

Washington State Nursing Demand Data Environmental Scan

Spring, 2022

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Summary of Key Findings

Employment data across nursing professions are presented in the table below. Nurse Anesthetists have the highest average wage. The average wage for Nursing Faculty is close to the Registered Nurse average wage. Metropolitan regions had the highest wages across nursing professions, with the exception of Nurse Anesthetists, where the highest wage was in the Eastern Washington Nonmetropolitan Area (NMA) area (see Figure 89).

Nurse Anesthetists saw the largest increase in employment from 2011 to 2021, with employment declining for Nurse Midwives during the same timeframe. Nurse Practitioners are projected to have the greatest increase in demand through 2029, with Nurse Faculty having the smallest projected increase. The greatest separations, turnover, transfers, and exits through 2029 are projected for Home Health and Personal Care Aides, followed by Nursing Assistants. Nurse Practitioners have had the greatest increase in online job postings between 2019 and 2021, with Licensed Practical Nurses and Registered Nurses showing marked decline during the same timeframe.

Table 1. WA Employment Data Across Nursing Professions

	Home Health & Personal Care Aides	Nursing Assistants	Licensed Practical Nurses	Registered Nurse	Nurse Practitioner	Nurse Anesthetist	Nurse Midwife	Nurse Faculty
2020 Average Wage	\$31,932	\$34,816	\$59,183	\$88,018	\$129,642	\$196,568	\$110,122	\$88,738
Highest Regional Wage in 2021	Wenatchee MSA \$33,739	Mount-Vernon-Anacortes MSA \$39,333	Seattle-Tacoma-Bellevue MSA \$65,213	Vancouver & Portland MSA \$100,703	Longview MSA \$142,392	Eastern Washington NMA \$253,604	Seattle-Tacoma-Bellevue MSA \$116,150	Seattle-Tacoma-Bellevue MSA \$100,621
Change in Employment from 2011-2021	+101.63%	+51.54%	-17.81%	+12.19%	+38.26%	+123.23%	-11.57%	+35.99%
Projected Change in Employment 2019-2029	+33.85%	+12.37%	+4.62%	+8.77%	+34.28%	+6.72%	+6.96%	+3.67%
% Of Projected Job Openings Due to Separations, Turnover, transfers and exits 2024-2029	37.57%	37.06%	35.63%	25.60%	27.49%	26.32%	26.02%	19.92%
Online Job Postings Percentage Change 2019-2021	N/A	-65.37%	-62.65%	-40.70%	+120.14%	N/A	N/A	N/A

Sources:

Overall Findings by Profession

Home Health and Personal Care Aides: Wages are consistently above the national average and compete well with the neighboring Pacific Coast States. There was a dramatic increase in employment from 2017-2018. Home Health and Personal Care Aides are projected to have a high rate of separations, turnover, transfers and exits.

Nursing Assistants: Wages are consistently above the national average but are less than the neighboring Pacific Coast states. The demand for Nursing Assistants has been increasing over the last ten years (2011-2021) and is projected to continue to increase through 2029. Nursing assistants are projected a high rate of separations, turnover, transfers and exits. Online Job postings have decreased dramatically since 2019. Large acute hospitals reported long vacancies, increased demand, and retention/turnover problems in the Fall of 2020 and Spring of 2021. Long Term care facilities reported long vacancies, increased demand, and retention/turnover problems for most Sentinel Network reporting periods from 2018-2021.

Licensed Practical Nurse: Wages in Washington are consistently above the national average and the closest neighboring states. Employment has declined between 2011-2021, though it is projected to increase slightly through 2029. There has been a marked decline in Online Job Postings since 2019. Long Term Care and Home Health Care Services reported the greatest issues with long vacancies, increased demand, and retention/turnover problems.

Registered Nurse: Wages in Washington are consistently above the national average but below the neighboring Pacific Coast States. There has been a small increase in employment over the last ten years, and a small increase is projected through 2029. There has been a marked decline in Online Job Postings since 2019. Long vacancies, increased demand and retention/turnover problems have been reported by both small and large acute hospitals and Long-Term Care Facilities across all Sentinel Network reporting periods.

Nurse Practitioner: Wages increased above the national average starting in 2017, and are above the neighboring Pacific Coast States, except California. There has been a marked increase in employment over the last 9 years which is projected to increase through 2029. There was a large increase in Online Job Postings from 2019-2021.

Nurse Anesthetist: Wages are consistently above the national average and below most neighboring Pacific Coast States. There has been a marked increase in employment over the last nine years, which is projected to slightly increase through 2029.

Nurse Midwife: Wages are consistently below the national average and higher than most neighboring Pacific Coast States. Employment has decreased over the last nine years although a slight increase is projected through 2029.

Nurse Faculty: Wages are consistently below the national average, just sliding above the national average in 2020 and is higher than most neighboring Pacific Coast States and lower than most post-secondary faculty in Washington State. Employment has increased over the last ten years, with a slight projected increase predicted through 2029.

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Background

Before the COVID-19 pandemic, nurse workforce recruitment, retention, and turnover prevention were important issues facing healthcare systems. The current COVID-19 pandemic nationwide nursing shortage further adds to this dire workforce situation. According to the Organization of Nurse Leaders (2022), there are key differences in nursing shortages today including not only the pandemic, but also an aging nursing workforce along with an aging population, tight labor markets and changes in state and organizational policies. An adequate nurse workforce supply is essential for healthcare systems to provide safe, quality patient care, and nursing staff and patient satisfaction (NSI Nurse Staffing Solutions, 2021). The direct financial cost incurred for losing and replacing a nurse is significant due to orientation costs and several other known factors. The average turnover cost for a bedside RN is \$40,038, resulting in the average hospital losing \$3.6 to 6.5 million /year. To decrease their nursing staff shortages, many healthcare systems rely on costly strategies such as agency/travel nurses, utilizing overtime, and offering premium pay. For every 20 travel RNs eliminated, a hospital can save an average of \$3,084,000 (NSI Nurse Staffing Solutions, 2021). Nursing shortages are evident internationally leading to the need to increase self-sufficiency of the nursing supply and increase efforts to retain nurses in order to sustain the current burned out and stressed nursing workforce (Buchan, Catton & Shaffer, 2022).

Introduction

This report features demand and employment data from two primary sources. This report was designed to pull together available nursing workforce demand data to determine 1) what information is already available 2) identify gaps for future demand research at the Washington Center for Nursing. This report has been informed by a survey of nursing workforce stakeholders in the Spring of 2021.

The first is the Washington Economic Security Department that is paired with national data information from the United States Bureau of Labor Statistics. This data includes wage trends, employment projections, job openings and where available job postings. More information about this data source including limitations is available in the appendix of this report.

