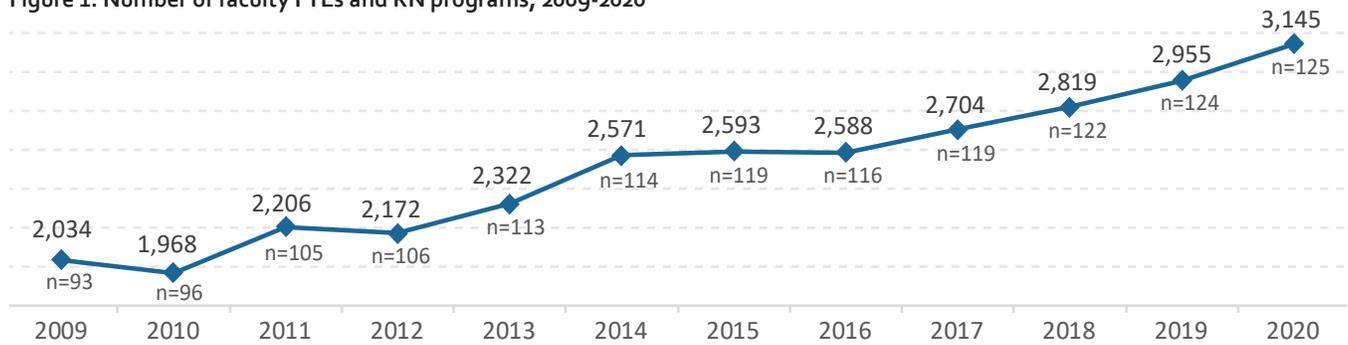


School of Nursing Faculty Trends, 2009-2020

The data in this report comes from the RN faculty profile, years 2009-2020, the RN NEPIS, years 2009-2020, and the BON licensing files, years 2009-2019. Figure 1 illustrates the number of faculty in FTEs, or full time equivalents, over the past 12 years. From 2009 to 2020, the number of faculty FTEs has increased by 54.6% compared to an increase of 34.4% among RN programs. The increase in faculty FTEs is therefore attributed to growth in the number of RN programs and growth in already existing RN programs of Texas. In the past 12 years, the average number of faculty FTEs per program has ranged from 20.5 (2012) to 25.2 (2020).

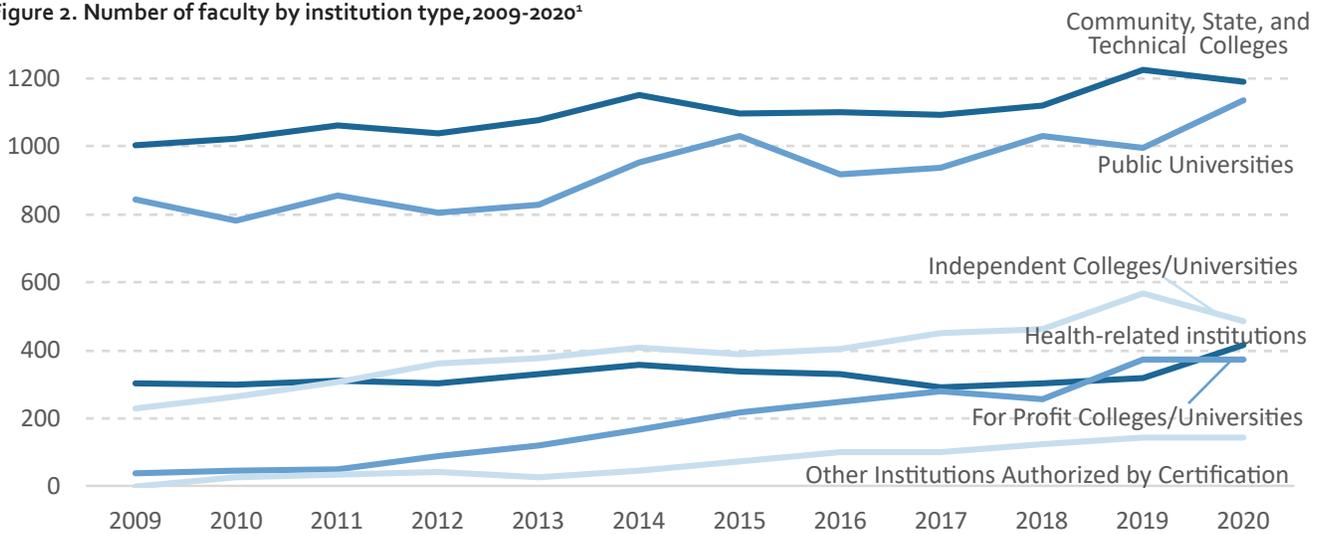
Figure 1. Number of faculty FTEs and RN programs, 2009-2020



n= the number of RN programs reported that year.

Faculty by Institution Types

Figure 2. Number of faculty by institution type, 2009-2020¹



The greatest proportion of faculty, since 2009, have worked in community, state, and technical colleges, followed by public universities. The number of faculty has increased at all institution types except for health-related institutions, where the number of faculty have remained stable.

¹ Definitions for public institutions are found in the Texas Education Code 61.003. "Health Related Institution" falls under "medical and dental unit" as per Texas Education Code 62.161.

Faculty Demographic Trends²

Age

Figure 3 shows the distribution of ages among faculty and the mean age over the past twelve years.

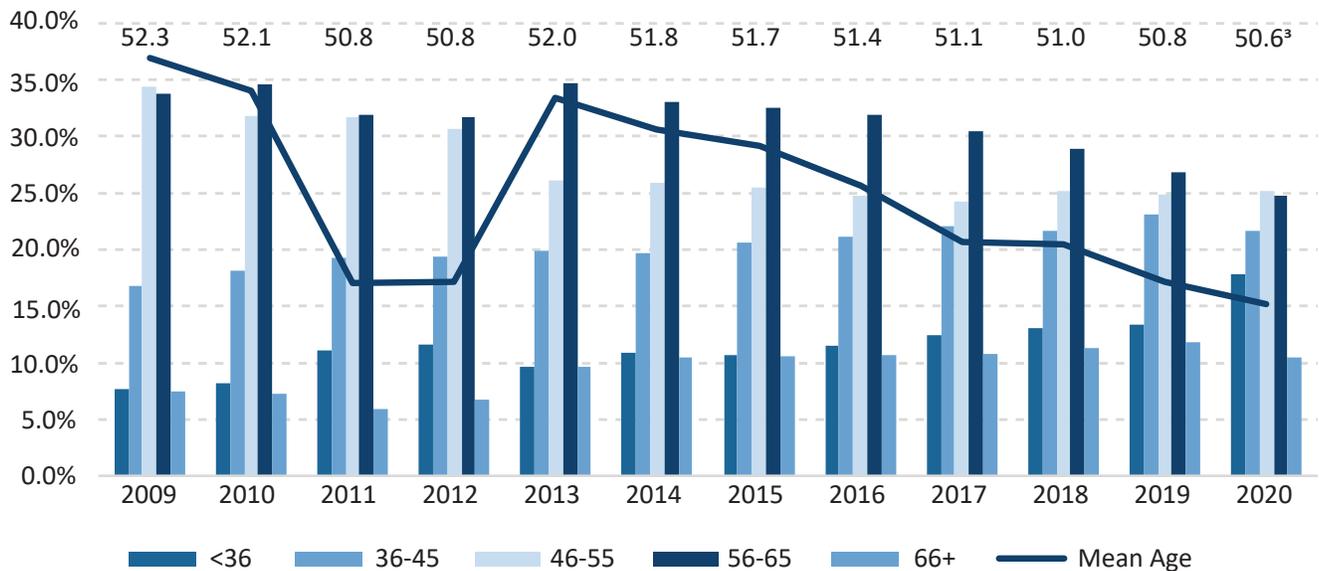
- The mean age of all faculty has decreased by 1.7 years since 2009.
- The proportion of faculty in each of the age

categories has become more evenly distributed since 2009.

- The <36, 36-45, and 65+ age categories have increased.
- The 46-55 and 56-65 age categories have decreased.

According to the AACN Fact Sheet on the National

Figure 3. Age categories and mean age of faculty, 2009-2020



Nursing Faculty Shortage, “one third of the current nursing faculty workforce in baccalaureate and graduate programs are expected to retire by 2025” (2020)⁴. With the shortage of nursing faculty already a challenge for many programs across Texas and the nation, the prospect of a third of the workforce retiring is alarming.

Interestingly, across Texas nursing schools, the percentage of faculty in the 66+ age category has increased in the past twelve years. This indicates that more nursing faculty are staying on after retirement age. While this helps alleviate the current nursing faculty shortage, it could lead to increased retirement rates in the future, worsening the shortage.

Figures 4-11 (page 4) show how the mean age has changed over the past 12 years for each of the Public Health Regions.

Table 1 (page 3) compares the percent of faculty who are aged 56 and older from 2009 to 2019 and the mean age of all faculty during that same time.

- The Panhandle, Rio Grande Valley, East Texas, and West Texas have all shown an increase in the percent of faculty age 56 and older with the Panhandle showing the largest increase, from 32.9% to 44.8%.
- North Texas, Gulf Coast, Central Texas, and South Texas regions all show a decrease in the percent of faculty age 56 and older with Central Texas showing the largest decrease, from 43.8% to 33.4%.
- The Rio Grande Valley and South Texas show little change in mean age from 2010 to 2019 with the Rio Grande Valley decreasing slightly from 51.8 to

² Demographics information comes from BON licensing data that is matched to the faculty profile. So, demographics are not available for those faculty that do not have a Texas, or compact, nursing license.

³ Because the 2020 faculty data was matched to the 2019 licensure files, 1 year was added to the mean age.

⁴ American Association of College of Nurses (AACN). 2020 (September). “Fact Sheet: Nursing Faculty Shortage.”



Table 1. Age by Public Health Regions, 2010 & 2019

Public Health Regions	% age 56 and older		Mean Age	
	2010	2019	2010	2019
Panhandle	32.9%	44.8%	50.6	51.9
Rio Grande Valley	35.3%	40.4%	51.8	51.6
North Texas	47.2%	37.9%	53.0	50.3
East Texas	39.1%	41.5%	51.3	50.2
Gulf Coast	41.0%	38.9%	51.6	50.8
Central Texas	43.8%	33.4%	51.8	49.3
South Texas	44.9%	43.4%	53.0	53.3
West Texas	37.7%	38.9%	51.6	48.5

51.6 and South Texas increasing slightly from 53.0 to 53.3.

Health Regions whose mean age increased from 2010 to 2019.

- The mean age in West Texas has dropped over 3 years, from 51.6 to 48.5, since 2010, showing the biggest change across all Public Health Regions.
- The mean age in North and Central Texas decreased by over 2 years.
- The Panhandle and South Texas are the only Public



