

#### **NURSE SUPPLY AND DEMAND PROJECTION EXECUTIVE SUMMARY**

### **Background**

Since the release of the Health Resources and Services Administration (HRSA) report, "The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025," the Texas Center for Nursing Workforce Studies has contracted with GlobalData (formerly IHS Markit) to apply the same models used by HRSA to estimate Texas nurse supply and demand, utilizing Texas-specific data when available. These projections will provide a more accurate model of the nursing workforce in our state. The following figures show the projected full-time equivalent (FTE) statewide supply and demand for nursing professions through 2036, with a baseline year of 2022. Demand projections are based on current national health care use and delivery patterns. As access to care changes and models of care transform, health care use and delivery patterns may change the demand for nurses over time.

## **Key Findings**

#### **Licensed Vocational Nurses**

- The 2022 LVN projected supply was 67,409 FTEs, and the projected demand was 51,351, leading to a surplus of 16,058 FTEs.
- By 2036, LVN supply is projected to decrease by 0.03% to 67,387 FTEs while demand is projected to grow by 38.7% to 71,225 FTEs, leading to a shortage of 3,839 FTEs.
- Between 2022 and 2033, statewide supply of LVNs is projected to exceed demand. By 2034, the surplus of LVN FTEs will become a deficit that will continue to increase through 2036.

# Registered Nurses

- The 2022 RN projected supply was 239,447 FTEs, and the projected demand was 284,125 FTEs, leaving a deficit of 44,678 FTEs.
- By 2036, RN supply is projected to grow by 27% to 304,116 FTEs, while demand is projected to grow by 26.9% to 360,487 FTEs, leaving a deficit of 56,370 RN FTEs.
- Between 2022 and 2036, statewide supply of RNs is projected to not meet demand. Based on these projections, 15.6% of the projected demand for RNs in 2036 will not be met.

Figure 1. LVN FTE Supply and Demand, 2022-2036

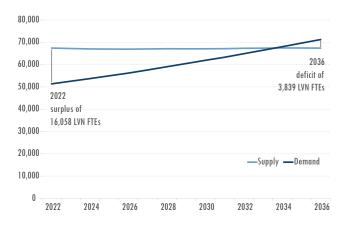
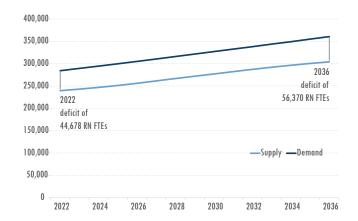


Figure 2. RN FTE Supply and Demand, 2022-2036



#### **Nurse Practitioners**

- The projected supply of NPs in Texas is expected to increase by 100.4% from 28,540 FTEs in 2022 to 57,201 FTEs in 2036.
- Demand for NPs is projected to increase by 26% from 20,430 FTEs in 2022 to 25,742 FTEs by 2036.
- The surplus of NP FTEs is projected to increase from 8,110 in 2022 to 31,459 in 2036.

#### **Certified Nurse Midwife**

- The projected supply of CNMs is expected to increase by 57.9% from 417 FTEs in 2022 to 658 FTEs in 2036.
- Demand for CNMs is projected to increase by 15.2% from 812 FTEs in 2022 to 935 FTEs in 2036.
- The deficit of CNM FTEs is projected to decrease from 395 in 2022 to 277 in 2036.

# **Certified Registered Nurse Anesthetist**

- The supply of CRNAs in Texas is projected to grow by 29.6% from 4,333 FTEs in 2022 to 5,614 FTEs in 2036.
- Demand for CRNAs is projected to increase by 20.2% from 2,242 FTEs in 2022 to 2,696 FTEs in 2036.
- The surplus of CRNAs is projected to increase from 2,091 in 2022 to 2,918 in 2036.

Figure 3. NP FTE Supply and Demand, 2022-2036

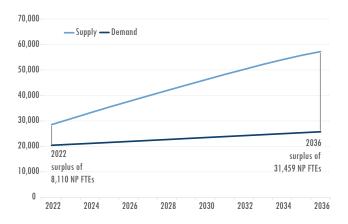


Figure 4. CNM FTE Supply and Demand, 2022-2036

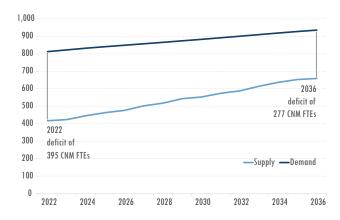


Figure 5. CRNA FTE Supply and Demand, 2022-2036

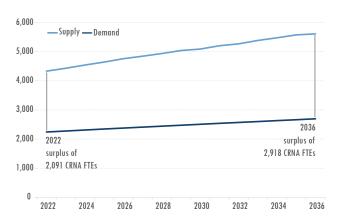
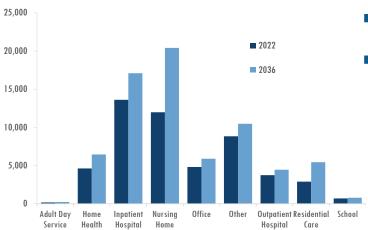


