

# 2025 Hawai'i Nursing Workforce Supply

## TECHNICAL DOCUMENTATION

*November 2025*



## DOCUMENT INFORMATION

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## ABBREVIATIONS

ABBREVIATION	DEFINITION
APRN	Advanced Practice Registered Nurse
DCCA	Department of Commerce and Consumer Affairs
HBON	Hawai'i Board of Nursing
LPN	Licensed Practical Nurse
MDS	Minimum Dataset
RN	Registered Nurse
The Center	Hawai'i State Center for Nursing
The Forum	National Forum of State Nursing Workforce Centers
Supply Survey	Hawai'i Nursing Workforce Supply Survey

## INTRODUCTION

This document contains the technical documentation for the 2025 Hawai'i Nursing Workforce Supply Survey. The document contains a description of the survey instrument, fielding method and period, sampling method, data cleaning procedures, margins of error, and method of count estimates.

Questions about the content of this document or the Supply Survey should be emailed to [hscndata@hawaii.edu](mailto:hscndata@hawaii.edu).

## INSTRUMENTATION

The Supply Survey is based on the National Forum of State Nursing Workforce Centers (2024) Minimum Dataset for Supply (Supply MDS). The Supply MDS provides guidance about the data that states should collect about their nursing workforces. The MDS includes variables that are necessary for statistical modeling of nursing workforce projections and allows states to compare the characteristics of their workforces to national nursing workforce data.

In addition to the Supply MDS variables, the Center's Supply Survey instrument includes items recommended by the Center's partners including chief nursing officers and nurse educators throughout the state. The additional variables (e.g., wellbeing, professional development, retention) were included to monitor important workforce characteristics or collect data in response to changes in the workforce or the nursing profession in Hawai'i.

To establish and maintain a historical time series of data, the Center's goal is to keep the survey as similar as possible between fielding years. To that end, the major content of the survey has not changed in at least the last five survey cycles.

Questions on the survey ask nurses to provide information related to their licensure, certifications, demographic characteristics, nursing education, employment status, primary and secondary employment characteristics, job satisfaction and intention to leave the workforce, and nursing professional development activities.

Though the Center's priority is to maintain as consistent a record of historical data as possible, it is also important that the instrument change when necessary. In 2025, three modifications were made to the instrument. The first was the deletion of a question related nursing volunteerism. This item was removed as it was deleted from the 2024 revision of the Forum's Supply MDS.

The second change was the deletion of most of the questions related to nurses' secondary nursing employment position. Though the MDS recommends collecting data about the secondary role, the Center has not historically analyzed the data from these questions. Because these questions have not been analyzed, they were removed from the survey to make the instrument as short as possible for nurses who have multiple jobs.

The final significant change was the deletion of a question related to the activities that nurses complete to fulfill the continuing professional development requirement for license renewal. Rather than asking nurses to report on professional development they completed to meet a licensing requirement, several questions were added or modified to collect data about professional development activities that the Center supports.

The 2025 instrument comprised 104 questions and was 11 questions shorter than the 2023 instrument. Skip logic was programmed into the survey to prevent respondents from seeing questions or sections on the survey that were not relevant to them. There was no circumstance under which any respondent saw every question.

The full 2025 Hawai'i Nursing Workforce Supply Survey instrument is [available by clicking this link](#) or by emailing [hscndata@hawaii.edu](mailto:hscndata@hawaii.edu).

## SAMPLING PROCEDURE

All nurses who renewed a Hawai'i nursing license using the online license renewal form during the regular license renewal period were eligible to participate in the Supply Survey. Participation in the study is strongly encouraged but not required for license renewal, so all participants voluntarily self-selected into the sample.

## FIELDING

The Center conducts the Supply Survey in each odd-numbered year during the biennial nurse license renewal period with the support of the Hawai'i Board of Nursing (HBON) and the technical assistance of the Professional and Vocational Licensing (PVL) Division of the Hawai'i Department of Commerce and Consumer Affairs (DCCA).

The Center provided a link to the staff at PVL who added the link to the online license renewal form. The survey also opened automatically when nurses completed their renewal application.

The 2025 license renewal and survey fielding period began on April 17 and ended on June 30.

## DATA CLEANING

The raw data file contained 16,737 records. Prior to analysis, blank and duplicate records were identified and removed from the data file. Blank records were those records in which the respondent did not indicate holding one or more active Hawai'i nursing licenses. The license question was the first question on the survey and respondents were unable to proceed beyond that question without answering it. As such, any record without license data was necessarily blank. A total of 992 records contained no license data and were removed from the data file. The resulting data file contained 15,745 records.

Cases were identified as probable duplicates if they had identical values in the alphanumeric variable created by concatenating the last five digits of the respondent's primary phone number and the respondent's birth year. In total, 213 surveys were identified as probable duplicates. In all cases in which multiple records were associated with the same phone digits + birth year combination, the survey with the latest completion date was retained in the data file and all other surveys were discarded. The rationale for retaining a respondent's last survey rather than

their first survey was that a person would have been unlikely to complete a 12-minute survey more than once unless their first attempt was incomplete or if they wanted to change one or more responses after the submission of their initial survey.

The removal of 213 probable duplicate records resulted in the retention of 15,532 records which comprised the final data file.