Figure 4. Mean Age, Panhandle, 2009-2020

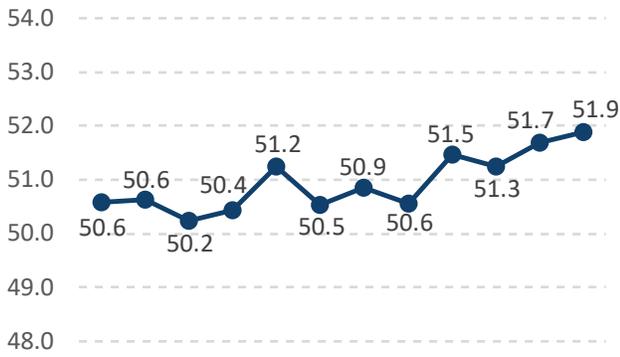


Figure 5. Mean Age, Rio Grande Valley, 2009-2020

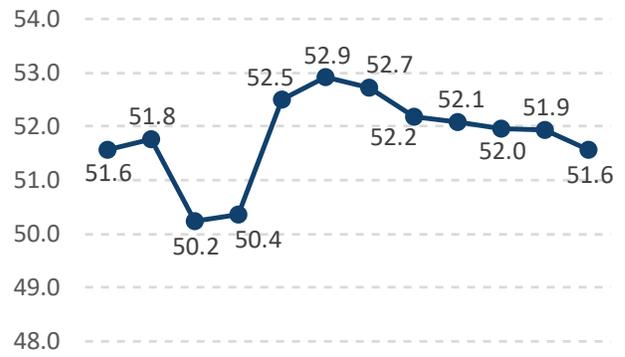


Figure 6. Mean Age, North Texas, 2009-2020

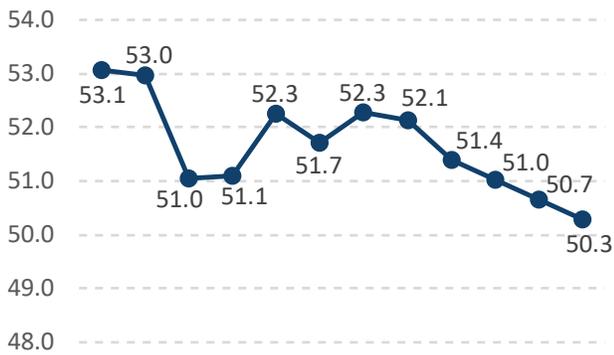


Figure 7. Mean Age, East Texas, 2009-2020



Figure 8. Mean Age, Gulf Coast, 2009-2020

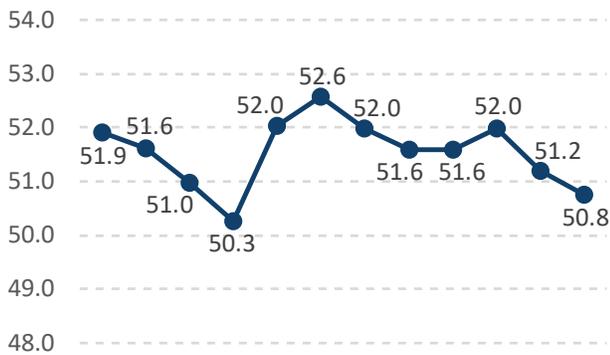


Figure 9. Mean Age, Central Texas, 2009-2020

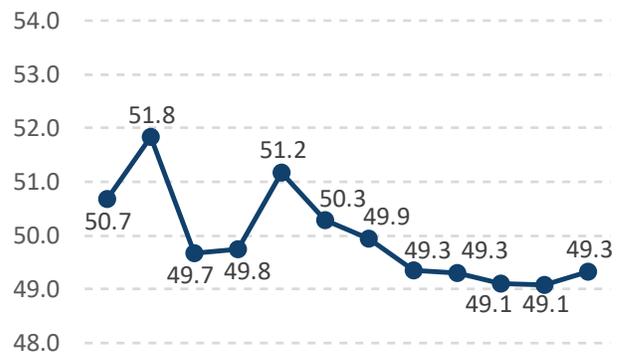


Figure 10. Mean Age, South Texas, 2009-2020

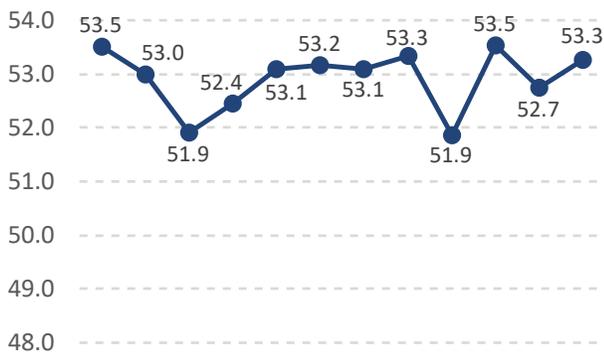


Figure 11. Mean Age, West Texas, 2009-2020

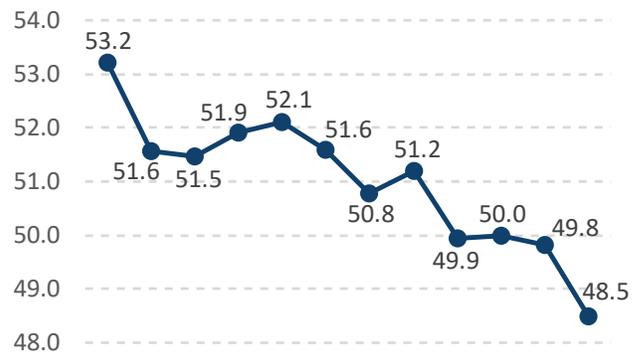
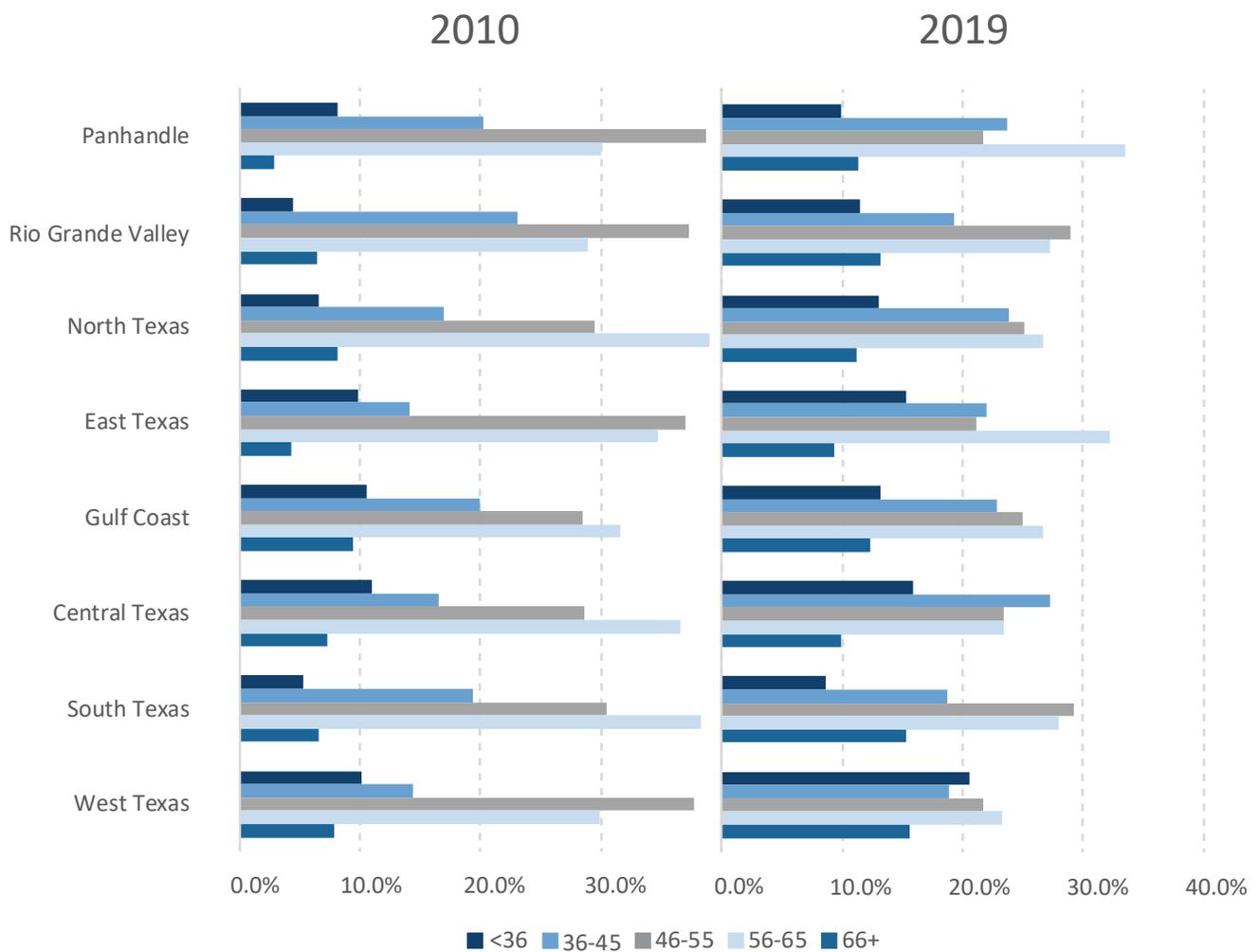


Figure 12 breaks down the proportion of faculty in each age category by Public Health Region. Overall, the age categories for each Public Health Region have become more evenly distributed since 2010.

- The <36 category has increased for all 8 regions from 2010 to 2019. West Texas has shown the biggest increase, from 10.2% to 20.6%, and the Panhandle has shown the smallest increase, from 8.1% to 9.9%.
- The 36-45 age category increased for all Public Health Regions except the Rio Grande Valley and South Texas. The largest increase was in Central Texas, increasing from 16.6% to 27.2%. The largest decrease was in the Rio Grande Valley, decreasing from 23% to 19.3%.
- The 46-55 age category decreased in every Public Health Region. There were large decreases in the Panhandle, from 38.7% to 21.7%, West Texas, from 37.7% to 21.7%, and East Texas, from 37.% to 21.2%. South Texas had only a slight decrease, from 30.5% to 29.2%.
- The 56 to 65 age category decreased in all Public Health Regions except the Panhandle which increased from 30.1% to 33.5%. The largest decrease was in Central Texas, decreasing from 36.6% to 23.5%.
- The 66+ age category has increased for all 8 Public Health Regions. The biggest increases in the 66+ age category was in the Panhandle, increasing from 2.9% to 11.3%, and in South Texas, increasing from 6.6% to 15.3%. The Gulf Coast and Central Texas showed the smallest increases among the 66+ category.

Figure 12. Age categories by Public Health Regions, 2010 & 2019



Sex

Table 2 shows the distribution of sex of faculty over the past 12 years compared to the distribution of sex of newly enrolled pre-licensure students. Since 2009, nursing school faculty and students have remained predominately female.

- 2009 saw the largest ratio of female faculty compared to male faculty at 92.4% females and 7.3% males. 2011 saw the smallest ratio with 84.3% females to 6.8% males.

- The student population, similar to that of the faculty, is disproportionately female. 2017 saw the greatest ratio of females compared to males, 85.8% and 14.2%, respectively. 2016 had the smallest ratio of females compared to males, 82% and 18%, respectively.
- Throughout the past 12 years, the ratio of females to males among faculty has made little change in the direction of diversification which is necessary to match the ratio of sex among students.

Table 2. Distribution of sex among faculty and students, 2009-2020*

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Faculty-female	92.4%	85.0%	84.3%	87.3%	89.1%	87.7%	85.3%	85.5%	85.8%	88.3%	88.3%	91.4%
Faculty-male	7.3%	6.5%	6.8%	7.4%	7.6%	7.7%	7.3%	7.4%	7.9%	8.7%	8.7%	8.6%
Student-female	85.6%	82.3%	83.0%	85.1%	83.4%	84.7%	85.3%	82.0%	85.8%	85.1%	83.1%	84.5%
Student-male	14.4%	17.7%	17.0%	14.9%	16.4%	15.1%	14.4%	18.0%	14.2%	14.9%	16.9%	15.4%

*Percentages may not equal 100% because of unknown sex of faculty or faculty that identify as a sex other than male or female.

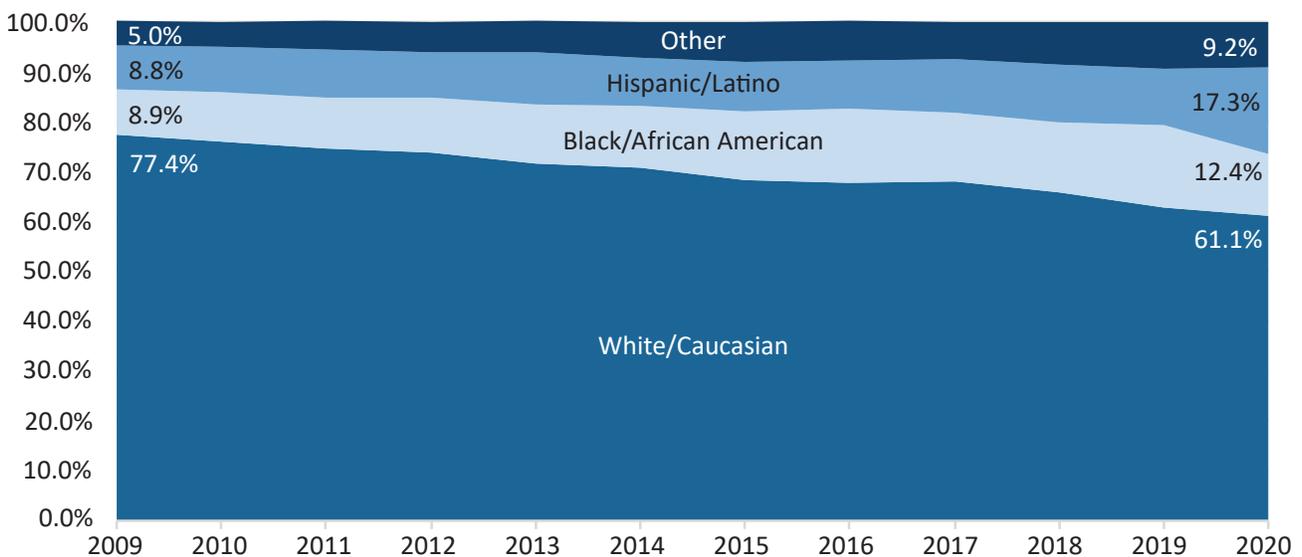
Race/ethnicity

Figure 13 shows how the distribution of faculty among race categories has changed over the past 12 years.

- In terms of race, nursing faculty have diversified since 2009 with the percentage of White faculty decreasing from 77.4% in 2009 to 61.1% in 2020.
- The percentages of Black, Hispanic, and “other” races have all increased since 2009.

- The percent of Hispanic faculty has increased from 8.8% in 2009 to 17.3% in 2020.
- In 2019, the total Active TX RN population had a race breakdown of 56.9%-White/Caucasian, 13.3%- Black/African-American, 16.6%-Hispanic/Latino, and 13.2%- Other, just slightly more diverse than the nursing faculty.

Figure 13. Distribution of race/ethnicity among faculty, 2009-2020



While the faculty population is becoming more racially diverse, they still do not match the level of diversity seen among newly enrolled RN students.

- In 2020, newly enrolled RN students were 41.2%-White/Caucasian, 15.7%- Black/African American, 29.7%- Hispanic/Latino, and 13.4%-Other.
- Perhaps the largest concern is the disparity between Hispanic faculty (17.3%) compared to Hispanic newly enrolled RN students (29.7%).

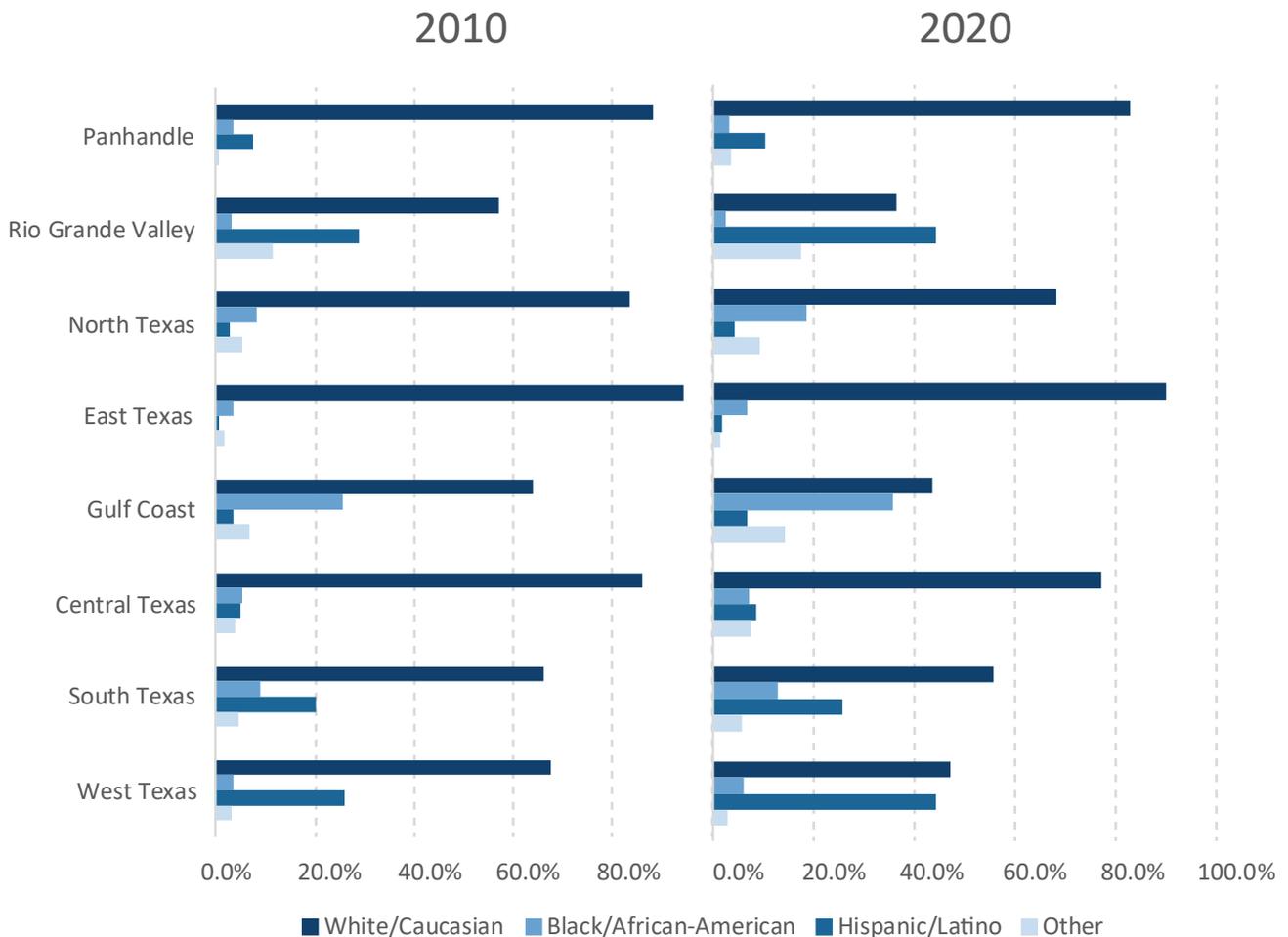
Figure 14 illustrates the percent of faculty from each racial background in each Public Health Region in 2010 and 2020.

- The proportion of White/Caucasian faculty decreased in every Public Health Region from 2010 to 2020. The proportion decreased most notably in the Rio Grande Valley, Gulf Coast, and West Texas.
- The percentage of Black/African-American faculty

increased in the majority of Public Health Regions but decreased in North Texas, East Texas, and the Gulf Coast regions. The greatest increases were in the Rio Grande Valley and West Texas. The greatest decrease was in the Gulf Coast region.

- The percentage of Hispanic/Latino faculty increased in half of the Public Health Regions and decreased in the Panhandle, Rio Grande Valley, South Texas, and West Texas regions. The greatest increase was in the Gulf Coast and the greatest decrease was in the Rio Grande Valley region.
- The “other” race category increased in every region except for small decreases in East and West Texas. The greatest increases were in the Gulf Coast and the Rio Grande Valley.

Figure 14. Race Categories Among Faculty by Public Health Regions, 2010 & 2020



Education

Figure 15 shows the distribution of highest degrees among nursing faculty.

- There has been little change in the proportion of those with a Bachelor's in Nursing, Master's in Nursing, Master's in Other Field, and Doctoral Level Degree.
- The largest decrease is seen among those with a Master's in a field other than nursing, from 3% to 0.2% from 2010 to 2020.
- The largest increase is seen among those with a doctoral degree, from 19.2% to 22.2%.

Figure 16 further breaks down the types of doctoral degrees each faculty may have.

- While a PhD in Nursing is the traditional degree for a nursing faculty to have, the proportion of faculty with these degrees has decreased and the number of nursing faculty with Doctor of Nursing Practice degrees has increased from 7.3% in 2010 to 51.4% in 2020.
- Very few faculty had Nursing Doctorates or Doctor of Nursing Science degrees in 2010 and even fewer in 2020.
- Doctorates in a field other than nursing has decreased notably.

