

Summary

This report describes the current supply of the nursing workforce and the distribution of nurses in Texas. The report is broken down into sections by nurse type, including Registered Nurses (RNs), Advanced Practice Registered Nurses (APRNs) and Licensed Vocational Nurses (LVNs). Licensure and certification data collected from the Texas Board of Nursing was processed and provided by the Health Professions Resource Center.

All reported data represent the licensed health professionals actively practicing in Texas. Inactive or retired licensed professionals were excluded, except where noted. Nurses were classified as active if their license status was “Current” and their employment status was “Employed in Nursing Full Time”, “Employed in Nursing Part Time”, or “Employed in Nursing on Per-Diem Basis”. Nurses were classified as working in Texas if they indicated that their primary practice state (or mailing address state if practice address was not available) was Texas.*

Supply ratios are calculated by dividing the number of providers in each nurse profession by the population of the area being evaluated and multiplying that number by 100,000. This results in a ratio of providers per 100,000 population that can be used to compare areas with different population sizes and over time.

*Changes and updates to the methodology to determine active nurses may result in differences on supply numbers. Comparisons of current and past reports are not recommended.

Introduction

In the United States, demand for health care services continues to increase. Factors such as an aging population and an increase in the prevalence of chronic diseases contribute to this growing need. Although total employment in the healthcare industry has gradually recovered since 2020, shortages and maldistribution of healthcare workers continue to persist.¹ This is particularly relevant for nurses, which make up the largest section of the health profession workforce.² The U.S. Bureau of Labor Statistics (BLS) projects that an additional 275,000 nurses will be needed from 2020 to 2030.³ However, issues such as an aging workforce, nurse burnout, and violence in the healthcare setting may impact nurse staffing.

The supply of nurses in Texas is still low in comparison to national numbers.⁴ The number of RNs per 100,000 population in Texas is below the national ratio, while the number of LVNs per 100,000 is higher than the national ratio.⁵

¹ Impact of the COVID-19 pandemic on the hospital and outpatient clinician workforce: challenges and policy responses (Issue Brief No. HP-2022-13). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. May 2022.

² Haddad LM, Annamaraju P, Toney-Butler TJ. Nursing Shortage. [Updated 2023 Feb 13]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK493175/>

³ “US Department of Labor Announces \$80M Funding Opportunity to Help Train, Expand, Diversify Nursing Workforce; Address Shortage of Nurses.” DOL, <http://www.dol.gov/newsroom/releases/eta/eta20221003>. Accessed 30 Jan. 2024.

⁴ National Council Of State Boards Of Nursing. “The NCSBN 2023 Environmental Scan: Nursing at a Crossroads—An Opportunity for Action.” *Journal of Nursing Regulation*, vol. 13, no. 4, Jan. 2023, pp. S1–48. DOI.org (Crossref), [https://doi.org/10.1016/S2155-8256\(23\)00006-6](https://doi.org/10.1016/S2155-8256(23)00006-6).

⁵ OES Home : U.S. Bureau of Labor Statistics. <https://www.bls.gov/oes/>. Accessed 30 Jan. 2024.

Licensed Vocational Nurses

Table 1 demonstrates how active nurses are determined in the state. Of those LVNs not working in Texas, 12.4% worked or lived in California, 6.6% in Florida, 6.0% in Louisiana, and less than 5.0% in all other states.

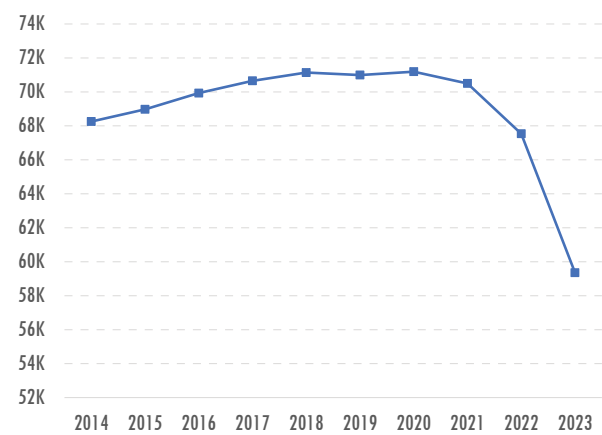
In 2023, there were 59,356 active LVNs in Texas, a supply ratio of 190 LVNs per 100,000 population.

