

**Texas Department of State Health Services** 

# Health Workforce Supply and Demand Projections

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#### **Topics**

- Physician Supply and Demand Projections (2022-2036)
  - Primary Care Physicians
  - Psychiatrists
- Nurse Supply and Demand Projects (2022-2036)
- Health Professional Shortage Area (HPSA)



Texas Department of State Health Services

# Physician Supply and Demand Projections (2022-2036)

## **About the Projection Model**

## DSHS developed state-level projections for physicians, nurses, dentists, and psychiatrists.

- This approach is also used by the Health Resources and Services Administration, American Association of Medical Colleges, and other state-level workforce entities.
- Developed using data from 2018 2022.
- All projections are based on Full-time Equivalents (FTEs).

#### Healthcare Workforce Supply Model

- Models likely career choices of providers
- Uses info based on what we know about providers from licensure data, education data, and other sources such as the American Community Survey.

#### Healthcare Demand Model

 Based on population characteristics, healthcare use and delivery patterns, and staffing patterns.

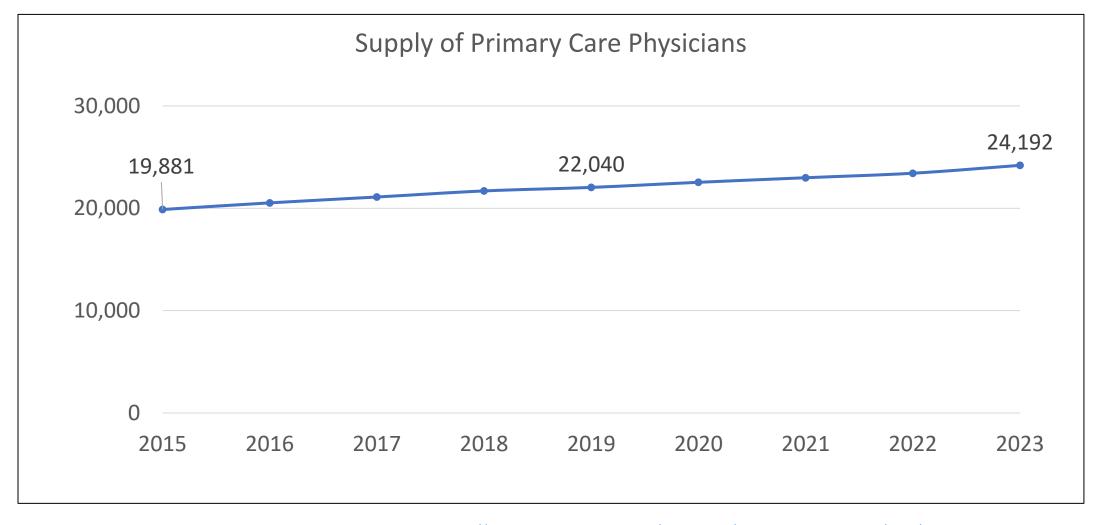
## **Primary Care Physicians**

## **Primary Care Physician Supply Trends 2015-2023**

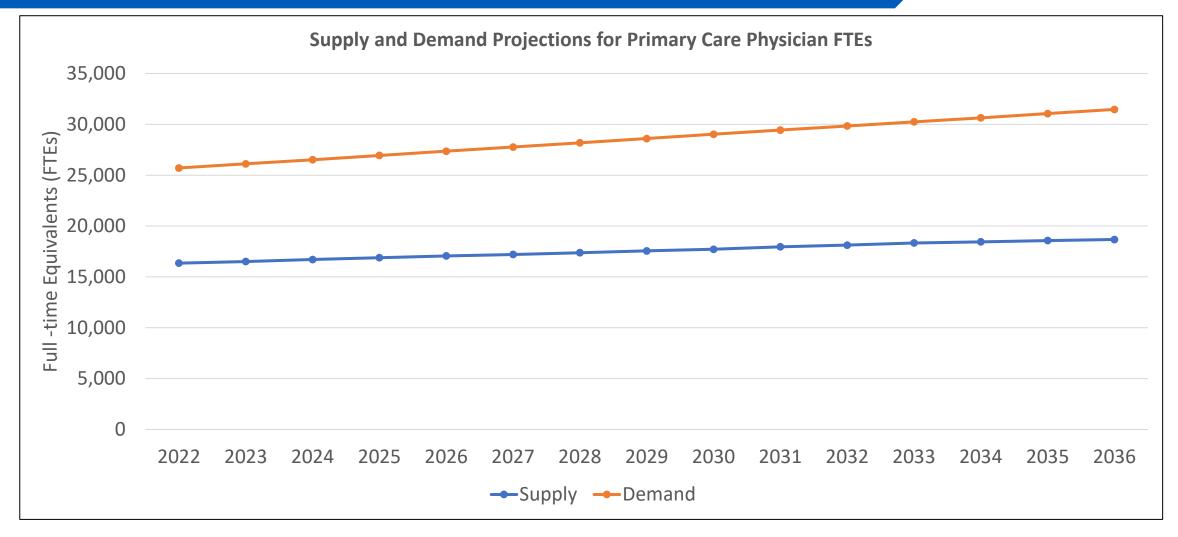
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Primary Care Physicians	19,881	20,530	21,102	21,695	22,040	22,537	22,984	23,424	24,192