The second data source is Washington's Health Workforce Sentinel Network. This is an initiative of Washington's Health Workforce Council conducted collaboratively by Washington's Workforce Board and the University of Washington Center for Health Workforce Studies. More information about this source is also available in the appendix.

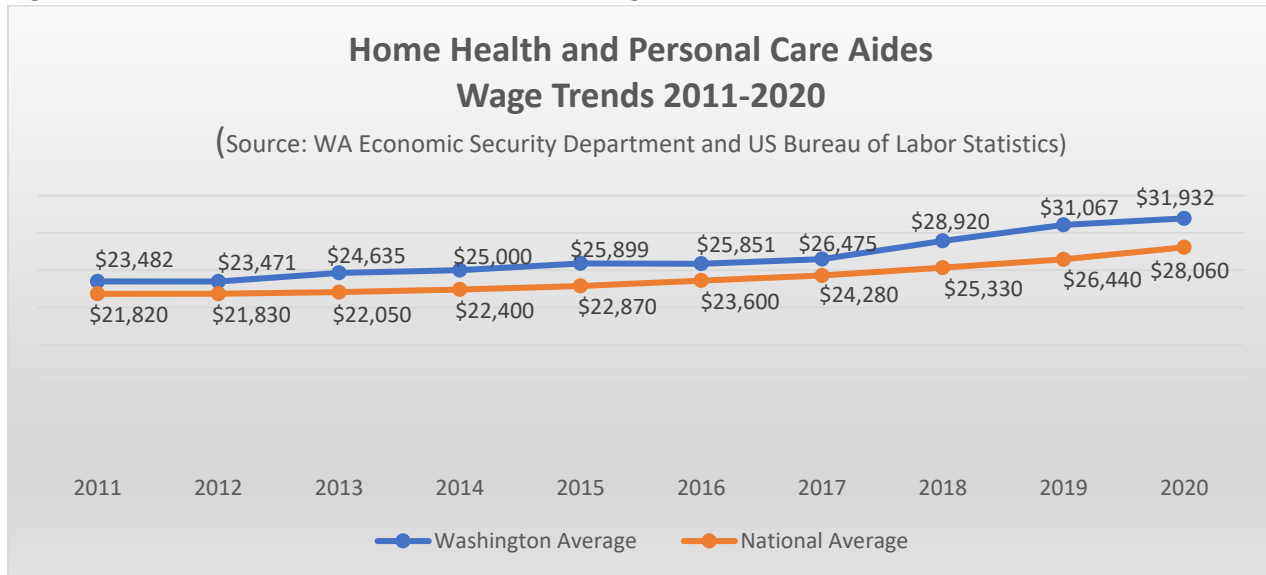
This report is organized into eight sections by provider type:

- Home Health and Personal Care Aides
- Nursing Assistants
- Licensed Practical Nurses
- Registered Nurses
- Nurse Practitioner
- Nurse Anesthetist
- Nurse Midwife
- Nurse Faculty

Home Health and Personal Care Aides

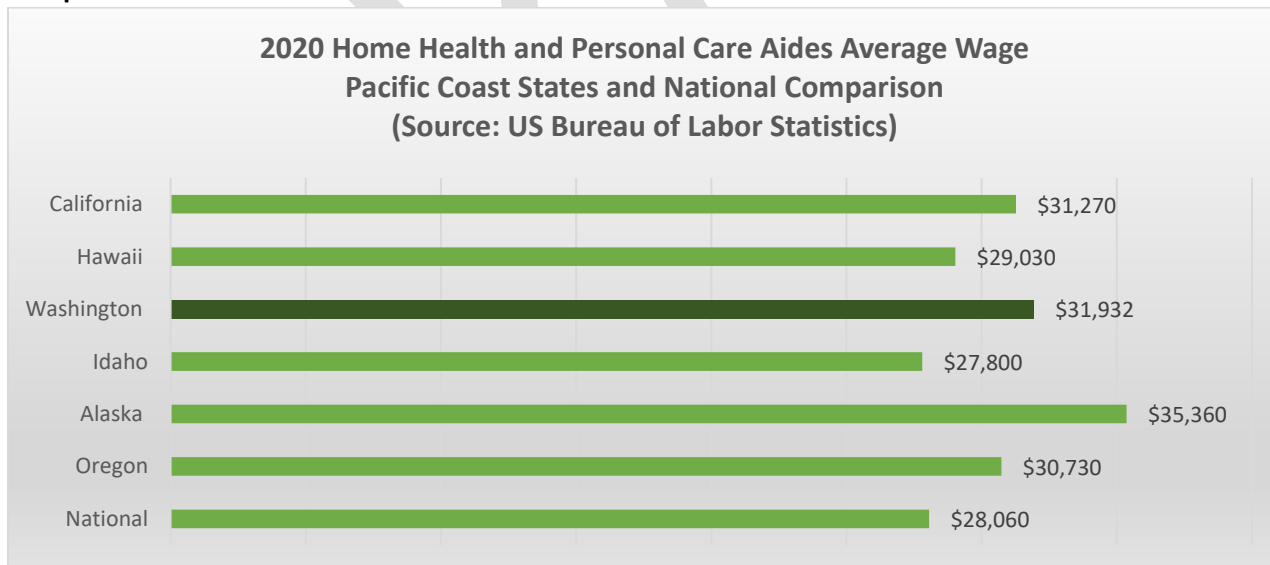
Washington's Home Health and Personal Care Aides annual wages have increased by 35.99% in the last ten years and have consistently exceeded the national average.