Table 1. Number of LVNs in Texas, 2023

2023 Texas Supply of Licensed Vocational Nurses	
LVNs with active licenses	102,932
LVNs with active licenses working in nursing	79,990
LVNs with active licenses working in nursing in Texas	59,356

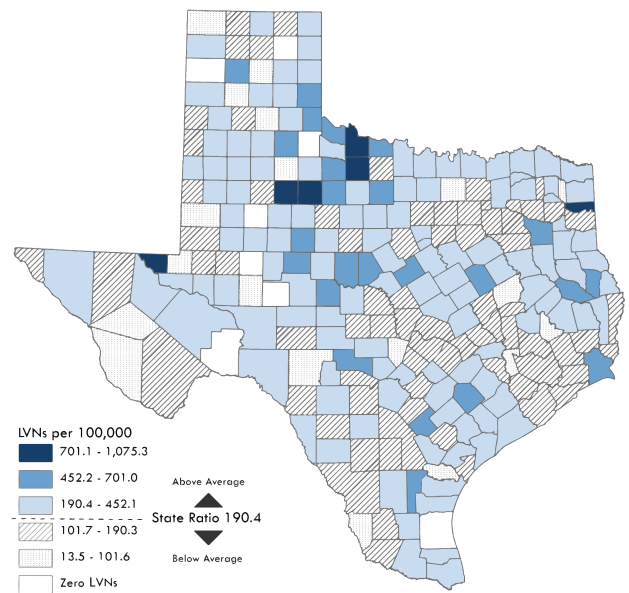
In 2014, there were 68,256 active LVNs in Texas with a supply ratio of 254 LVNs per 100,000 population. The number of LVNs decreased by 13% since 2014 and the supply ratio decreased by 25%. This suggests that the Texas population is growing faster than the population of LVNs in Texas.

Figure 1. Number of LVNs in Texas, 2014-2023



In addition to the declining number of LVNs in Texas, the supply of LVNs is not evenly distributed across the state (Figure 2). Eight of the 254 counties in Texas did not have any LVNs.

Figure 2. Map of LVNs per 100,000 population by practice county, Texas, 2023



Of the 59,356 actively licensed LVNs employed in nursing in Texas, 89.2% had a primary address in a non-border county, and 84.5% had a primary address in a metropolitan county.

Table 2. Supply of LVNs by county designation, 2023

County Designation	# of LVNs	LVNs per 100,000 population
Border counties	6,421	221
Non-border counties	52,935	187
Metropolitan counties	50,153	179
Non-metropolitan counties	9,203	288

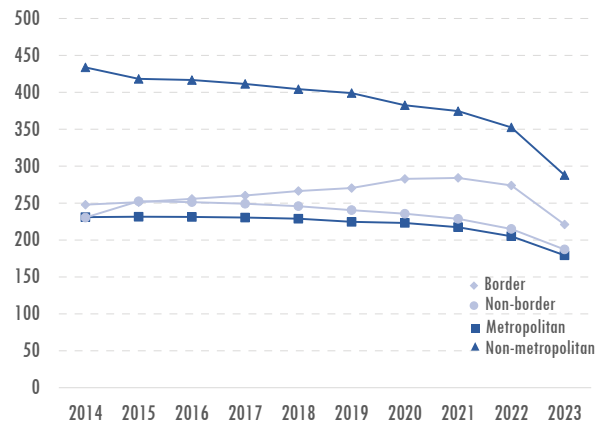


From 2014 to 2023, the supply ratios for LVNs have been larger in non-metropolitan counties than in metropolitan counties, unlike the supply ratios of RNs and APRNs (Figure 3).

While the Texas supply of LVNs has been steadily declining in recent years, Texas remains one of the highest contributors to total national LVN licenses. In 2023, data from the National Council of State Boards of Nursing indicated that 8.5% of total national LVN licenses were from Texas, second only to California that produced 11.4%. Additionally, the ratio of LVNs per 100,000 population in Texas remains larger than the national ratio (194 and 188, respectively).*

*These supply ratios utilize data from 2023 taken from the semiannual Occupational Employment Statistics survey published by the U.S. Bureau of Labor Statistics. <https://www.bls.gov/oes/current/oes291141.htm#nat>

Figure 3. LVNs per 100,000 population by county designation, Texas, 2014-2023



Registered Nurses

There were 396,852 RNs with an active license in 2023. Among them, 232,187 (58.5%) met the criteria to be counted in the final RN workforce number: an active license, employed in nursing, primary address in Texas, and without an APRN license. Of those RNs not working in Texas, 14.0% worked or lived in California, 6.0% in Florida, and less than 5.0% in all other states.