• Data are from the Texas Medical Board and represent the number of primary care physicians that held a current license and were practicing in Texas during the reporting year.

#### **Primary Care Physician Supply Trends** 2015-2023



#### **Projections for Primary Care Physician FTEs**

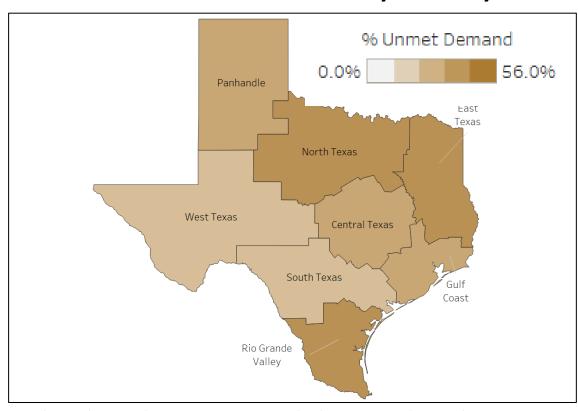


#### **Projections for Primary Care Physician FTEs**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Supply FTE	16,350	16,513	16,709	16,888	17,062	17,206	17,376	17,555	17,715	17,960	18,123	18,337	18,444	18,574	18,670
Demand FTE	25,704	26,112	26,518	26,938	27,358	27,770	28,187	28,603	29,025	29,437	29,839	30,241	30,640	31,054	31,463
FTE Unmet Demand	9,354	9,599	9,809	10,050	10,296	10,564	10,811	11,048	11,310	11,477	11,716	11,904	12,196	12,480	12,793
% Unmet Demand	36%	37%	37%	37%	38%	38%	38%	39%	39%	39%	39%	39%	40%	40%	41%

# Unmet Demand of Primary Care Physician FTEs by Public Health Region, 2036

#### Percent unmet demand for Primary Care Physicians in 2036



 The Rio Grande Valley and East Texas public health regions (PHR) show the highest projected percent unmet demand of 56 percent and 51 percent demand.

Darker colors in the map represent a higher unmet demand

# Unmet Demand of Primary Care Physician FTEs by Public Health Region, 2036

Geographic Designation	Demand FTE	Supply FTE	FTE Unmet Demand	% Unmet Demand
North Texas	9,802	5,375	4,427	45%
Gulf Coast	8,497	5,334	3,163	37%
Central Texas	4,429	2,816	1,613	36%
South Texas	3,241	2,229	1,012	31%
Rio Grande Valley	1,983	872	1,111	56%
West Texas	1,344	903	441	33%
East Texas	1,369	674	695	51%
Panhandle	798	467	331	41%
Statewide	31,463	18,670	12,793	41%

