



Nurse Workforce Projections, 2023-2038

December 2025

This brief contains highlights of workforce projections for the nursing workforce in the United States.

These estimates were generated using HRSA's Health Workforce Simulation Model (HWSM) and start with the year 2023 and go through 2038. The primary function of the HWSM is to assess the adequacy of the nation's projected workforce supply to meet the demand.¹ Full data on the workforce projections are available in the [Workforce Projections Dashboard](#).

Key Results and Takeaways

These projections were generated using historical data up to and including some data from 2023. Data are shown at 5-year intervals (2028, 2033, and 2038) throughout this analysis.

- **At the national level, there are shortages projected until 2038.** Specifically, there is a projected 8% shortage of registered nurses (RNs) in 2028. By 2038, the shortage is 3% (a shortage of 108,960 full-time equivalent [FTE] RNs). See *Exhibits 1a-1c*.² These projections assume that historical patterns of attrition, graduation, and labor force participation remain the same over the forecast period.³
- Nonmetro areas are projected to have a higher shortage of RNs than metro areas in each of the three interval years: 11% vs 2% in 2038, 18% vs 4% in 2033, and 24% vs 5% in 2028.
- The demand for licensed practical and vocational nurses (LPNs) is projected to grow faster than supply between 2023 and 2038, resulting in a projected shortage (245,950 LPN FTEs) in 2038. Nationwide, the projected supply of LPNs in 2038 is sufficient to meet just 70% of the demand for LPNs, compared to 83% in 2028. See *Exhibits 1a-1c*.
- At the national level, the supply of nurse practitioners (NPs) is projected to exceed demand over the projection period; however, distribution remains the most important issue.

About the National Center for Health Workforce Analysis

The National Center for Health Workforce Analysis informs public and private sector decision makers on health workforce issues by expanding and improving health workforce data, disseminating workforce data to the public, and improving and updating projections of the supply and demand for health workers.

For more information, visit the [Health Workforce Analysis](#) webpage.

¹ For a detailed explanation of the data, methods, and assumptions of the model, including the definitions of supply and demand, refer to the [HWSM technical documentation](#).

² An FTE is defined as working 40 hours per week.

³ NCHWA also reports projections under alternative scenarios of supply, such as varying graduation rates, and of demand including improved access to care. The projected estimates under each scenario are available at [Workforce Projections Dashboard](#).

Exhibit 1a. Projected National Supply and Demand for Selected Nursing Occupations, 2028

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,034,360	589,200	501,010	68,380	11,830
Demand	3,301,690	711,730	399,200	66,790	11,360
Percent Adequacy	92%	83%	126%	102%	104%

Exhibit 1b. Projected National Supply and Demand for Selected Nursing Occupations, 2033

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,269,070	578,050	638,990	74,110	14,160
Demand	3,473,760	764,020	420,250	68,930	11,490
Percent Adequacy	94%	76%	152%	108%	123%

Exhibit 1c. Projected National Supply and Demand for Selected Nursing Occupations, 2038

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,509,970	565,690	766,260	79,540	16,130
Demand	3,618,930	811,640	437,330	70,400	11,520
Percent Adequacy	97%	70%	175%	113%	140%

Notes: Demand and supply estimates and projections are in full-time equivalents (FTEs), defined as working 40 hours a week. FTE estimates may differ from estimates of the headcounts of the health workforce. Percent adequacy is calculated by taking projected supply divided by projected demand.

- Despite national shortages of RNs and LPNs, significant geographic maldistribution remains a large issue for the nursing profession. Projected supply adequacy of RNs varies considerably across states, ranging from a shortage of 22% in California to a projected 79% oversupply in Wyoming in 2038.
- The ten states with the largest projected RN shortages in 2038 are: California (22%), North Carolina (20%), Georgia (20%), Michigan (18%), Washington (17%), Maryland (16%), Oklahoma (13%), South Carolina (12%), Louisiana (11%) and Virginia (8%).⁴ See Exhibit 2.
- As with RNs, the projected adequacy of supply for LPNs varies considerably across states, ranging from 21% (a 79% shortage) in Alaska to 139% (a 39% oversupply) in Oklahoma in 2038.

⁴ For state-level projections, see the [Workforce Projections Dashboard](#). Shortage percentages are calculated as 1 minus supply adequacy, which is calculated as projected supply divided by projected demand.

Exhibit 2. States with the Largest Projected Shortages of RNs, 2038

State	Projected Shortage (%)	Projected Shortage (FTEs)
California	22%	84,750
North Carolina	20%	25,710
Georgia	20%	25,110
Michigan	18%	20,290
Washington	17%	15,020
Maryland	16%	10,890
Oklahoma	13%	5,900
South Carolina	12%	7,250
Louisiana	11%	5,680
Virginia	8%	8,020

Notes: Demand and supply estimates and projections are in full-time equivalents (FTEs), defined as working 40 hours a week. FTE estimates may differ from estimates of the headcounts of the health workforce. Shortage percentages are calculated as 1 minus supply adequacy, which is calculated as projected supply divided by projected demand.

See the [HWSM technical documentation](#) for details on the methodology and datasets used to generate these projections. For full data on the workforce projections, see the [Workforce Projections Dashboard](#). You can also [download the data](#) from the dashboard in spreadsheet form.