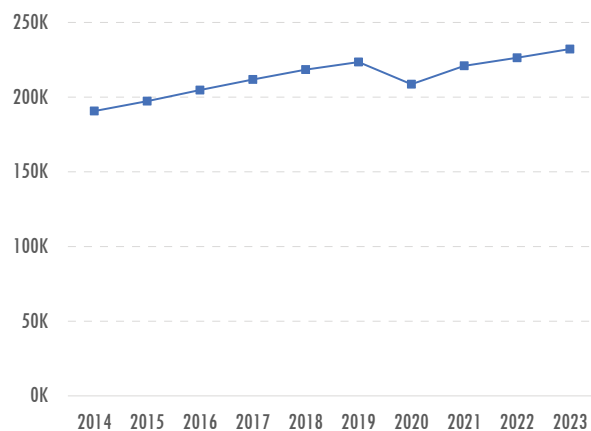
Table 3. Number of RNs in Texas, 2023

2023 Texas Supply of Registered Nurses	
RNs with active licenses	396,852
RNs with active licenses working in nursing	305,612
RNs with active licenses working in nursing in Texas	232,187

The Texas RN workforce has grown by 6.3% since 2018 and 21.8% since 2014. The 232,187 RNs equates to a supply ratio of 745 RNs per 100,000 population in Texas. This represents 2.1% decline in the supply ratio since 2018, but a 5.0% increase since 2014.

Although the Texas supply ratio has grown in the last decade, it continues to remain lower than the U.S. supply ratio reported by the BLS.

Figure 4. Number of RNs in Texas, 2014-2023



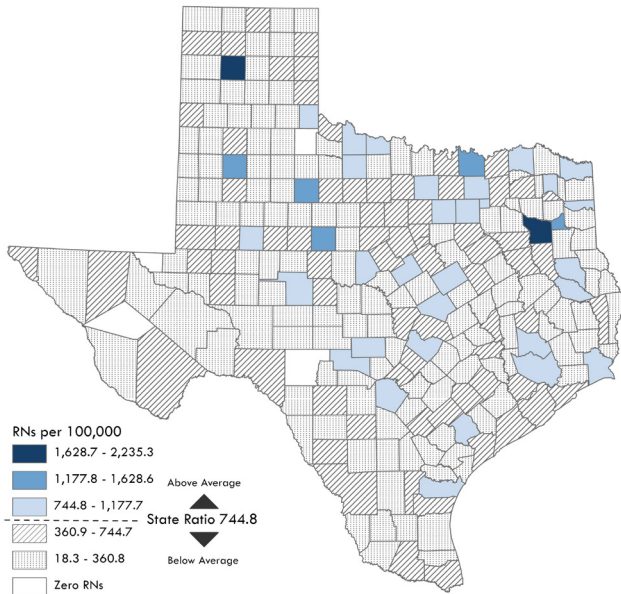
In 2023, the BLS estimated that there were 3,175,390 RNs practicing in the United States for a supply ratio of 948 RNs per 100,000 population nationwide. However, Texas (826 per 100,000) remained below the national average (948 per 100,000).*

*These supply ratios utilize data from 2023 taken from the semiannual Occupational Employment Statistics survey published by the U.S. Bureau of Labor Statistics. <https://www.bls.gov/oes/current/oes291141.htm#nat>



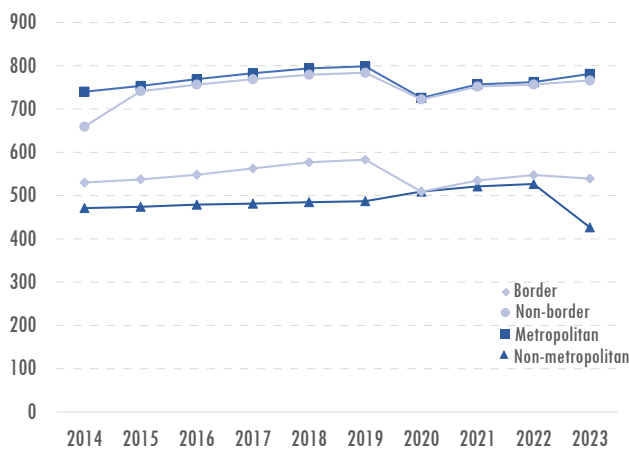
Additionally, the supply of RNs is not distributed evenly across the state. Figure 5 shows the supply of nurses per 100,000 population in each county compared to the state supply ratio.

