



TEXAS
Health and Human
Services

**Texas Department of State
Health Services**

Nursing Shortages

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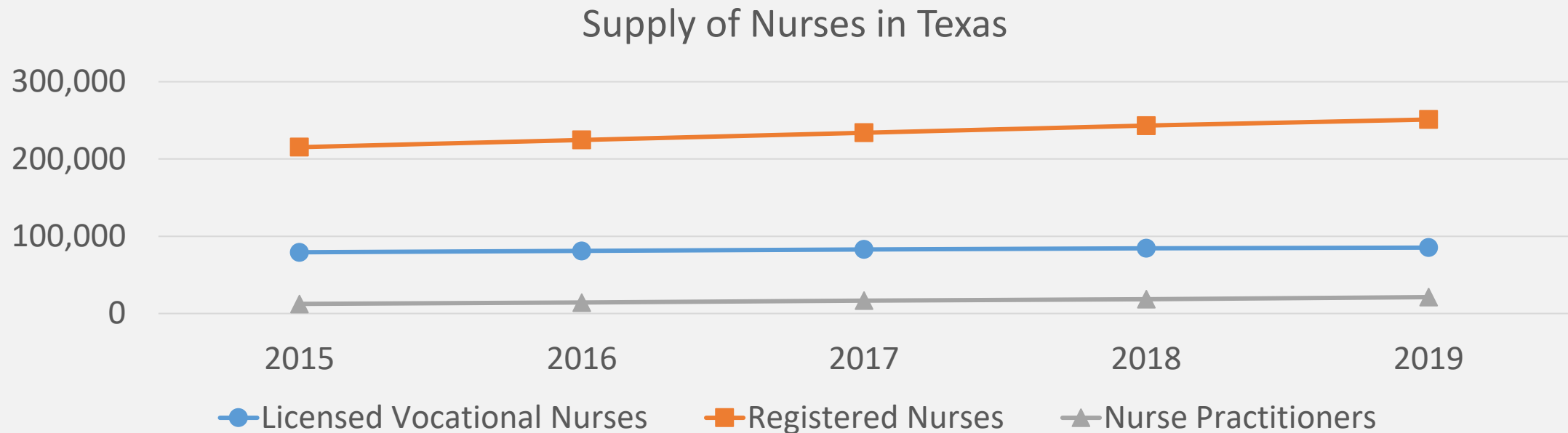
Texas Center for Nursing Workforce Studies

- Nursing workforce center in Department of State Health Services
- 21-member advisory committee
 - Organizations that represent nurses, employers of nurses, nurse researchers, state agencies, and nurse educators
- Focused on data collection, analysis, and dissemination

Reports and Surveys

- Demographics & Trends
 - Based on licensing files
- NEPIS & Faculty Reports
 - Nursing Education Program Information Survey (NEPIS)
- Nurse Employer Surveys
 - Hospitals, long term care facilities, home health and hospice agencies, governmental public health agencies
- Workplace Violence
 - Facility surveys and individual nurse survey
 - Workplace Violence Against Nurses Prevention Grant Program

Supply of Nurses, 2015-2019



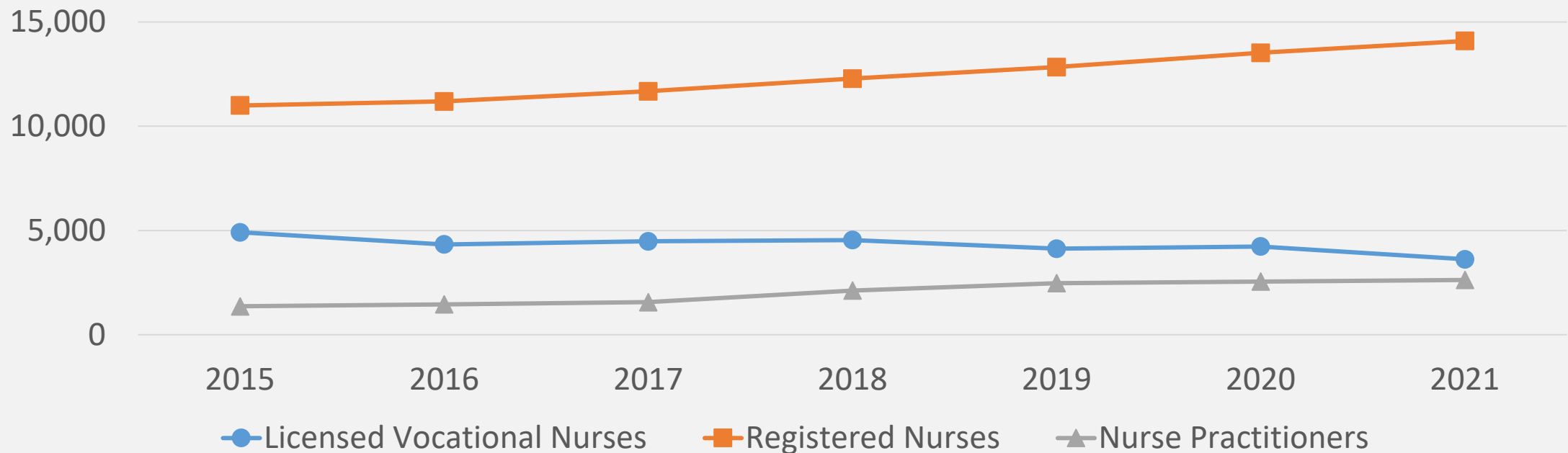
- Supply numbers are based on counts of nurses with active licenses, working in a nursing position, in a Texas county
- Data obtained from the Texas Board of Nursing Licensure Renewal Files and then geocoded and filtered to “active, working in nursing, in Texas” by the Health Professions Resource Center and Texas Center for Nursing Workforce Studies
- More current files are expected from Board of Nursing this Fall