Figure 1: Home Health and Personal Care Aides Wage Trends 2010-2020



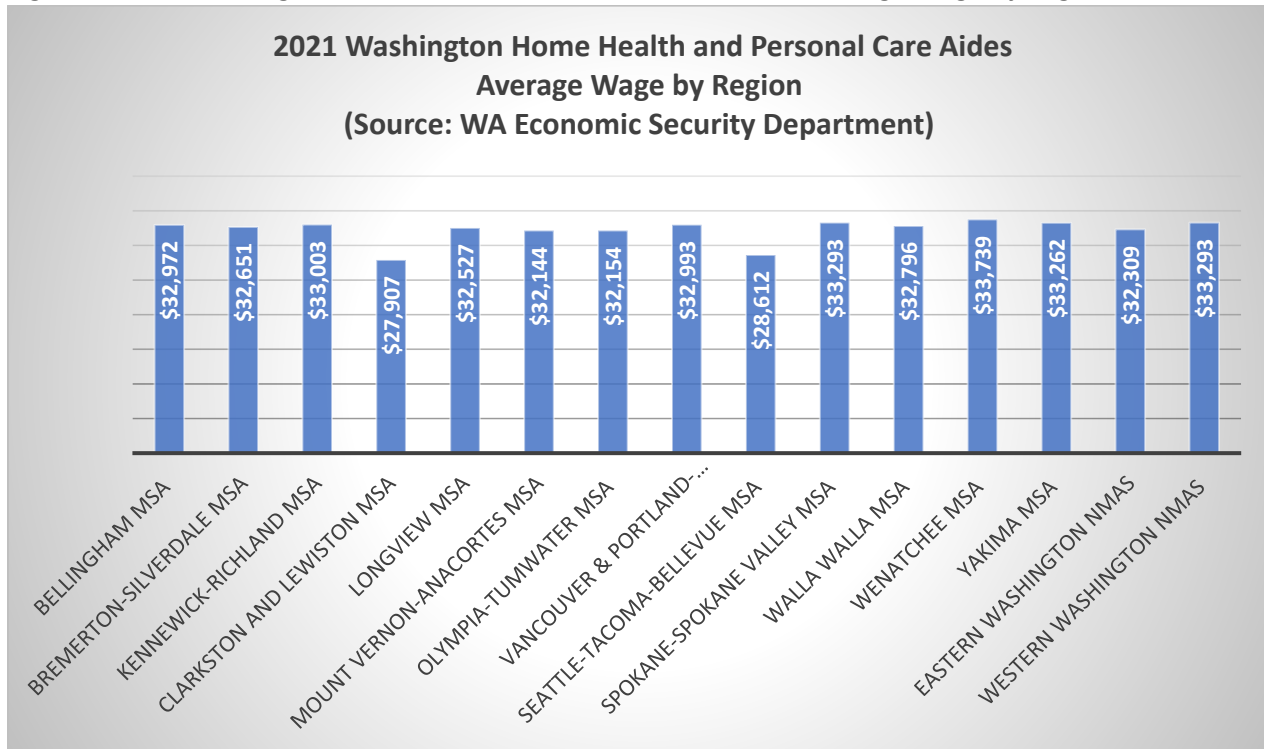
When compared with Pacific Coast states, Alaska (\$35,360) offered higher wages for Home Health and Personal Care Aides in 2020 as compared to Washington State (\$31,932).

Figure 2: 2020 Home Health and Personal Care Aides Average Wage Pacific Coast States and National Comparison



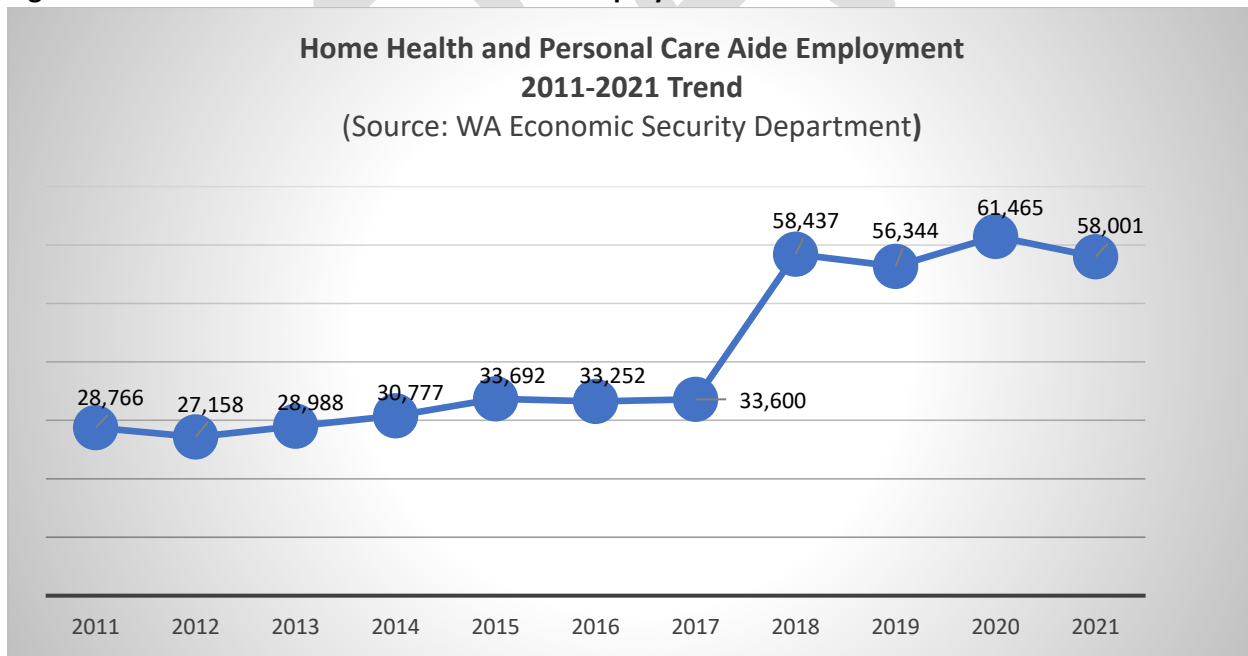
When divided by region, 2021 Home Health and Personal Care Aides annual wages were highest in the Wenatchee MSA region (\$33,739) and lowest in the Clarkson and Lewiston MSA (\$27,907). A map depicting regions is available in the appendix.

Figure 3: 2021 Washington Home Health and Personal Care Aides Average Wage by Region