Figure 5. Map of RNs per 100,000 population by practice county, Texas, 2023



Non-metropolitan and border counties have consistently had lower ratios of RNs than metropolitan and non-border counties.

Figure 6. RNs per 100,000 population by county designation, Texas, 2014-2023



In 2023, 94.1% of RNs had a primary address in a metropolitan county, and 93.3% had a primary address in a non-border county.

Table 4. Supply of RNs by county designation, 2023

County Designation	# of RNs	RNs per 100,000 population
Border counties	15,662	539
Non-border counties	216,525	766
Metropolitan counties	218,550	781
Non-metropolitan counties	13,637	427

This means that while 10.3% of the Texas population resides in non-metropolitan counties, only 5.9% of Texas RNs had a primary address in those counties. The supply ratio of RNs in border counties (539 per 100,000) was also much lower than the supply ratio in non-border counties (766 per 100,000).

Research has found that individuals living in border counties in Texas have more limited access to providers and are more likely to report poor physical health.⁶ Evidence shows that greater numbers of RNs per capita are associated with better population health.⁷

⁶ Pillai, Drishti, and Samantha Artiga Published. "Health and Health Care in the U.S.-Mexico Border Region." KFF, 21 Nov. 2022, <https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-and-health-care-in-the-u-s-mexico-border-region/>.

⁷ Bigbee, Jeri L., et al. "RN-to-Population Ratio and Population Health: A Multifactorial Study." *Journal of Nursing Regulation*, vol. 5, no. 1, Apr. 2014, pp. 11–17. DOI.org (Crossref), [https://doi.org/10.1016/S2155-8256\(15\)30094-6](https://doi.org/10.1016/S2155-8256(15)30094-6).



Advanced Practice Registered Nurses

The APRN category variable in the APRN licensing file has values for the four APRN types: Certified Registered Nurse Anesthetists (CRNAs), Certified Nurse-Midwives (CNMs), Clinical Nurse Specialists (CNSs), and Nurse Practitioners (NPs).

As of 2023, there were 54,603 active Texas APRN licenses. Please note that nurses may be licensed in more than one APRN role (nurse anesthetist, nurse midwife, clinical nurse specialist, or nurse practitioner) and they may hold more than one specialization within an APRN role. The following numbers represent an unduplicated count of APRNs with an active license and primary address in Texas. In 2023, there were 35,766 (65.5%) nurses who fit this criteria.

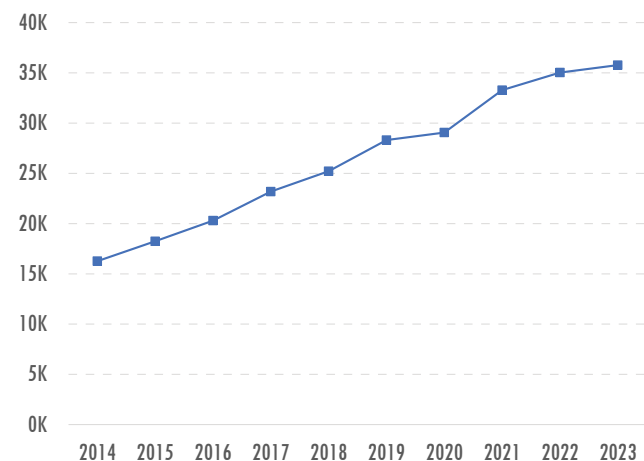
- Of those nurses not working in Texas, 14.1% were working or living in Florida, 10.4% in California, 5.7% in Louisiana, and 5.0% or less in all other states.

Table 5. Number of APRNs in Texas, 2023

2023 Texas Supply of Registered Nurses	
APRNs with active licenses	54,603
APRNs with active licenses working in nursing	48,793
APRNs with active licenses working in nursing in Texas	35,766

Figure 7 shows that the number of APRNs in Texas continues to increase each year, with overall growth of 41.7% since 2018 and 119.9% since 2014.

