

The Texas Center for Nursing Workforce Studies (TCNWS) uses the Hospital Nurse Staffing Survey (HNSS) to assess the size and effects of the state’s ongoing nursing shortage in hospitals, Texas’ largest employer of nurses. The HNSS was conducted for the first time in 2004 and then every two years since. In each repetition, the survey is distributed to all operating Texas hospitals. These include for-profit, non-profit, public, and Texas Department of State Health Services-operated hospitals, as well as those linked to academic institutions; military hospitals are not surveyed. Broadly, facilities surveyed are general acute care, psychiatric, special, and rehabilitation hospitals. In 2004 the survey response rate was 34.1%, rising to a high of 61.9% of Texas hospitals in 2012.

A total of 81 hospitals responded to the 2006, 2008, 2010, and 2012 surveys and are included in the analyses below. These 81 hospitals voluntarily participated in each year’s survey and do not constitute a random sample of hospitals in Texas over this time period. However, the 81 hospitals were comparable to all Texas hospitals by region and bed size in 2006, the first year included in this analysis.

This report contains vacancy and turnover, staffing numbers, and interim staffing data from all 81 hospitals who responded to each of the past four HNSS surveys. The time period covered by this data overlapped with the recent U.S. economic recession, providing insights into its impacts on Texas hospitals’ nursing workforce. For information on each year’s HNSS and other nursing workforce data, visit: <http://www.dshs.state.tx.us/chs/cnws/Publications/>

### Vacancy & Turnover Rates

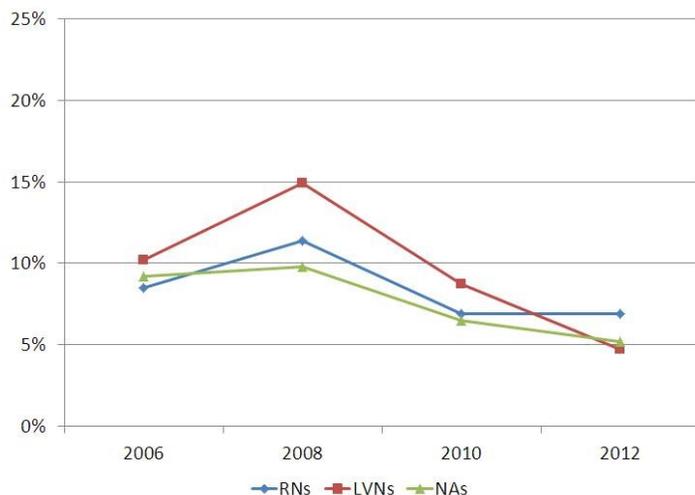
Nurse vacancy and turnover rates are among the key measures for assessing a nursing workforce shortage, the severity of the shortage, and changes in the nursing labor market over time. TCNWS reports both position vacancy rates and median facility vacancy rates to allow for comparison with data being collected by other entities across the state and country. These two methods reflect two different considerations: position vacancy rate describes the proportion of all full-time equivalent (FTE) positions that are vacant across the 81 hospitals responding to each HNSS from 2006 to 2012, while median facility vacancy rate provides the midpoint of vacancy rates among the 81 hospitals, regardless of hospital or staff size.

#### Position Vacancy Rate

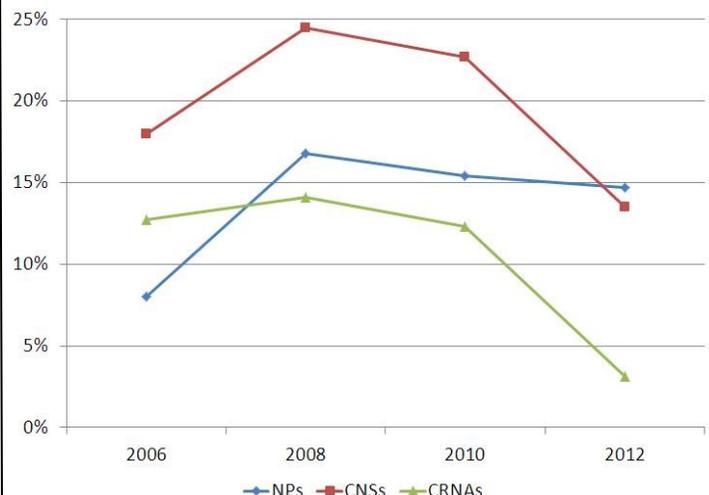
- Position vacancy rates increased from 2006 to 2008 and then decreased from 2008 to 2010 for all nurse types.
- From 2010 to 2012, the position vacancy rate for RNs remained constant while decreasing for all other nurse types.
- For LVNs, NAs, and NPs, the rate of decrease of position vacancy rate slowed from 2010 to 2012.
- For CNSs and CRNAs, the rate of decrease of position vacancy rate hastened from 2010 to 2012.