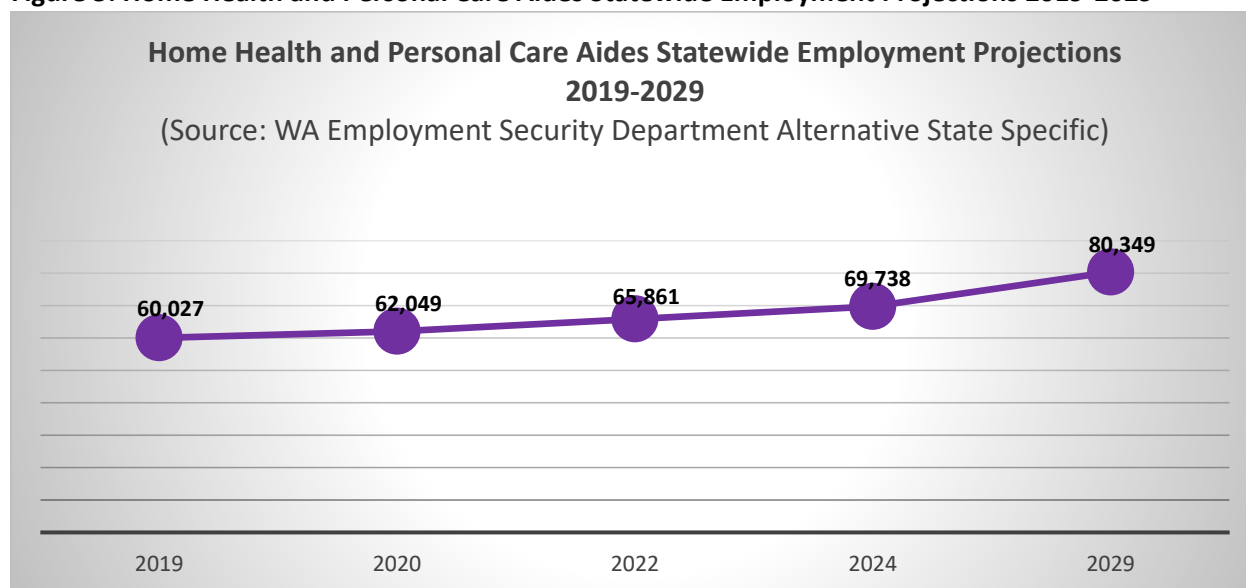
Employment of Home Health and Personal Care Aides has increased by 101.63% from 28,766 (2011) to 58,001 (2021).

Figure 4: Home Health and Personal Care Aide Employment 2011-2021 Trend



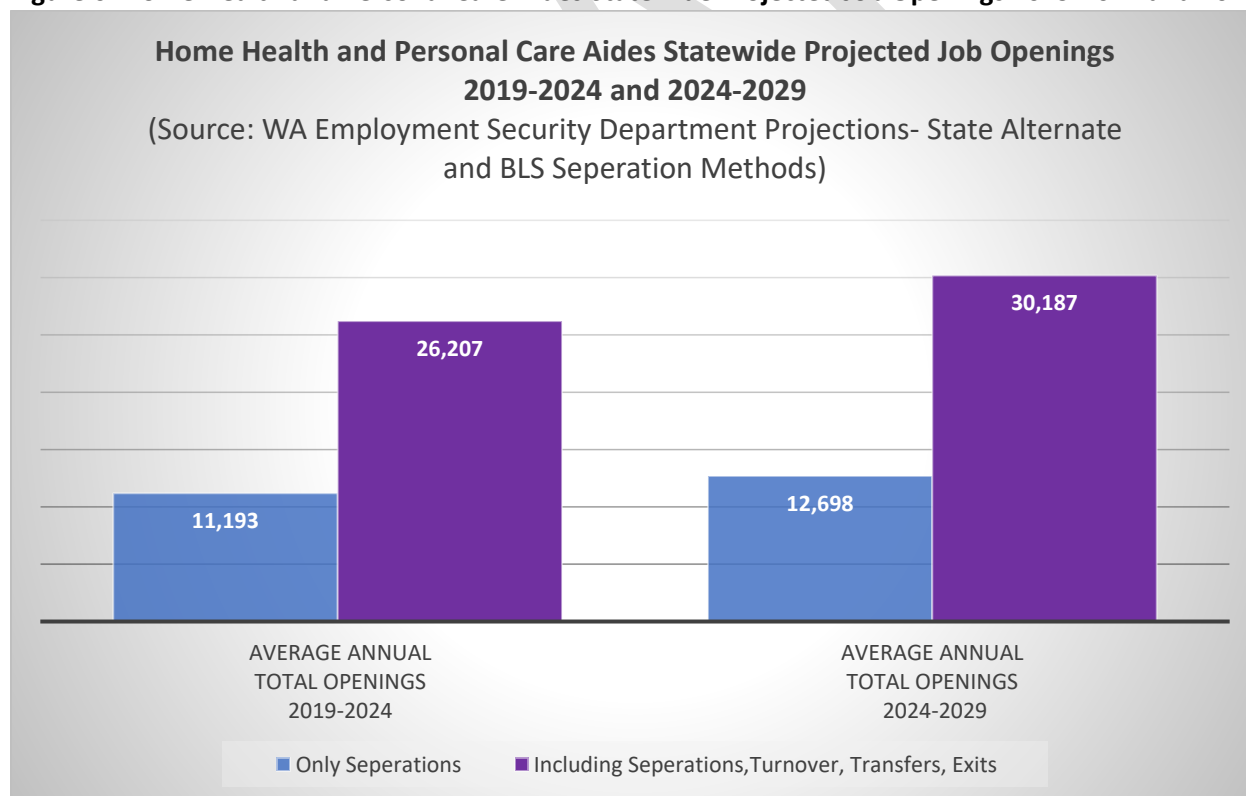
Home Health and Personal Care Aide employment is projected to increase by 33.85% from 60,027 in 2019 to 80,349 in 2029.

Figure 5: Home Health and Personal Care Aides Statewide Employment Projections 2019-2029



Average Home Health and Personal Care Aide annual job openings including separations, turnovers, transfers and exits are projected to compose 37.58% by 2024 and 37.57% in 2029 openings when divided by total employment.

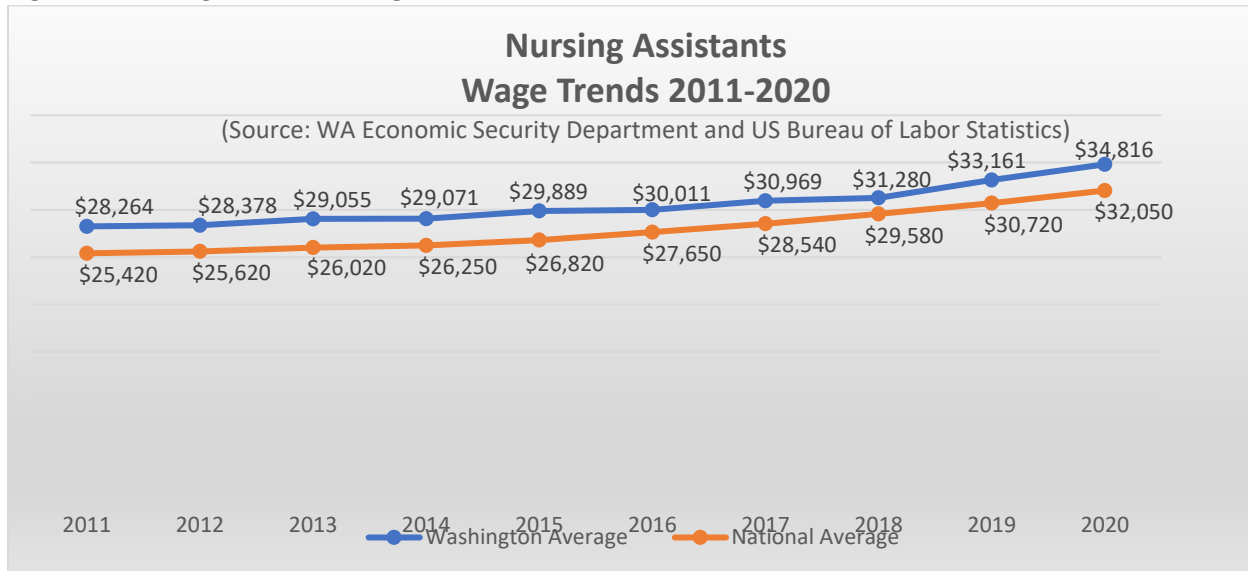
Figure 6: Home Health and Personal Care Aides Statewide Projected Job Openings 2019-2024 and 2024-2029