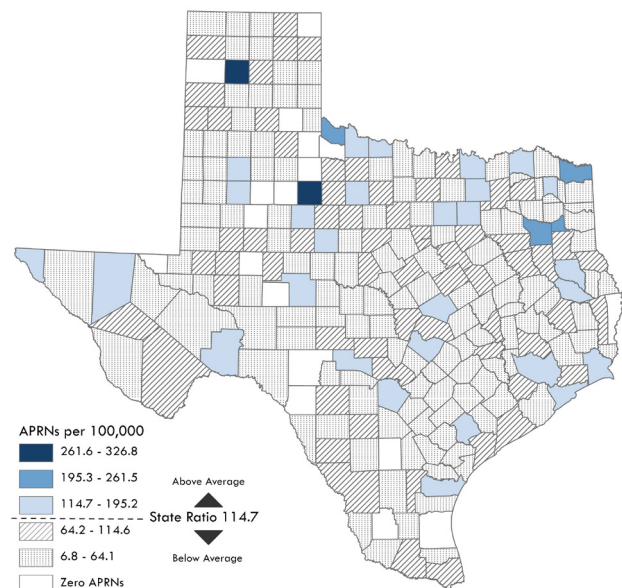
Figure 7. Number of APRNs in Texas, 2014-2023



The supply ratio of APRNs has also steadily increased over the past ten years. The 2023 supply ratio of all APRNs was 115 APRNs per 100,000 population in Texas, representing an increase of 30.6% since 2018.

Like RNs, the supply of APRNs varies across different regions. Figure 8 shows the supply of APRNs per 100,000 population in each county compared to the state supply ratio.

Figure 8. Map of APRNs per 100,000 population by practice county, Texas, 2023



In 2023, the supply ratio of APRNs in border counties was 87 APRNs per 100,000 population, compared to 118 in non-border counties. In non-metropolitan counties, there were 64 APRNs per 100,000 population, compared to 120 in metropolitan counties. Only 5.8% of Texas APRNs had a primary address in non-metropolitan counties; those counties contained 10.3% of the Texas population.

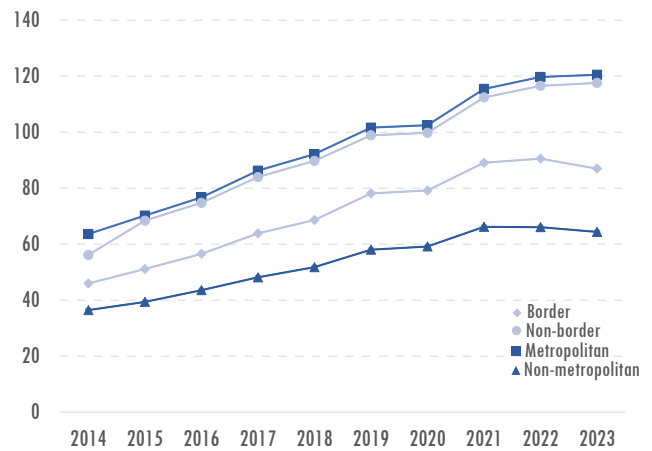
Table 6. Supply of APRNs by county designation, 2023

County Designation	# of APRNs	APRNs per 100,000 population
Border counties	2,526	87
Non-border counties	33,240	118
Metropolitan counties	33,708	120
Non-metropolitan counties	2,058	64

There has been some improvement in the supply of APRNs in border counties and rural areas over the past eight years but there is still a considerable difference between rural and metropolitan areas, as well as between border and non-border counties. As previously stated, evidence shows that greater numbers of nurses per capita are associated with better population health.⁸

⁸ Bigbee, Jeri L., et al. "RN-to-Population Ratio and Population Health: A Multifactorial Study." *Journal of Nursing Regulation*, vol. 5, no. 1, Apr. 2014, pp. 11–17. DOI.org (Crossref), [https://doi.org/10.1016/S2155-8256\(15\)30094-6](https://doi.org/10.1016/S2155-8256(15)30094-6).

Figure 9. APRNs per 100,000 population by county designation, Texas, 2014-2023



Advanced Practice Registered Nurses by Type

The supply of APRNs varied by APRN type, as shown in Table 7. NPs represented the largest group, with 30,498 licensees. CRNAs were the next biggest group, with 4,037 licensees in 2023. There were a total of 752 CNSs. Finally, CNMs made up the smallest group of APRNs with 485 active CNMs in 2023.

