Iowa’s history. However, in the 2017—2018 school year, Iowa’s schools of nursing reported a decrease of over 7 percent from the 2015 school year in pre-licensure nursing student graduations for associate degree and BSN degrees, combined.

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 are required to 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.

Overview of data provided in this report:

- Based on active Iowa nurse licensees.
- Licensees may or may not be actively employed in Iowa.
- The report is a high level analysis of trends in workforce and available nursing education programs in Iowa.
- Unless otherwise noted, data is reported for the last 11 years (2008 – 2018).
- Nursing education programs are counted separately by site and type. In some instances, more than one site may share administration, a common philosophy, curriculum, and faculty.
- Charts have been abridged for comparison of the most recent years. Data is available in its entirety from 1986.
- Licensees are not required to update workforce information between renewals.

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. 2017. National and Regional Supply and Demand Projections of the Nursing Workforce: 2014-2030. Rockville, Maryland.



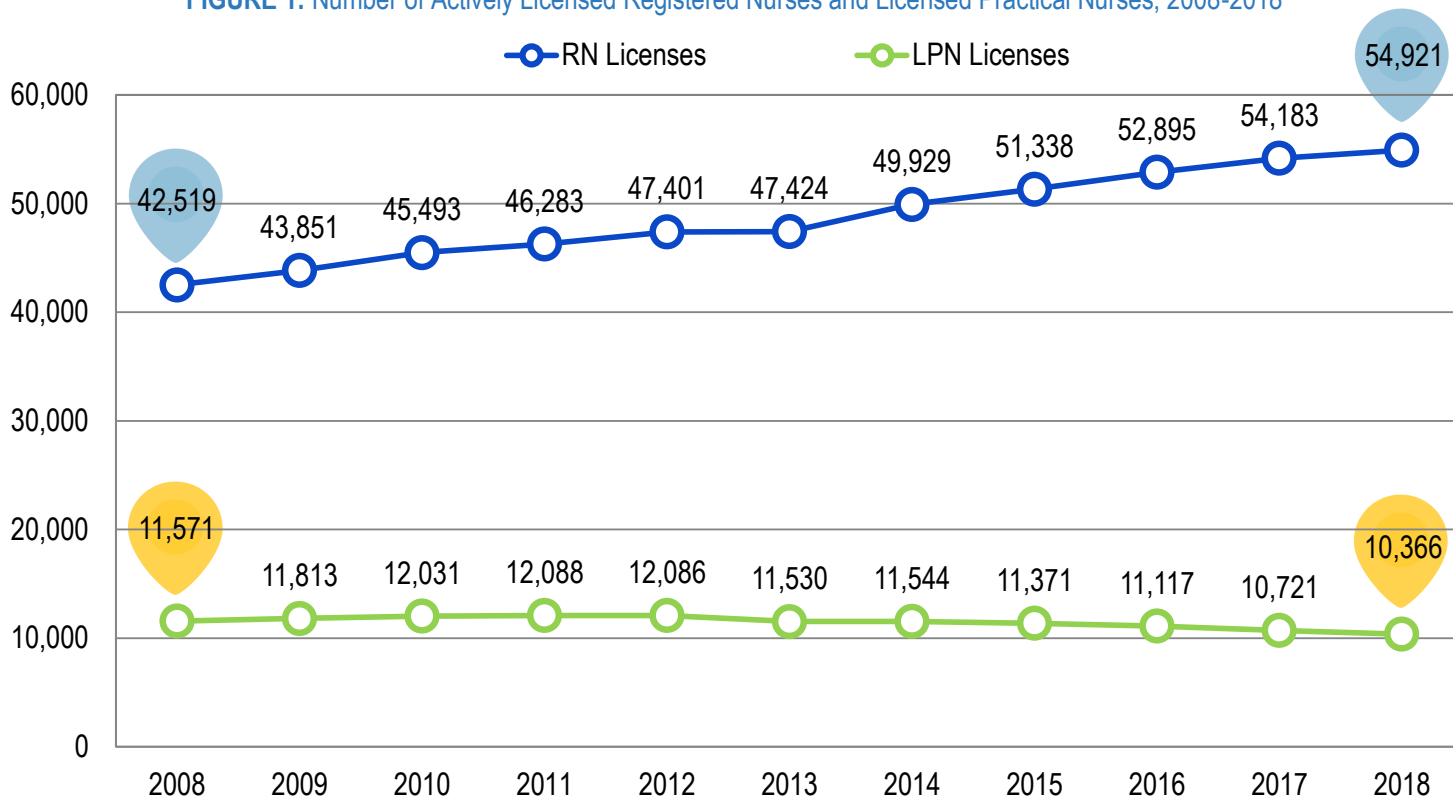
NURSING SUPPLY

ACTIVE LICENSES

The following charts are prepared using the Iowa Board of Nursing annual reports from 2008 to 2018. The graphs illustrate trends in Iowa and provide a basis of comparison for Registered Nurse (RN) and Licensed Practical Nurse (LPN) data.

Note: In Iowa, nurses may hold RN and LPN licenses concurrently. For this reason, the categories are not mutually exclusive on the following charts.

FIGURE 1: Number of Actively Licensed Registered Nurses and Licensed Practical Nurses, 2008-2018



The number of active RNs in Iowa steadily increased from 42,519 in 2008 to 54,921 in 2018. Resulting in an overall growth of 29.2 percent or a net gain of 12,402.

From 2008 to 2011, the number of active LPNs increased from 11,571 in 2008 to 12,088 in 2011, a net gain of 517. This represented a growth rate of 4.4 percent. However, since 2011 there has been an overall decrease in the number of active LPN licenses of 1,722; though there was a slight uptick of 14 active licenses between 2013 and 2014.

Note: The original Nurse Licensure Compact (NLC) became effective in Iowa on July 2, 2000. The enhanced NLC became effective on January 1, 2018. For information about the multi-state licensure compact, visit the Iowa Board of Nursing website at: nursing.iowa.gov

More than a

29% increase in active RNs

COMPARED TO

10% decrease in active LPNs

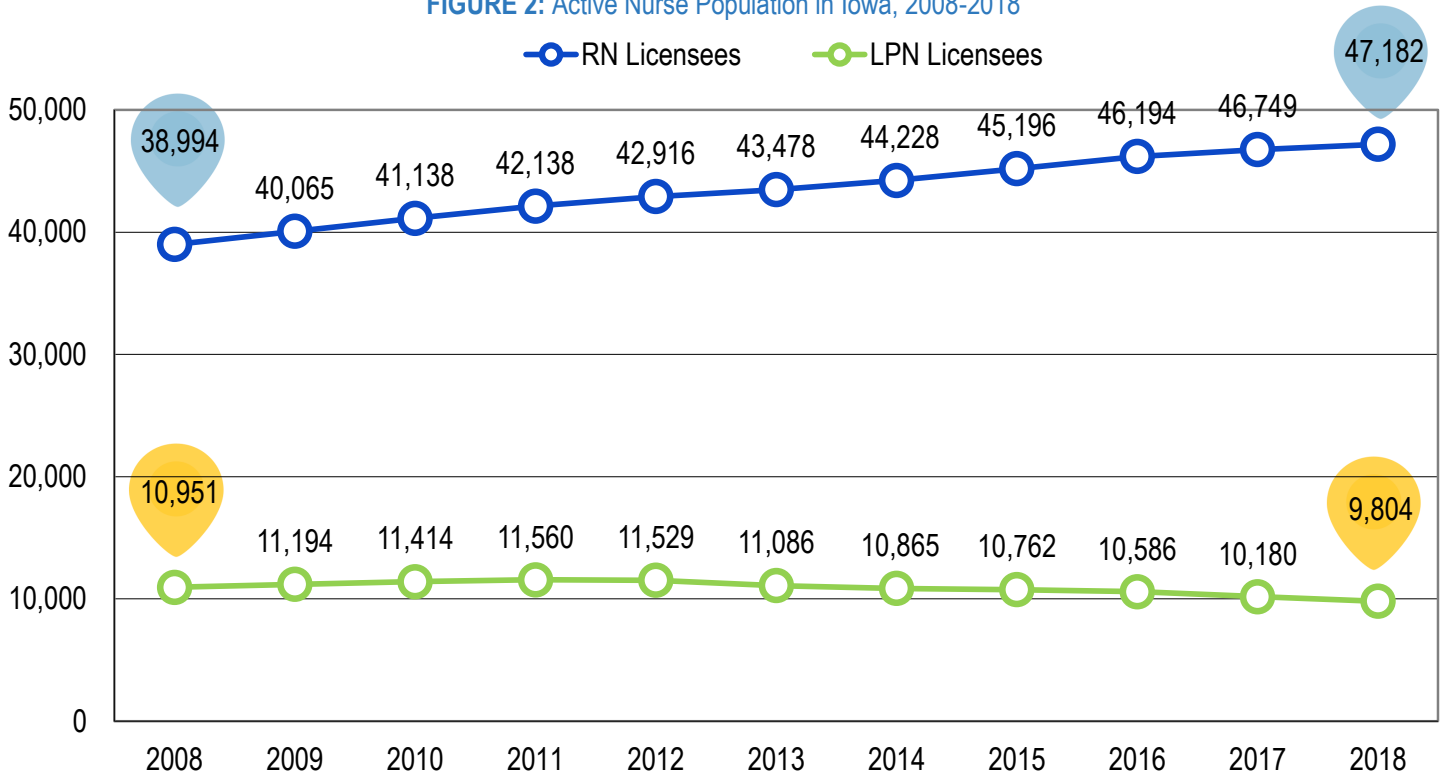
(2008 - 2018)

ACTIVE POPULATION

The following chart shows the population of active nurses in Iowa. The number of RN Iowa residents has steadily increased each year between 2008 and 2018. Over the course of this eleven-year time frame the total number of active RN residents increased by 21 percent.

During this same time period, from 2008 to 2011, the number of LPN residents in Iowa increased. However, since 2011 the total number of active LPN residents has experienced a decline of 15.2 percent.

FIGURE 2: Active Nurse Population in Iowa, 2008-2018



Active RN residents **INCREASED** by about
12% COMPARED TO A DECREASE
of over **15%** among active LPN residents
(2011 - 2018)

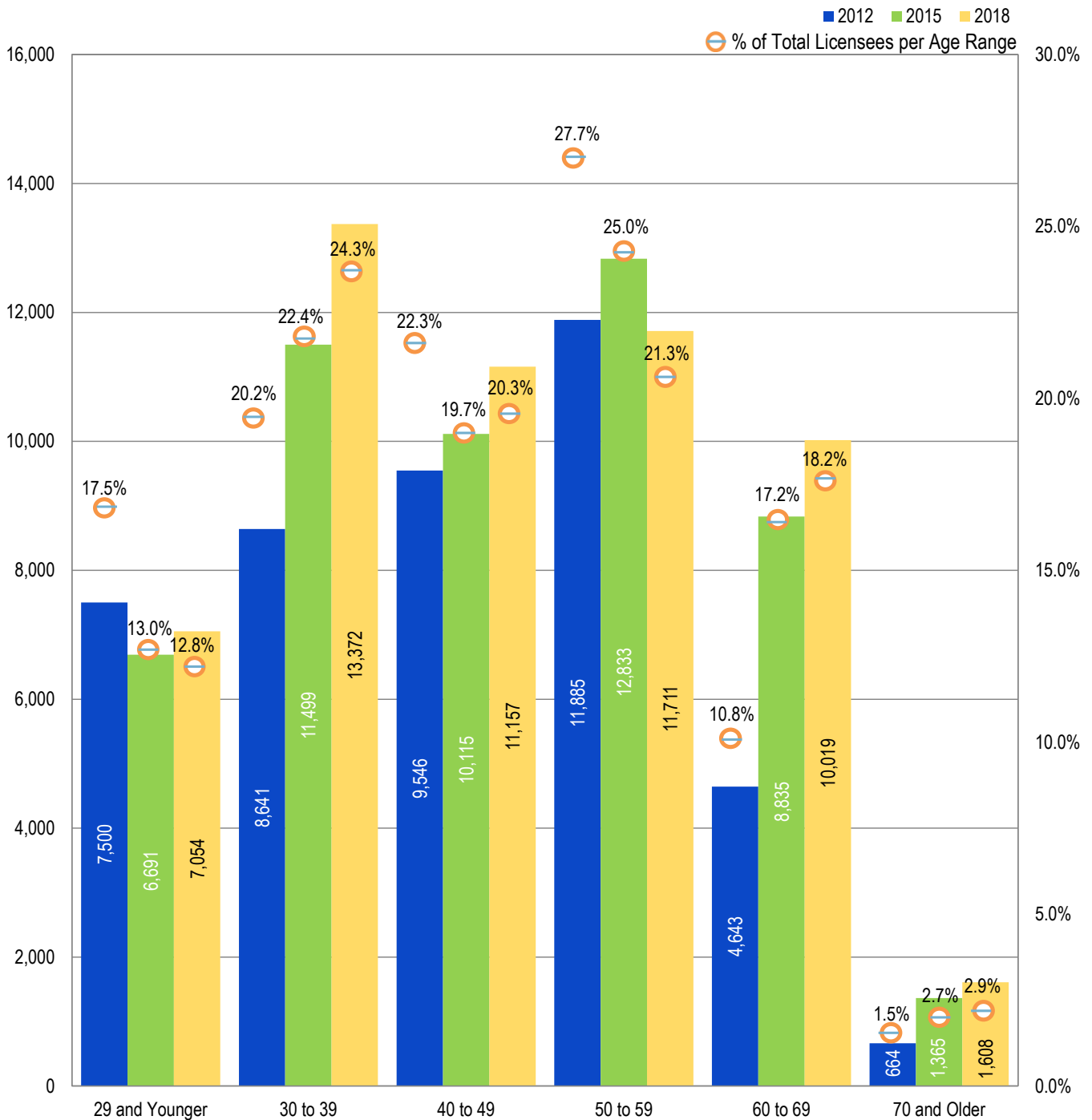
AGE RANGE OF LICENSEES

The following chart illustrates the total number of RN licensees by age range and also gives the percentage of total licensees by age range. There has been a steady increase in the number of licensees aged 39 and under with 37.1 percent of all RN licensees within this age group in 2018.

Not quite half (41.6%) of all RN licensees fall within the 40 to 59 age group. In 2018, the largest cohort of RNs was in the 30 to 39 range (24.3%) and those in the 50 to 59 year age range has dropped to 21.3%.