## CRITERIA FOR CLASSIFICATION OF CASES INTO LICENSE CATEGORIES

Prior to analysis, each data record was classified into one and only one nurse license category according to the following rules:

1. Any respondent who reported holding only an LPN license *or* only an RN license was classified into the license category corresponding to the license they reported holding.
2. Any respondent who reported holding both an LPN license *and* an RN license but *not* an APRN license was classified as an RN.
3. Any respondent who reported holding an APRN license *and* an RN license but *no* APRN certification was classified as an RN as it is possible but unlikely to be an APRN without holding an APRN certification.
4. Any respondent who indicated holding an APRN license *and* an RN license *and* at least one APRN certification was classified as an APRN.

## RESPONSE RATES BY LICENSE

A total of 36,225 nurses renewed their licenses during the license renewal period. The completion of 15,532 surveys resulted in a study response rate of 43%.

Despite the 2025 Supply Survey having the largest sample in its 18-year history, the response rate was notably lower than in 2023 (48%) (Hawai'i State Center for Nursing, 2023). This may be due to the growing share of out-of-state residents licensed in state. Between 2015 and 2025, the number of nurses licensed in Hawai'i increased by 60% (Hawai'i State Center for Nursing, 2025). During that same period, the share of licenses held by in-state residents decreased from 67% to 46%.

Additionally, out-of-state nurses are less likely to complete the Supply Survey. Out-of-state nurses account for 55% of RN licenses but only 39% of survey respondents. Out-of-state LPNs and APRNs are similarly underrepresented in the survey data.

Given that out-of-state residents comprise a growing share of nurses and are less likely to complete the survey, the response rate will likely decrease even as the sample size increases.

**Table 1. Response Rates and Margins of Error by License**

	<b>TOTAL</b>	<b>LPN</b>	<b>RN</b>	<b>APRN</b>
Renewed a License in 2025	36,225	1,730	31,436	3,032
Completed a 2025 Supply Survey	15,532	848	13,404	1,280
Response Rate	43%	49%	43%	42%
Margin of Error ( $\alpha=95\%$ )	$\pm 0.59\%$	$\pm 2.4\%$	$\pm 0.64\%$	$\pm 2.08$

*Margins of error will vary by question due to item non-response. Margins of error by license for counties are not calculable because the number of license renewals were not reported by PVL at the county level.*

## CRITERIA FOR INCLUSION OF CASES IN ANALYSIS

The primary goal of the survey is to describe the characteristics of nurses who practice in Hawai‘i. As such, most of the analysis, except where explicitly noted in reports and data tables, were run on a subset of data that included only those nurses who reported that they were working in a license-relevant role in Hawai‘i.

Records were retained in the dataset but removed from most analysis if the respondent indicated that they chose or were unable to work, that they were working in a role that was unrelated to their nursing expertise, or that they were working in nursing-related role outside of Hawai‘i.

**Table 2. Number of Survey Responses Included in Analysis of the Hawai‘i Workforce**

	<b>TOTAL</b>	<b>LPN</b>	<b>RN</b>	<b>APRN</b>
Total Records	15,532	848	13,404	1,280
Working in a Nursing Related Position	13,748	711	11,880	1,157
Nursing Position is Located in Hawai‘i <sup>1</sup>	8,195	533	6,971	691

<sup>1</sup> *These records are included in most reports and data tables unless otherwise specified.*

## MISSING DATA

Records are excluded from analysis on a case-wise basis if the record was missing data in one or more variables included in a given analysis. No attempt was made to interpolate or otherwise estimate missing values.

## ESTIMATION OF COUNTS OF NURSES WORKING IN HAWAI‘I

Some of the data tables produced from the 2025 Supply Survey data include frequency distributions or cross-tabulations that include both percentages and counts. The counts represent the total number of nurses estimated to be working in a nursing-related role in Hawai‘i.

The basis of the count estimation was the total number of active in-state licenses as of March 2025 as reported in [PVL's Geographic Report of Licenses](#)<sup>1</sup>. Because of Hawai‘i's geographic isolation, the likelihood that a nurse who resides outside the state primarily works in Hawai‘i is very low. Using licensees who reside in Hawai‘i provides the most accurate estimate of the in-state workforce despite potentially undercounting nurses who work predominantly via telehealth or who are travelers.

The estimated counts for each license type were calculated using the formula below and then rounded to the nearest 5:

$$\begin{array}{r}
 \text{\# Active In-State Licenses} \\
 * \\
 \text{\% of Survey Respondents Whose Nursing Job is Located in Hawai‘i} \\
 = \\
 \text{\# of Nurses Working in Hawai‘i}
 \end{array}$$

**Table 3. Estimated Counts of Nurses Working in Hawai‘i**

	TOTAL	LPN	RN	APRN
Active, In-State Licenses	21,403	1,423	17,914	1,706
% of Survey Respondents Working in a License Relevant Role in Hawai‘i	90%	85%	90%	91%
Est. Count of Nurses Working in Hawai‘i	18,840 <sup>1</sup>	1,210	16,085	1,545

<sup>1</sup>The total for all nursing licenses was calculated as the sum of the estimated counts for LPNs, RNs, and APRNs rather than multiplying total in-state licenses by the percentage of nurses working in Hawai‘i.

The estimated counts described above were the basis for the calculation of counts corresponding to percentages in frequency distributions. Each percentage was multiplied by the estimated count for the corresponding license category.

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<sup>1</sup> The number of licensees used in the calculation of the number of nurses working in Hawai‘i was based on a report published by PVL in March of 2025. A revised report was subsequently published in September of 2025. This report was deemed unusable for the purpose of this calculation because approximately 25% of records were assigned a geographic category of "unknown." The March 2025 report has since been removed from PVL's website and is no longer publicly available.

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