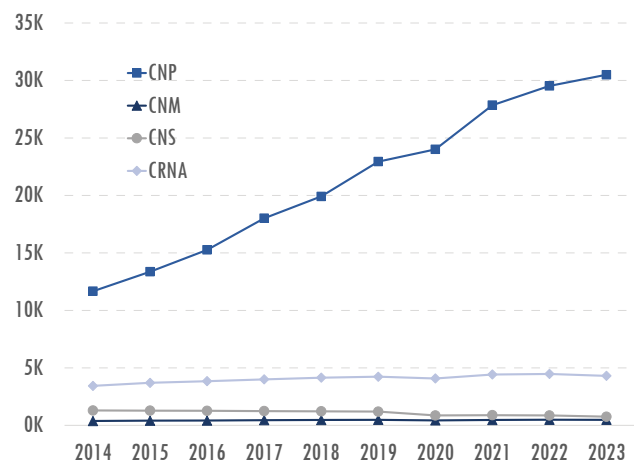
Table 7 . Supply of APRNs in Texas, by type, 2023

Supply of Nurse Practitioners	
Active NP licenses	56,028
Active NP licenses working in nursing	46,017
Active NP licenses working in nursing in Texas	30,498
Supply of Certified Registered Nurse Anesthetists	
Active CRNA licenses	10,983
Active CRNA licenses working in nursing	6,260
Active CRNA licenses working in nursing in Texas	4,037
Supply of Clinical Nurse Specialists	
Active CNS licenses	3,554
Active CNS licenses working in nursing	1,348
Active CNS licenses working in nursing in Texas	752
Supply of Certified Nurse Midwives	
Active CNM licenses	1,809
Active CNM licenses working in nursing	978
Active CNM licenses working in nursing in Texas	485

The number of active NPs in Texas has grown each year since 2009, with overall growth of 161.3% from 2014 to 2023. The supply ratio of NPs per 100,000 population has increased by 40.8% since 2018, and 124.9% since 2014.

The number of CRNAs grew 25.3% from 2014 to 2023. The supply ratio of CRNAs per 100,000 population in Texas decreased by 4.2% since 2018, however has increased by 7.8% since 2014. Overall, there has been a decrease of 542 active CNSs from 2014 to 2023 (a 41.9% decrease). The supply ratio of CNSs has also steadily decreased over the past ten years. The number of active CNMs in Texas has continually grown, with an overall growth rate of 27.6% from 2014 to 2023. The 2023 CNM supply ratio represented an increase of 14.3% since 2014.

Figure 10. Number of APRNs in Texas, by type, 2014-2023



Though the supply of APRNs has been slowly increasing over the past several years, the growth has not been evenly distributed. Among all four APRN types, the supply ratios are larger in non-border counties than border counties, and larger in metropolitan counties than non-metropolitan counties (Figures 11-14, page 8). Table 8 shows the number of counties with no practicing APRNs by type.

Table 8. Counties with no practicing APRNs, by APRN type, 2023

APRN Type	Number of counties with no practicing APRNs
NPs	18
CRNAs	135
CNSs	199
CNMs	201