Supply of Nurses, 2015-2019

	2015	2016	2017	2018	2019
Licensed Vocational Nurses	79,154	80,993	82,901	84,524	85,345
Registered Nurses	215,436	224,780	234,027	243,288	251,253
Nurse Practitioners	12,421	14,191	16,776	18,563	21,281

Nursing Graduation Trends

Graduates from Nursing Education Programs

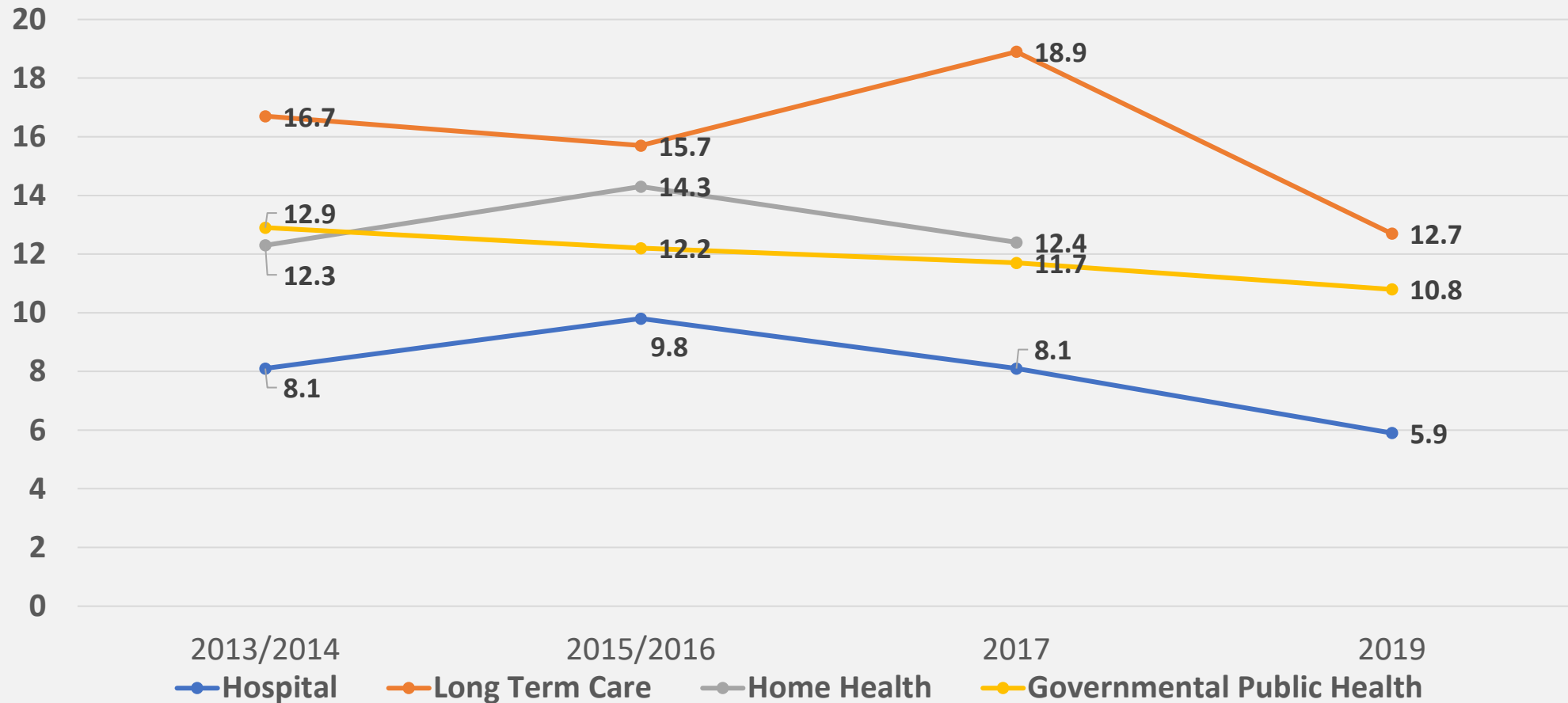


- Number of graduates as reported by vocational, professional, and graduate-level nursing education programs in annual Nursing Education Program Information Survey (NEPIS)