Figure 15. Highest degrees among faculty, 2010-2020

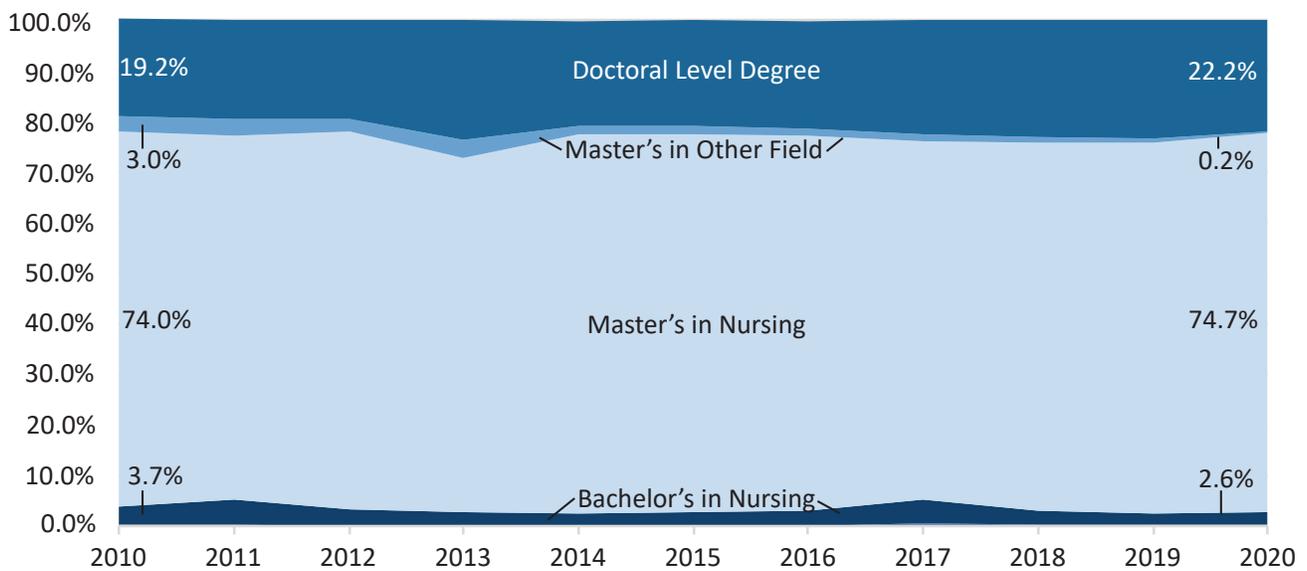
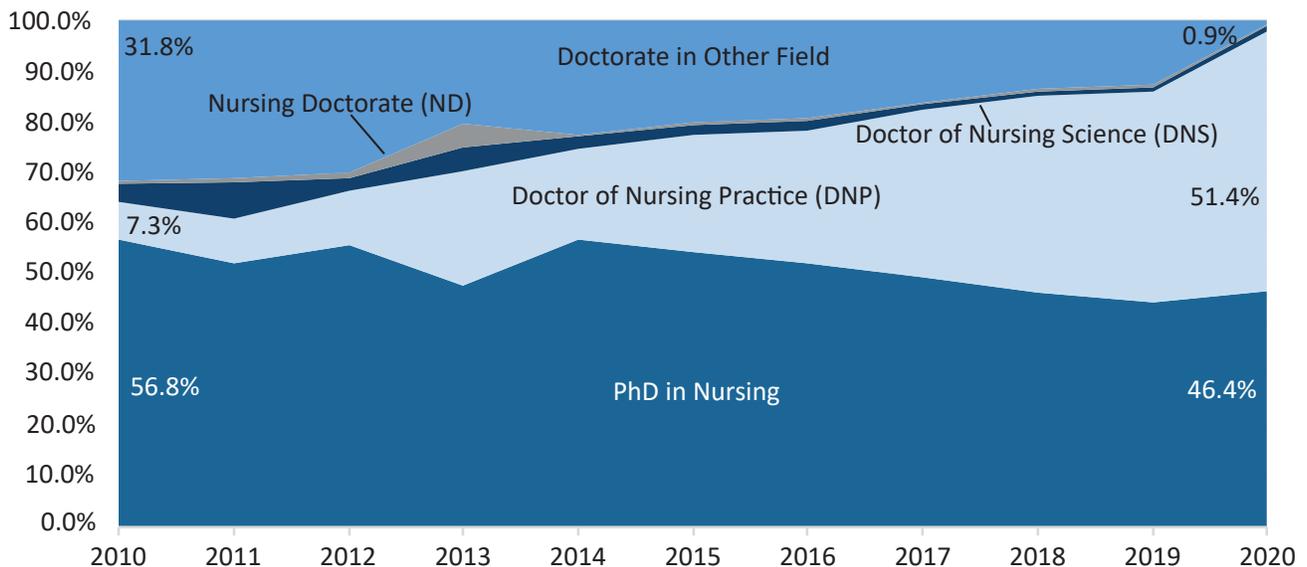


Figure 16. Doctorate distribution among faculty, 2010-2020



Education by Institution Type

Table 3 shows the distribution of degrees among faculty at the different institution types for 2010 and 2020.

- The Community, State, and Technical Colleges is the only institution type that has faculty with an Associate in Nursing as their highest degree (less than 1% in 2010 and 2020).
- The majority of faculty, no matter the institution type, had a Master's in Nursing (MSN) as their highest degree.
- The percent of faculty with Master's in fields other than nursing have decreased to almost zero in the past ten years.
- The percent of faculty with Doctor of Nursing

Practice (DNP) degrees increased notably from 2010 to 2020 in all institution types. The greatest increase was in Health-related institutions, from 3.0% in 2010 to 21.9% in 2020.

- Health-related institutions have had the greatest percent of doctorally prepared faculty since 2010.
- Doctorates in non-nursing fields among faculty have decreased greatly since 2010 with less than 1.0% with those degrees in each institution type.

Table 3. Percent of Faculty Degrees by Institution Type, 2010 & 2020

2010	Associate in Nursing (ADN)	Bachelor's in Nursing (BSN)	Master's in Nursing (MSN)	Master's in other field	PhD in Nursing	Doctor of Nursing Practice (DNP)	Doctor of Nursing Science (DNS)	Nursing Doctorate (ND)	Doctorate in other field
Community, State, & Technical Colleges	0.5%	6.9%	81.4%	4.7%	3.0%	0.3%	0.4%	0.2%	2.5%
For Profit Colleges and Universities authorized by certificate	0.0%	0.0%	93.8%	2.1%	4.2%	0.0%	0.0%	0.0%	0.0%
Health-related institutions	0.0%	0.3%	58.5%	0.7%	23.4%	3.0%	1.3%	0.0%	12.7%
Independent Colleges/Universities	0.0%	3.8%	71.9%	1.1%	8.7%	2.3%	1.9%	0.4%	9.9%
Other Institutions authorized by certificate	0.0%	14.8%	74.1%	3.7%	7.4%	0.0%	0.0%	0.0%	0.0%
Public Universities	0.0%	0.4%	69.7%	2.2%	17.7%	1.9%	0.6%	0.0%	7.4%
2020	Associate in Nursing (ADN)	Bachelor's in Nursing (BSN)	Master's in Nursing (MSN)	Master's in other field	PhD in Nursing	Doctor of Nursing Practice (DNP)	Doctor of Nursing Science (DNS)	Nursing Doctorate (ND)	Doctorate in other field
Community, State, & Technical Colleges	0.8%	3.4%	84.3%	0.4%	3.4%	7.3%	0.0%	0.0%	0.3%
For Profit Colleges and Universities authorized by certificate	0.0%	1.9%	84.0%	0.0%	1.1%	12.6%	0.3%	0.0%	0.3%
Health-related institutions	0.0%	1.0%	55.0%	0.2%	21.6%	21.9%	0.0%	0.0%	0.2%
Independent Colleges/Universities	0.0%	6.4%	65.6%	0.0%	14.3%	13.5%	0.0%	0.2%	0.0%
Other Institutions authorized by certificate	0.0%	0.7%	81.0%	0.0%	3.5%	12.7%	0.0%	1.4%	0.7%
Public Universities	0.1%	1.2%	71.3%	0.2%	15.9%	10.6%	0.7%	0.1%	0.0%



Education by Mean Age

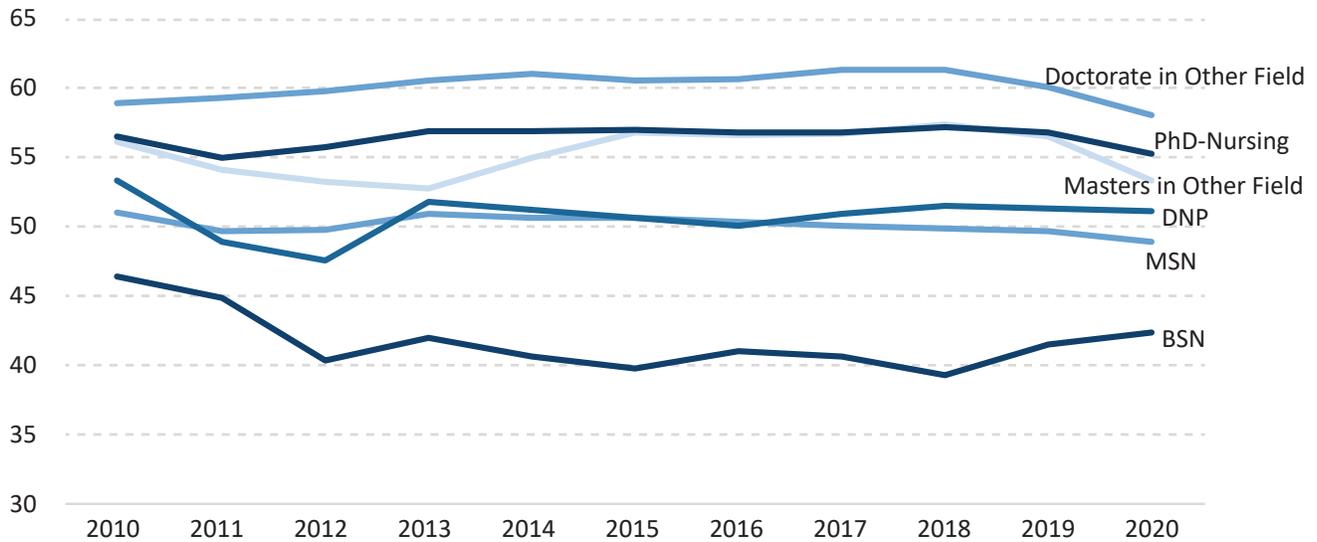
Figure 17 shows the trend of mean age of nursing faculty broken down by the faculty's highest degree.

- Every highest degree showed a decrease in mean age from 2010 to 2020. The most significant decrease was among those with a BSN as their highest degree, dropping 4 years.

- The mean age among those with an MSN, Master's in other field, and DNP decreased over 2 years from 2010 to 2020. The mean age for those with a PhD in Nursing decreased by over 1 year.
- The mean age of those with a Doctorate in a field other than nursing decreased by less than 1 year.

There are only a couple of instances of faculty with a diploma as their highest level of education. If we don't

Figure 17. Mean Age by Highest Degree, 2010-2020



consider this category, the trend reads that faculty with higher degrees are older than those with lower degrees.

Conceptually, nursing faculty with higher degrees being older is understandable because it takes longer to get higher degrees. However, it could also point to what the literature says in that nurses are going back to school to get higher degrees later in life⁵.

This is concerning because older faculty are closer to retirement, meaning nursing institutions will be left with fewer faculty with higher education degrees. Regardless of the level of degree, it seems like nurses are waiting to become faculty until later in life, providing nursing institutions with less years before retirement than a traditional nursing career in a clinical setting.

The changes in mean age by highest degree were not great from 2010 to 2020. The mean age of those with higher education nursing degrees needs to decrease notably if nursing institutions are to have individual faculty teach at their institutions longer before retirement.

The numbers seen among Texas' nursing faculty are also

trending similarly to those at the national level. According to the AACN's fact sheet on the Nursing Faculty Shortage (2020), nursing faculty with doctoral degrees largely ranged from 50 to over 60 years of age while the age of those with master's degrees largely ranged from just under 50 to 57 years of age⁶.

⁵ Daw, Peggy, Mary Etta Mills, and Oscar Ibarra. 2018. "Investing in the Future of Nurse Faculty: A State-Level Program Evaluation." *Nursing Economic* 36, no. 2: 59-67.

⁶ American Association of College of Nurses (AACN). 2020 (September). "Fact Sheet: Nursing Faculty Shortage."



Primary & Secondary Practice Settings

The information about primary and secondary practice settings comes from the Board of Nursing’s licensing files. Nurses getting relicensed can choose which primary and secondary practice setting most fits with their job. For this report, we assume that the setting that would most fit with nursing faculty is “School of Nursing.”

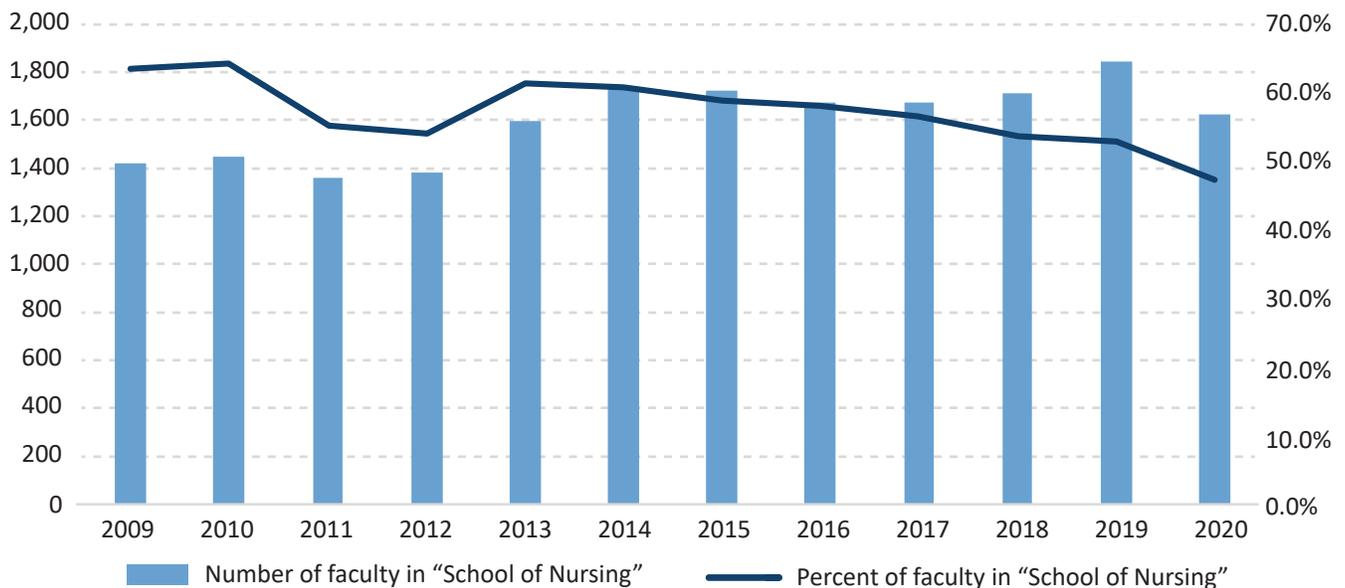
Prevalence of “School of Nursing”

Not every faculty member listed on the Faculty Profile selected “School of Nursing” as their primary practice setting on their licensing file. It is possible that this survey question was left blank in the file because it was simply skipped or forgotten. Another possibility is that, given there were 1,678 faculty who listed “School/

College Health” as their primary (in the total 2009-2019 file), some of these faculty may have made a mistake in choosing “School/College Health” rather than “School of Nursing.”

Figure 18 shows us that, while the number of faculty indicating their primary practice setting to be “School of Nursing” has increased over the past ten years, the percentage of faculty that list “School of Nursing” has decreased. This could be due to more faculty working in secondary positions as seen in the “Secondary Setting” section below. This is also corroborated with the decrease in the number of hours worked in the primary practice setting as seen in figure 21 (page 12).