Figure 11. Map of NPs per 100,000 population by practice county, Texas, 2023

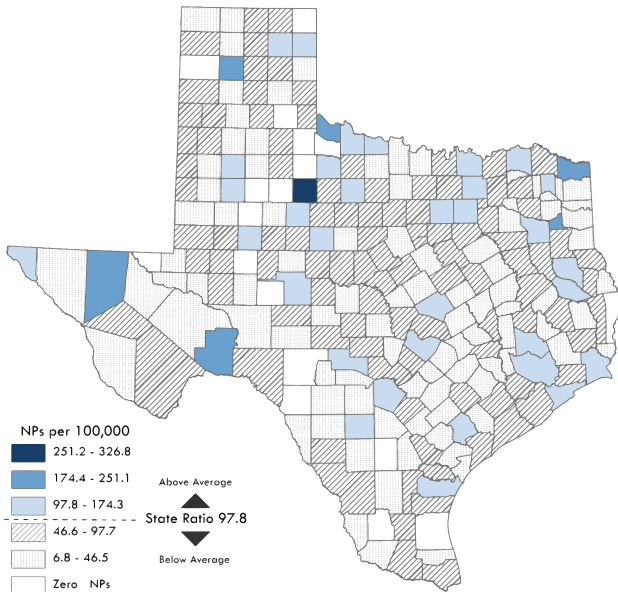


Figure 12. Map of CRNAs per 100,000 population by practice county, Texas, 2023

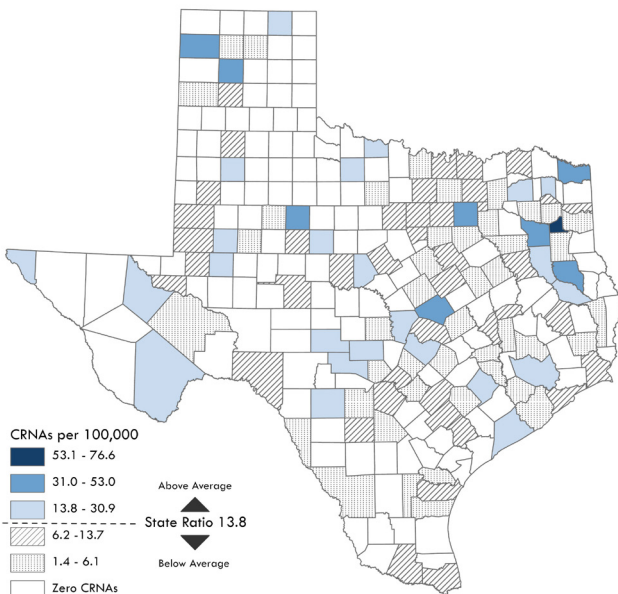


Figure 13. Map of CNSs per 100,000 population by practice county, Texas, 2023

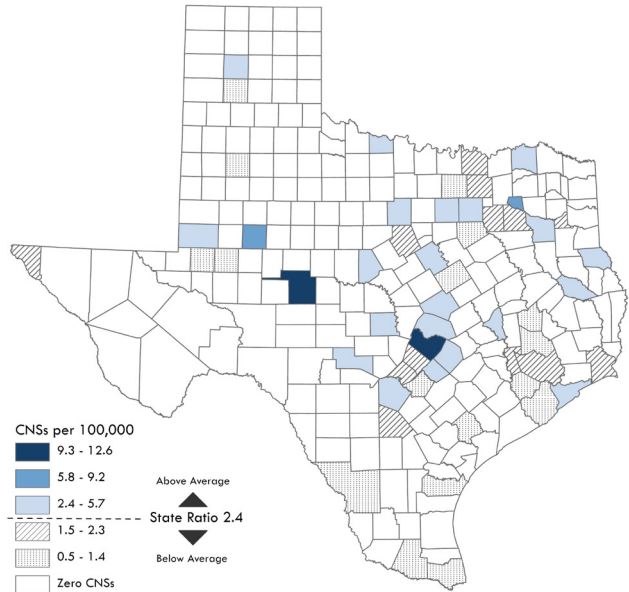
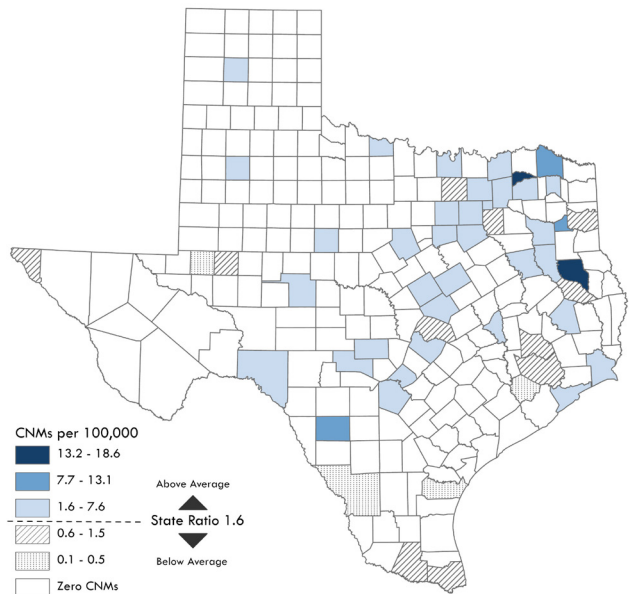


Figure 14. Map of CNMs per 100,000 population by practice county, Texas, 2023



Impact

This report presents as complete a picture as can be constructed with available data on LVNs, RNs, and APRNs in Texas. It is a data and information resource for legislators, policy makers, and planners that informs long-term planning projects and aids in evaluating programs designed to improve Texans' access to health care providers. With a focus on the supply side of the nursing workforce and per population distribution of nurses in Texas, it can also serve as a resource for those who are conducting research, planning projects and developing proposals, and who have questions about the nursing workforce in Texas.