- Nursing programs continue to increase the number of RN and NP graduates while the number of LVN graduates is on the decline.

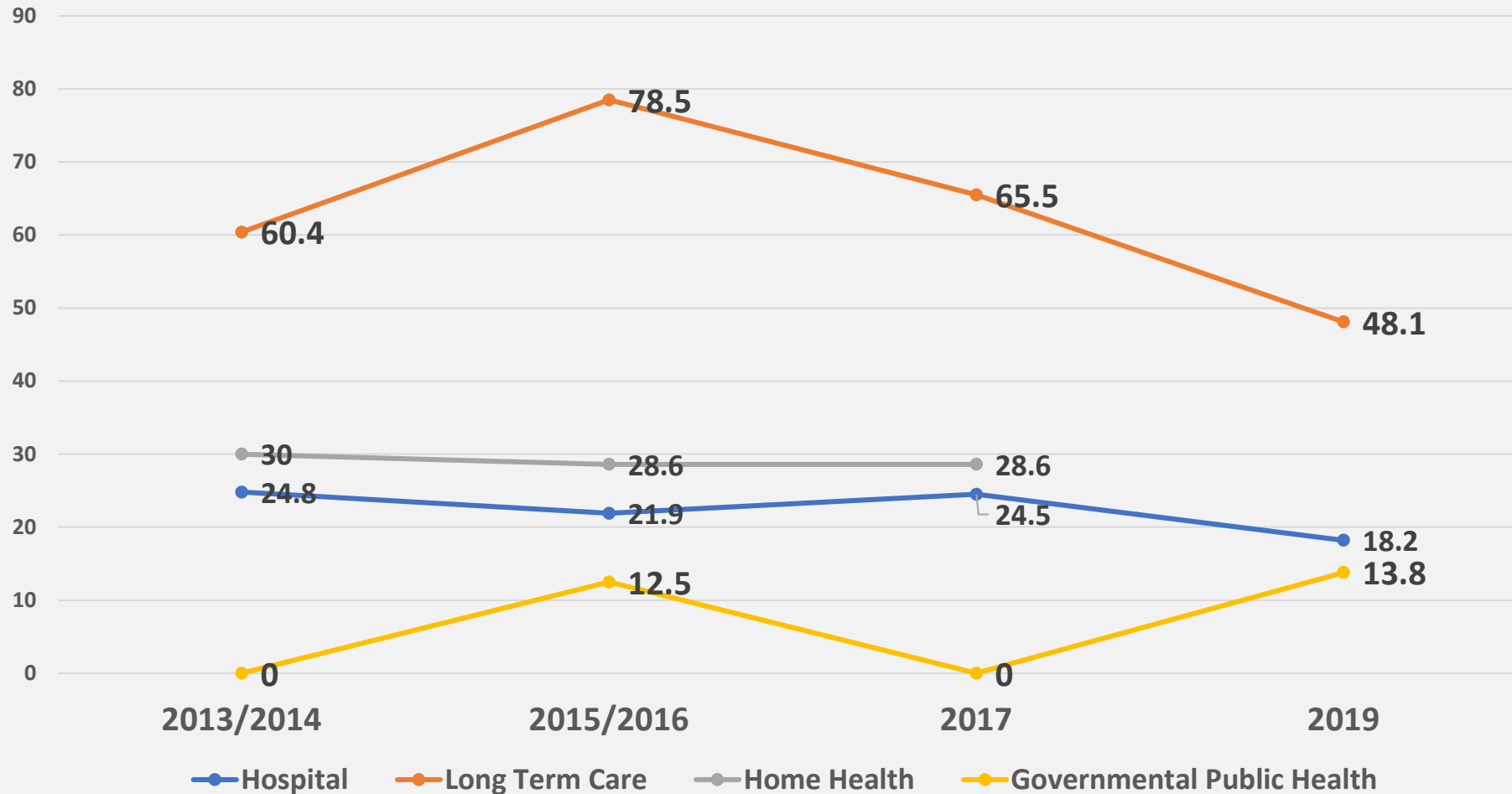
Nursing Graduation Trends

	2015	2016	2017	2018	2019	2020	2021
Licensed Vocational Nurses	4,909	4,331	4,477	4,539	4,123	4,229	3,618
Registered Nurses	10,999	11,189	11,677	12,284	12,839	13,525	14,096
Nurse Practitioners	1,364	1,454	1,561	2,121	2,472	2,552	2,629