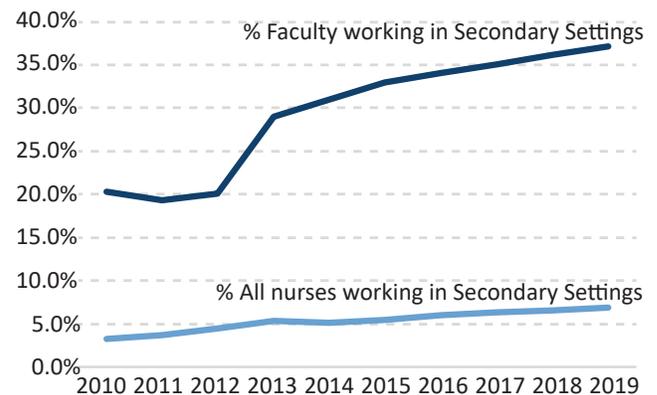
Figure 18. Prevalence of “School of Nursing”, 2009-2020



Secondary Settings

Figure 19 shows that the number of faculty working in a secondary setting, regardless of what that secondary setting is, has increased since 2009. The number of faculty working in a secondary setting has increased by 1,000 nurses, or 20%. Figure 19 also shows that the percentage of nursing faculty working in a secondary setting is far greater than the percent of total nurses working in a secondary setting. This could be due to the pay gap between nursing faculty and nurses working in a clinical setting, with the latter making a, sometimes much higher, salary (AACN, Fact Sheet: Nursing Faculty Shortage, 2020).

Figure 19. Percent of faculty and all nurses working in secondary settings, 2010-2019



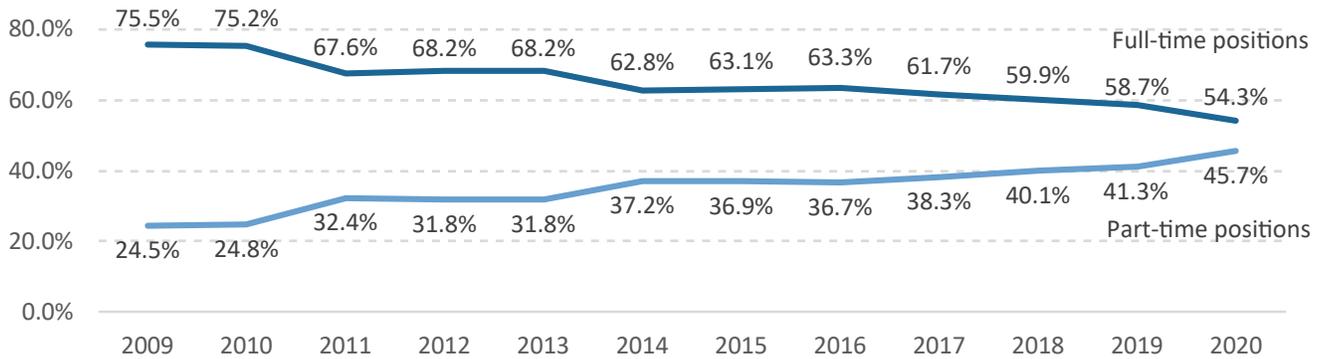
Full and Part-time Faculty Status

Figure 20 shows the percent of faculty positions considered full-time vs. part-time, as reported in the NEPIS directly from school of nursing programs.

- Since 2009, the percent of full-time faculty positions has decreased from 75.5% to 54.3%.

- As the percent of part-time faculty positions at schools of nursing increases, according to the NEPIS data, so does the number of nurses working in secondary settings, according to the BON relicensure data as seen in Figure 19 (page 11).

Figure 20. Percent of faculty positions designated as full and part-time, 2009-2020



Average Weekly Hours Worked at Primary Setting

The average number of weekly hours worked by nursing school faculty has decreased by 3 hours, or 7.4%, over the past ten years. This data is consistent with a decrease in full-time faculty and an increase in faculty working in secondary settings.

Figure 21 shows this decrease in average hours worked for all nursing school faculty and breaks it down by age category.

- Those younger than 45 show little change in the

average number of hours worked in a week since 2011.

- Those faculty aged 46-65 have decreased the number of hours they work a week by 3, the same as the overall average.
- The greatest change is seen in the nursing school population of those older than 65. The average number of hours worked for this group has decreased by 5 hours a week, or 12.2%.

Figure 21. Average hours worked each week by age category, 2011-2020

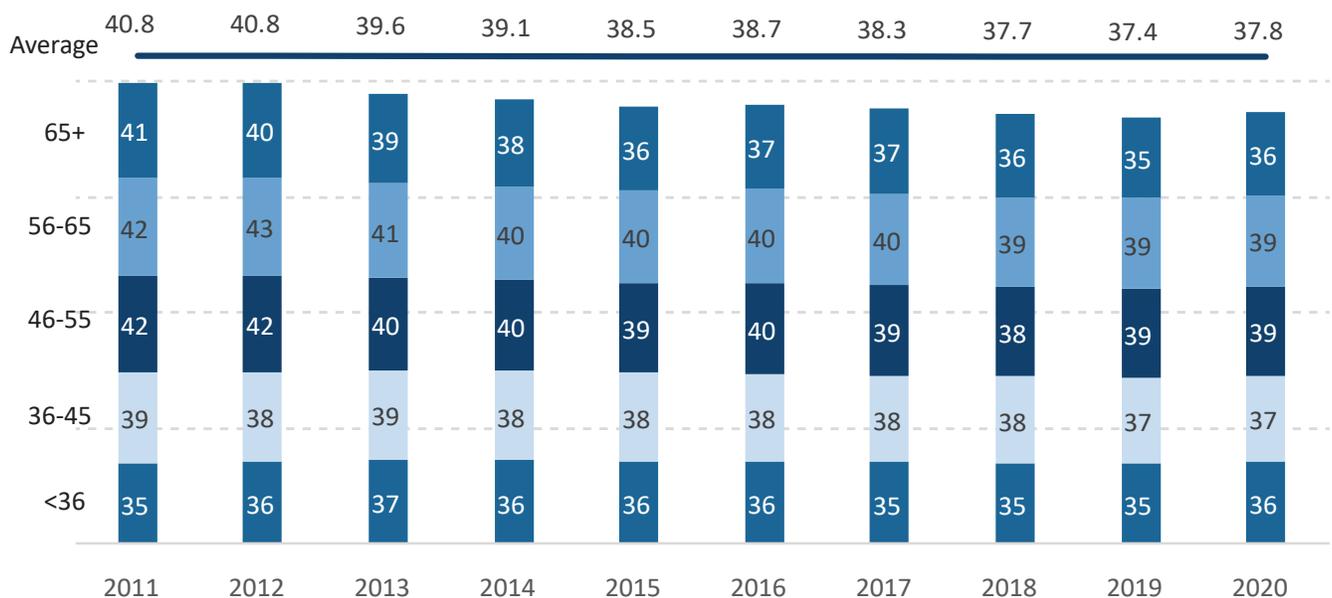
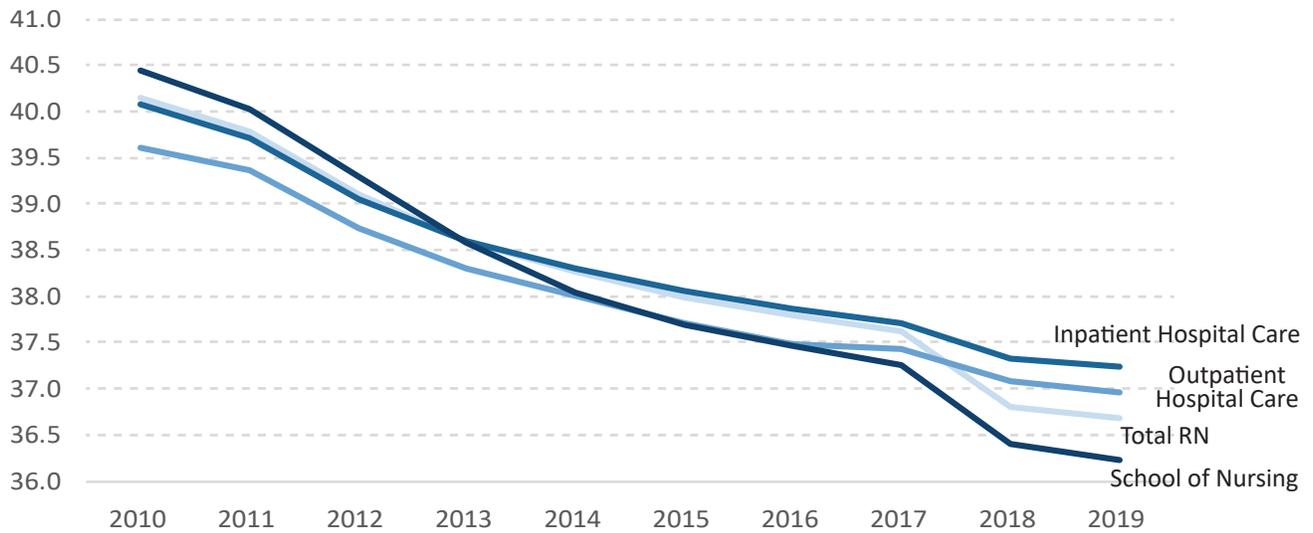


Figure 22 shows the average weekly hours worked by nurses from 2009-2019 broken down by primary practice setting.

- Every primary practice setting shows a decrease in average weekly hours worked by nurses. However, those that list school of nursing as their primary practice setting show the greatest decrease.

Figure 22. Average hours worked each week by Primary Practice Setting, 2010-2019



Faculty Shortages

The shortage of nursing faculty is not only impacting Texas schools, but is becoming a worsening problem nationwide, and is a major factor influencing nursing shortages, and therefore health care deficits (AACN, Fact Sheet: Nursing Faculty Shortage, 2020). Faculty shortages can be caused by a lack of qualified candidates, unsatisfactory job requirements, faculty tending to be older and therefore working fewer years than would younger faculty before retirement, competition for clinical sites limiting the number of faculty that can support the program, and lastly, compassion fatigue and burnout occurring at higher rates due to intense workload and the combination of working in academia and clinical settings simultaneously.

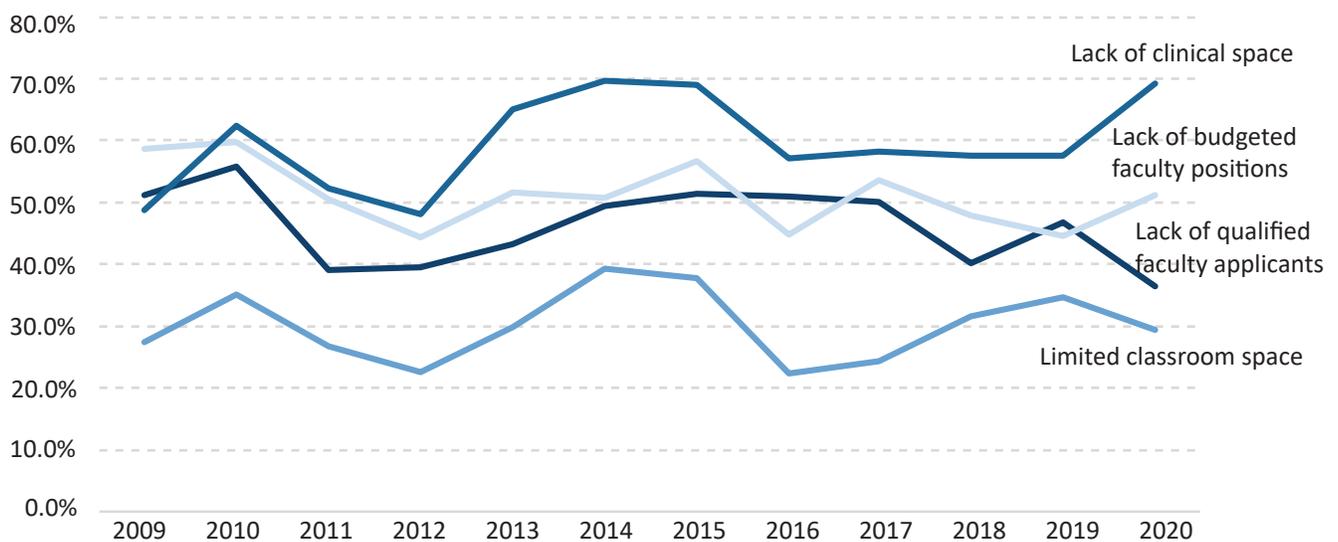
Evidence of Shortages

In the 2020 RN NEPIS, Schools of Nursing were asked to rank the following reasons why qualified student

applicants were not admitted: lack of qualified faculty applicants for budgeted positions, lack of budgeted faculty positions, lack of clinical space, limited classroom space, or “other.” Figure 23 illustrates the percentage of schools that listed each reason as “Important” or “Very Important.” While lack of clinical space was the most important factor restricting schools from accepting all qualified applicants, lack of budgeted faculty positions and lack of qualified faculty applicants are seen to be reasons for more than 30% of schools in the past 12 years.

In describing what “other” reasons schools of nursing had for not admitting all qualified students, responses pertaining to faculty included: inadequate faculty salary and lack of faculty with a focus in nursing research.

Figure 23. Barriers for not admitting all qualified applicants, 2009-2020



Faculty Salary

According to AACN fact sheet on Nursing Faculty Shortage (2020), many schools have difficulty recruiting and retaining faculty because of the salary discrepancies between that of nursing faculty and those advanced practice nurse salaries obtained through clinical practice, with an average of \$110,000 for clinical practice and \$79,444 for teaching.⁷ As explained above, two schools of nursing indicated that they had difficulty hiring faculty because the salary of faculty was lower than what that

advanced practice nurse could make in a clinical setting. Not enough data exists for us to determine if this is the case for many schools in Texas. In the future, the TCNWS is considering adding questions about faculty salary to its surveys as it would pertain to nursing faculty.

⁷ American Association of College of Nurses (AACN). 2020 (September). "Fact Sheet: Nursing Faculty Shortage."



Faculty Positions

Figure 24 and Table 4 lists the total number of filled, budgeted, resigned, retired, and vacant faculty positions, in FTEs, across nursing schools in Texas from 2012 through 2020. Before 2012, resignations and retirements were combined on our survey question.

Filled and Budgeted Positions

- The number of budgeted positions has increased from 2,399 FTEs to 3,343.5 FTEs, or 39.4%, since 2012.
- The number of filled positions has increased from 2,205 FTEs to 3,144.5 FTEs, or 42.6%, since 2012.

Resignations and Retirements

- The number of resignations has increased from 226 FTEs to 248.5 FTEs, or 10%, since 2012. The percent of resigned faculty FTEs has decreased from 9.4% to 7.4%.

- The number of retirements has increased from 42.5 FTEs to 77.5 FTEs, or 82.4%, since 2012. The percent of retired faculty FTEs has increased from 1.8% to 2.3%.

Vacant Positions

- Since 2012, the number of vacant FTE positions has shown a slight increase from 194 FTEs to 199 FTEs.
- The percent of vacant positions or the vacancy rate, has decreased from 8.1% to 5.9% since 2012.