Licenses are renewed every three years. This illustration shows a glimpse of three licensure cycles for the years 2012 through 2018.

FIGURE 3: Number and Percentage of RN Licensees by Age Range (2012, 2015, & 2018)



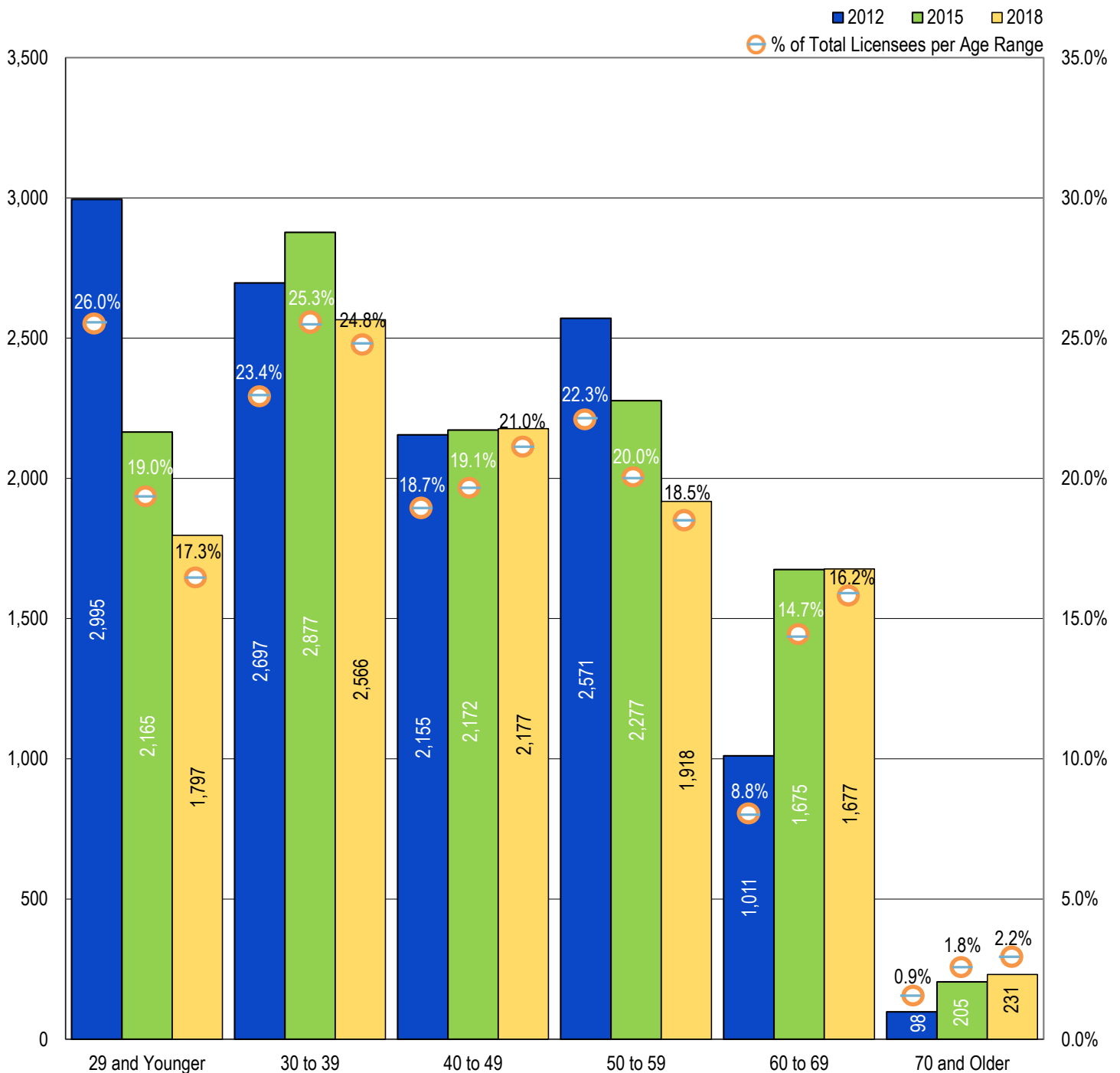
The chart below shows the total number of LPN licensees by age range and also gives the percentage of total licensees by age range.

A significant increase in the number of LPN licensees aged 39 and under has resulted in approximately 42.1 percent of all licensees falling within this age group. This outpaces the 40 to 59 age group which makes up 39.5 percent of all LPN licensees.

In 2018, the largest cohort of LPNs was within the 30 to 39 year age range (24.8%).

Licenses are renewed every three years. This illustration shows a glimpse of three licensure cycles for the years 2012 through 2018.

FIGURE 4: Number and Percentage of LPN Licensees by Age Range (2012, 2015, & 2018)



EDUCATION OF LICENSEES

The following chart illustrates the total number of active licensees and the original RN graduate award level.

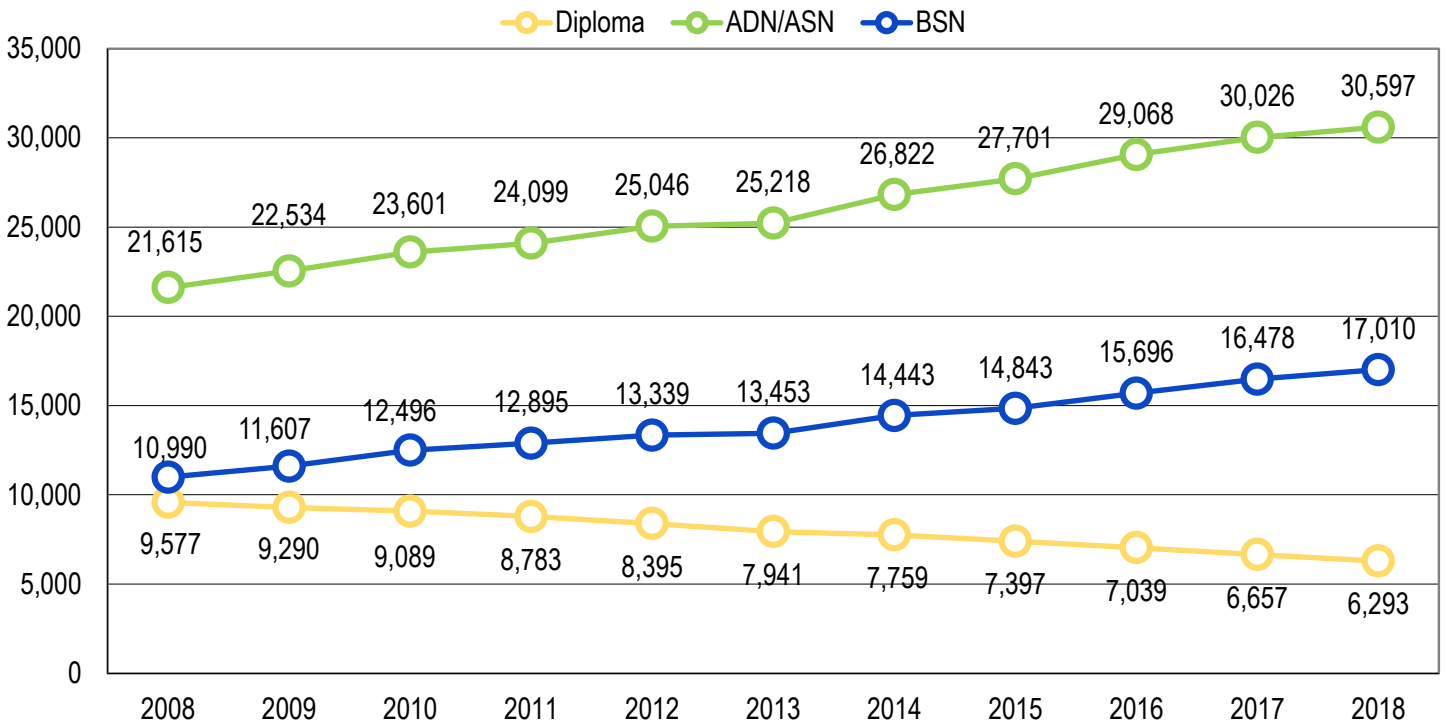
Diploma programs were nursing programs associated with a hospital or medical facility. Diploma numbers continue to decline following the closing of the last Iowa diploma program in 1999, and the retirements of nurses who attended the diploma programs.

The number of Associate Degree in Nursing/ Associate of Science in Nursing (ADN/ASN)

graduates and Bachelor of Science in Nursing (BSN) graduates have continued to rise over the last 11 years. However, the total number of graduates from ADN/ASN programs continues to outpace the number who earn a BSN degree upon original licensure.

Since 2008, the number of ADN/ASNs awarded has increased by 41.5 percent while the number of 4-year degrees earned has increased by 54.7 percent.

FIGURE 5: Basic RN Education, Graduates by Award Level (2008-2018)



Total BSN graduates have increased
AT A RATE OVER 13%
GREATER THAN ADN/ASN graduates
 (2008 - 2018)

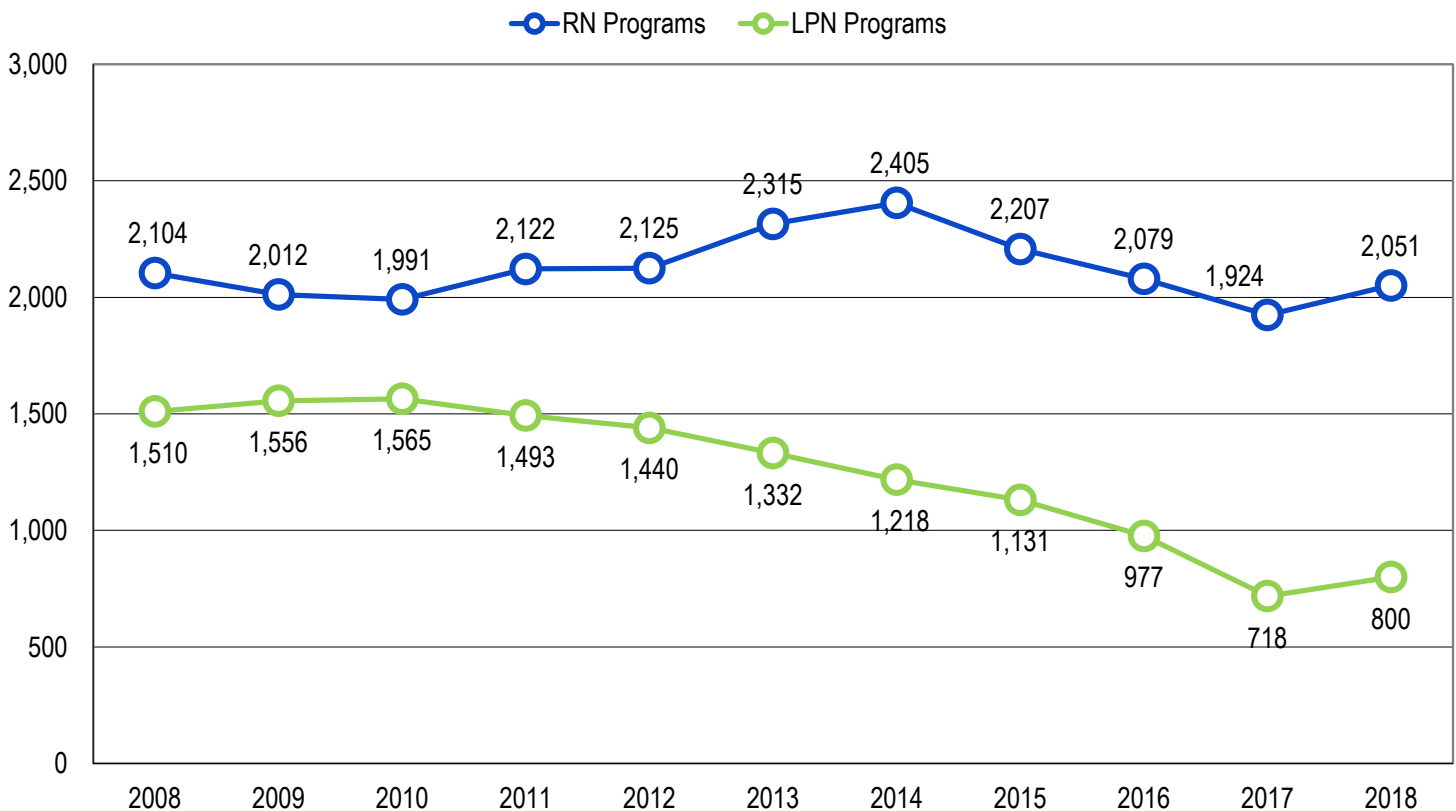
The chart below shows the number of graduates with Iowa's **pre-licensure** nursing programs.

The number of RN graduates increased steadily between 2005 (n = 1,669) and 2008 and then again between 2010 and 2014. In 2015, RN pre-licensure program graduates dropped by 198—for a total percentage decrease of 8.2. This is the first time in five years there has been a decrease in pre-licensure graduates. This may perhaps be due to stricter admission standards at various institutions across the State of Iowa; instituted in 2012 and 2013.

Since 2010, the number of LPN graduates has steadily declined. In 2018, the total number of graduates was 800, a decrease of 7.1 percent from prior the year.

Note: Some nursing education programs at Iowa community colleges are built on a career ladder concept that prepares graduates to apply for LPN licensure upon completion of the first level (year) and RN licensure upon completion of the second level (year).

FIGURE 6: Graduates of Iowa Nursing Education Pre-Licensure Programs (2008-2018)*



*Data collection for RN programs has been modified. Numbers reported here have been revised and may not match data reported previously.