RN Vacancy Rates



RN Median Facility Turnover Rates

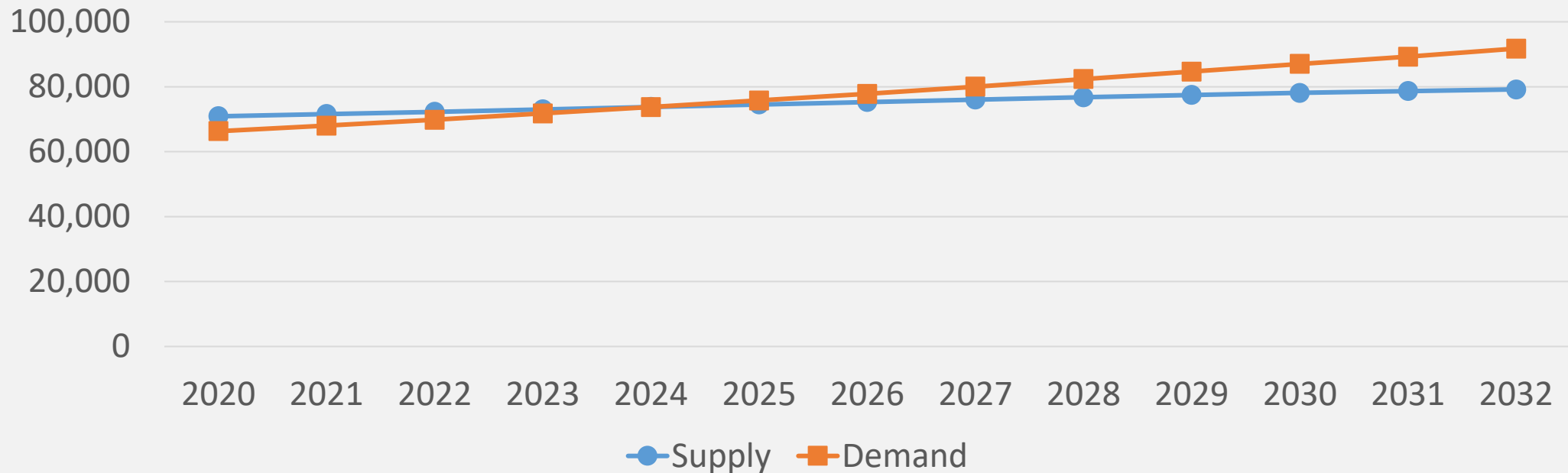


About the Projection Model

- DSHS contracted with IHS Markit to develop state-level projections for nurses, physicians, and oral health providers
- Same model used by Health Resources and Services Administration, American Association of Medical Colleges, and other state-level workforce entities
- Comprised of two models
 - Health Care Workforce Supply Model
 - Uses a microsimulation approach that models likely career choices of providers based on what we know about them from licensure data, education data and other sources such as the American Community Survey
 - Healthcare Demand Model
 - Demand for health care services and providers based on population characteristics, health care use patterns, and staffing patterns
- Projections in the following slides were developed using data from 2015-2018 and do NOT include the impact of COVID-19 on the healthcare workforce