Figure 24. Number of FTEs, 2012-2020

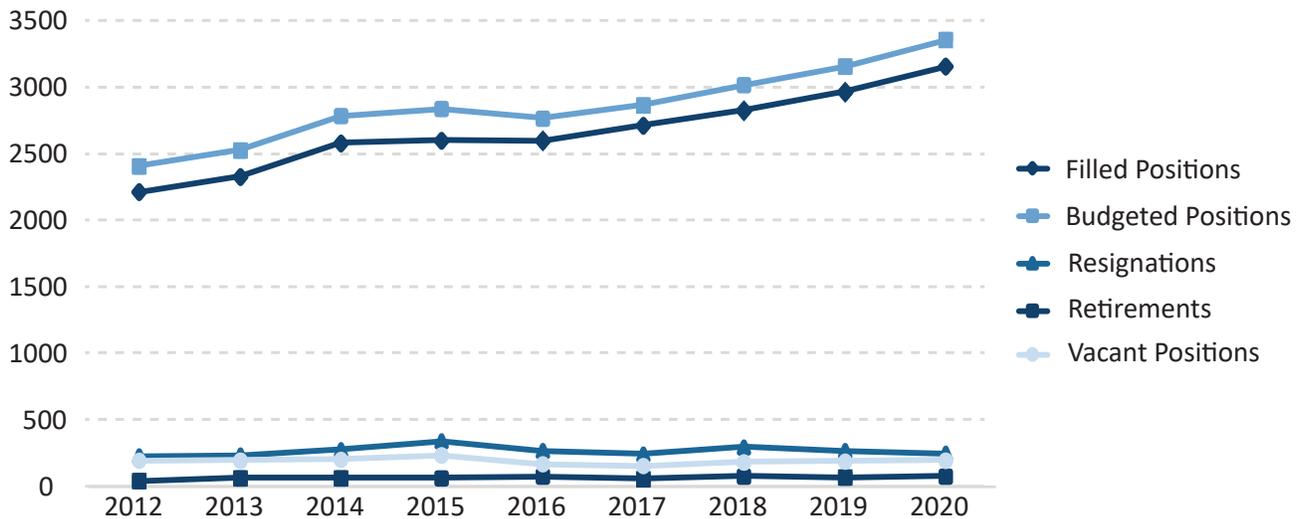


Table 4. Number of FTEs, 2012-2020

FTEs	2012	2013	2014	2015	2016	2017	2018	2019	2020
Filled Positions	2,205.0	2,321.5	2,571.0	2,592.5	2,587.5	2,703.5	2,818.5	2,955.0	3,144.5
Budgeted Positions	2,399.0	2,518.5	2,774.5	2,828.0	2,756.0	2,858.0	3,004.0	3,146.0	3,343.5
Resignations	226.0	233.0	278.5	341.0	267.5	243.5	296.0	267.0	248.5
Retirements	42.5	65.0	66.5	64.0	76.5	57.0	78.0	67.5	77.5
Vacant Positions	194.0	197.0	203.5	235.5	168.5	154.5	185.5	191.0	199.0



Filled Positions

Table 5 compares the number of filled FTE positions in each Public Health Region in 2009 and 2020.

- The Gulf Coast region showed the largest percent increase in filled FTEs since 2009 with 81.0%.
- The Panhandle region showed the smallest percent increase in filled FTEs since 2009 with 4.3%.

Figures 25-32 show the number of filled FTE positions broken down by Public Health Region since 2009.

- The number of filled faculty FTEs has increased in every Public Health Region. The increase has ranged from an increase in only 8 FTEs in the Panhandle region to 394 FTEs in North Texas.

Table 5. Filled FTEs by Public Health Regions, 2009 & 2020

Public Health Regions	2009	2020	Percent Change
Panhandle	185 (n=5)	193 (n=6)	4.3%
Rio Grande Valley	157 (n=8)	203 (n=10)	29.7%
North Texas	500 (n=22)	894 (n=29)	79.0%
East Texas	174 (n=9)	241 (n=12)	38.2%
Gulf Coast	361 (n=23)	654 (n=27)	81.0%
Central Texas	335 (n=9)	477 (n=16)	42.4%
South Texas	229 (n=11)	326 (n=14)	42.7%
West Texas	95 (n=6)	158 (n=11)	66.3%

n= the number of RN programs reported that year.

Figure 25. Filled FTEs, Panhandle, 2009-2020

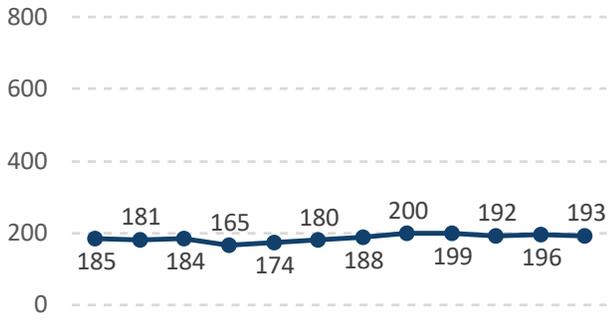


Figure 26. Filled FTEs, Rio Grande Valley, 2009-2020

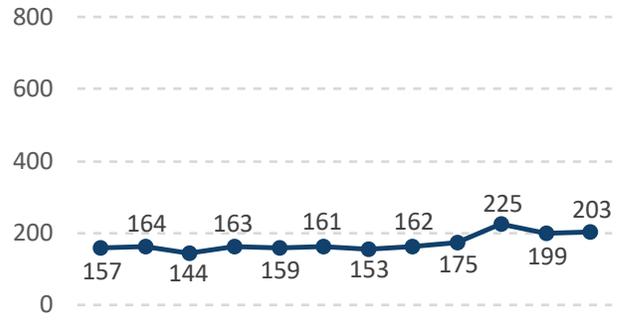


Figure 27. Filled FTEs, North Texas, 2009-2020

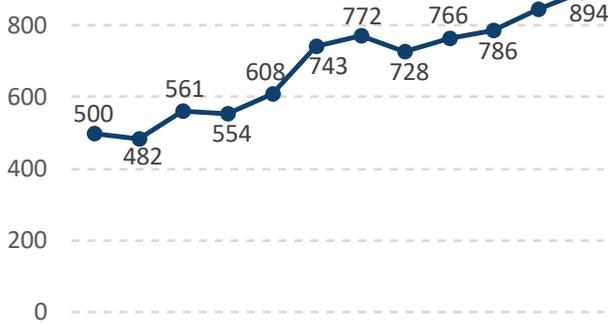


Figure 28. Filled FTEs, East Texas, 2009-2020

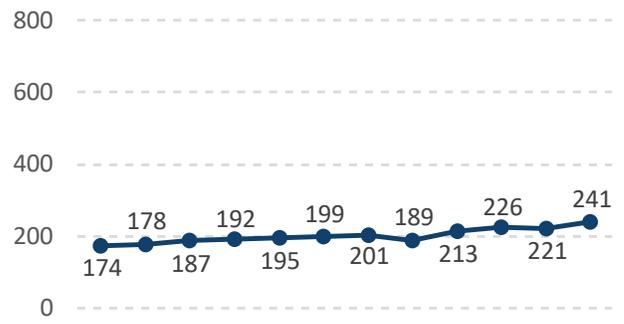


Figure 29. Filled FTEs, Gulf Coast, 2009-2020

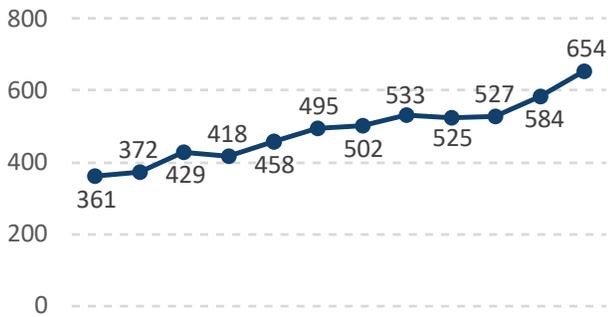


Figure 30. Filled FTEs, Central Texas, 2009-2020

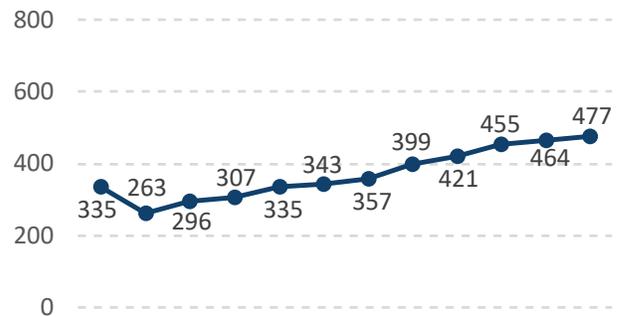


Figure 31. Filled FTEs, South Texas, 2009-2020

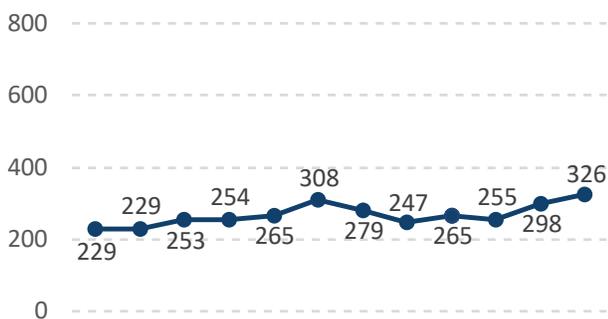
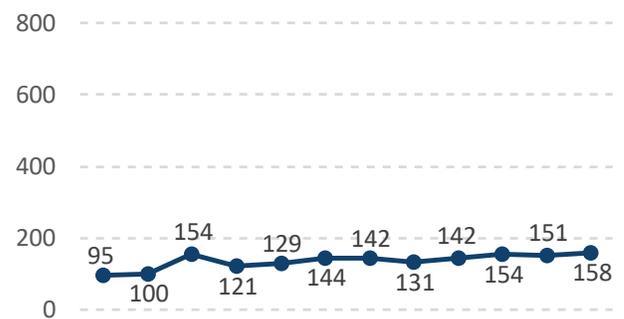


Figure 32. Filled FTEs, West Texas, 2009-2020



Budgeted Positions

Table 6 compares the number of budgeted FTE positions in each Public Health Region in 2009 and 2020.

- The Gulf Coast and North Texas regions have had the largest percent increase in budgeted positions with 81.9% and 80.8%, respectively.
- The Panhandle has had the smallest percent increase in budgeted positions with 8.4%.

Figures 33-40 show the number of budgeted FTE positions broken down by Public Health Regions since 2009.

- The number of budgeted positions has increased in every Public Health Region over the past 12 years. The increase by region ranges from only 16 budgeted faculty FTEs in the Panhandle to 426 FTEs in North Texas.

Table 6. Budgeted FTEs by Public Health Regions, 2009 & 2020

Public Health Regions	2009	2020	Percent Change
Panhandle	190	206	8.4%
Rio Grande Valley	177	223	26.0%
North Texas	527	953	80.8%
East Texas	178	257	44.4%
Gulf Coast	387	704	81.9%
Central Texas	347	484	39.5%
South Texas	236	345	46.2%
West Texas	100	173	73.0%



Figure 33. Budgeted FTEs, Panhandle, 2009-2020

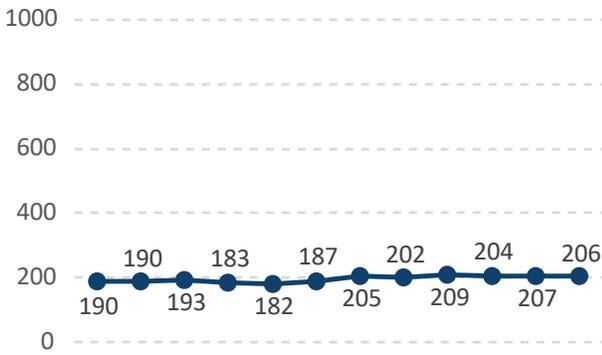


Figure 34. Budgeted FTEs, Rio Grande Valley, 2009-2020

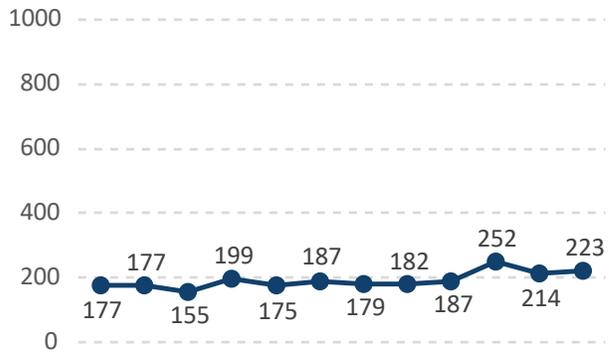


Figure 35. Budgeted FTEs, North Texas, 2009-2020

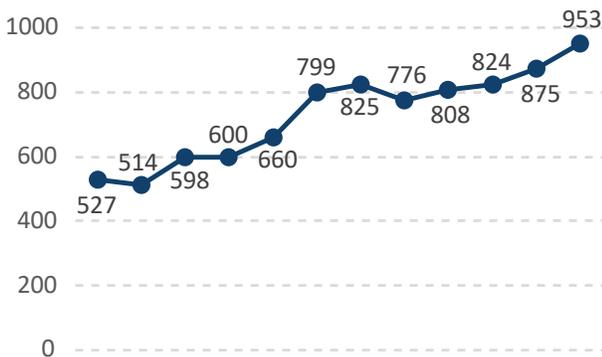


Figure 36. Budgeted FTEs, East Texas, 2009-2020

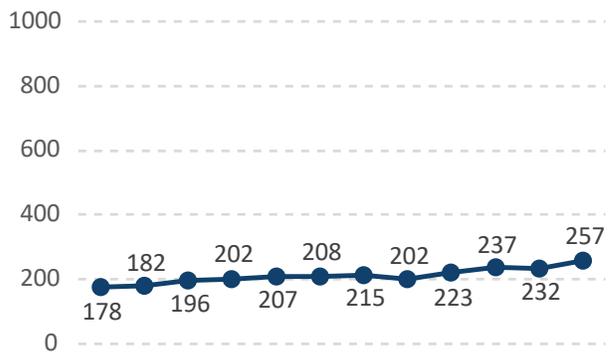


Figure 37. Budgeted FTEs, Gulf Coast, 2009-2020

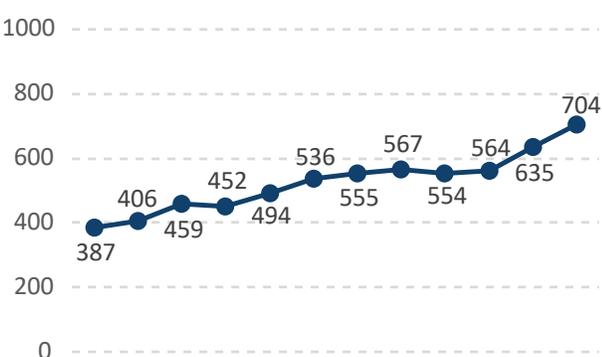


Figure 38. Budgeted FTEs, Central Texas, 2009-2020

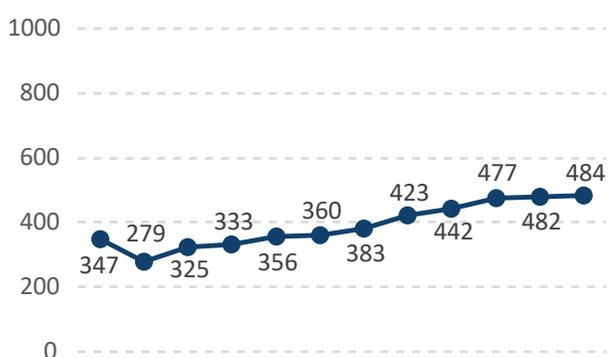


Figure 39. Budgeted FTEs, South Texas, 2009-2020

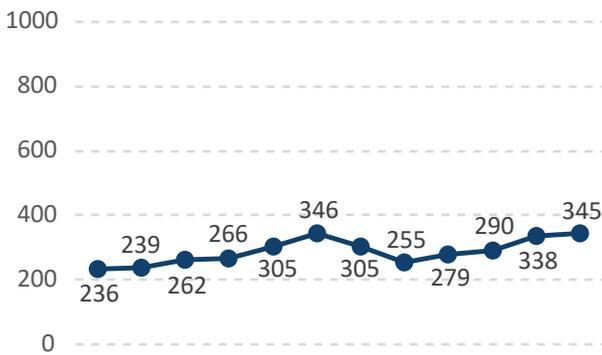
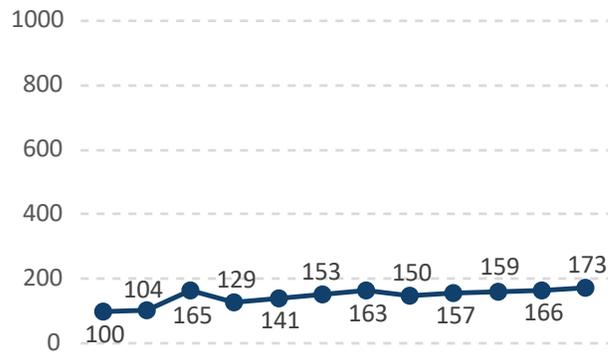


Figure 40. Budgeted FTEs, West Texas, 2009-2020



Vacant Positions

Table 7 compares the number of vacant FTE positions in each Public Health Region in 2009 and 2020.