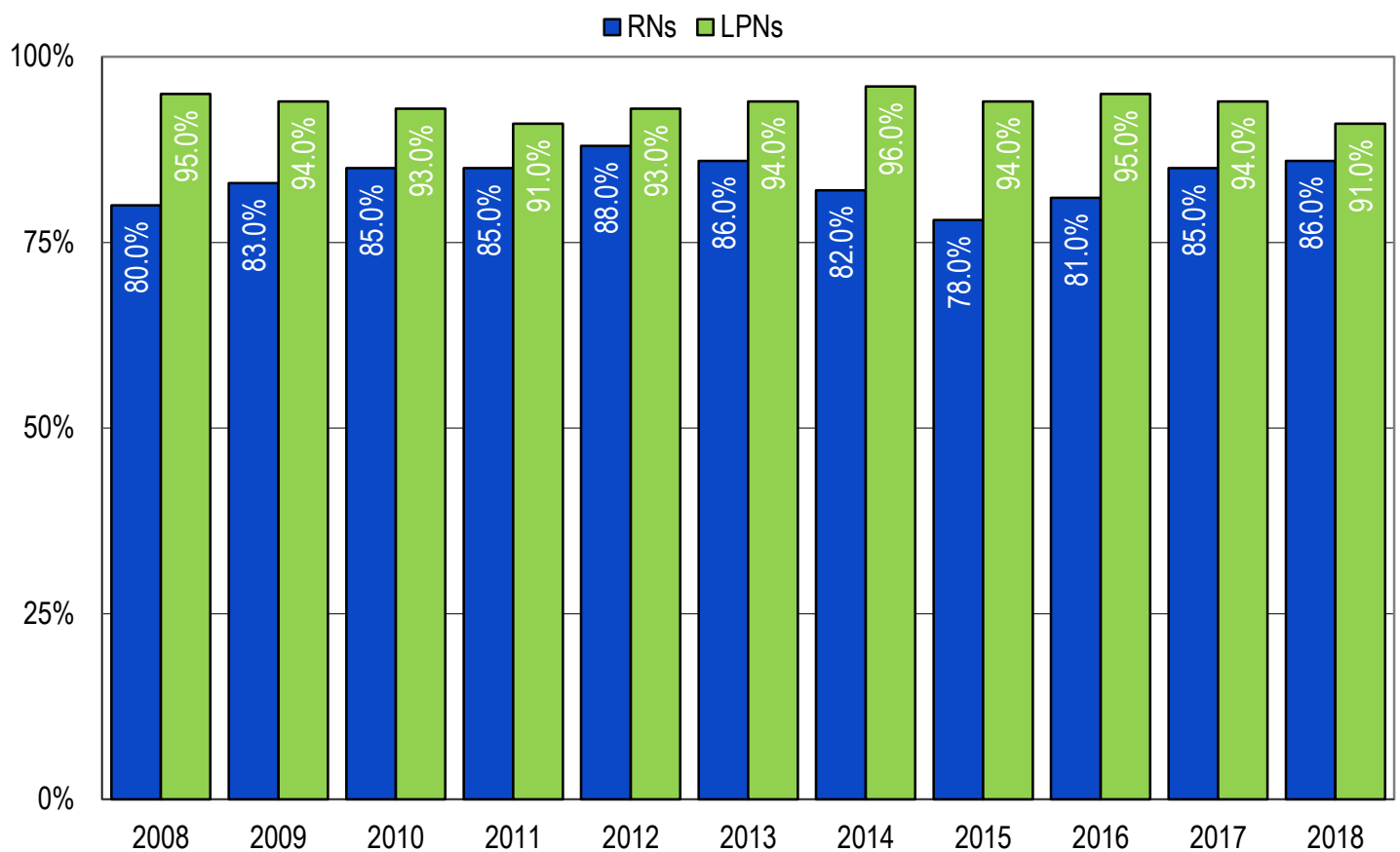
{ In 2015, the total number of RN pre-licensure graduates
DROPPED BY 198, THE FIRST **DECREASE** IN FIVE YEARS }

The following chart depicts the pass rates among graduates of Iowa's nursing programs taking the national licensure examination for the first time, during fiscal year reporting, ending June 30, 2018.

The average pass rate among RNs during the same time period was 83.5 percent.

Throughout the 2008-2018 time period the pass rate among LPNs never dipped below 91.0 percent.

FIGURE 7: First-Time Tester Passing Rates Among Graduates of Iowa Nursing Programs, National Licensure Examination (2008-2018)



FROM 2008 TO 2018,
 THE PASS RATE FOR FIRST-TIME TEST-TAKERS, AMONG LPNs,
 NEVER FELL BELOW **91%**

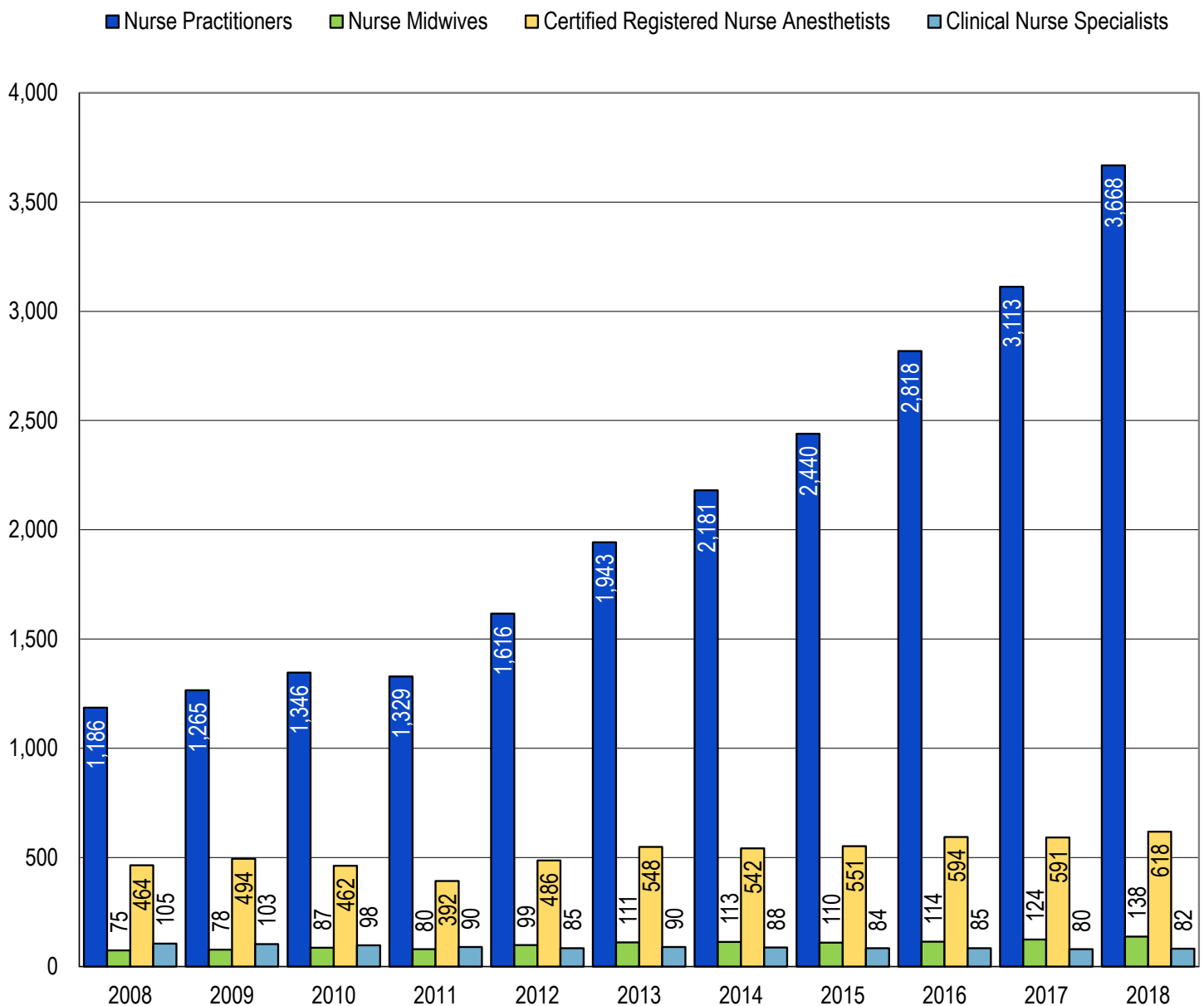
The following chart illustrates the number of Advanced Registered Nurse Practitioners (ARNPs) in Iowa.

Overall, the total number of ARNPs has more than doubled since 2008. The most significant change among ARNPs within the last year was the Nurse Practitioner category which experienced an increase of 555 licenses (2017 to 2018).

Nurse Midwives had a slight increase of 14 licensees and Certified Registered Nurse Anesthetists has an increase of 27 licensees in the same one-year period.

Between 2017 and 2018, the total number of ARNPs increased by 15.3 percent.

FIGURE 8: Advanced Registered Nurse Practitioners in Iowa (2008-2018)



The following chart identifies the highest degree held by active licensed RNs. All degree categories identified by RNs experienced an *overall* increase since 2008 with the exception of diplomas which is a reflection of the absence of diploma nursing programs in Iowa and the aging workforce.

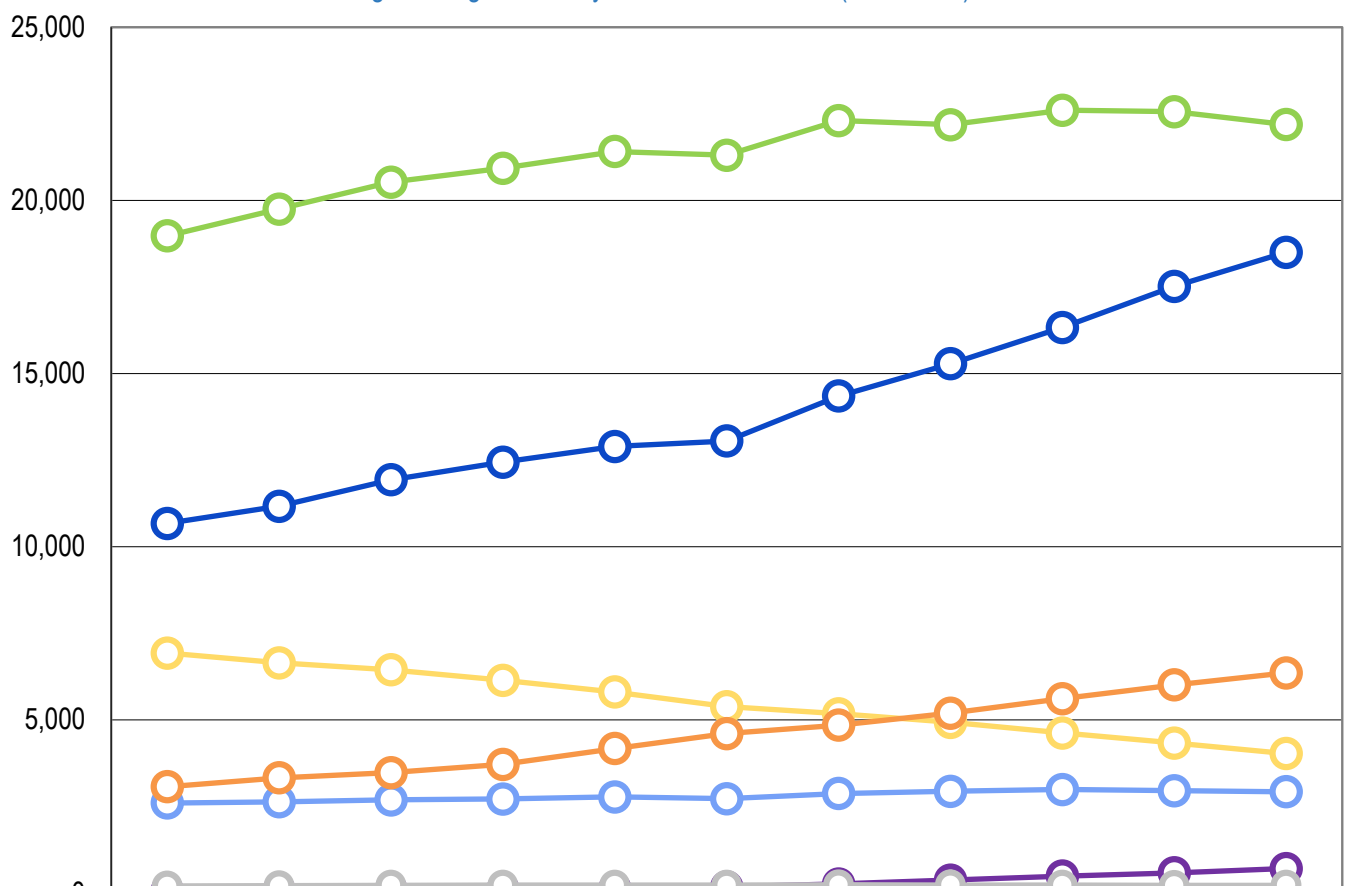
There was a 15.7 percent increase between 2017 and 2018 for RNs who reported a doctorate as their highest degree. During this same time period, there was a 21.2 percent increase in RNs who specifically reported a doctoral level in nursing as their highest degree.

In addition, there was an increase of 5.5 percent during 2017-2018 timeframe among RNs who reported a BSN as their highest degree level and a 4.6 percent increase in baccalaureate degrees, overall.

Nurses with Master's degrees as their highest level of education more than doubled from 2008, with 3,065 reporting to 6,353 reporting in 2018.

In 2018, over half (52.2%) of total RN licensees reported a highest degree level of a baccalaureate or higher.

FIGURE 9: Highest Degree Held by Active Licensed RNs (2008-2018)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Diploma	6,924	6,642	6,443	6,141	5,801	5,379	5,175	4,927	4,616	4,327	4,024
ADN/ASN	18,978	19,751	20,529	20,929	21,415	21,305	22,308	22,186	22,605	22,565	22,190
BSN	10,671	11,168	11,932	12,442	12,893	13,050	14,350	15,282	16,331	17,521	18,501
Other Baccalaureate	2,596	2,630	2,687	2,711	2,769	2,719	2,868	2,935	2,985	2,950	2,921
Masters	3,065	3,323	3,472	3,710	4,167	4,599	4,844	5,189	5,608	6,007	6,353
*Doctoral in Nursing	67	79	93	100	116	170	258	369	482	579	702
Other Doctorate	199	208	220	224	224	222	232	227	223	216	218

*For 2018, of the 702 doctoral in nursing degrees reported: 537 are Doctor of Nursing Practice (DNP) degrees, 32 are other doctoral nursing degrees, and 133 are PhDs in nursing.

NURSING EDUCATION

NURSING EDUCATION PROGRAMS

For the purposes of this report, nursing programs are listed separately by site and type. In some instances, more than one site may share administration by a single program, a common philosophy, curriculum and faculty.

Since 2010, the total number of nursing programs offered in Iowa has decreased by 6. From 2010 to 2014, available DNP programs saw the greatest increase, among all program levels, with a total of 5 programs being added.

There were 5 ADN/ASN programs added between 2011 and 2012 and LPN programs have declined from a high in 2010 of 37 to 26 programs in 2018.

Professional master's and Clinical Nurse Leader (CNL) master's (pre-licensure) programs were discontinued in 2010. DNP programs were first introduced in 2008.