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

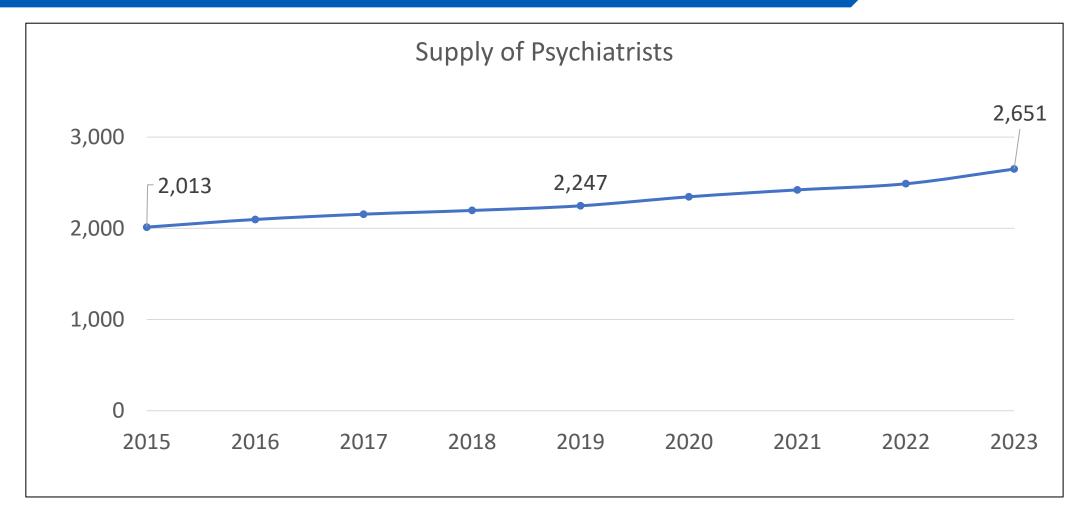
## **Psychiatrists**

#### Psychiatrist Supply Trends, 2015-2023

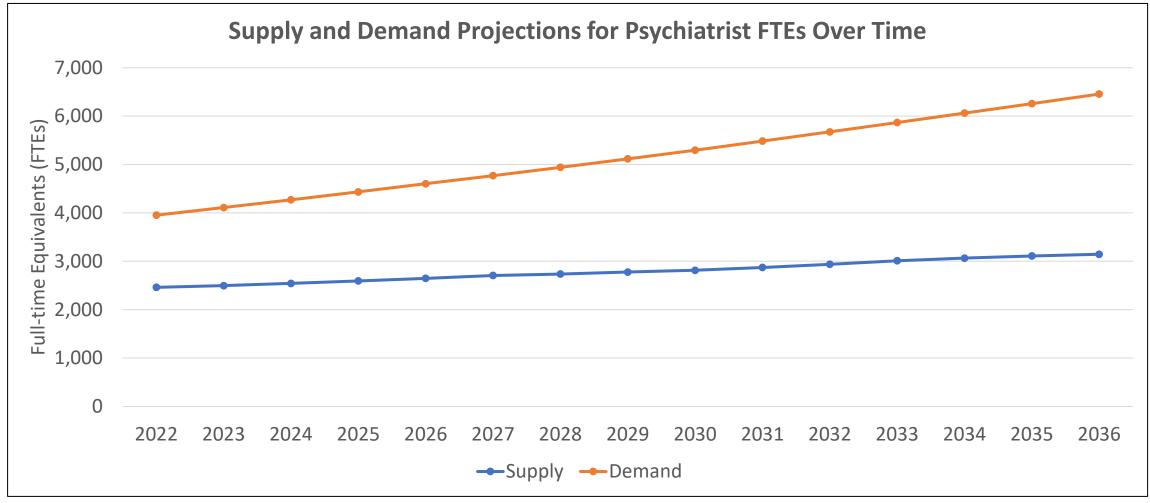
Year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Psychiatrists	2,013	2,097	2,155	2,196	2,247	2,346	2,422	2,489	2,651

• Data are from the Texas Medical Board and represent the number of psychiatrists that held a current license and were practicing in Texas during the reporting year.

#### Psychiatrist Supply Trends, 2015-2023



#### **Projections for Psychiatrist FTEs**

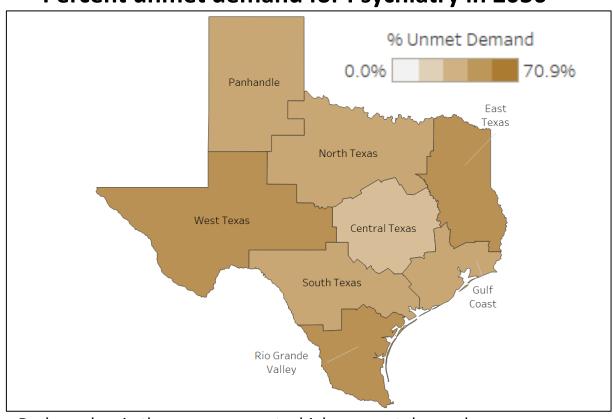


#### **Projections for Psychiatrist FTEs**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Supply FTE	2,461	2,496	2,543	2,594	2,646	2,706	2,736	2,778	2,813	2,871	2,938	3,011	3,065	3,109	3,145
Demand FTE	3,952	4,110	4,271	4,434	4,602	4,770	4,941	5,116	5,296	5,483	5,674	5,867	6,062	6,258	6,455
FTE Unmet Demand	1,491	1,614	1,728	1,840	1,956	2,064	2,205	2,338	2,483	2,702	2,736	2,856	2,997	3,149	3,310
% Unmet Demand	38%	39%	40%	41%	43%	43%	45%	46%	47%	48%	48%	49%	49%	50%	51%

# Unmet Demand of Psychiatrist FTEs by Public Health Region, 2036

#### Percent unmet demand for Psychiatry in 2036



- The Central Texas PHR has the lowest projected unmet demand at 38 percent.
- The Rio Grande Valley has the highest projected unmet demand at 71 percent.