Figure 6. LVN FTE Demand by Setting, 2022-2036



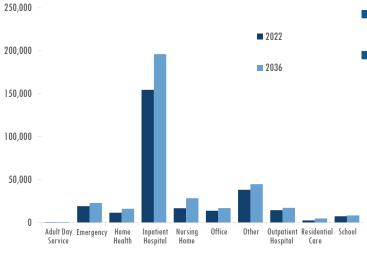
### LVN Demand by Setting

- Between 2022 and 2036, projected LVN FTE demand is expected to increase in all settings.
- In 2022, the inpatient setting had the largest projected LVN FTE demand. However, in 2036 the largest projected LVN FTE demand is in the nursing home setting.

Table 1. LVN FTE Demand by Setting, 2022-2036

	Adult Day Service	Home Health	Inpatient Hospital	Nursing Home	Office	Other	Outpatient Hospital	Residential Care	School
LVN FTE Demand 2022	166	4,624	13,610	11,981	4,813	8,829	3,743	2,891	695
LVN FTE Demand 2036	230	6,449	17,094	20,410	5,890	10,470	4,453	5,445	786
% Change 2022-2036	38.6%	39.5%	25.6%	70.4%	22.4%	18.6%	19.0%	88.3%	13.1%

Figure 7. RN FTE Demand by Setting, 2022-2036



# **RN Demand by Setting**

- Between 2022 and 2036, projected RN FTE demand is expected to increase in all settings.
- In 2022 and 2036, the inpatient hospital setting had the largest projected RN FTE demand. While hospital settings employ the greatest number of nurses, the growth rate between 2022 and 2036 is greater in nursing homes (70.4%) than in hospitals (25.6%).

Table 2. RN FTE Demand by Setting, 2022-2036

	Adult Day Service	Emergency	Home Health	Inpatient Hospital	Nursing Home	Office	Other	Outpatient Hospital	Residential Care	School
RN FTE Demand 2022	514	21,110	11,516	157,967	16,679	13,787	38,199	14,442	2,562	7,348
RN FTE Demand 2036	710	24,948	16,061	198,403	28,415	16,874	44,733	17,183	4,825	8,306
% Change 2022-2036	38.1%	18.2%	39.5%	25.6%	70.4%	22.4%	17.1%	19.0%	88.3%	13.0%

#### Conclusion

Based on Texas-specific data using the Health Workforce Model, Texas is projected to face a shortage of LVNs, RNs, and CNMs by the year 2036. The supply of LVNs is projected to exceed demand between 2022 and 2033. However, in 2034 projected demand begins to outpace the supply of LVNs. The supply of NPs and CRNAs is projected to exceed demand for every year between 2022 and 2036, which is consistent with national trends for these provider types.

It should be noted that these projections are not meant to be used as a prediction tool; they are to be used as a planning tool for adequately preparing the future workforce to meet the needs of the Texas population. There are many factors that can influence either supply of or demand for nurses. Demand for health care services could be impacted by changes to the number of people with health care coverage, changes in health care access and services, transformation of health care delivery, and changes in disease prevalence. Likewise, supply of nurses could be impacted by factors such as the ability to draw nurses to the workforce and educate them in adequate numbers, and improvements or declines in the economic climate that may drive retirement patterns.

Other factors that extend beyond supply and demand numbers, such as a diverse workforce and adequate geographical distribution of providers, should also be considered when discussing the health workforce. Diversity in the health workforce enhances the availability of culturally competent care and an adequate distribution of providers increases access to care. It is also important to consider the distribution and combination of certain nurse types to meet demand for needed specializations and skill sets.

For more data, including projections by geographic region and nurse type, visit Texas Health Data at <a href="http://healthdata.dshs.texas.gov/dashboards/health-care-workforce/tcnws/">http://healthdata.dshs.texas.gov/dashboards/health-care-workforce/tcnws/</a>.