FIGURE 10: Number of Nursing Education Programs by Type (2010-2018)*

Program	2010	2011	2012	2013	2014	2015	2016	2017	2018
PhD in Nursing	1	1	1	1	1	1	1	1	1
DNP	1	3	4	4	6	6	6	6	6
Post-Master's	5	5	6	6	5	5	4	6	6
Master's	8	9	9	9	8	8	7	8	8
Professional Master's/ CNL (Pre-Licensure) Master's	1	0	0	0	0	0	0	0	0
BSN	19	18	19	19	20	20	20	20	20
ADN/ASN	35	31	36	36	36	36	33	34	34
Practical Nursing	37	33	34	34	31	31	30	28	26
Total	107	100	109	109	107	107	101	103	101

*Data collection for nursing programs has been modified. Numbers reported here have been revised and may not match data reported previously.

** There were 19 educational institutions who offered the ADN/ASN programs listed in this table.

*** There were 15 educational institutions who offered the practical nursing programs listed in this table.

****There were 18 educational institutions who offered the BSN programs listed in this table.

{ IN 2010, IOWA HAD **ONE**
 DOCTOR OF NURSING PRACTICE PROGRAM
 IN 2018, THERE WERE **6.** }

ADMISSIONS DATA

Admission data is based on the number of students who have met program admission requirements and are taking nursing courses the first day classes meet for the reporting year.

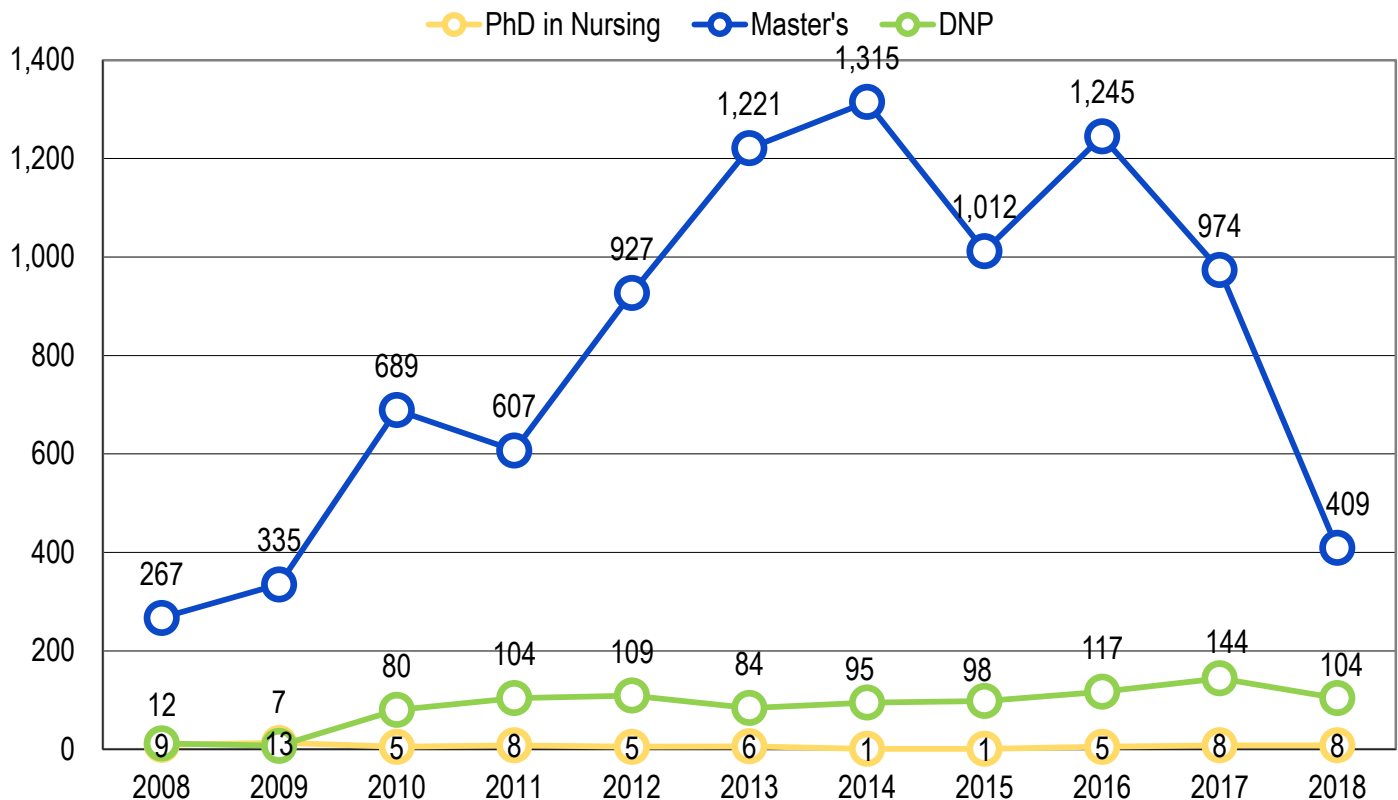
The following chart provides the total number of admissions per school year within graduate nursing programs in Iowa.

During the 2018 school year 112 students were admitted into Iowa's doctoral programs.

For the same school year 409 students were admitted into a master's program. This represents a 58 percent decrease over the prior year.

The availability of additional master's programs from 2008 to 2011 may have accounted for the significant increase in admissions within this program type during the early years in this reporting period. (Figure 10).

FIGURE 11: Admission Totals for Graduate Nursing Programs (2008-2018)



From 2011 to 2015, the number of students admitted into a master's program increased by 66.7 percent, followed by a steep decline from 2016 to 2018.

The rise in online graduate programs is likely responsible for the increased admissions from 2010 to 2014. However, the loss of one large online program which now reports in another state may explain the steep decline from 2017 to 2018.

FROM 2015 TO 2018,
MASTER'S PROGRAM ADMISSIONS
 DECREASED BY NEARLY **60%**

The following chart provides the total number of admissions per school year within non-degree certificate nursing programs in Iowa.

The post-master's certificate program is designed for master's prepared nurses pursuing advanced practice certification in a specialty area. The post-master's certificate provides additional knowledge, clinical experience and competency for master's prepared nurses who are seeking a role expansion or role change.

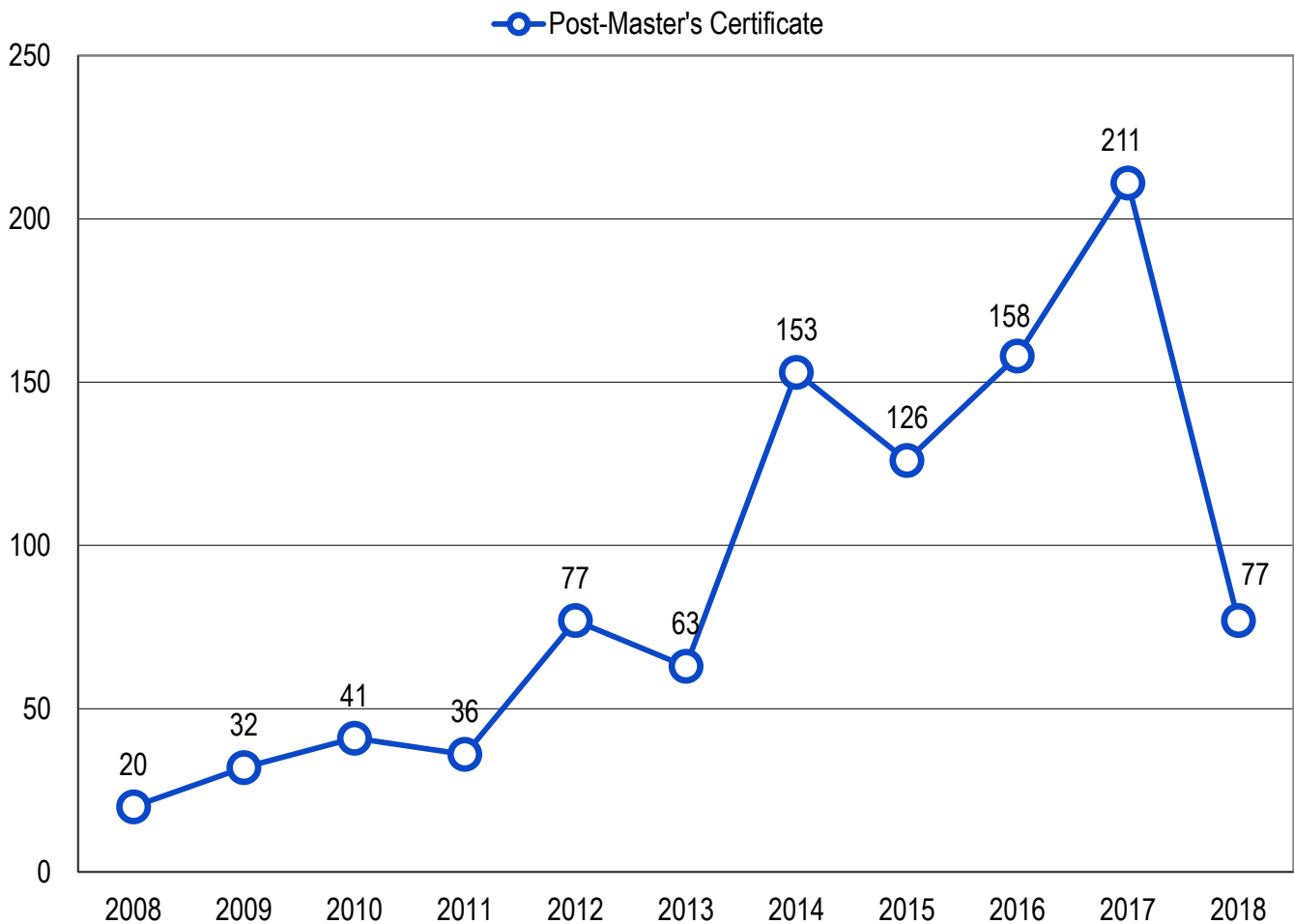
During the 2018 school year 77 students were admitted into Iowa's post-master's certificate

programs. This represents a sharp decrease over the prior three years (126, 158 and 211).

The addition of one online post-master's certificate program in 2012 may account for the spike in admissions seen between 2013 and 2014. Likewise, the loss of one large online program which now reports in another state may explain the reason for the steep decline from 2017 to 2018.

In 2018, there were no students on waiting lists for post-master's certificate programs.

FIGURE 12: Admission Totals for Non-Degree Nursing Programs (2008-2018)*



*No data available for non-degree certificate programs other than the post-master's certificate

FROM 2017 TO 2018,
POST-MASTER'S CERTIFICATE
 ADMISSIONS DECREASED BY **63.5%**

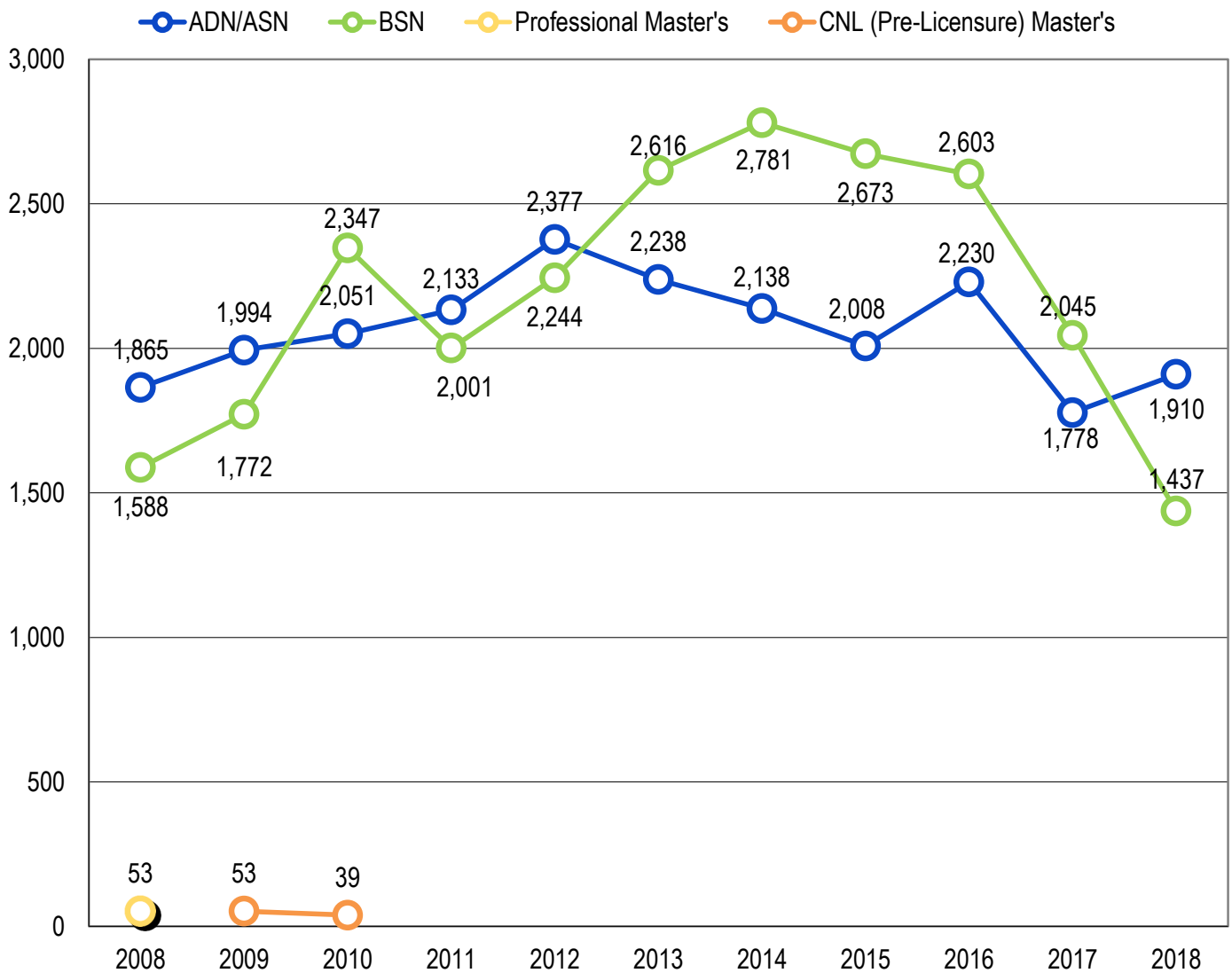
The chart below shows the total number of admissions per school year within pre-licensure and RN nursing programs in Iowa.