Note: CNMs were excluded from this analysis because of their low numbers.

**Position Vacancy Rates for RNs, LVNs, and NAs, 2006-2012**



**Position Vacancy Rates for NPs, CNSs, and CRNAs, 2006-2012**



Note: RN = Registered Nurse, LVN = Licensed Vocational Nurse, NA = Nurse Aide, NP = Nurse Practitioner, CNS = Clinical Nurse Specialist, CRNA = Certified Registered Nurse Anesthetist, CNM = Certified Nurse Midwife, APRN = Advanced Practice Registered Nurse

**Vacancy and Turnover Rates (continued)**

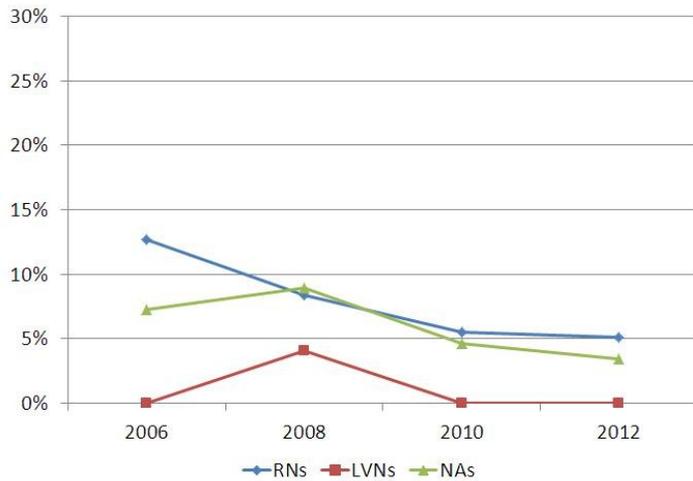
Median Facility Vacancy Rate

- Median facility vacancy rates for RNs have decreased steadily since 2006.
- With the exception of 2008, median facility vacancy rates for LVNs were measured at 0%.
- Facility vacancy rates for all APRN types were 0% for all measurements, meaning that over half of all hospitals had zero vacancies for each APRN type.

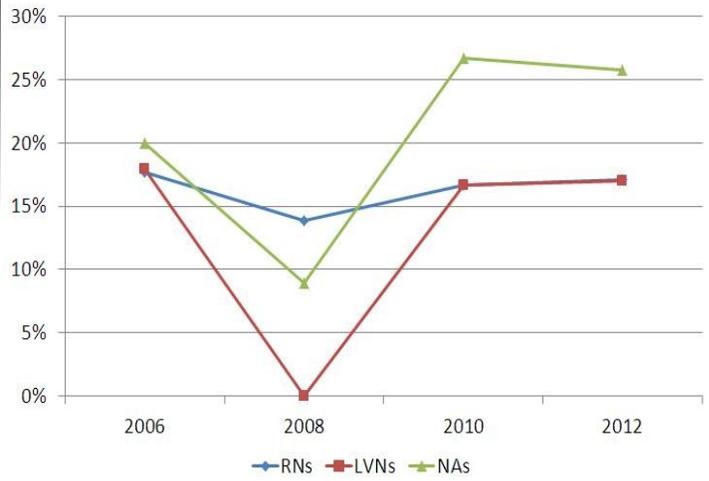
Median Facility Turnover Rate

- Median facility turnover rates for RNs have remained fairly stable over the past four measurements, though rates for LVNs and NAs decreased dramatically between 2006 and 2008, then rebounded between 2008 and 2010.
- Median facility turnover rates for all APRN types were 0% for all measurements, with the exception of a 5.2% rate for CRNAs in 2008.