- East Texas saw the biggest percent increase (325.0%) from 4 to 17 vacant FTEs.
- Central Texas saw the largest percent decrease (-41.7%) from 12 to 7 vacant FTEs.

Figures 41-48 show the number of vacant FTE positions broken down by Public Health Regions since 2009.

- The number of vacancies in each Public Health Region was mostly proportional to the number of budgeted FTE positions available. However, within each region, the number fluctuated depending on the year, with no clear trends since 2009.

Table 7. Vacant FTEs by Public Health Regions, 2009 & 2020

Public Health Regions	2009	2020	Percent Change
Panhandle	5	14	180.0%
Rio Grande Valley	21	20	-4.8%
North Texas	28	59	110.7%
East Texas	4	17	325.0%
Gulf Coast	26	51	96.2%
Central Texas	12	7	-41.7%
South Texas	7	19	171.4%
West Texas	5	15	200.0%



Figure 41. Vacant FTEs, Panhandle, 2009-2020

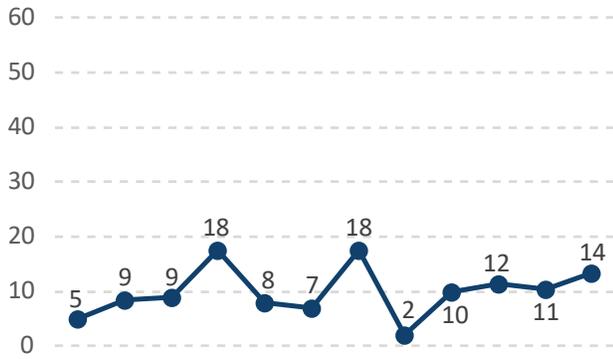


Figure 42. Vacant FTEs, Rio Grande Valley, 2009-2020

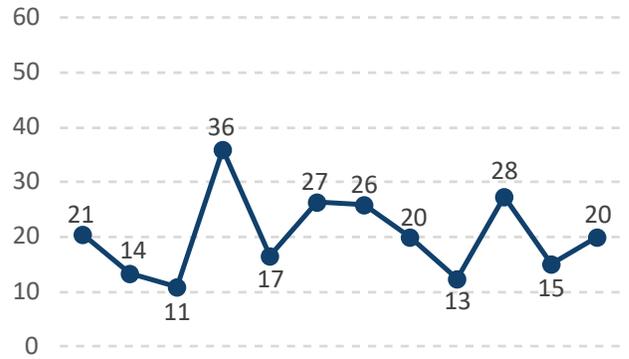


Figure 43. Vacant FTEs, North Texas, 2009-2020

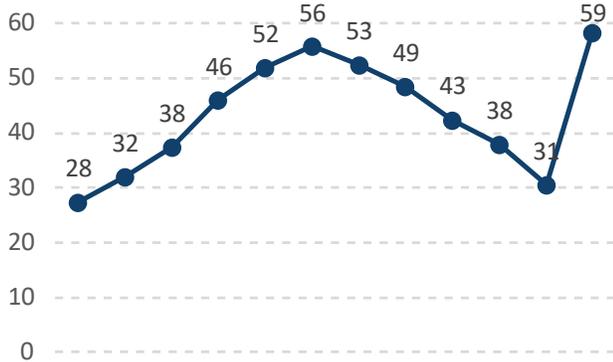


Figure 44. Vacant FTEs, East Texas, 2009-2020

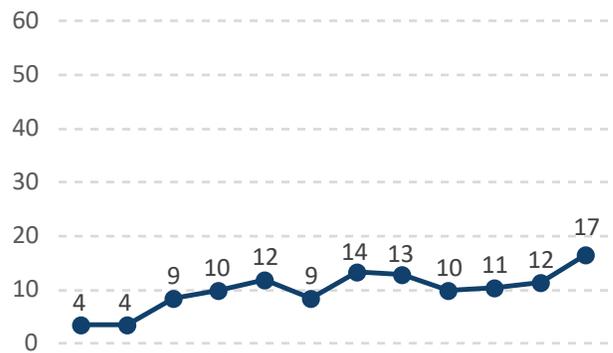


Figure 45. Vacant FTEs, Gulf Coast, 2009-2020

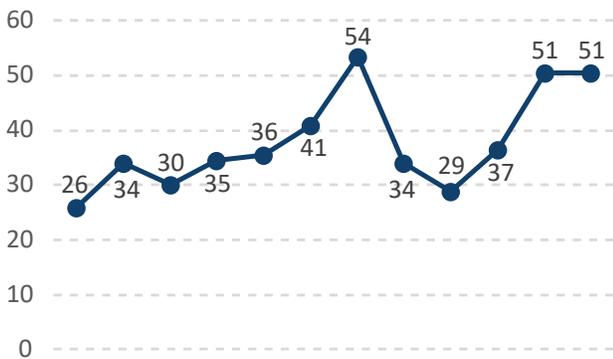


Figure 46. Vacant FTEs, Central Texas, 2009-2020

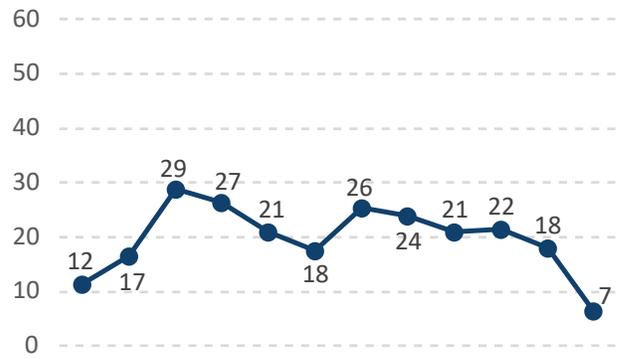


Figure 47. Vacant FTEs, South Texas, 2009-2020

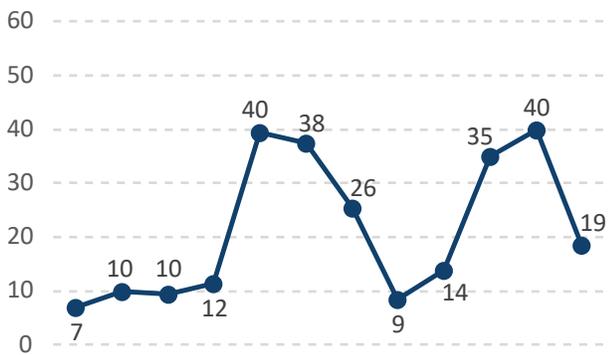


Figure 48. Vacant FTEs, West Texas, 2009-2020



Vacancy Rates

The overall vacancy rate for Texas in 2019 was 6.1% compared to the reported national faculty vacancy rate of 7.2% (AACN, Fact Sheet: Nursing Faculty Shortage, 2020). In 2020, the Texas vacancy rate remained steady at 5.9%.

Figures 49-56 and Table 8 show the vacancy rate in each Public Health Region from 2009 to 2020.

- West Texas has shown the largest increase in vacancy rate out of the 8 Public Health Regions, increasing from 3.9 to 8.7 since 2009.
- North Texas has shown the smallest increase in vacancy rates, from 5.7 to 6.1.
- The Rio Grande Valley, Gulf Coast, and Central Texas all showed decreases in vacancy rates from 2009 to 2020.

Table 8. Vacancy Rate FTEs by Public Health Regions, 2009-2020

Public Health Regions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Panhandle	2.6	4.5	4.7	9.6	4.4	3.7	8.5	1.0	4.8	5.7	5.1	6.6
Rio Grande Valley	11.6	7.6	7.1	18.1	9.4	14.2	14.5	11.0	6.7	10.9	7.0	9.0
North Texas	5.7	6.2	6.2	7.7	7.9	7.0	6.4	6.3	5.3	4.6	3.5	6.1
East Texas	2.0	1.9	4.3	5.0	5.8	4.1	6.3	6.4	4.5	4.4	5.0	6.4
Gulf Coast	8.0	9.2	6.9	8.2	7.2	7.7	9.6	6.0	5.2	6.3	8.0	7.2
Central Texas	3.3	5.9	8.9	8.0	5.9	4.9	6.7	5.7	4.8	4.5	3.7	1.3
South Texas	3.7	4.8	3.6	4.3	13.0	10.9	8.4	3.3	5.0	12.1	11.8	5.4
West Texas	3.9	2.9	6.0	5.4	8.9	6.2	13.2	12.4	9.9	3.2	9.1	8.7



Figure 49. Vacancy Rate, Panhandle, 2009-2020

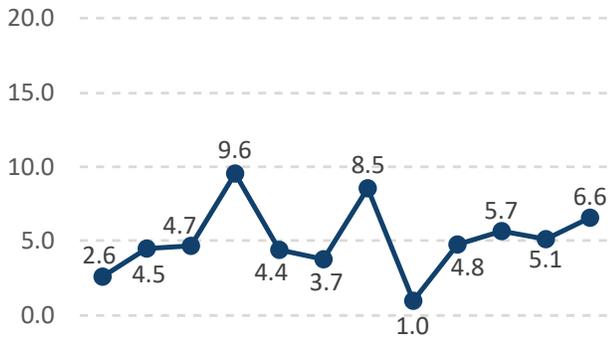


Figure 50. Vacancy Rate, Rio Grande Valley, 2009-2020

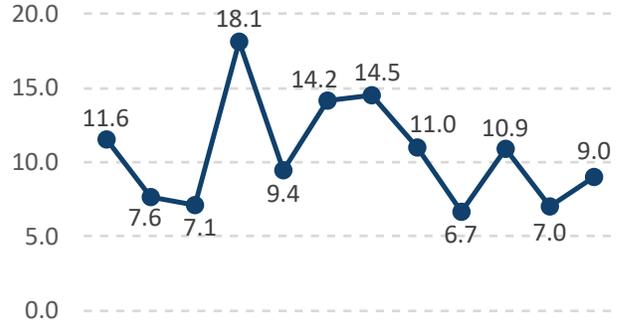


Figure 51. Vacancy Rate, North Texas, 2009-2020

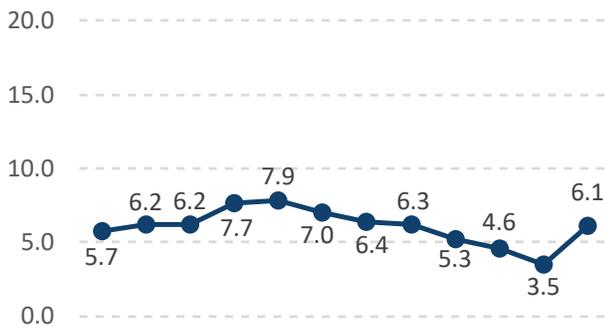


Figure 52. Vacancy Rate, East Texas, 2009-2020

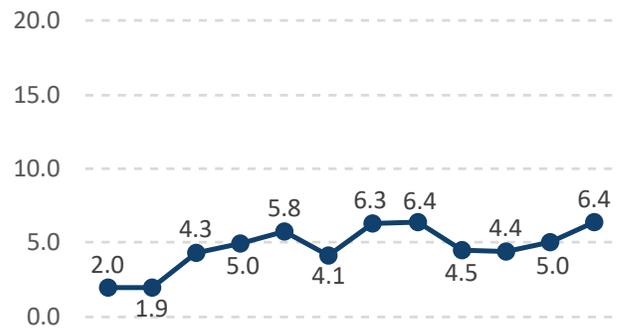


Figure 53. Vacancy Rate, Gulf Coast, 2009-2020

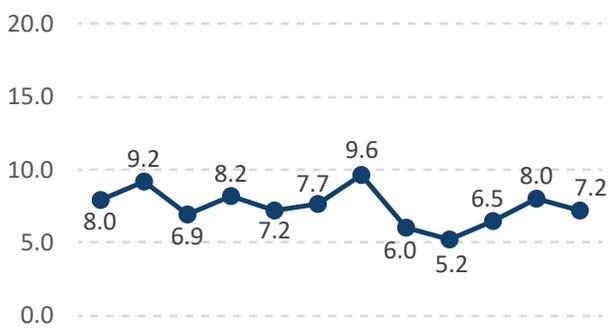


Figure 54. Vacancy Rate, Central Texas, 2009-2020

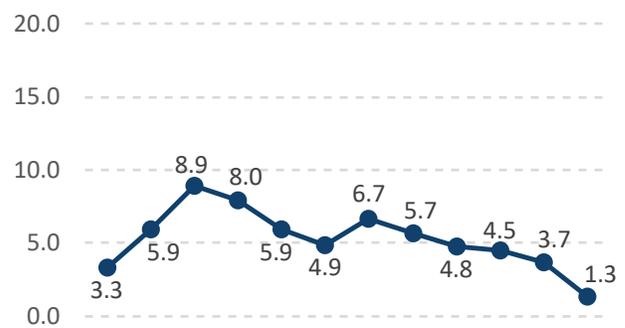


Figure 55. Vacancy Rate, South Texas, 2009-2020

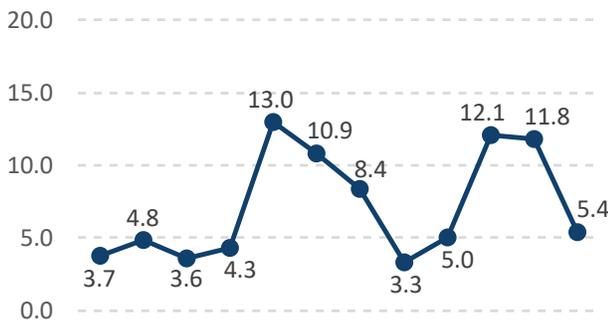
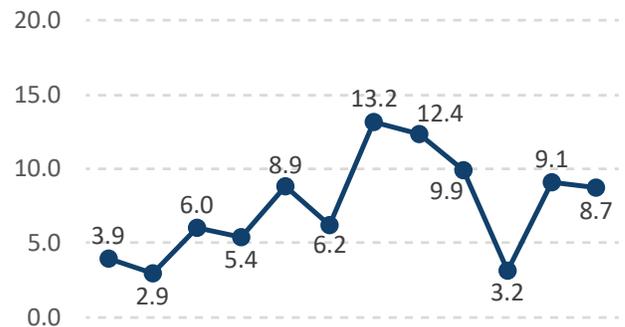


Figure 56. Vacancy Rate, West Texas, 2009-2020



Vacancies in Schools

Figures 57-64 show the percent of schools that had 0 vacant faculty FTE positions by Public Health Region. Many schools in each Public Health Region indicated that they had zero vacancies among faculty. From 2009 to 2020, the percent of schools that reported 0 vacancies ranged from 33.3% (in 2014) to 45.6% (in 2020) across the state.

- East Texas has consistently had one of the highest percents of schools without vacancies since 2009, ranging from 33%-60% of schools without any vacancies.
- The following regions, Rio Grande Valley (2011), West Texas (2015), and Panhandle (2019) all had vacancies at 100% of their schools in the corresponding years.

- The Panhandle was the most unpredictable region of the Public Health Regions, ranging from 83% of schools with 0 vacancies to 0% of schools with no vacancies.

The variability of the percent of schools without vacancies in each Public Health Region shows that vacancies are an issue across the state of Texas, not concentrated in any particular region.