Licensed Vocational Nurses Projections

Supply of and Demand for Licensed Vocational Nurse FTEs

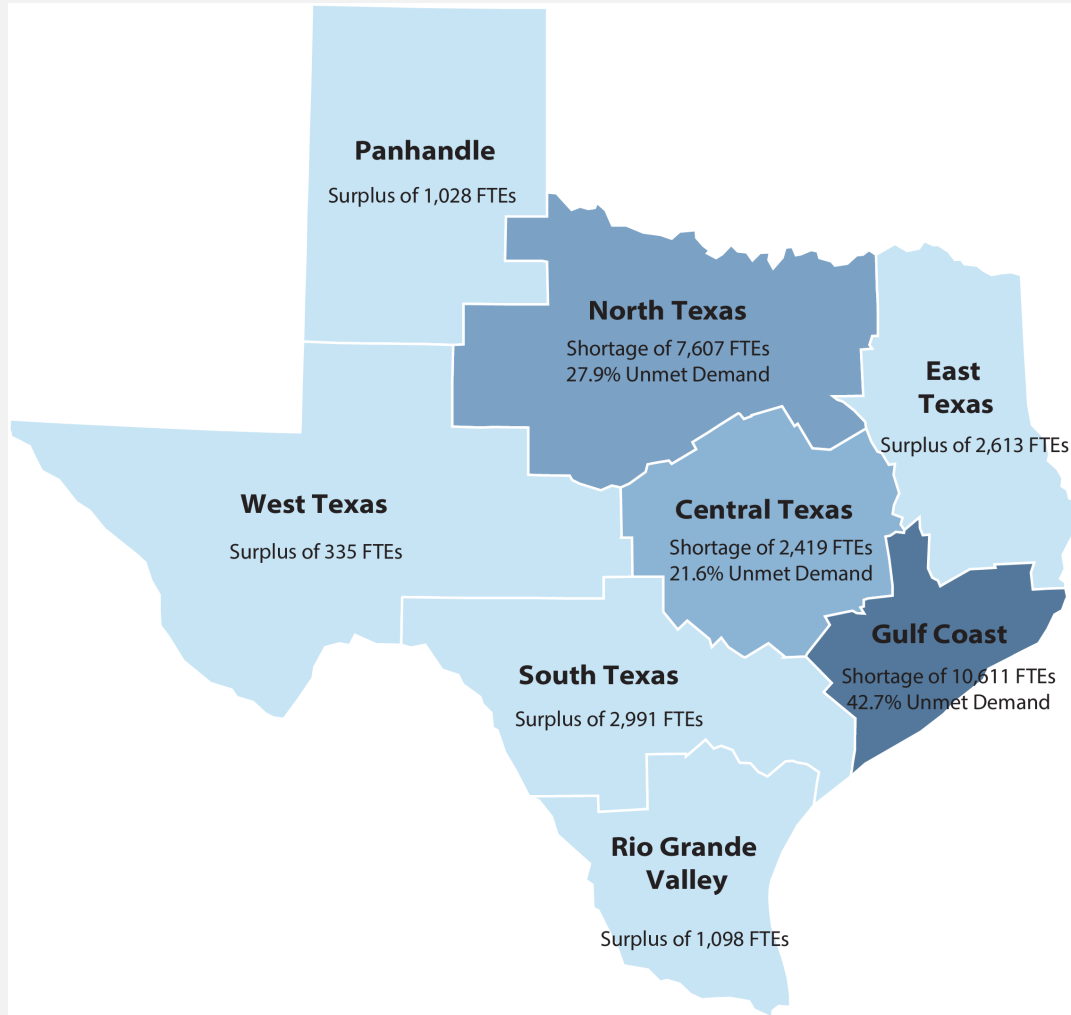


- Based on the projection models, demand for licensed vocational nurses is projected to outpace supply by 2025 and lead to a deficit of 12,572 FTEs by 2032.

Licensed Vocational Nurse Projections

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Supply	70,925	71,593	72,299	73,048	73,779	74,538	75,288	76,030	76,771	77,491	78,108	78,693	79,179
Demand	66,319	68,008	69,837	71,808	73,758	75,799	77,800	80,045	82,381	84,667	87,031	89,280	91,750
FTE Unmet Demand	-4,606	-3,586	-2,462	-1,240	-21	1,261	2,512	4,015	5,609	7,176	8,923	10,588	12,572
% Unmet Demand	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	3.2%	5.0%	6.8%	8.5%	10.3%	11.9%	13.7%