Darker colors in the map represent a higher unmet demand

# Unmet Demand of Psychiatrists FTEs by Public Health Region, 2036

Geographic Designation	Demand FTE	Supply FTE	FTE Unmet Demand	% Unmet Demand
North Texas	2,133	1,013	1,120	53%
Gulf Coast	1,821	920	901	49%
Central Texas	917	565	352	38%
South Texas	674	300	374	56%
Rio Grande Valley	309	90	219	71%
West Texas	219	88	131	60%
East Texas	234	98	136	58%
Panhandle	149	72	77	52%
Statewide	6,455	3,145	3,310	51%

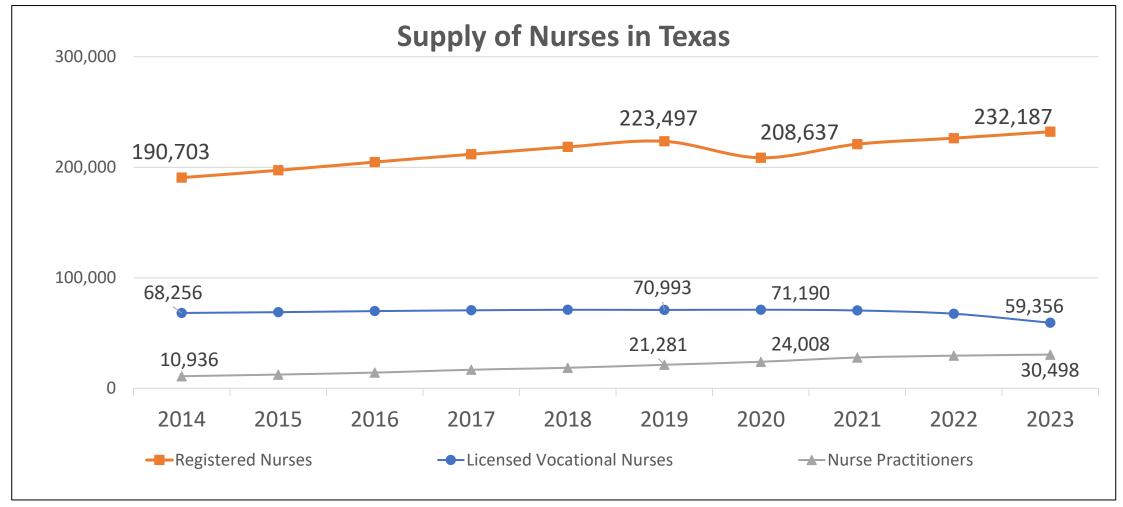
# Nurse Supply and Demand Projections (2022-2036)

## Nurse Supply Trends, 2014-2023

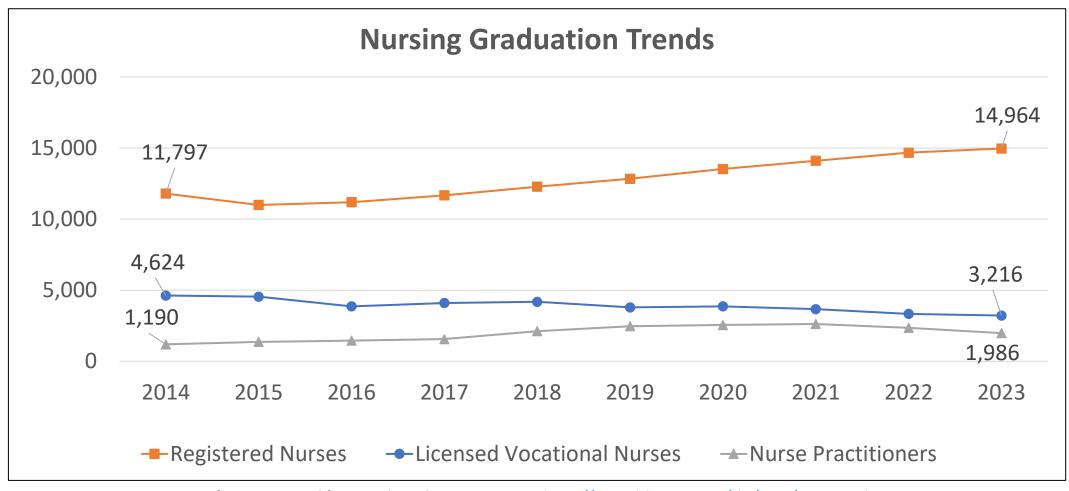
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Licensed Vocational Nurses	68,256	68,974	69,930	70,651	71,140	70,993	71,190	70,498	67,536	59,356
Registered Nurses	190,703	197,327	204,756	211,819	218,432	223,497	208,637	220,974	226,361	232,187
Nurse Practitioners	10,936	12,421	14,191	16,776	18,563	21,281	24,008	27,850	29,527	30,498