During the 2018 school year 3,347 students were admitted into Iowa's pre-licensure and RN nursing programs. This represents a decrease of 28.5 percent over the last report in the 2015 school year. Two large ADN programs moved to stand-alone programs in 2015, eliminating their ladder

programs, which may have caused the dip in ADN admissions then. The loss of one large online program which now reports in another state may explain the steep decline from 2017 to 2018.

In 2018, overall, the undergraduate RN programs which include: ADN/ASN and BSN (pre-licensure) degrees had 3,300 seats available with 3,282 applicants in the same year.

FIGURE 13: Admission Totals for Pre-Licensure and RN Nursing Programs (2008-2018)



The rise in BSN program admissions between 2008 and 2016 may be the result of enrollment increases in online RN to BSN programs and the Future of Nursing report encouraging BSN degrees.

**RN & PRE-LICENSURE ADMISSIONS
DECREASED OVER 28%
(FROM 2015 TO 2018)**

The following chart provides the total number of admissions per school year within practical nursing programs in Iowa.

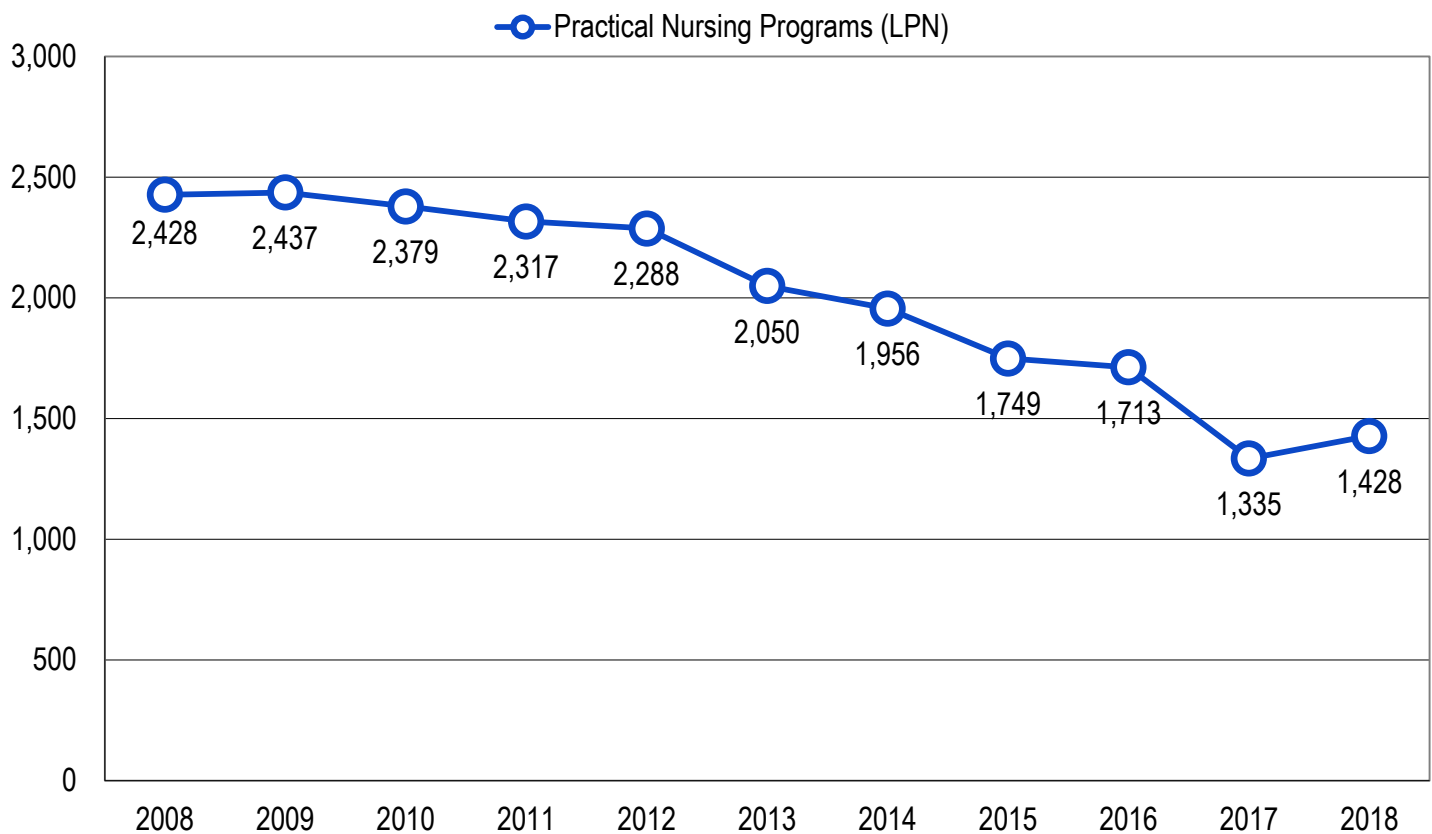
The downward trend in LPN admissions may be the result of programs moving from ladder programs to LPN and ADN stand-alone programs.

During the 2018 school year 1,428 students were admitted into Iowa's LPN programs. This is an 18.4 percent decrease over the last reporting year in 2015 which indicated 1,749 admissions.

For 2018, overall there were 1,490 LPN seats available for students and 1,428 admissions.

Note: An unknown portion of practical nursing graduates proceed directly to RN programs.

FIGURE 14: Admission Totals for Practical Nursing Programs (2008-2018)



FROM 2008 TO 2018,
PRACTICAL NURSING PROGRAM
 ADMISSIONS FELL BY OVER **41%**

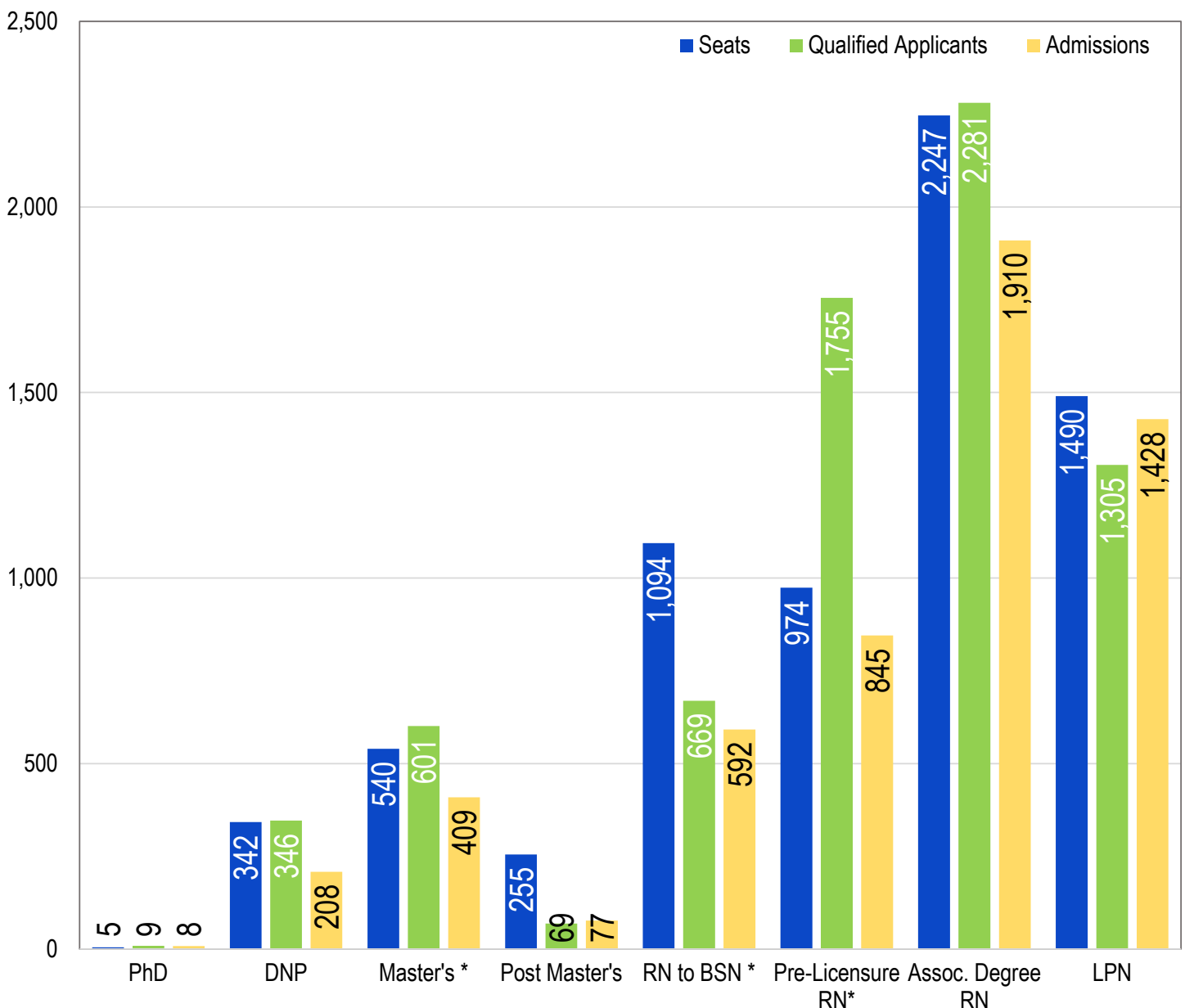
WAIT LIST DATA

The heads of programs for the schools of nursing approved by the Iowa Board of Nursing self-report program data about the number of available seats for nursing students, qualified applicants for those seats, and the actual admissions for students who have met program criteria. For a variety of reasons, a school may admit more students than their stated available seats; this may offset enrollment fluctuations and anticipated attrition. Although admissions may be higher than the available seats, the actual enrollment

numbers and completion rates of students ultimately lead to the graduation statistics we see in the State.

Overall, the data indicates there are more seats available in the schools of nursing than there are students to fill those seats. In the pre-licensure RN programs, there are three schools whose qualified applicants exceed the number admitted: This may be called "wait-listing" by those schools. When a student is wait-listed, someone may choose to attend school elsewhere, or attempt enrollment again in the next school year.

FIGURE 15: Available Seats Compared to Number of Qualified Applicants and Admissions (2017-2018)



Note: The raw totals for the Master's, RN to BSN and Pre-Licensure seats were adjusted to match the actual qualified applicants for some schools. For example, there were four online RN to BSN programs in the state who reported available seats at elevated numbers (999, 999, 999, 888). The total available seats in the RN to BSN category were adjusted to match the current qualified candidates for this illustration. Raw data is available, upon request. Attrition rates for the Associate Degree programs range from zero to 28% with three higher outliers. Attrition rates for the BSN programs range from zero to 18.9% with an average of 3.8%.

ENROLLMENT DATA

Enrollment data is based on the number of students who have met admission requirements, are accepted into the nursing program, and are taking the nursing courses as of October 15th of the reporting year.

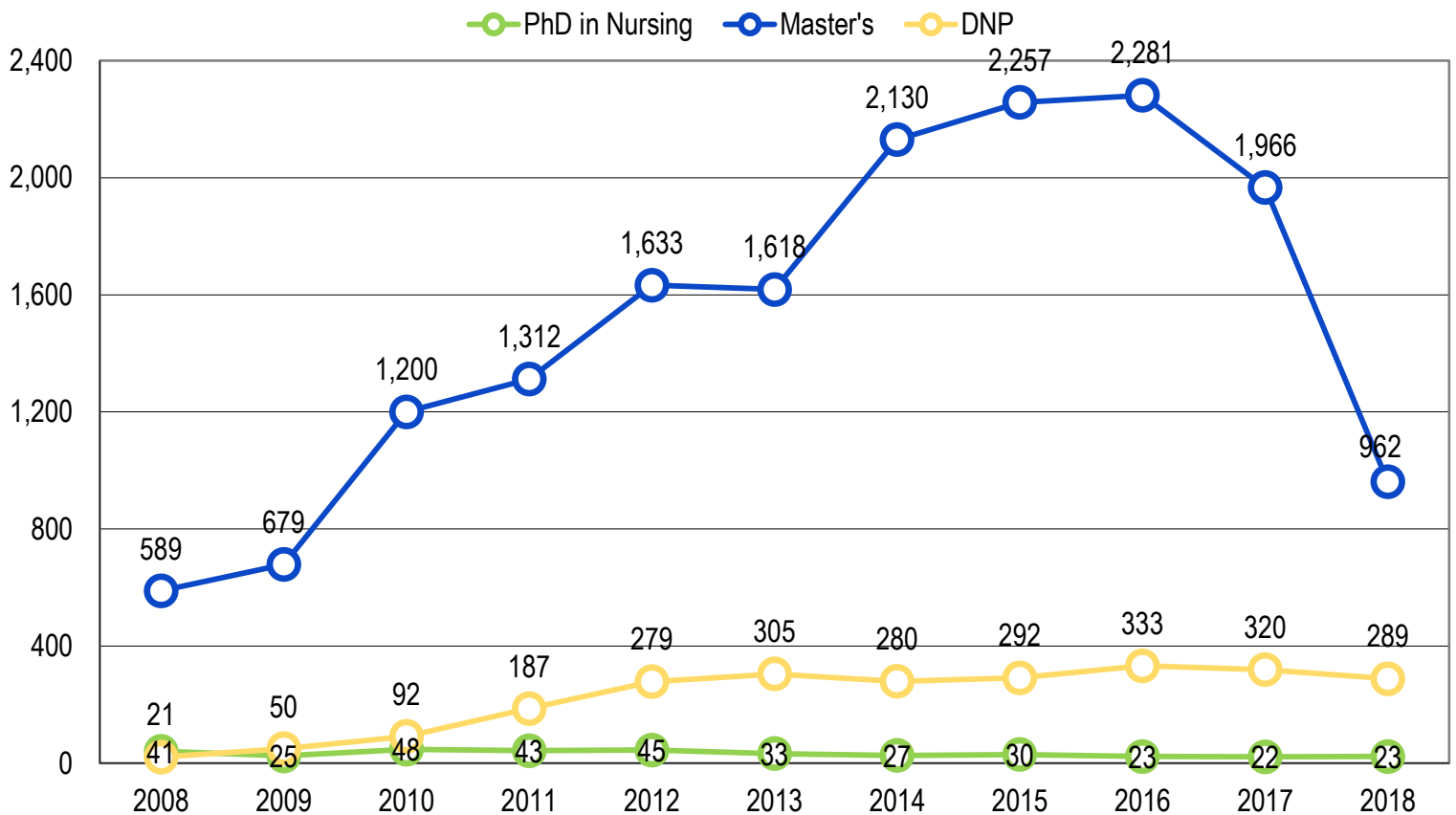
The following chart provides the total number of enrollments per school year within graduate nursing programs in Iowa.