Nursing Assistants

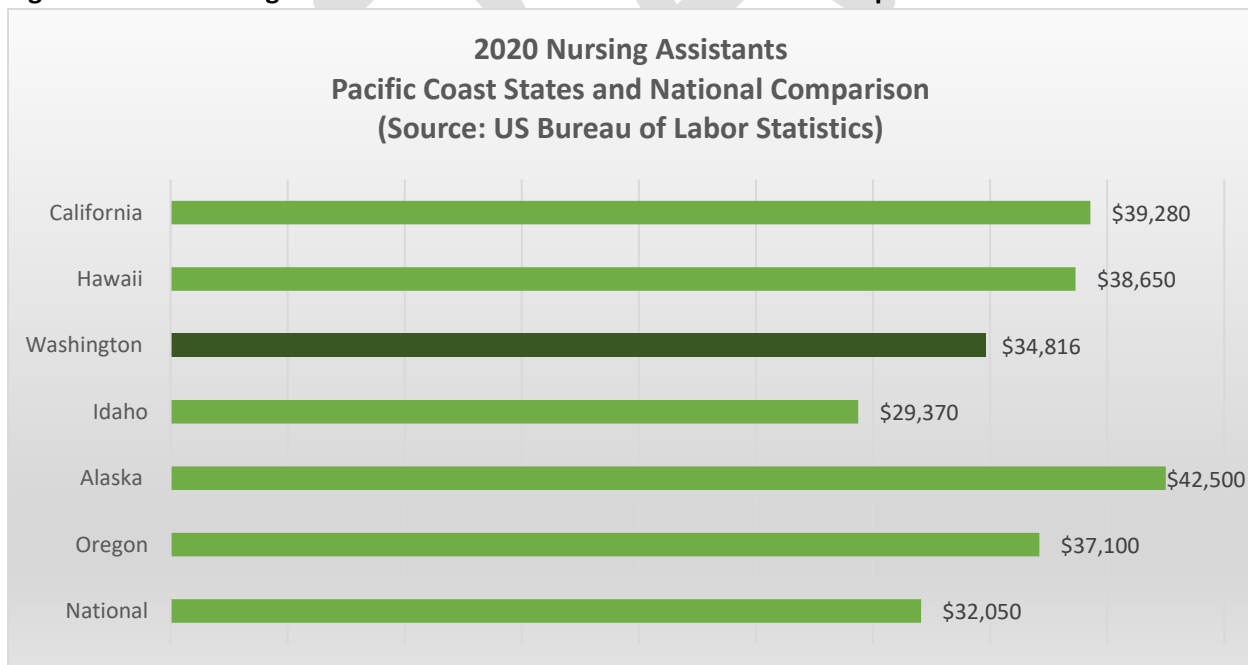
Washington's Nursing Assistant annual wages have increased by 23.18% in the last ten years and have consistently exceeded the national average.

Figure 7: Nursing Assistants Wage Trends 2011-2020



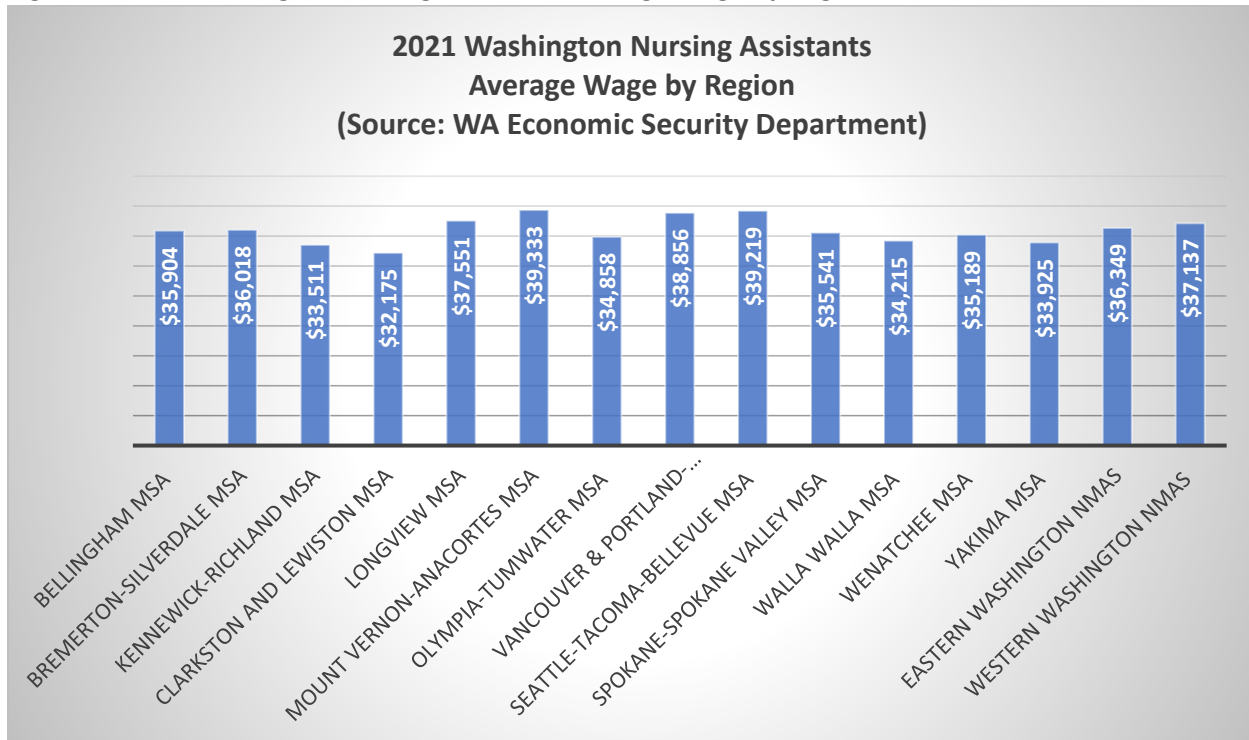
When compared with Pacific Coast states, Alaska (\$42,500), California (\$39,280), Hawaii (\$38,650) and Oregon (\$37,100) offered higher wages for Nursing Assistants in 2020 as compared to Washington State (\$34,816).