Figure 57. Percent Zero Vacancies, Panhandle, 2009-2020

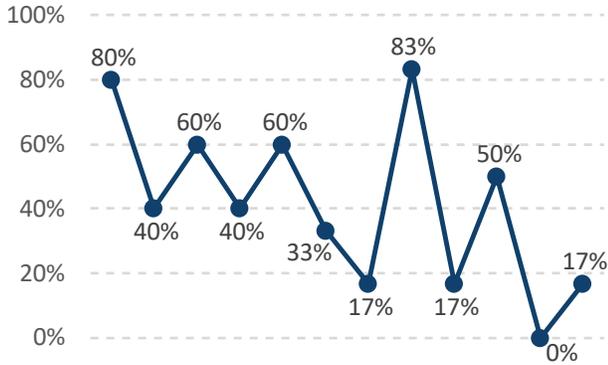


Figure 58. Percent Zero Vacancies, Rio Grande Valley, 2009-2020

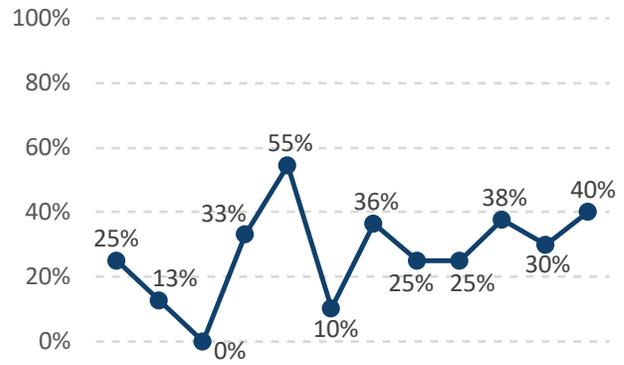


Figure 59. Percent Zero Vacancies, North Texas, 2009-2020

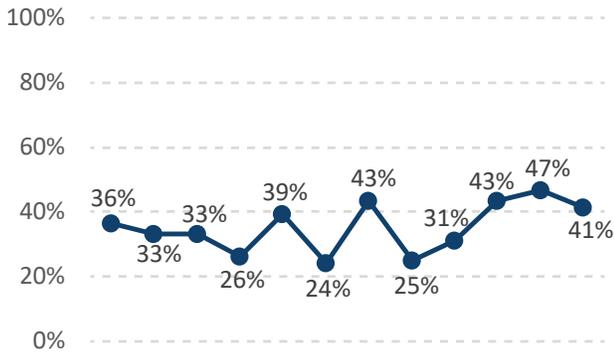


Figure 60. Percent Zero Vacancies, East Texas, 2009-2020

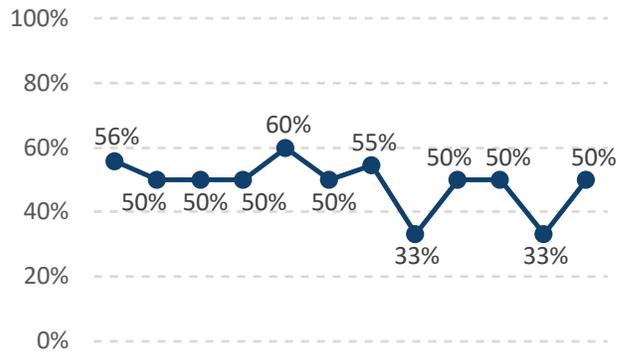


Figure 61. Percent Zero Vacancies, Gulf Coast, 2009-2020

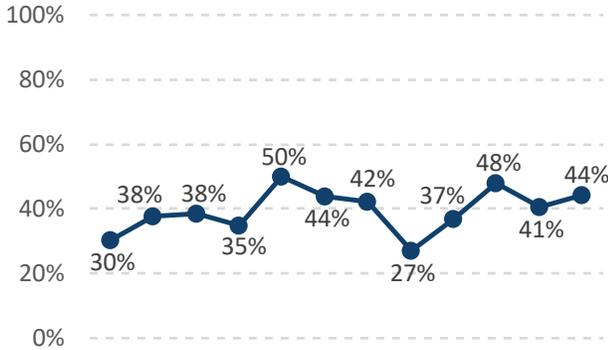


Figure 62. Percent Zero Vacancies, Central Texas, 2009-2020

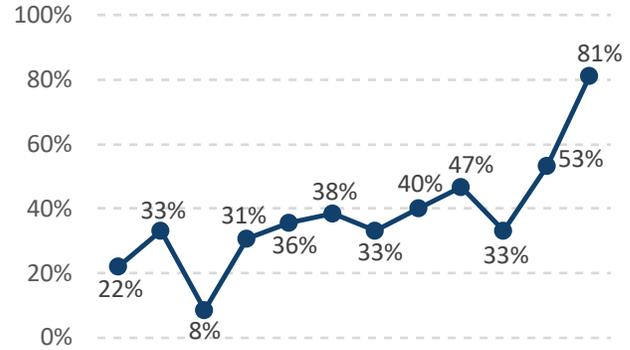


Figure 63. Percent Zero Vacancies, South Texas, 2009-2020

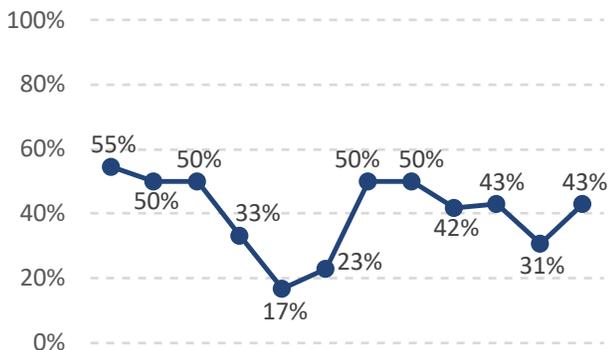
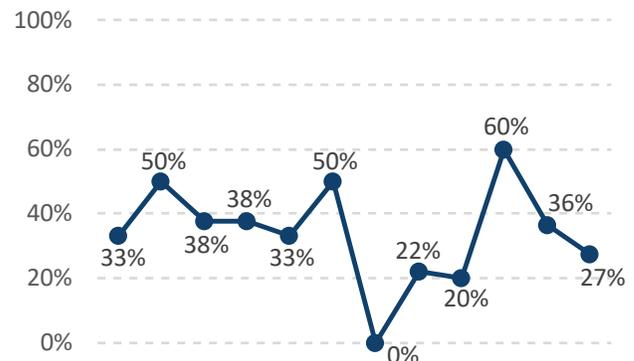


Figure 64. Percent Zero Vacancies, West Texas, 2009-2020



Resignations

Table 9 compares the number of resigned FTEs in each Public Health Region in 2012 and 2020.

- South Texas had the greatest change in resigned FTEs, increasing 73.7% from 2012 to 2020.
- East Texas had the smallest change in resigned FTEs, decreasing by 5.1%.
- West Texas decreased the number of resigned FTEs by 43.5%.

Figures 65-72 show the number of resigned FTEs broken down by Public Health Region since 2012.

- North Texas consistently had the greatest number of resigned FTEs while the Rio Grande Valley consistently had the lowest number of resigned FTEs since 2012.

Table 9. Resigned FTEs by Public Health Regions, 2012 & 2020

Public Health Regions	2012	2020	Percent Change
Panhandle	13	16	23.1%
Rio Grande Valley	17	11	-35.3%
North Texas	59	66	12.0%
East Texas	20	19	-5.1%
Gulf Coast	35	51	45.7%
Central Texas	32	42	31.3%
South Texas	19	33	73.7%
West Texas	23	13	-43.5%



Figure 65. Resignation FTEs, Panhandle, 2012-2020

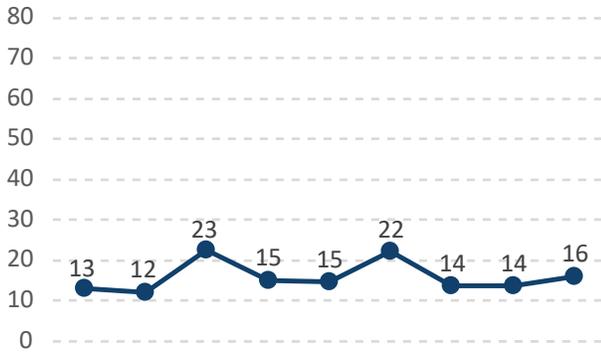


Figure 66. Resignation FTEs, Rio Grande Valley, 2012-2020

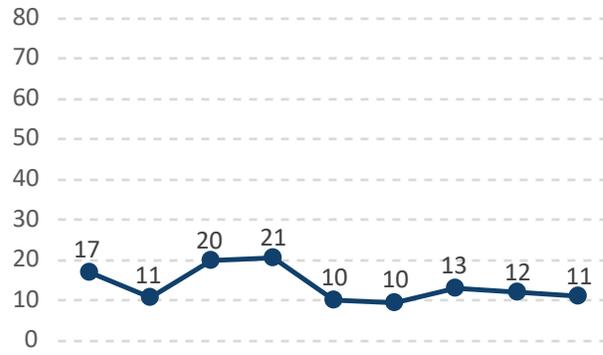


Figure 67. Resignation FTEs, North Texas, 2012-2020

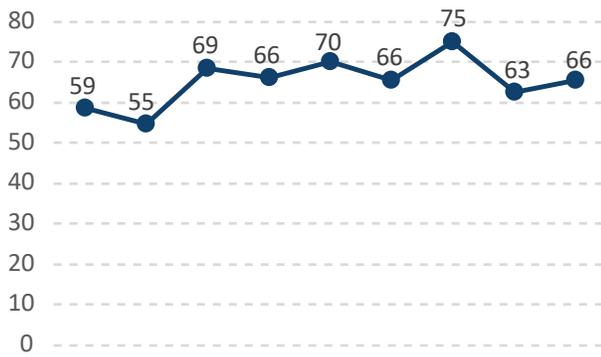


Figure 68. Resignation FTEs, East Texas, 2012-2020

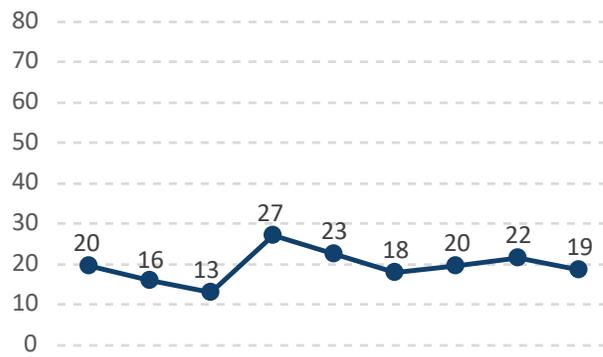


Figure 69. Resignation FTEs, Gulf Coast, 2012-2020

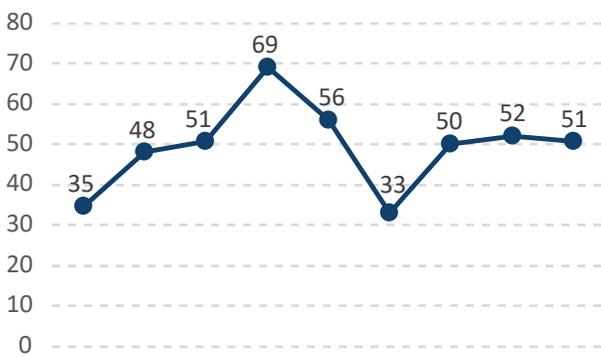


Figure 70. Resignation FTEs, Central Texas, 2012-2020

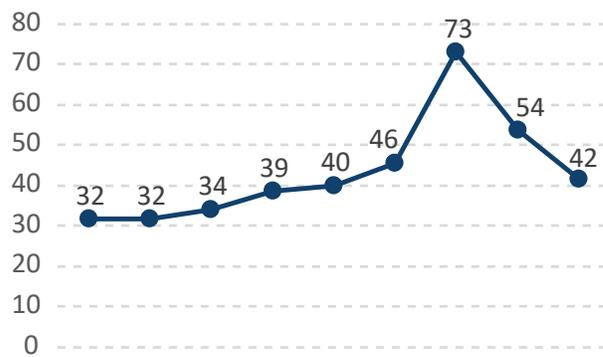


Figure 71. Resignation FTEs, South Texas, 2012-2020

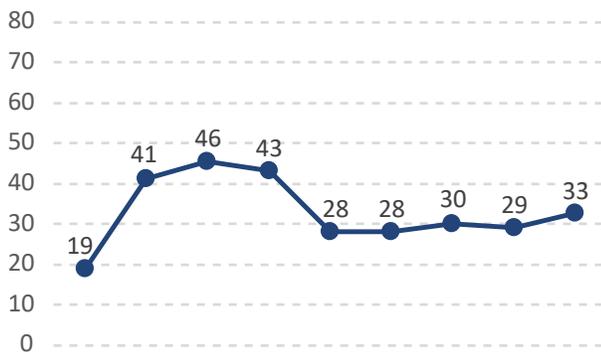
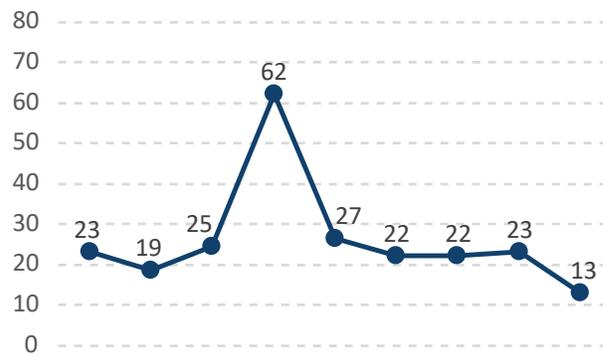


Figure 72. Resignation FTEs, West Texas, 2012-2020



Retirements

Table 10 compares the number of retired FTEs in each Public Health Region in 2012 and 2020.

- South Texas is the only region that showed a decrease in retirements from 2012 to 2020.
- Rio Grande Valley and West Texas had the same amount of retirements in 2012 and 2020.

Figures 73-80 show the number of retired FTEs broken down by Public Health Region since 2012.

- The greatest number of retirements in any Public Health Region and in any year was 30 FTEs in North Texas (2018).
- There were no Public Health Regions or years without any retirements.

Retiring faculty is a big concern for schools of nursing in the state and nationwide. However, according to the retirement data in Table 10 and Figures 73-80, few faculty are actually retiring from schools of nursing across Texas.

When discussing retirement in terms of faculty shortages, the concern is that faculty of retirement age are leaving, or will leave, schools of nursing. However, the retirement numbers shared here refer to those faculty that officially retire, meaning they are tenured, full-time faculty that gain retirement benefits when they leave their positions at retirement age. With the increase in adjunct and part-time faculty, less of these faculty are considered “retired” even when they are leaving their position at retirement age.