**Median Facility Vacancy Rates for RNs, LVNs, and NAs, 2006-2012**



**Median Facility Turnover Rates for RNs, LVNs, and NAs, 2006-2012**



**Changes in Staffing**

The total number of budgeted and filled positions and vacancies provides information on the overall size of the nursing workforce of the 81 hospitals analyzed here. This data is useful for measuring the growth or contraction of the hospital nursing workforce.

Budgeted Positions

- The number of budgeted RNs increased by 21.8% between 2006 and 2012.
- Between 2010 and 2012, the number of budgeted RNs increased by 16.6% while the number of budgeted LVNs decreased by 16.8% .
- The number of budgeted APRNs decreased by 14.5% between 2006 and 2012, though the number of budgeted CRNAs increased by 88.2% over that time.
- From 2010 to 2012, the 81 hospitals increased the number of budgeted NPs by 38.8%, the number of budgeted CNSs by 54.2% and the number of budgeted CRNAs by 106.5%.

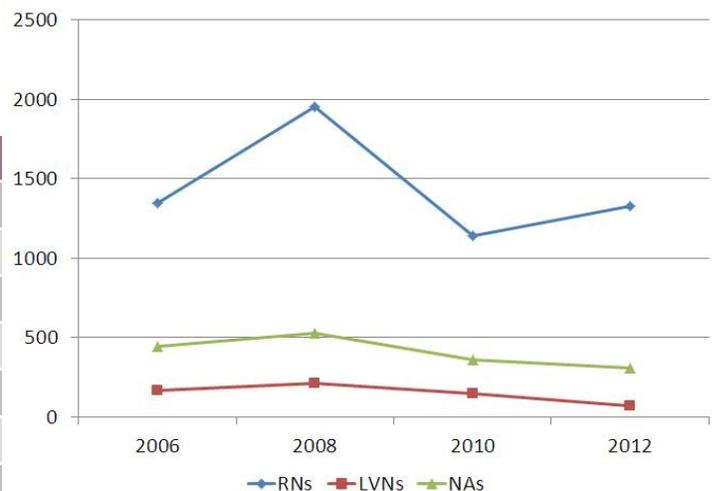
RN, LVN, and NA Vacancies

- The total number of RN vacancies peaked in 2008 with nearly 2,000 vacancies but by 2012 had dropped 1.2% below the 2006 total.
- The number of LVN vacancies has fallen by 67.6% since its 2008 high.
- While the number of budgeted NAs has increased 20.5% since 2006, NA vacancies have decreased by 30.9%.

**Total Number of Budgeted Positions by Nurse Type, 2006-2012**

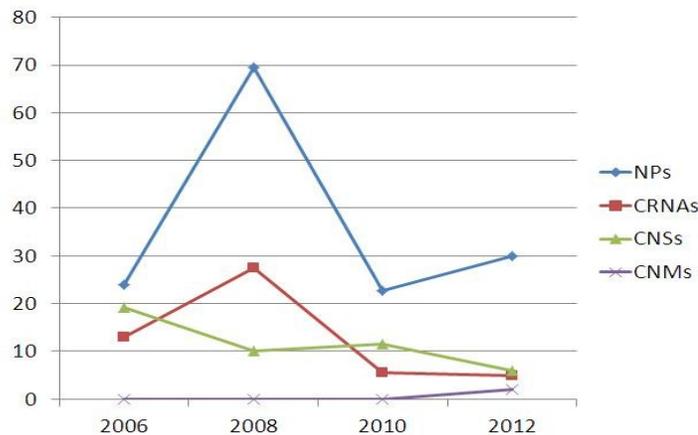
	2006	2008	2010	2012
<b>RNs</b>	15,754	17,157	16,448	19,182
<b>LVNs</b>	1,675	1,411	1,730	1,439
<b>NAs</b>	4,853	4,349	5,510	5,850
<b>NPs</b>	300	414	147	204
<b>CNSs</b>	106	41	24	37
<b>CRNAs</b>	102	195	93	192
<b>CNMs</b>	3	3	4	5