Figure 8: 2020 Nursing Assistants Pacific Coast States and National Comparison



When divided by region, 2021 Nursing Assistant annual wages were highest in the Mount Vernon-Anacortes MSA region (\$39,333) and lowest in the Clarkson and Lewiston MSA (\$32,175). A map depicting regions is available in the appendix.

Figure 9: 2021 Washington Nursing Assistants Average Wage by Region



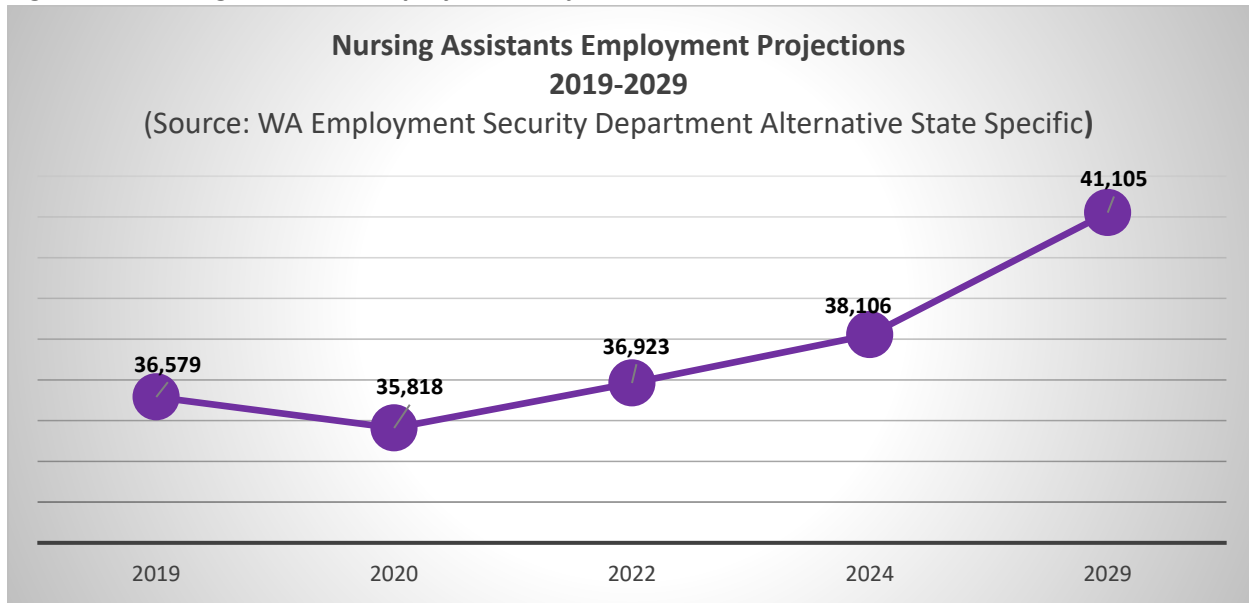
Employment of Nursing Assistants has increased by 51.54% from 22,714 (2011) to 34,421 (2021).

Figure 10: Nursing Assistant Employment 2011-2021 Trend



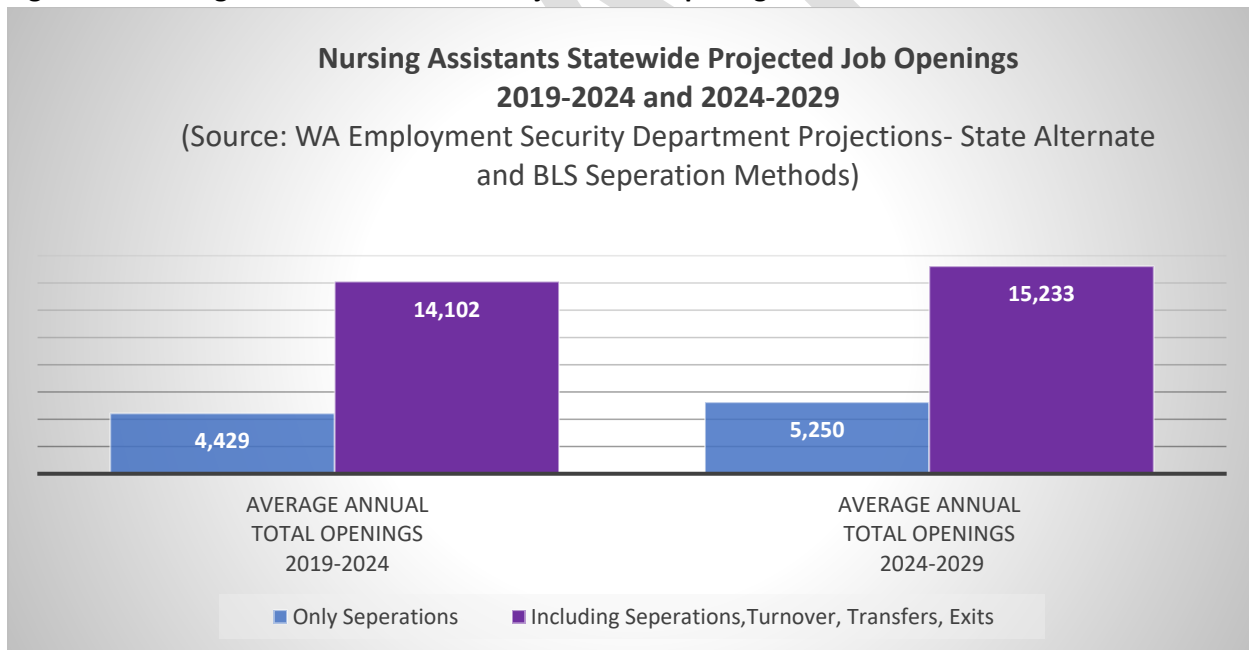
Nursing Assistant employment is projected to increase by 12.37% from 36,579 in 2019 to 41,105 in 2029.