During the 2018 school year 312 students were enrolled in Iowa's doctoral programs, a decrease of 3.1 percent when compared to 2015.

For the 2018 school year 962 students were enrolled in a master's program. This represents a decrease of 57.4 percent increase over the 2015 reporting year.

Between 2009 and 2011, two additional master's programs became available in Iowa. This may account for the significant increase in enrollment within this program type during this period of time (**Figure 10**). The loss of one large online program which now reports in another state may explain the steep decline from 2017 to 2018.

FIGURE 16: Enrollment Totals for Graduate Nursing Programs (2008-2018)



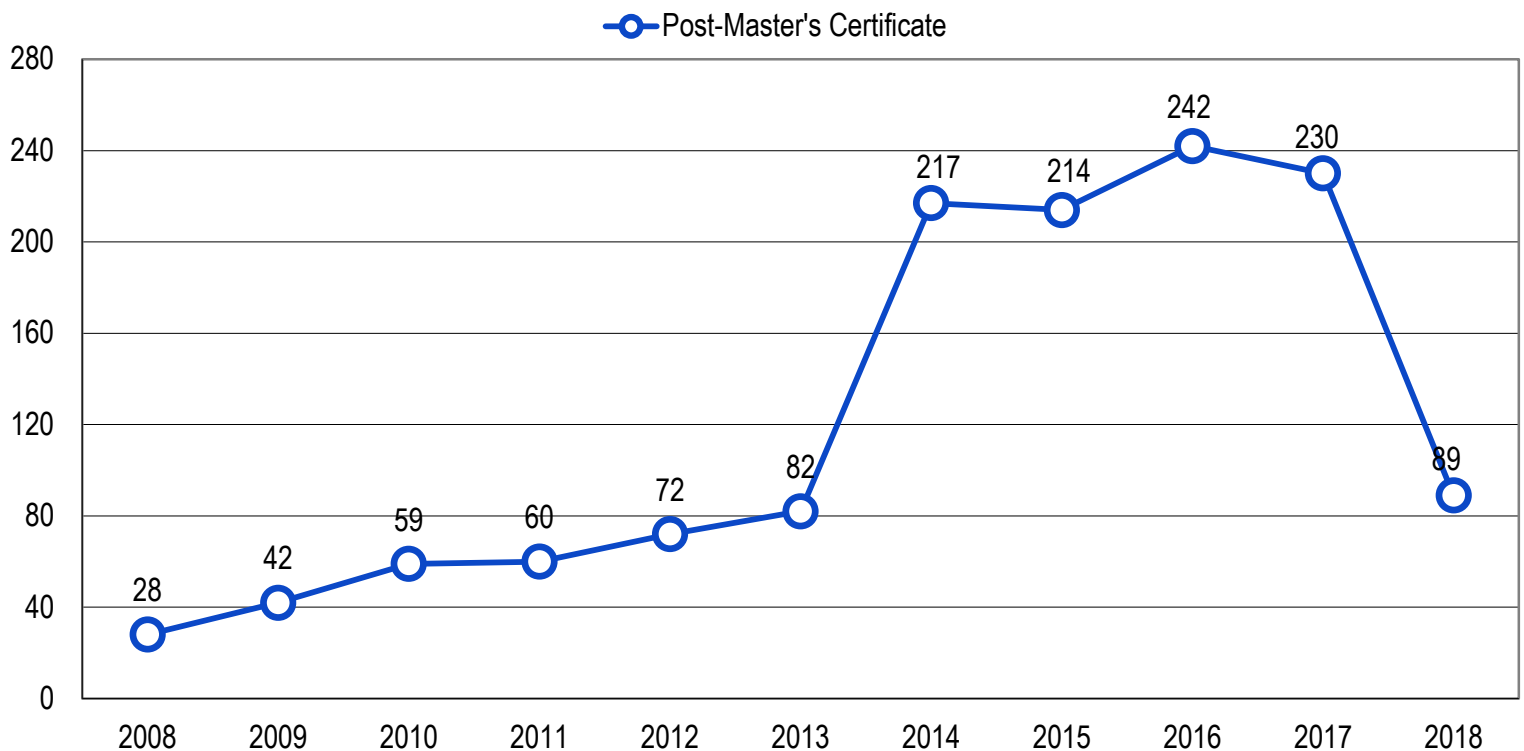
FROM 2015 TO 2018,
DOCTORAL PROGRAM ENROLLMENT
 DROPPED BY OVER **3%**

The following chart provides the total enrollment level per school year within post-master's certificate nursing programs in Iowa.

During the 2018 school year 89 students were enrolled in Iowa's post-master's certificate programs. This represents a steep decrease of 61.3 percent over the prior year which had a total enrollment of 230.

The addition of one online post-master's certificate program in 2012 may account for the spike in enrollment, then. Of the 214 enrolled, 155 students were in an online program. That same program is no longer reporting in Iowa which likely accounts for the significant drop from 2017 to 2018.

FIGURE 17: Enrollment Totals for Post-Master's Certificate Nursing Programs (2008-2018)



FROM 2017 TO 2018,
POST-MASTER'S CERTIFICATE
ENROLLMENT FELL BY **61.3%**

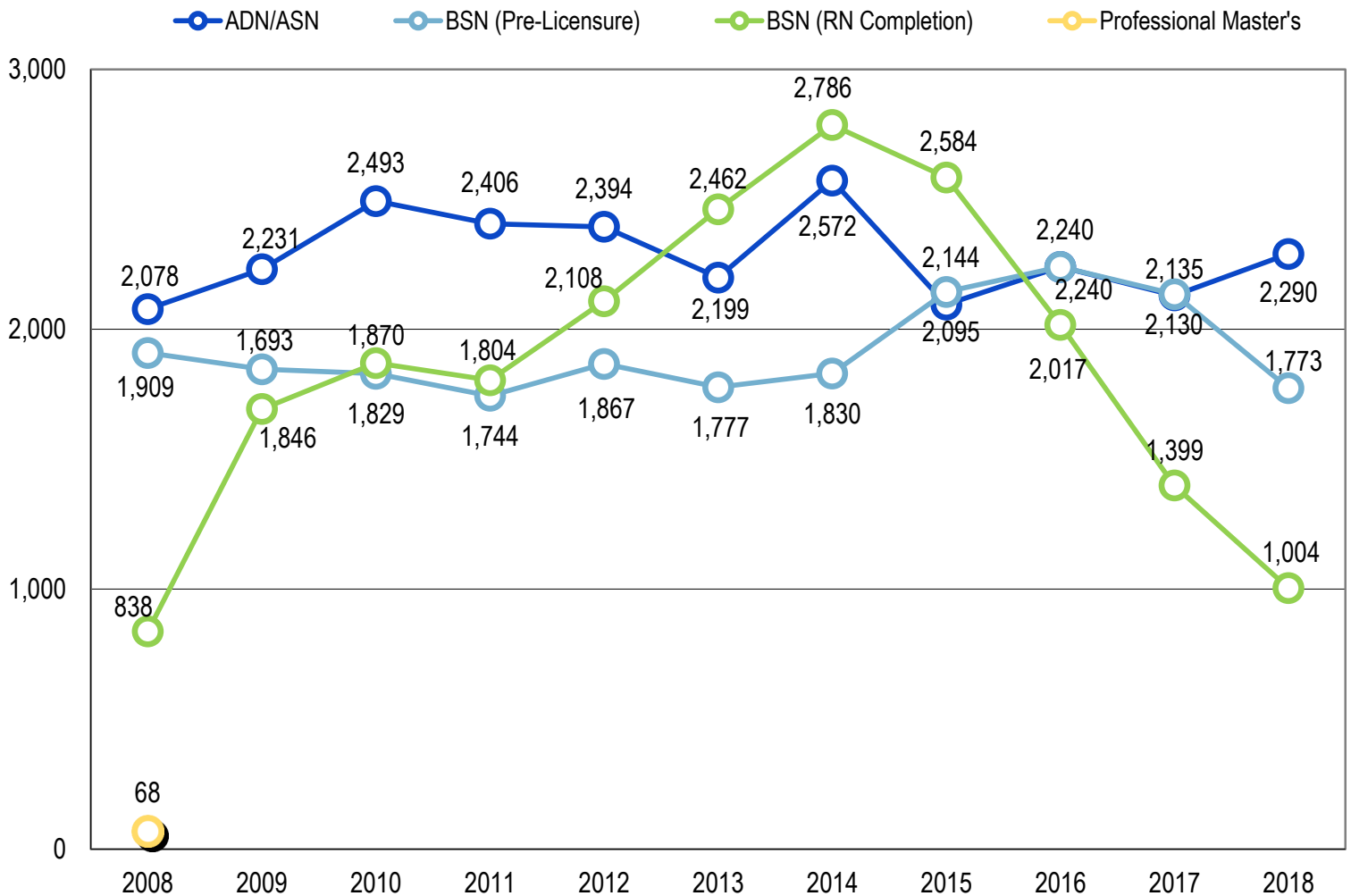
The chart below shows the total enrollment per school year within RN nursing programs in Iowa.

During the 2018 school year 5,067 students were enrolled in Iowa's RN programs. This represents a 25.7 percent decrease since the 2015 school year and a 3.56 percent increase since 2008.

ADN/ASN degree enrollment has rebounded again since the 2015 enrollment low of 2,095, with 2,290 students enrolled in 2018.

Enrollment within BSN (RN completion) programs grew from 2008 to 2014 by 232.5 percent. Since 2015, the enrollments have decreased by 61.5 percent.

FIGURE 18: Enrollment Totals for Pre-Licensure and RN Nursing Programs (2008-2018)



{ RN NURSING PROGRAM ENROLLMENT }
 DECREASED BY OVER **25%**
 (2015 to 2018)

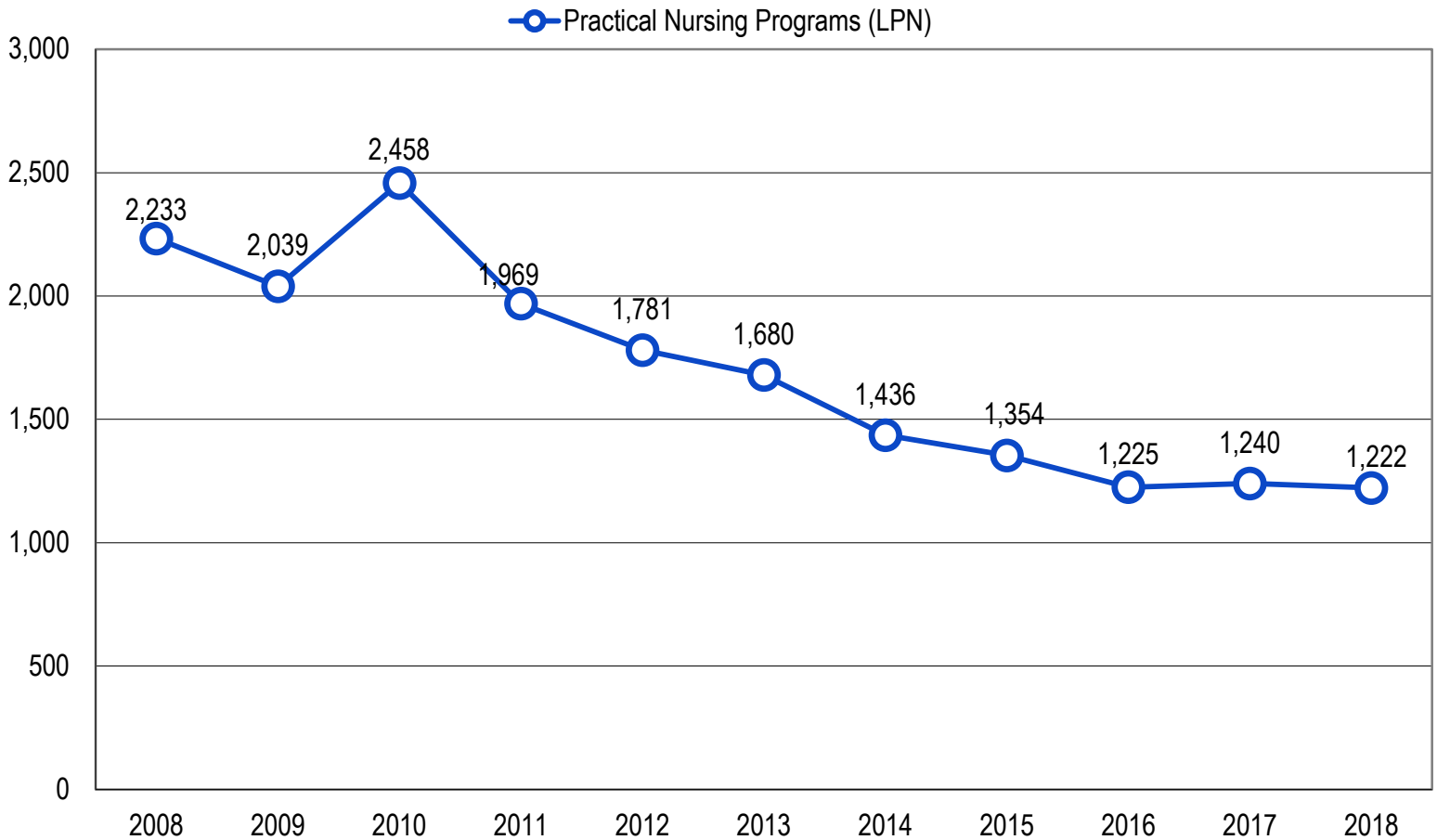
The following chart provides the enrollment levels per school year within practical nursing programs in Iowa.

In 2018, 1,222 students were enrolled in Iowa's LPN programs. This is a 9.75 percent decrease over the prior 2015 report year which had an enrollment of 1,354.

Enrollment in LPN programs in Iowa has trended downward for the last eight years. From 2010 to 2018 there has been a 50.3 percent decline in LPN program enrollment.

The downward trend in LPN enrollment may be the result of the increased market demand for nurses to attain their BSN degrees.