Table 10. Retired FTEs by Public Health Regions, 2009 & 2020

Public Health Regions	2012	2020	Percent Change
Panhandle	1	5	400.0%
Rio Grande Valley	4	4	0.0%
North Texas	7	26	271.4%
East Texas	9	17	88.9%
Gulf Coast	9	16	77.8%
Central Texas	7	8	14.3%
South Texas	4	1	-75.0%
West Texas	2	2	0.0%



Figure 73. Retirement FTEs, Panhandle, 2012-2020

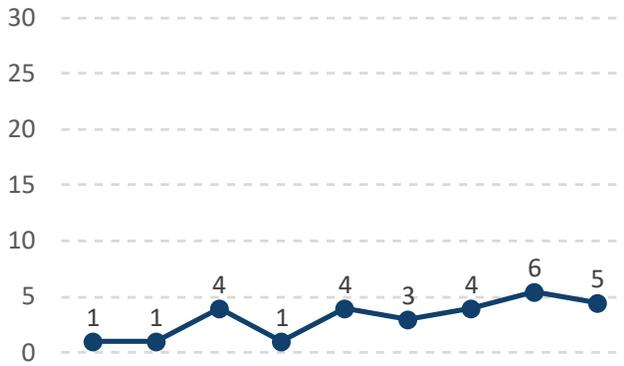


Figure 74. Retirement FTEs, Rio Grande Valley, 2012-2020

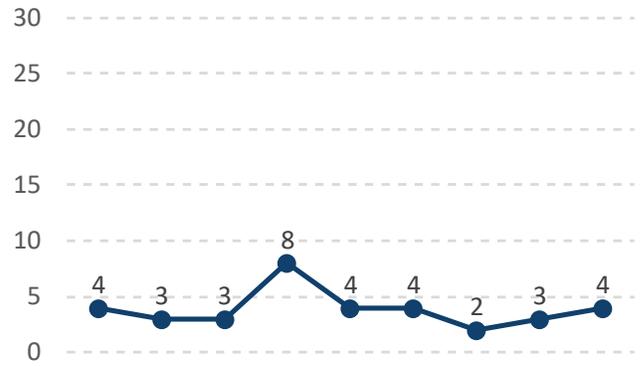


Figure 75. Retirement FTEs, North Texas, 2012-2020

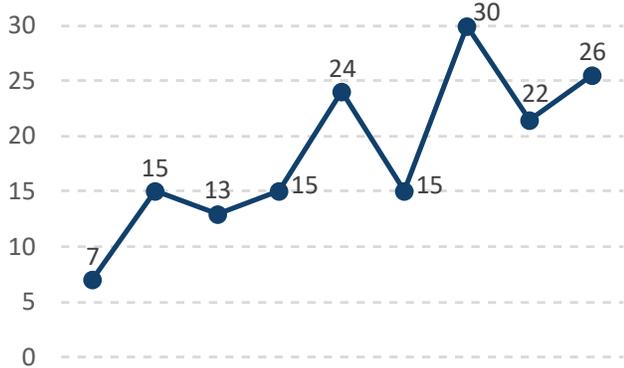


Figure 76. Retirement FTEs, East Texas, 2012-2020

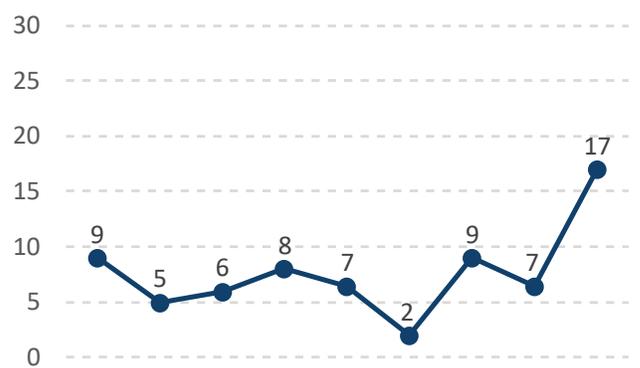


Figure 77. Retirement FTEs, Gulf Coast, 2012-2020

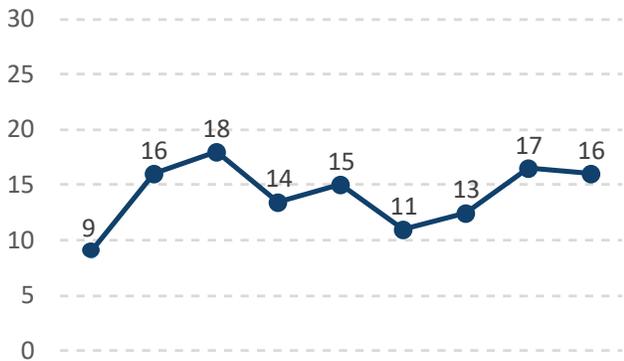


Figure 78. Retirement FTEs, Central Texas, 2012-2020

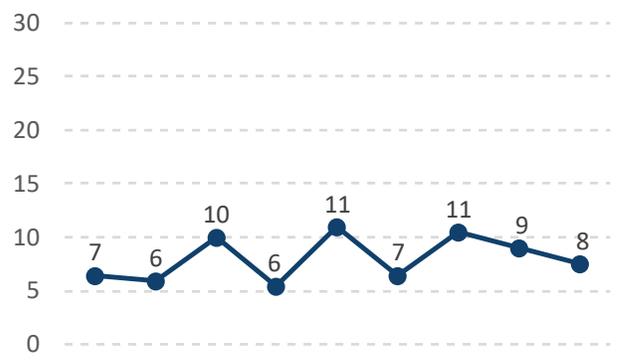


Figure 79. Retirement FTEs, South Texas, 2012-2020

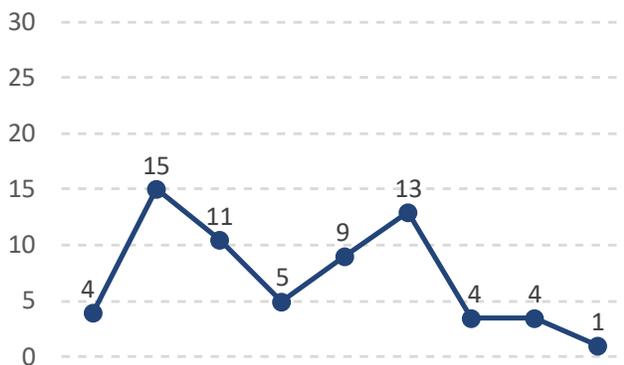
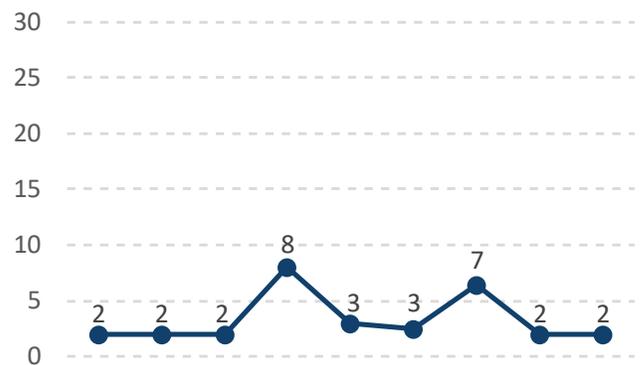


Figure 80. Retirement FTEs, West Texas, 2012-2020



Turnover Rates

Figures 81-88 and Table 11 show the turnover rate for each Public Health Region since 2009. The turnover rates varied from 2009 to 2020 for each Public Health Region.

- West Texas had the highest turnover rate in the last 12 years with 47.4% turnover in 2015.
- Rio Grande Valley had the lowest turnover rate in the last 12 years with 5.6% turnover in 2019.

Table 11. Turnover Rate FTEs by Public Health Regions, 2009-2020

Public Health Regions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Panhandle	11.6	14.4	9.1	8.1	7.9	15.8	8.6	9.3	11.4	8.7	10.8	10.8
Rio Grande Valley	12.1	7.6	7.0	12.7	7.1	14.5	13.5	14.0	9.4	9.3	5.6	8.5
North Texas	12.5	12.1	18.6	12.7	12.6	13.7	10.1	11.3	10.5	13.1	11.0	9.8
East Texas	7.9	9.2	16.1	15.0	12.3	9.8	18.6	15.9	9.9	14.4	13.7	15.1
Gulf Coast	11.1	15.8	13.3	9.6	15.5	14.5	16.2	13.6	8.4	12.5	12.9	11.4
Central Texas	12.5	11.9	14.1	11.9	12.0	13.3	13.9	15.3	13.6	20.6	14.7	14.7
South Texas	18.0	17.5	15.9	9.6	21.9	20.5	16.1	16.5	17.4	14.0	13.3	13.3
West Texas	19.8	17.9	20.5	16.9	18.1	22.2	47.4	24.4	21.5	21.7	18.9	11.9



Figure 81. Turnover Rate, Panhandle, 2009-2020

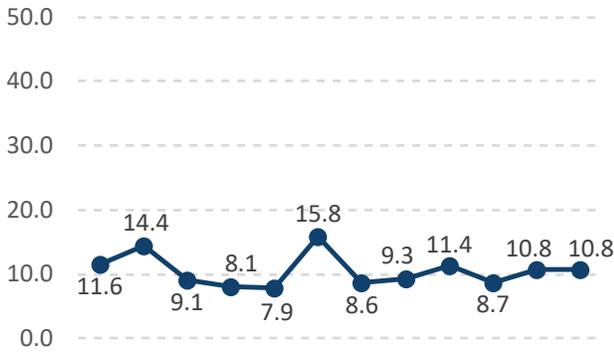


Figure 82. Turnover Rate, Rio Grande Valley, 2009-2020

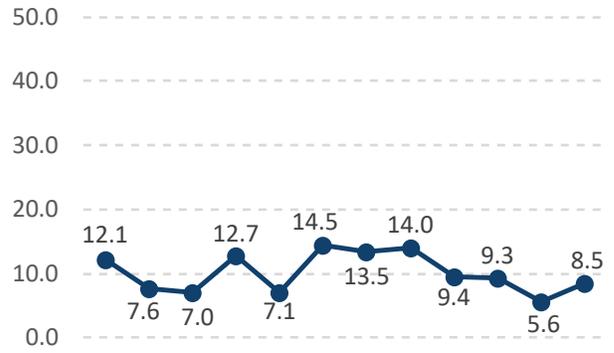


Figure 83. Turnover Rate, North Texas, 2009-2020

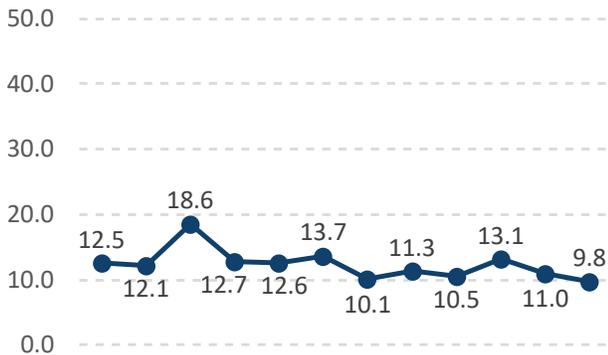


Figure 84. Turnover Rate, East Texas, 2009-2020

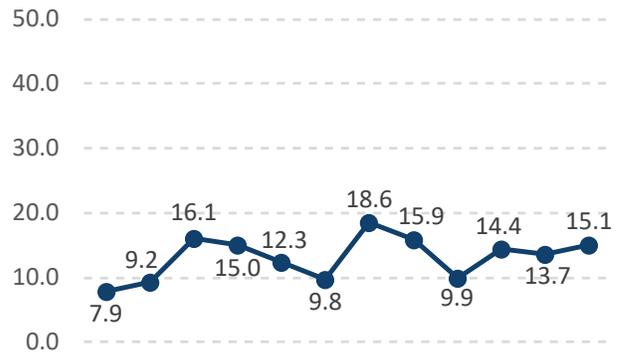


Figure 85. Turnover Rate, Gulf Coast, 2009-2020

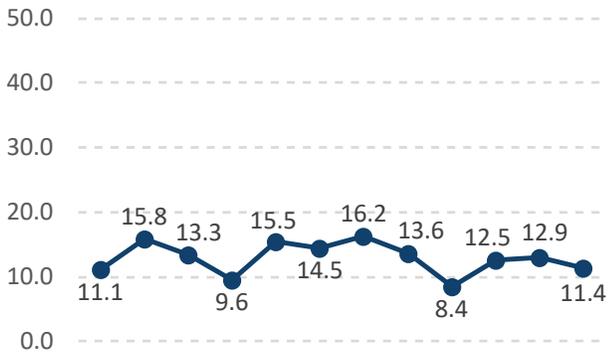


Figure 86. Turnover Rate, Central Texas, 2009-2020

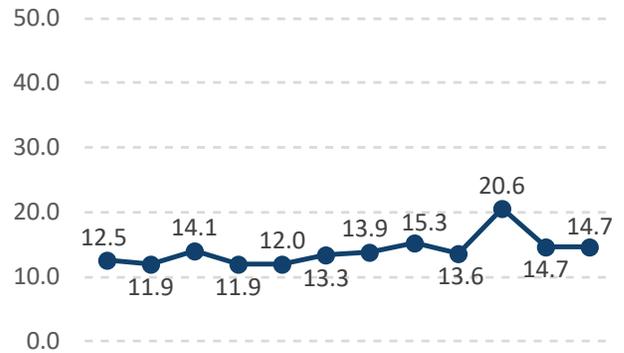


Figure 87. Turnover Rate, South Texas, 2009-2020

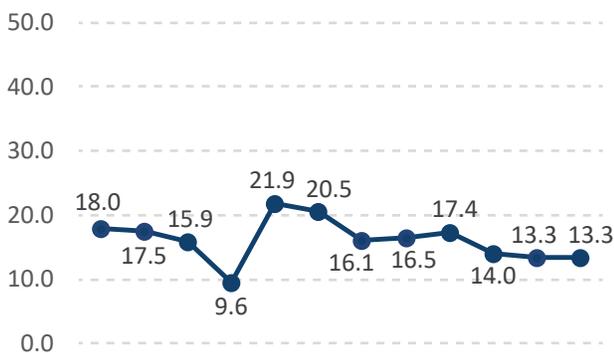
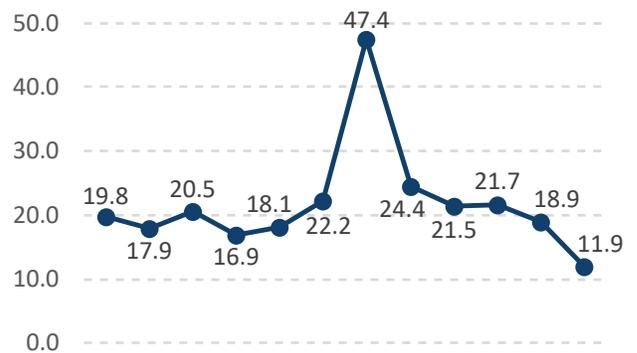


Figure 88. Turnover Rate, West Texas, 2009-2020



Number of Faculty

Since 2009, the number of nursing faculty in Texas has increased by 54.6% while the number of RN programs has increased by 34.4%. The largest proportion of faculty continue to work at community, state, and technical colleges and public universities.

Age

The mean age of nursing faculty has decreased 1.7 years since 2009. The age categories among nursing faculty have become more evenly distributed over the past 12 years.

Sex

The ratio of females to males among nursing faculty has shown little change since 2009. While the distribution of sex among RN students has also shown little change, in 2020 nursing faculty were 8.6% male and nursing students were 15.4% male.

Race

While the distribution of races among nursing faculty does not match the distribution of race among nursing students, over the past 12 years, nursing faculty have diversified. White/Caucasian faculty have decreased and Black/African-American, Hispanic, and those identified as other races have increased.

School of Nursing Licensure Data

The number of faculty that list “School of Nursing” as their primary practice setting has increased since 2009 while the percent of overall nurses choosing “School of Nursing” has decreased. The percent of faculty who work in a secondary practice setting also continues to increase and far exceeds the percent of all nurses working in secondary settings. The average number of hours worked at their primary practice setting has decreased by 3 hours since 2009 and is now less than the average hours a week worked by other settings like inpatient and outpatient hospital care.

Faculty Shortages

Faculty shortages is an issue across the state of Texas. A large proportion of schools cannot admit all qualified applicants to their program for lack of budgeted faculty position and/or a lack of qualified faculty. Faculty salary was also a barrier for schools as qualified faculty could often make more money in clinical positions.

Faculty Positions

The number of budgeted and filled faculty positions

have increased by roughly 1,000 FTEs each since 2012. Retirements, resignation, and vacant FTEs have increased but not to the same magnitude, a positive sign as faculty shortages are addressed.

Regional Analysis

Faculty demographics and faculty positions were broken down by Public Health Region. An additional regional analysis of anything described in the above report can be provided upon request. Please contact TCNWS@dshs.texas.gov with the region and type of data you would like to receive.

Importance of Nursing Faculty

The number of faculty working in nursing schools directly impacts how many students a program can admit which then determines the number of nurses entering the workforce. Understanding barriers to faculty recruitment and retainment is essential in making sure all qualified applicants can be admitted to nursing schools to reduce nursing shortages across Texas.

Understanding current demographics and demographic trends of nursing faculty help determine where efforts are needed to create a more diverse faculty population to better reflect the nursing student population.

The age of faculty is also important in understanding the future retirement concerns, placing importance on preparing nurses for faculty positions and recruiting more qualified faculty into nursing programs.

Finally, understanding problems with faculty numbers and trends by region can help outside organizations recognize where the largest efforts are needed and distribute resources accordingly.