**RN, LVN, and NA Vacancies, 2006-2012**



## Changes in Staffing (continued)

### NP, CRNA, CNS, and CNM Vacancies, 2006-2012



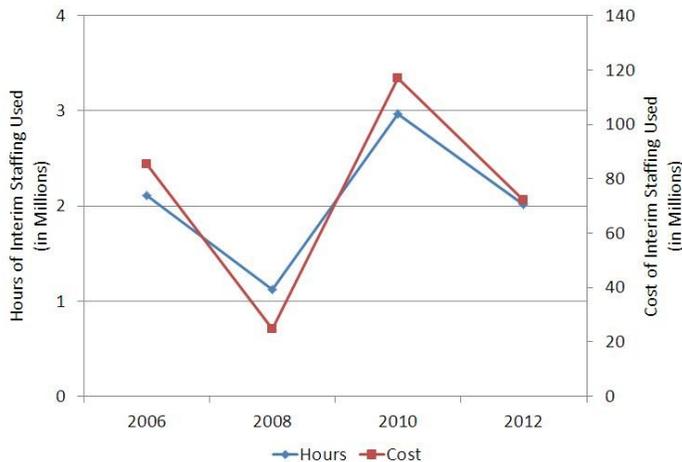
### NP, CRNA, CNS, and CNM Vacancies

- The number of NP vacancies peaked in 2008 then dropped below 2006 levels in 2010. In 2012 there were 25.6% more vacancies than in 2006.
- The number of CRNA vacancies in 2012 was 81.8% below its 2008 high.
- Unlike the NP and CRNA vacancies, the number of CNS vacancies decreased from 2006 to 2008, then increased from 2008 to 2010.
- There were two CNM vacancies in 2012, the first such vacancies for this nurse type since 2006.

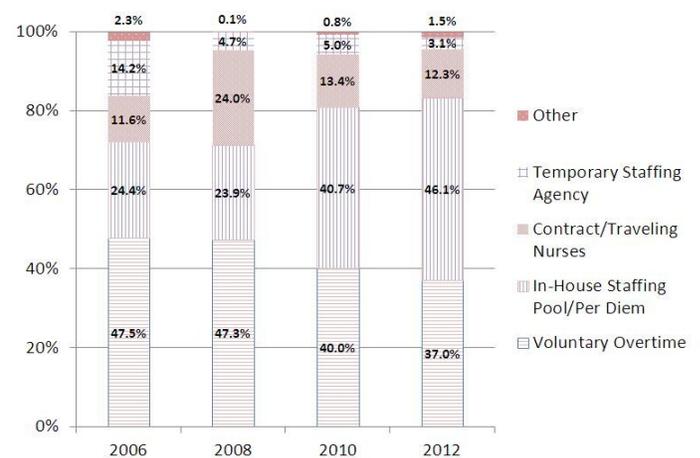
## Methods of Interim Staffing

When hospitals experience staff vacancies and turnover, they often utilize interim staffing methods to ensure continued quality of patient care. The extent of interim coverage used provides data on the ability of the 81 hospitals to maintain full permanent staffing levels, while consideration of the types of interim staffing methods can identify potential stresses on hospital nursing staff and measure the magnitude of use of externally contracted nurses.

### Hours and Cost on Interim Staffing Use, 2006-2012



### Usage Distribution of Interim Staffing Methods, 2006-2012



- While the 2006 and 2012 levels of interim staffing hours and costs are roughly equal, there was a 46.7% decrease in hours used from 2006 to 2008 followed by a 163.6% increase in hours between 2008 and 2010.
- From 2006 to 2012, the percentage of interim staffing hours filled using voluntary overtime decreased 22% while the in-house staffing pools and per diem nurse use increased 88.9% from 2006 to 2012.
- Over the same period the percentage of hours being filled using temporary staffing agencies has decreased by 78.2%.

## Discussion of Findings

Despite an RN position vacancy rate higher than those found in other populous states, Texas hospitals have recently reported decreasing vacancy rates likely attributable to recession-driven factors. A continued decrease in the RN median facility vacancy rate further indicates that fewer Texas hospitals are experiencing high numbers of RN vacancies. In fact, the total nursing workforce in this report's 81 hospital population increased by 18.1% from 2006 to 2012 while total vacancies decreased by 13.4%.

Still, with a continued increase in the aging population, high demand for care from the critically and chronically ill, and the impacts of the Patient Protection and Affordable Care Act, long-term demand for nurses will continue to increase. Texas stakeholders and policymakers must strengthen the current nursing workforce and find ways to expand the long-term supply of nurses. This can be accomplished through improving nursing practice environments, addressing safety and quality issues, removing barriers to educational progression, and increasing the capacity of Texas' nursing education programs.