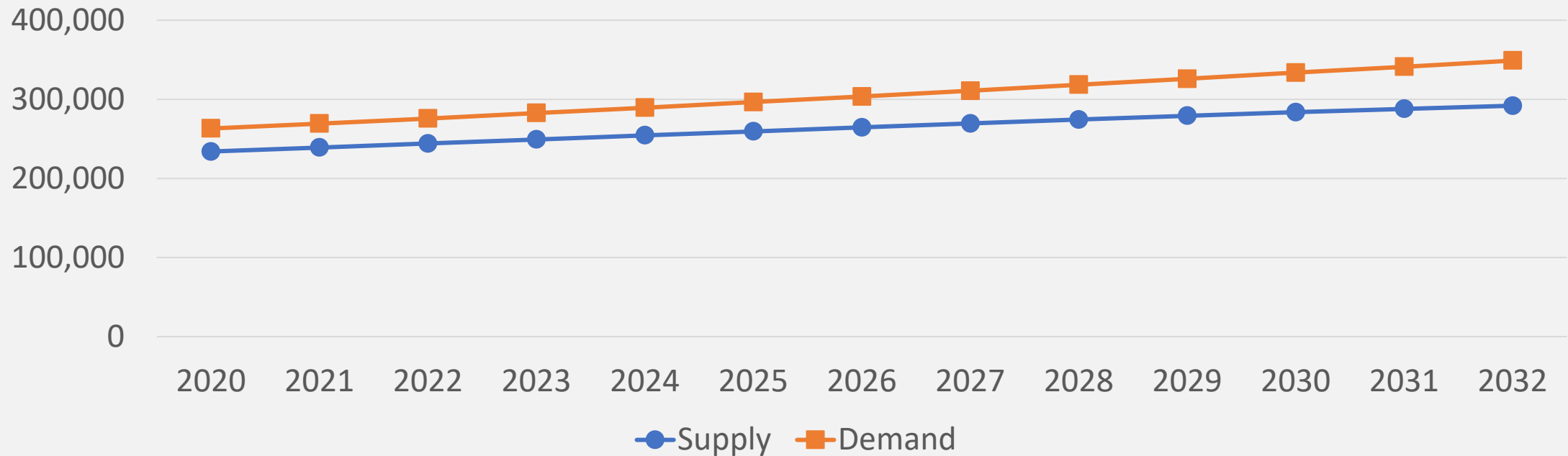
Unmet Demand of Vocational Nurse FTEs by Region, 2032



- Unmet demand for Vocational Nurse FTEs in 2032
- As unmet demand increases, the colors of the region darken
- North Texas, Central Texas, and the Gulf Coast are projected to have shortages of vocational nurses by 2032.
- The Gulf Coast region is projected to have the greatest shortage of 10,611 FTEs representing 42.7% of demand