FIGURE 19: Enrollment Totals for Practical Nursing Programs (2008-2018)



FROM 2010 TO 2018,
PRACTICAL NURSING PROGRAM
 ENROLLMENT DECLINED OVER **50%**

GRADUATION DATA

Graduation data is based on the number of students who have successfully completed the requirements of a nursing program, earned a degree in nursing, and were assigned a graduation date between August 1st and July 31st of the reporting year.

The following chart provides the total number of graduates per school year from graduate nursing programs in Iowa.

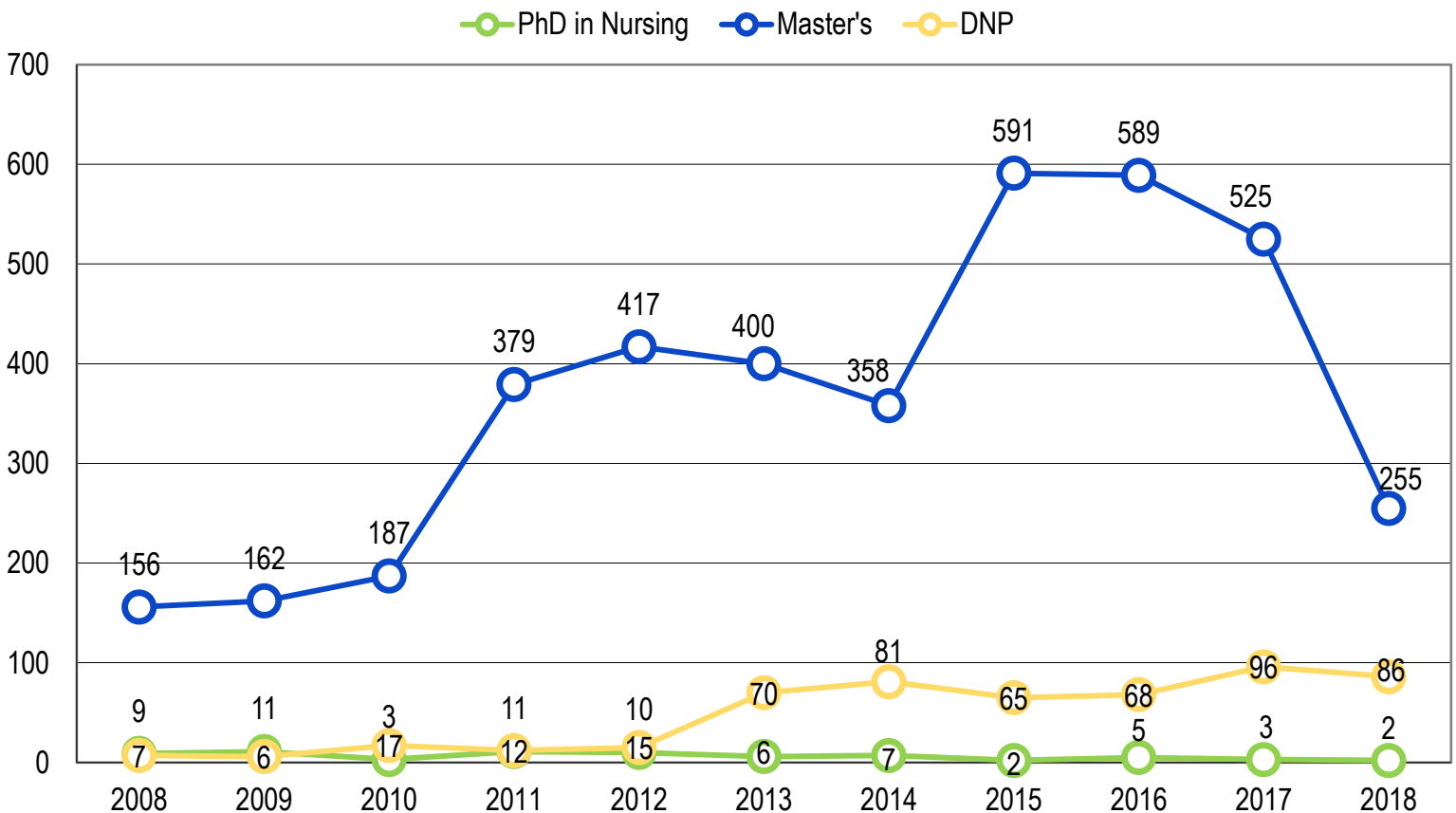
During the 2018 school year 88 students graduated from Iowa's doctoral programs, an increase of 31.3 percent compared to the last report in 2015.

A total of 260 students have graduated from doctoral programs since 2015.

For the 2018 school year 255 students graduated from a master's program. This represents a 51.4 percent decrease since 2017 and a 56.8 percent decrease since 2015.

Between 2009 and 2011, two additional master's programs became available in Iowa. This may account for the significant increase in graduation rates within this program type during this period of time (**Figure 10**). One large online program is no longer reporting in Iowa which likely accounts for the significant drop from 2017 to 2018.

FIGURE 20: Graduate Totals from Graduate Nursing Programs (2008-2018)



FROM 2017 TO 2018,
MASTER'S PROGRAM GRADUATES
 DROPPED BY OVER **51%**

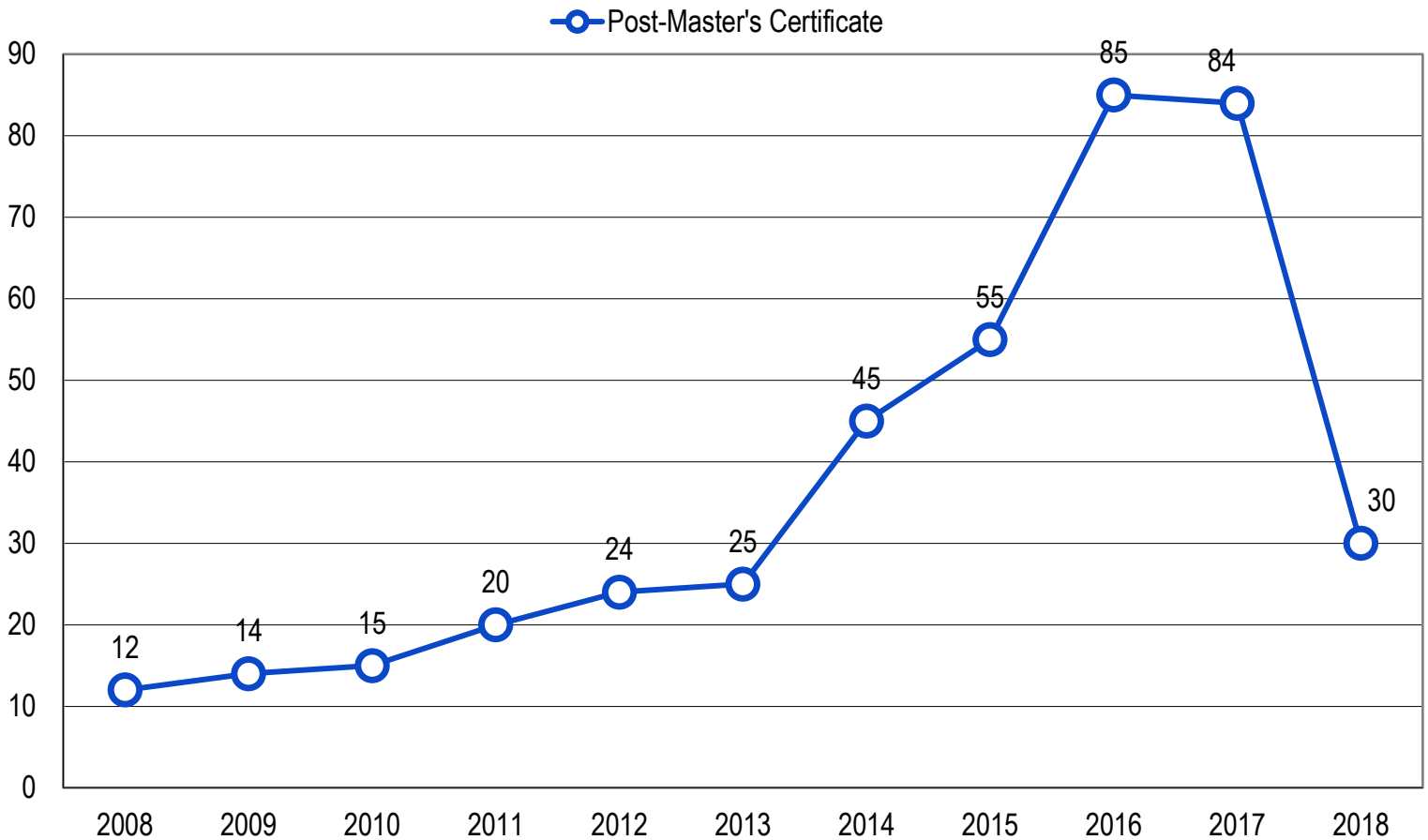
The following chart provides the total number of graduates per school year from post-master's certificate nursing programs in Iowa.

During the 2018 school year 30 students graduated from Iowa's post-master's certificate programs. This is a 64.3 percent decrease over the prior year which had 84 graduates.

The addition of one online post-master's certificate program in 2012 may account for the spike in the graduation levels from 2013 through 2017. The drop from 2017-2018 may be accounted for by the departure of one online course that no longer reports in Iowa.

Enrollment and graduation numbers vary due to the length of programs, part-time or full-time student

FIGURE 21: Graduate Totals from Post-Master's Certificate Nursing Programs (2008-2018)



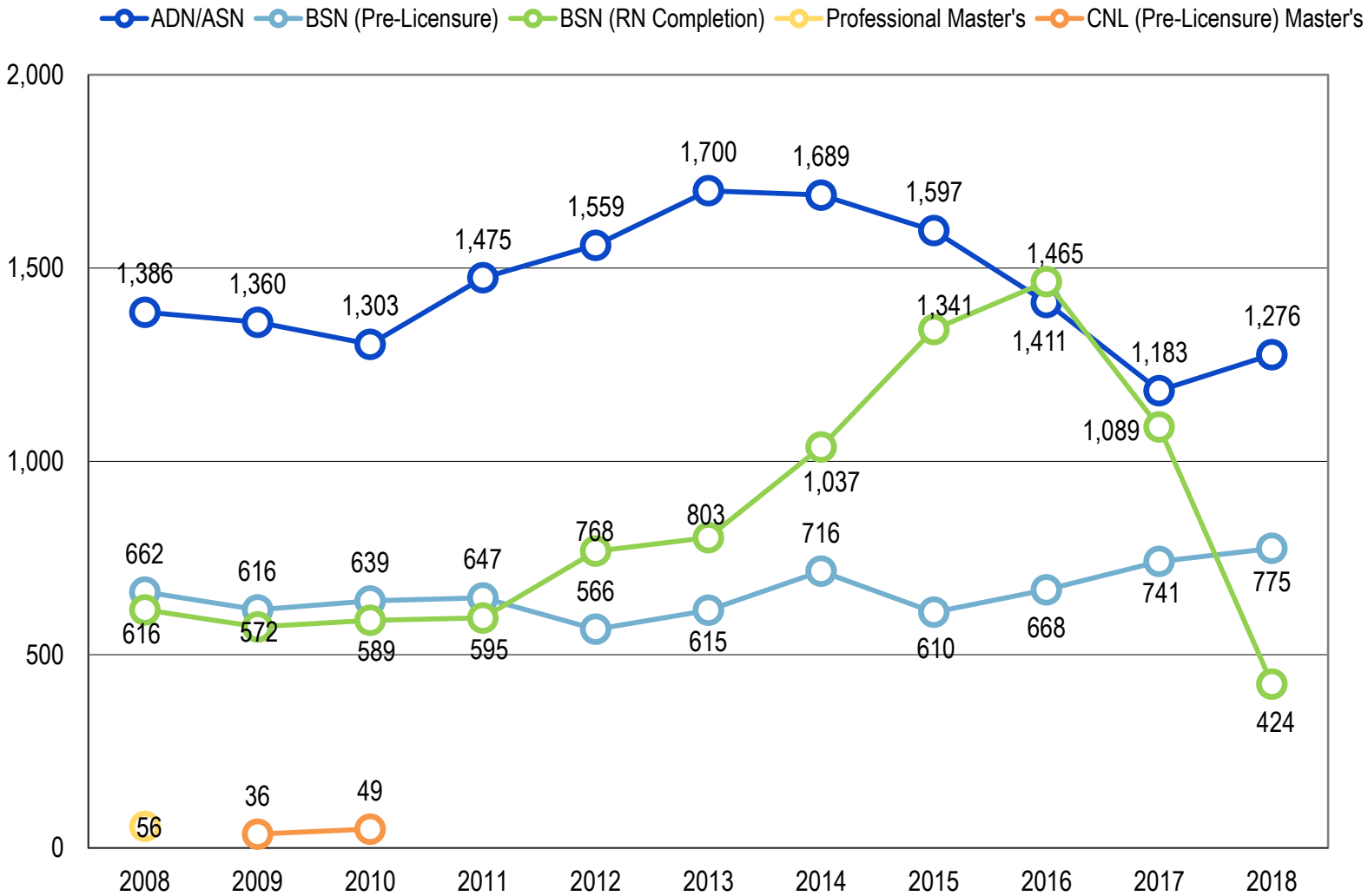
FROM 2017 TO 2018,
POST-MASTER'S CERTIFICATE
 PROGRAM GRADUATES
 FELL BY MORE THAN **64%**

The chart below shows the total graduates per school year from RN nursing programs in Iowa.

During the 2018 school year 2,475 students graduated from Iowa's RN programs. This represents a 30.2 percent decrease since the 2015 school year and a 20.6 percent decrease since the high number of 3,118 in 2013.

For the four school years from 2014 though 2017, the total graduates from the BSN programs combined (both RN completion and pre-licensure) outpaced the number of graduates from ADN/ASN degree programs.