Figure 11: Nursing Assistants Employment Projections 2019-2029



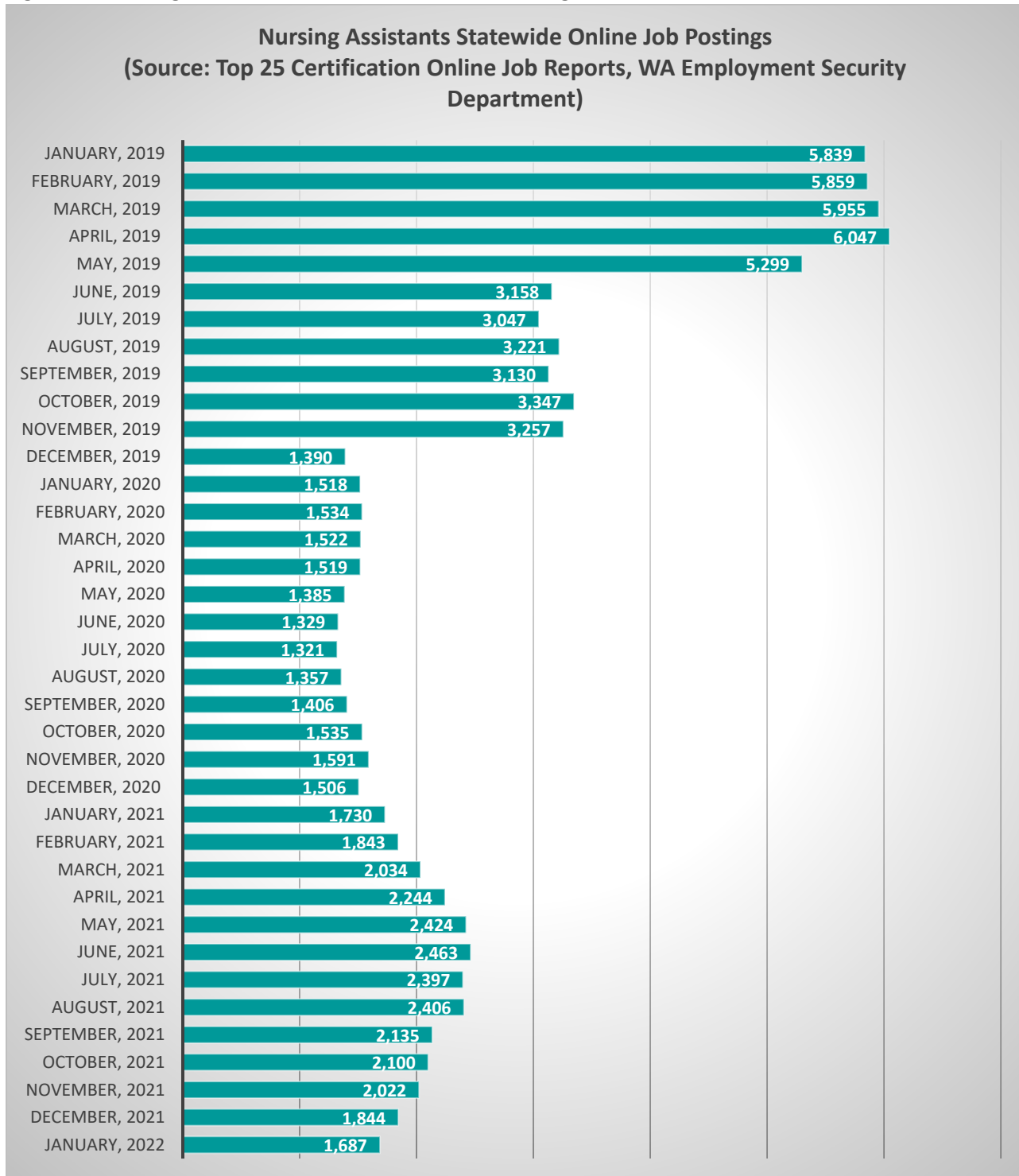
Average Nursing Assistant annual job openings including separations, turnovers, transfers and exits is projected to compose 37.01% by 2024 and 37.06% in 2029 openings when divided by total employment.

Figure 12: Nursing Assistants Statewide Projected Job Openings 2019-2024 and 2024-2029



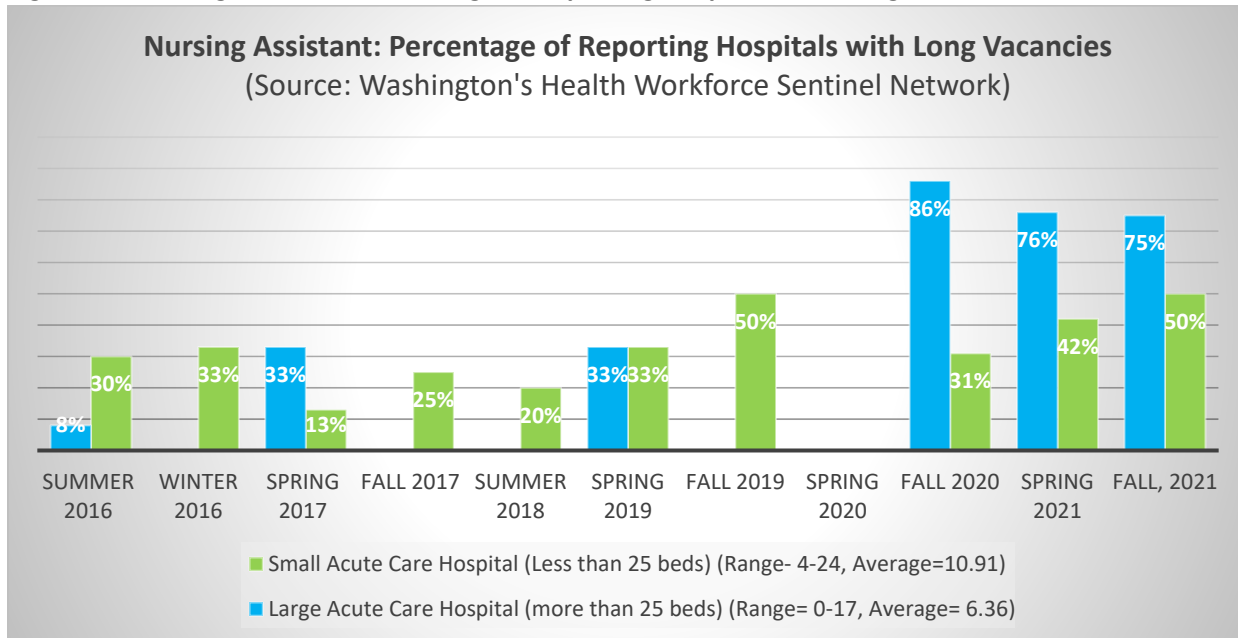
Nursing Assistant Job Postings decreased by 71.11% between January 2019 (5,839 jobs) and January 2022 (1,687 jobs). Please note that each monthly report reflects the number posted in the last three months.