Source: Health Professions Resource Center – Supply Tables - <a href="https://www.dshs.texas.gov/health-professions-resource-center-hprc/health-professions">https://www.dshs.texas.gov/health-professions-resource-center-hprc/health-professions</a>

#### Nurse Supply Trends, 2014-2023



#### **Nursing Graduation Trends**



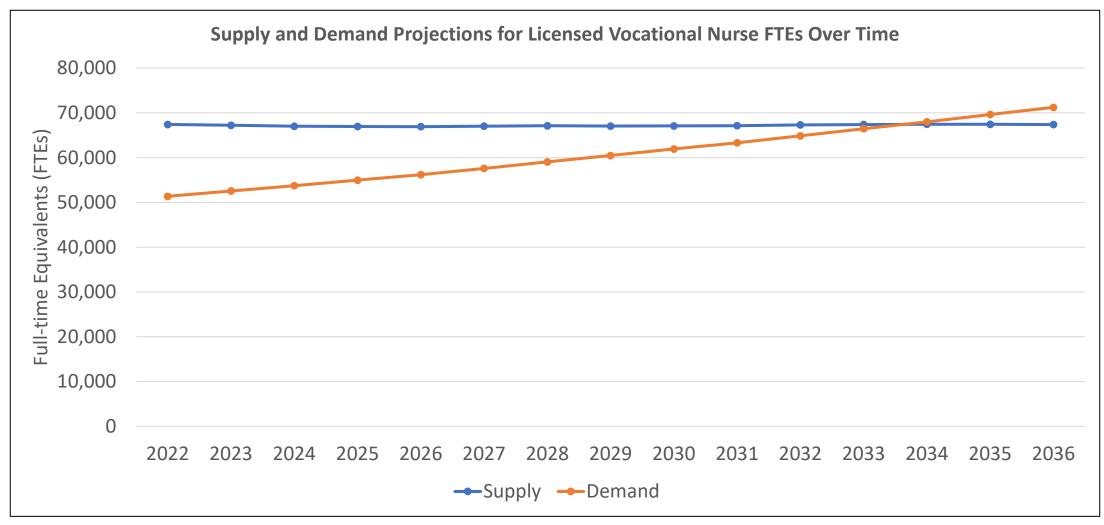
Source: Texas Center for Nursing Workforce Studies Education Reports - <a href="https://www.dshs.texas.gov/chs/cnws/Nursing-Education-Reports.aspx">https://www.dshs.texas.gov/chs/cnws/Nursing-Education-Reports.aspx</a>

## **Nursing Graduation Trends**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Licensed Vocational Nurses	4,624	4,548	3,862	4,102	4,184	3,790	3,865	3,670	3,336	3,216
Registered Nurses	11,797	10,997	11,189	11,677	12,284	12,839	13,525	14,104	14,674	14,964
Nurse Practitioners	1,190	1,364	1,454	1,561	2,121	2,472	2,552	2,629	2,359	1,986

Source: Texas Center for Nursing Workforce Studies Education Reports - <a href="https://www.dshs.texas.gov/chs/cnws/Nursing-Education-Reports.aspx">https://www.dshs.texas.gov/chs/cnws/Nursing-Education-Reports.aspx</a>