Registered Nurse Projections

Supply of and Demand for Registered Nurse FTEs

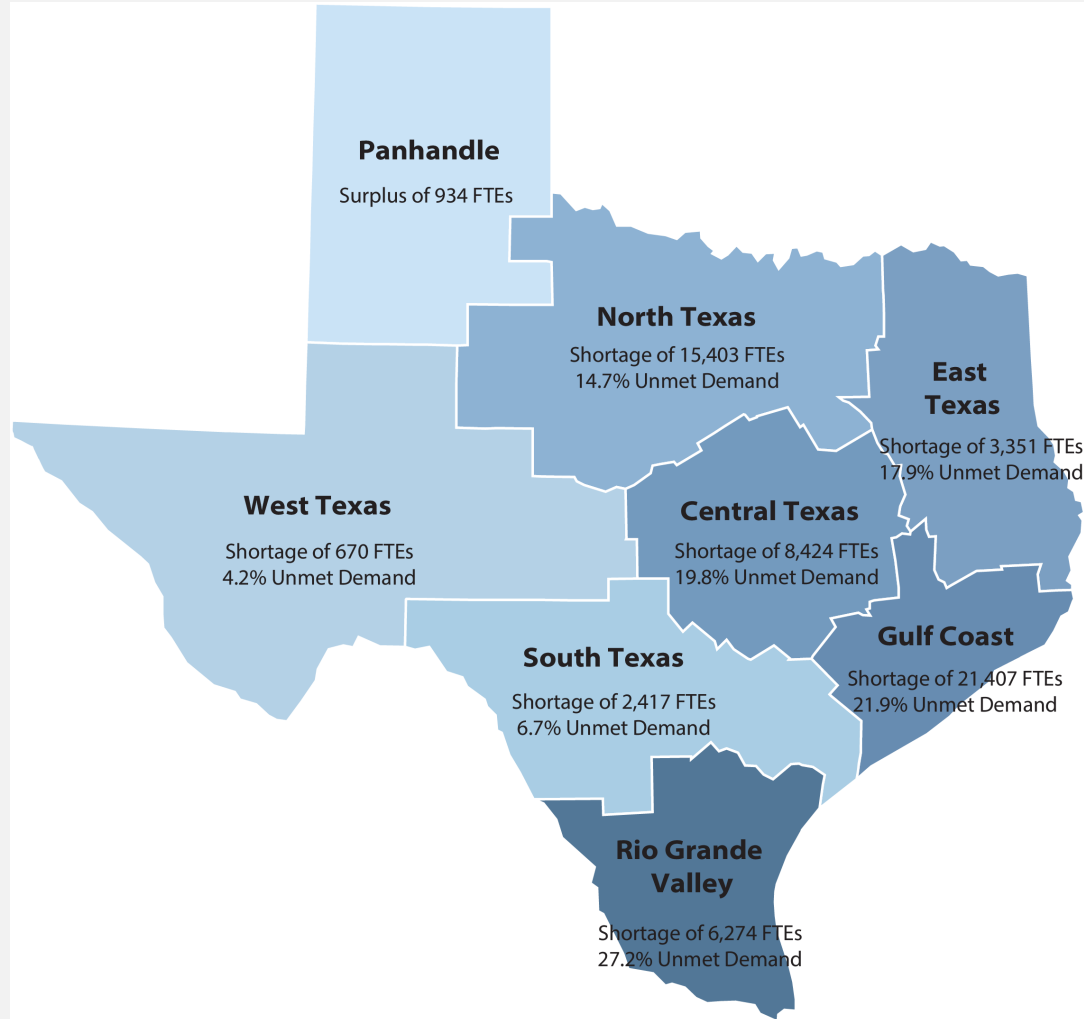


- Based on the projection models, demand for registered nurses is projected to outpace supply every year through 2032.
- The projected shortage of registered nurses is expected to increase from over 29,000 FTEs to 57,012 FTEs by 2032.

Registered Nurse Projections

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Supply	233,968	239,007	244,127	249,240	254,379	259,451	264,491	269,462	274,349	279,096	283,656	287,925	291,872
Demand	263,133	269,197	275,713	282,580	289,352	296,416	303,363	310,755	318,375	325,860	333,602	341,086	348,883
FTE Unmet Demand	29,165	30,190	31,586	33,340	34,973	36,965	38,871	41,293	44,026	46,764	49,946	53,161	57,012
% Unmet Demand	11.1%	11.2%	11.5%	11.8%	12.1%	12.5%	12.8%	13.3%	13.8%	14.4%	15.0%	15.6%	16.3%

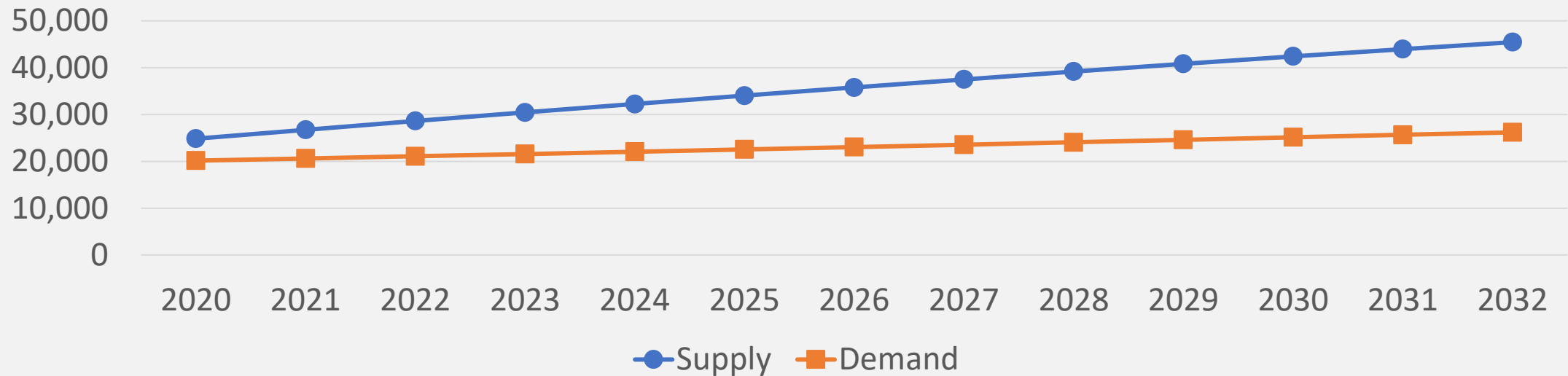
Unmet Demand of Registered Nurse FTEs by Region, 2032



- Unmet demand for Registered Nurse FTEs in 2032
- As unmet demand increases, the colors of the region darken
- The Rio Grande Valley is projected to have the greatest percentage of demand unmet at 27.2% representing 6,274 FTEs
- The greatest absolute shortage of FTEs is projected for Gulf Coast region at 21,407 FTEs representing 21.9% demand