FIGURE 22: Graduate Totals from Pre-Licensure and RN Nursing Programs (2008-2018)



BSN (PRE) PROGRAM GRADS
 INCREASED OVER **17%**
 (2008 to 2018)

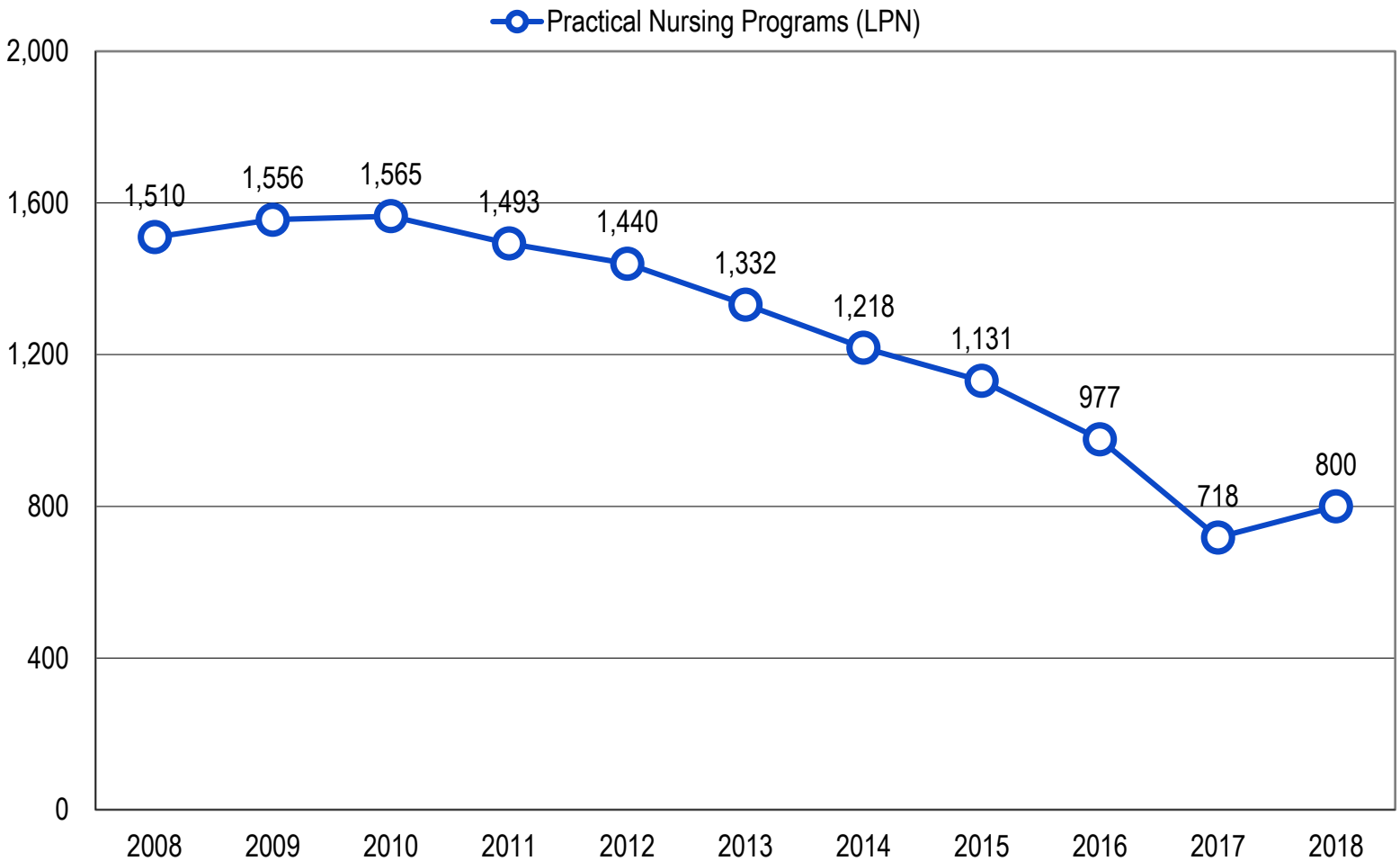
The following chart provides the graduate totals per school year from practical nursing programs in Iowa.

In 2018, 800 students graduated from Iowa's LPN programs. This is a 29.2 percent decrease over the prior report year in 2015 which had an enrollment of 1,131. Since 2008, there has been

an overall 170 student decrease in total graduates of 47.0 percent.

Graduate levels in LPN programs in Iowa have trended downward for the years 2011—2017, with a slight increase in 2018. This follows the reports of decreases in enrollment within Iowa's LPN programs.

FIGURE 23: Graduate Totals from Practical Nursing Programs (2008-2018)



{ BETWEEN 2010 AND 2017
PRACTICAL NURSING PROGRAM
 GRADUATES DECLINED OVER **54%** }

FACULTY DATA

The following charts present the number of nursing program faculty in Iowa by age range in the 2015 school year and then in the 2017-2018 school year.

In 2015, the methodology in survey collection was changed. Due to this, the age ranges of faculty collected 2010-2014 did not match the age ranges provided in 2015. Therefore, the current age information is not absolutely comparable to past years.

In general, Iowa nursing faculty has become increasingly younger. By 2015, 58.9 percent of faculty were 50 years old or younger and 40.6 percent were aged 51 years or older. In 2017, 62.9 percent of faculty were 50 years old or younger and 37.0 percent were aged 51 years or older.

In 2017, the nursing programs in Iowa reported 43 total faculty vacancies (19 full-time, 4 part-time and 20 adjunct). In the next two years 59 faculty are expected to retire (35 full-time, 13 part-time and 11 adjunct).

FIGURE 24: Distribution of Faculty Members by Age Range (2015)

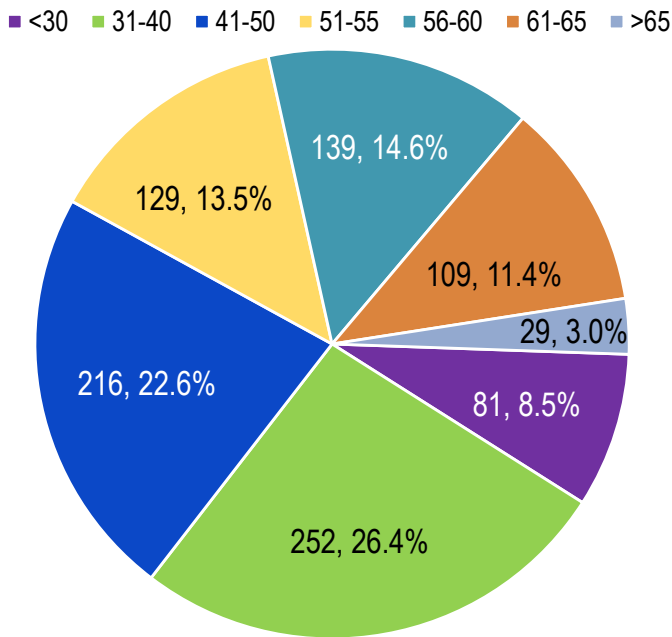
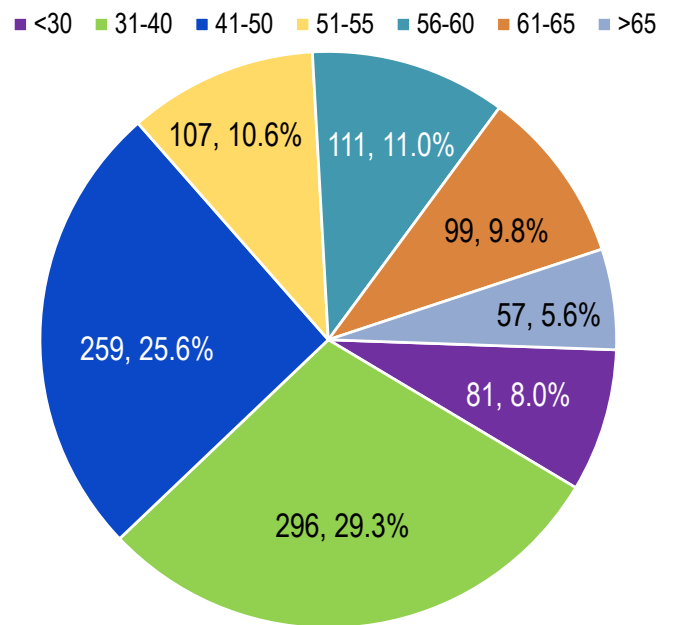


FIGURE 25: Distribution of Faculty Members by Age Range (2017)*



Note: Nursing program faculty in Iowa are highly educated. In 2017, over 60 percent of all faculty members had a master's degree or higher. In addition, 35.9 percent had their baccalaureate.

Faculty members who teach nursing theory must hold a master's degree in nursing or an applicable field, or make progress toward such a degree.

59 FACULTY MEMBERS
ARE EXPECTED TO RETIRE
 WITHIN THE NEXT 2 YEARS

*Faculty members with unknown age are not included in above totals or percentages.

CONCLUSION

The following table provides a comparison between the State of Iowa and the nation for various data points and provides the State with a benchmark for assessing its current position regarding its nursing workforce.

There is a higher saturation of active nurses in the State of Iowa than in the nation with nearly 244 more nurses per 100,000 in population. Both the RN and LPN workforce is younger in Iowa than in the nation; with 37.1 percent of RNs in Iowa 39 years old or younger compared to only 28.9 percent nationwide. In addition, 42.1 percent of LPNs in Iowa are 39 years old or younger compared to 27.7 percent in the nation.

The State of Iowa has a lower percentage (52.2%) of RNs with a baccalaureate degree or higher than the nation (64.1%). Also, Iowa has a lower percentage (24.2%) of students enrolled in an RN-to-BSN nursing program than the nation (46.2%).

This report on the nursing supply in Iowa is a high-level analysis of trends in workforce and available nursing education programs in Iowa as seen over the last 11 years.

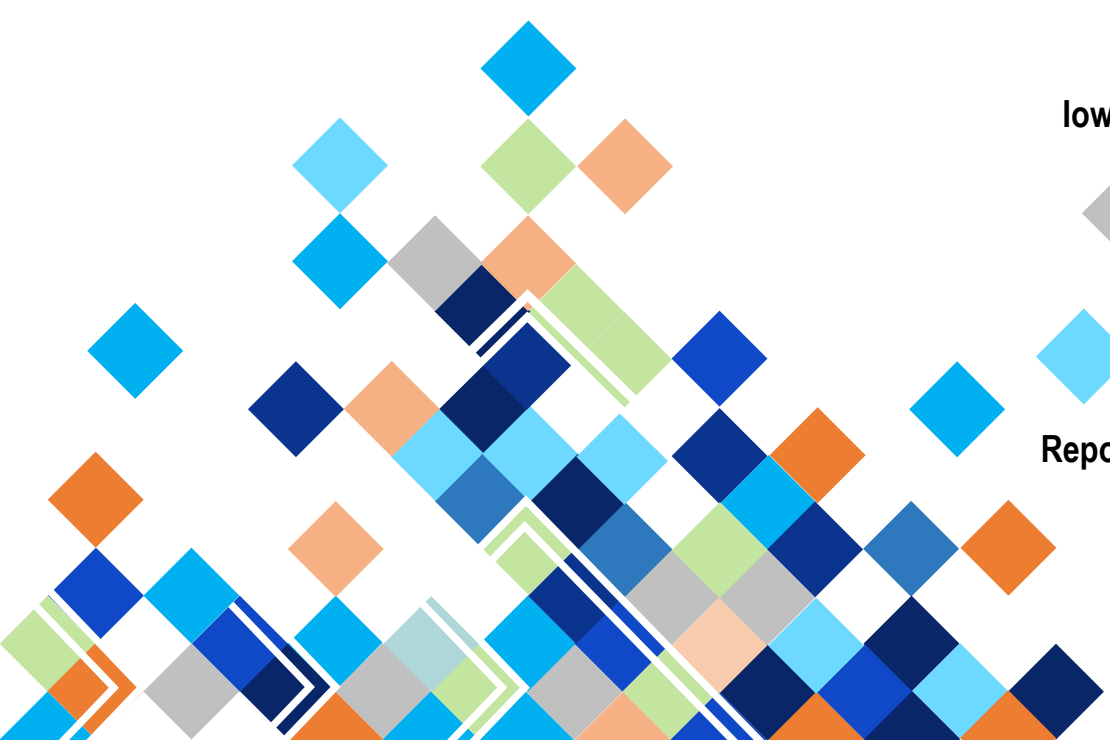
The healthcare landscape in the United States is shifting daily. With an aging workforce supply and ever increasing workforce demands, the picture in Iowa is similar to those of other states. Additional tracking of supply will continue through the licensure process and a demand survey is planned in the coming reporting period.

FIGURE 26: Comparison of Selected Data Points Between the State and the Nation

Variable ¹	Iowa	Nation
Total Active Nurse Licenses (RN & LPN) ²	65,287	5,698,353
Nurses per 100,000 Population	1,986.8	1,742.7
Percent Increase in Active RNs (2008-2018)	29.2%	26.6%
Percent Increase (Decrease) in Active LPNs (2008-2018)	-10.4%	-4.5%
RNs 39 and Younger	37.1%	28.9%
RNs 50 and Older	42.4%	50.9%
LPNs 39 and Younger	42.1%	27.7%
LPNs 50 and Older	36.9%	50.3%
Education - Candidates Educated in Member Board Jurisdictions with Valid Ed Program Codes		
RNs with a Baccalaureate Degree or Higher	52.2%	64.1%
Passing Rate for First-Time Test Takers of NCLEX®, RNs (2017)	86.0%	87.1%
Passing Rate for First-Time Test Takers of NCLEX®, LPNs (2017)	93.6%	83.8%
Breakdown of Enrollment in Nursing Programs by Type of Degree: Baccalaureate and Above		
Percent Enrolled within any Baccalaureate Program	67.0%	66.8%
Percent Enrolled within an RN-to-BSN Program	24.2%	38.4%
Percent Enrolled within a Master's Program	25.3%	26.2%
Percent Enrolled within a DNP Program	6.9%	6.0%
Breakdown of Graduates from Nursing Programs by Type of Degree: Baccalaureate and Above		
Percent Graduated from any Baccalaureate Program	76.0%	72.1%
Percent Graduated from an RN-to-BSN Program	27.0%	47.2%
Percent Graduated from a Master's Program	18.1%	23.8%
Percent Graduated from a DNP Program	5.4%	3.6%

¹Statewide variables, unless otherwise noted, reflect data for the year 2018. National data sources include: Age data: 2008 Nurse Licensee Volume and NCLEX Examination Statistics & 2017 National Nursing Workforce Study; NCLEX Data: 2017 NCLEX® Examination Statistics, Chicago, IL: National Council of State Boards of Nursing. 2018-2019 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC: American Association of Colleges of Nursing.

²Regarding the reported statewide number: licensees may or may not be actively employed in the State of Iowa.



**Iowa Center for Nursing Workforce
Iowa Board of Nursing**

400 S.W. 8th Street Suite B
Des Moines, IA 50309-4685

Tel: (515) 281-3255

Fax: (515) 281-4825

Web: <https://nursing.iowa.gov>

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