#### **Projections for Vocational Nurse FTEs**

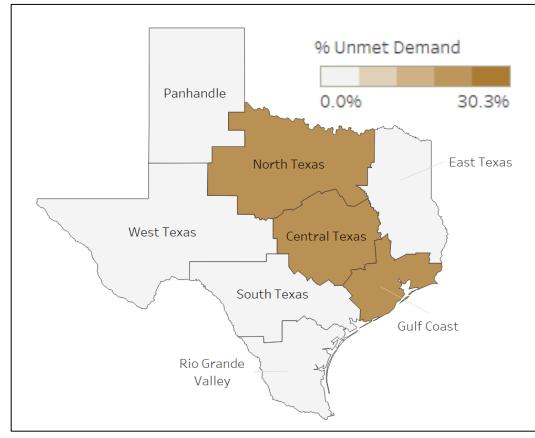


#### **Projections for Vocational Nurse FTEs**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Supply FTE	67,409	67,220	67,008	66,956	66,920	67,017	67,117	67,050	67,079	67,127	67,306	67,374	67,457	67,439	67,387
Demand FTE	51,351	52,547	53,728	54,975	56,201	57,589	59,047	60,471	61,927	63,304	64,864	66,459	67,993	69,633	71,225
FTE Unmet Demand	-16,058	-14,673	-13,280	-11,981	-10,719	-9,428	-8,070	-6,579	-5,152	-3,823	-2,442	-915	536	2,194	3,838
% Unmet Demand	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	5%

# Unmet Demand of Vocational Nurse FTEs by Public Health Region, 2036

#### Percent unmet demand for Vocational Nurse FTEs in 2036



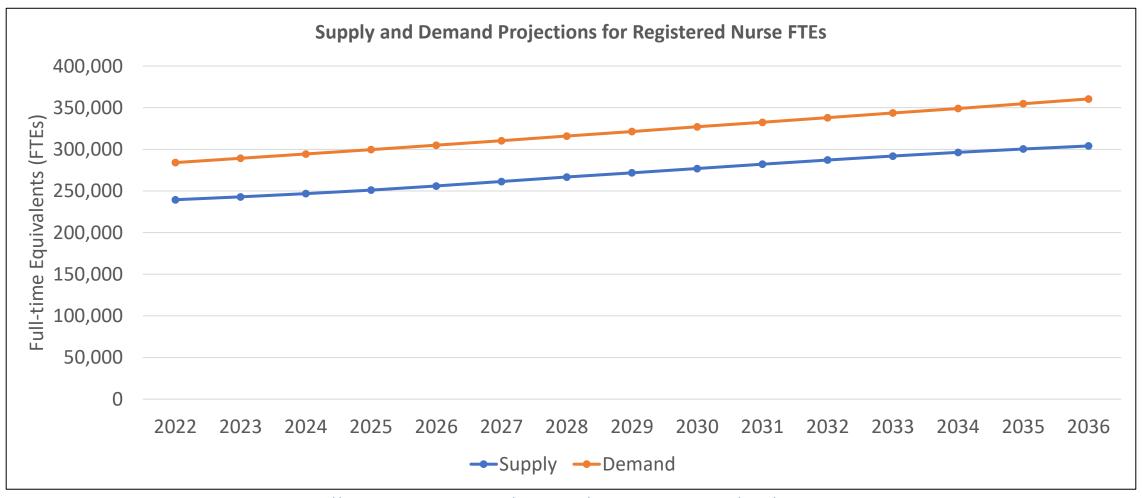
Darker colors in the map represent a higher unmet demand

 North Texas, Central Texas, and the Gulf Coast public health regions (PHR) are projected to have an unmet demand in 2036.

# Unmet Demand of Vocational Nurse FTEs by Public Health Region, 2036

Geographic Designation	Demand FTE	Supply FTE	FTE Unmet Demand	% Unmet Demand
North Texas	21,737	16,032	5,706	26%
Gulf Coast	18,299	12,748	5,551	30%
Central Texas	9,758	7,077	2,681	27%
West Texas	3,282	3,917	-635	0%
Panhandle	1,977	2,979	-1,002	0%
Rio Grande Valley	4,772	7,203	-2,431	0%
East Texas	3,896	6,571	-2,675	0%
South Texas	7,504	10,860	-3,356	0%
Statewide	71,225	67,387	3,839	5%