Nurse Practitioner Projections

Supply of and Demand for Nurse Practitioner FTEs



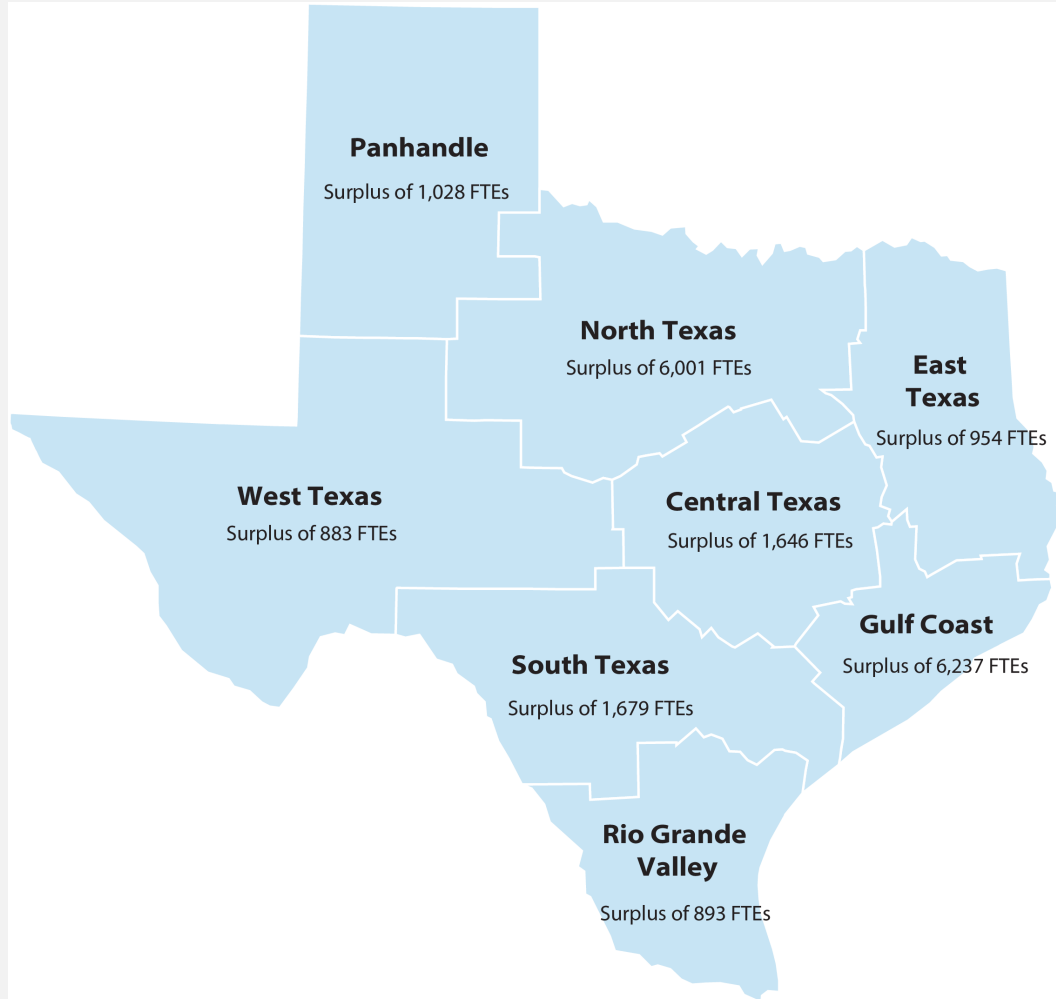
- Based on the projection models, the supply of nurse practitioners is projected to outpace demand every year through 2032, with the surplus growing from 4,676 to 19,271 FTEs by 2032.

Nurse Practitioner Projections

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Supply	24,854	26,750	28,620	30,455	32,250	34,034	35,781	37,491	39,175	40,827	42,417	43,974	45,462
Demand	20,178	20,616	21,087	21,574	22,055	22,558	23,055	23,565	24,086	24,604	25,139	25,664	26,191
Surplus	4,676	6,134	7,533	8,881	10,195	11,477	12,725	13,927	15,089	16,223	17,277	18,310	19,271

Source: Texas Health Data - <https://healthdata.dshs.texas.gov/dashboard/health-care-workforce/workforce-supply-and-demand-projections>

Projected Surplus of Nurse Practitioner FTEs by Region, 2032



- All regions are projected to have a surplus of Nurse Practitioners by 2032

Impact of COVID-19

- Limited data available on the impact of COVID-19 on healthcare workforce
 - The impact on the supply of nurses in Texas will be assessed upon availability of updated nurse licensure data
 - Nursing education data show increased faculty retirements and resignations in FY21 academic year
 - Nurse staffing data results will be published in October 2022 and address impact on COVID-19 on nurse staffing in hospitals, home health and hospice care agencies, long term care nursing facilities, and governmental public health agencies

Thank you!