#### **Projections for Registered Nurse FTEs**

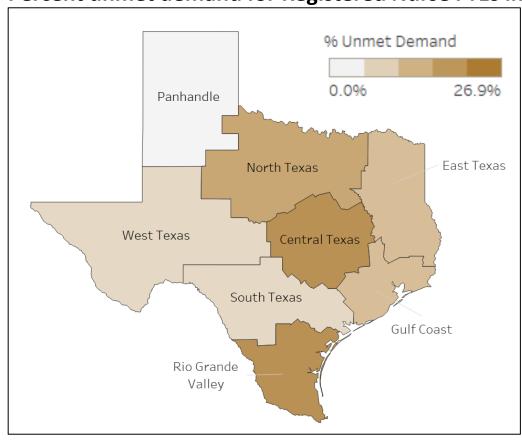


## **Projections for Registered Nurse FTEs**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Supply FTE	239,447	242,936	246,806	251,093	255,969	261,330	266,687	271,797	276,906	282,152	287,172	291,904	296,311	300,402	304,116
Demand FTE	284,125	289,314	294,400	299,715	304,955	310,355	315,913	321,393	327,026	332,463	338,031	343,639	349,093	354,854	360,487
FTE Unmet Demand	44,678	46,378	47,594	48,622	48,986	49,025	49,226	49,596	50,120	50,311	50,859	51,735	52,782	54,452	56,371
% Unmet Demand	16%	16%	16%	16%	16%	16%	16%	15%	15%	15%	15%	15%	15%	15%	16%

# Unmet Demand of Registered Nurse FTEs by Public Health Region, 2036

#### Percent unmet demand for Registered Nurse FTEs in 2036



 The Rio Grande Valley public health region (PHR) is projected to have the greatest unmet demand at 27 percent. Followed by the Central Texas PHR at 26 percent.

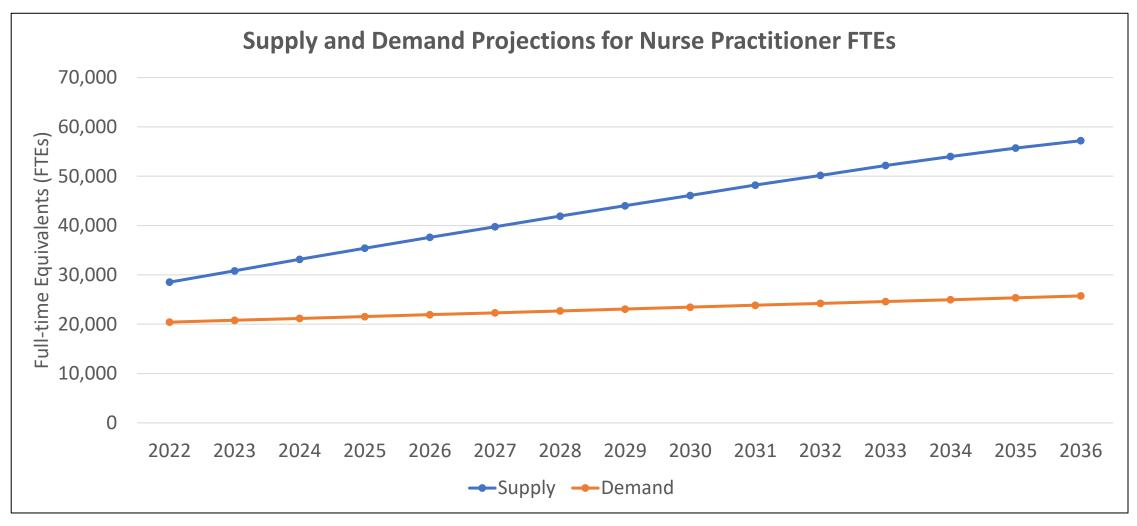
Darker colors in the map represent a higher unmet demand

# Unmet Demand of Registered Nurse FTEs by Public Health Region, 2036

Geographic Designation	Demand FTE	Supply FTE	FTE Unmet Demand	% Unmet Demand
North Texas	111,522	92,080	19,422	17%
Central Texas	49,587	36,544	13,043	26%
Gulf Coast	92,317	81,639	10,678	12%
Rio Grande Valley	23,317	17,034	6,283	27%
South Texas	36,875	34,144	2,731	7%
East Texas	19,915	17,232	2,683	13%
West Texas	17,062	15,235	1,828	11%
Panhandle	9,891	10,208	-317	0%
Statewide	360,487	304,116	56,370	16%

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

#### **Projections for Nurse Practitioner FTEs**



## **Projections for Nurse Practitioner FTEs**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Supply FTE	28,540	30,827	33,150	35,417	37,615	39,763	41,914	44,029	46,107	48,206	50,163	52,174	53,999	55,717	57,202
Demand FTE	20,430	20,802	21,169	21,551	21,932	22,308	22,691	23,073	23,465	23,848	24,222	24,598	24,969	25,358	25,743
FTE Unmet Demand	-8,110	-10,025	-11,981	-13,866	-15,683	-17,455	-19,223	-20,956	-22,642	-24,358	-25,941	-27,576	-29,030	-30,359	-31,459
% Unmet Demand	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

# Supply and Demand of Nurse Practitioner FTEs by Public Health Region, 2036

Geographic Designation	Demand FTE	Supply FTE	FTE Unmet Demand	% Unmet Demand
Panhandle	668	1,764	-1,096	0%
West Texas	1,137	2,643	-1,506	0%
East Texas	1,281	2,849	-1,569	0%
Rio Grande Valley	1,621	3,226	-1,605	0%
Central Texas	3,572	6,935	-3,363	0%
South Texas	2,646	6,280	-3,634	0%
Gulf Coast	6,803	15,364	-8,561	0%
North Texas	8,015	18,140	-10,125	0%
Statewide	25,743	57,202	-31,459	0%

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

## Health Professional Shortage Areas (HPSA)

A Health Professional Shortage Area (HPSA) is a designation, determined by the U.S. HHS Secretary, of a provider shortage.

- State Primary Care Offices submit available data to the Health Resources and Services Administration
  as part of the designation process. DSHS houses the Texas Primary Care Office.
- A HPSA designation can be made for:

#### Geographic Areas

- Whole counties
- Partial counties

#### **Population Groups**

- Low-Income, etc.
- Areas with high incidence of certain health conditions, etc.

#### Specific Facility Types

- Federally Qualified Health Centers
- Rural Health Clinics
- State/county mental health or correctional facilities

Source: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services

There are three types of HPSA designations:



**Primary Care** 



Mental Health



**Dental Health** 

- HPSA type and score are used to determine eligibility for many state and federal programs:
  - National Health Service Corps and Nurse Corps
  - State funded loan repayment programs
  - Conrad 30 J-1 Visa Waiver Program
  - U.S. Centers for Medicare and Medicaid Services HPSA Bonus Payment Program

 HPSA designations are determined by the ratio of population to provider and analysis of availability of providers in surrounding areas.

Minimum Ratio by Type					
HPSA Type	Primary Care	Mental Health			
Geographic	≥3,500:1	≥30,000:1			
Population	≥3,000:1	≥20,000:1			

Source: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services Shortage Designation Management System(SDMS): Manual for Policies and Procedures

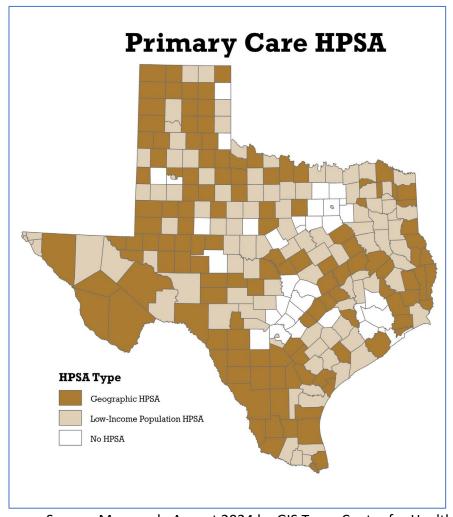
Total

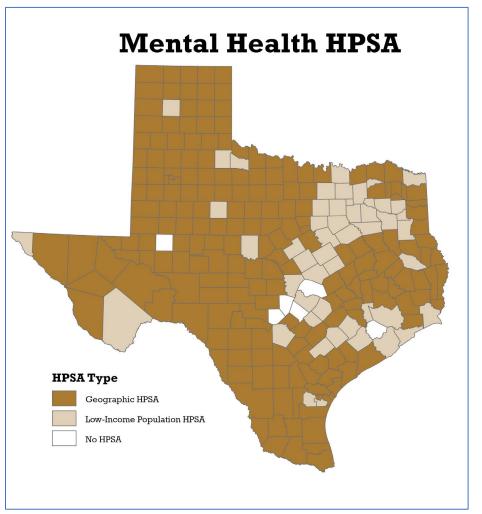
2024 Texas HPSA Count						
HPSA Type	Primary Care	Mental Health				
Geographic	127	189				
Population	105	45				
Facility	137	142				

Source: Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services <a href="https://data.hrsa.gov/topics/health-workforce/shortage-areas">https://data.hrsa.gov/topics/health-workforce/shortage-areas</a>

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Source: Map made August 2024 by GIS Team-Center for Health Statistics; Data: <a href="https://data.hrsa.gov/data/download">https://data.hrsa.gov/data/download</a>