Figure 13: Nursing Assistants Statewide Online Job Postings



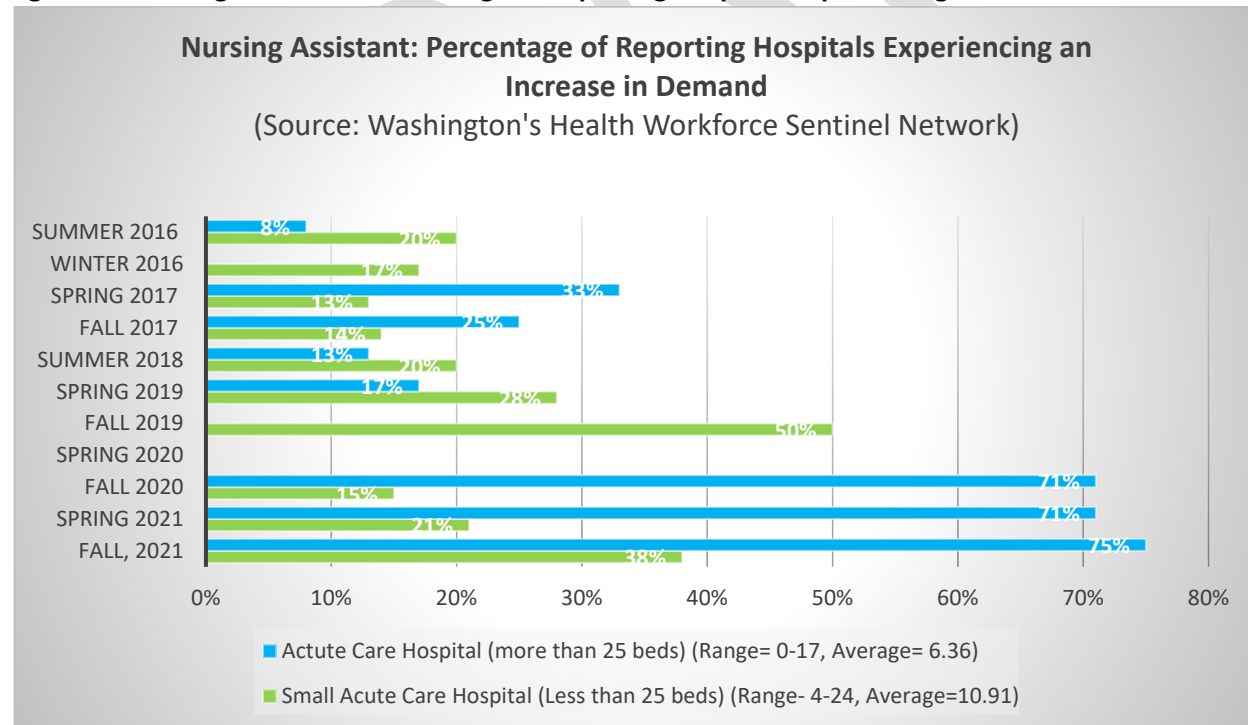
The greatest percentage of Acute Care Hospitals reported long Nursing Assistant vacancies in Fall of 2020 to Fall of 2021. An increasing percentage of Small Acute Care Hospitals have reported long Nursing Assistant vacancies from 2020 to 2021.

Figure 14: Nursing Assistant: Percentage of Reporting Hospitals with Long Vacancies



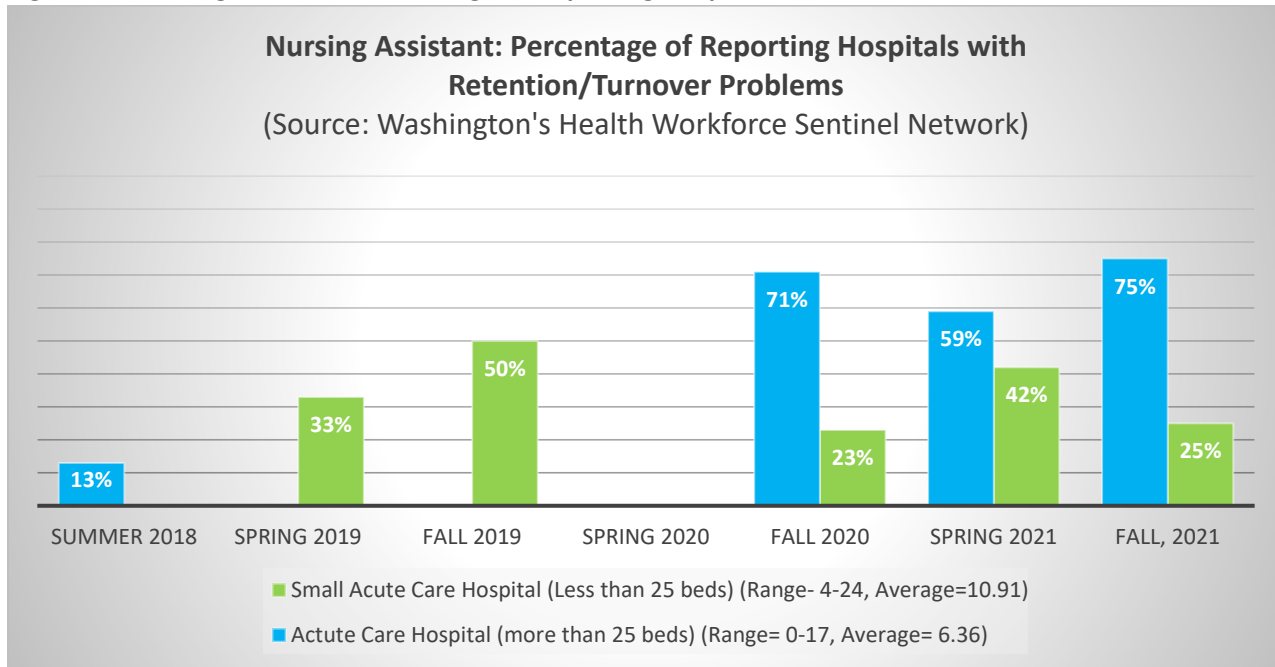
Seventy-one percent of Acute Care Hospitals reported experiencing an increase in demand for Nursing Assistants in Fall 2020, Spring 2021 and Fall, 2021. Small Acute Care Hospitals reported the greatest demand in Fall of 2019 (50%).

Figure 15: Nursing Assistants: Percentage of Reporting Hospitals Experiencing an Increase in Demand



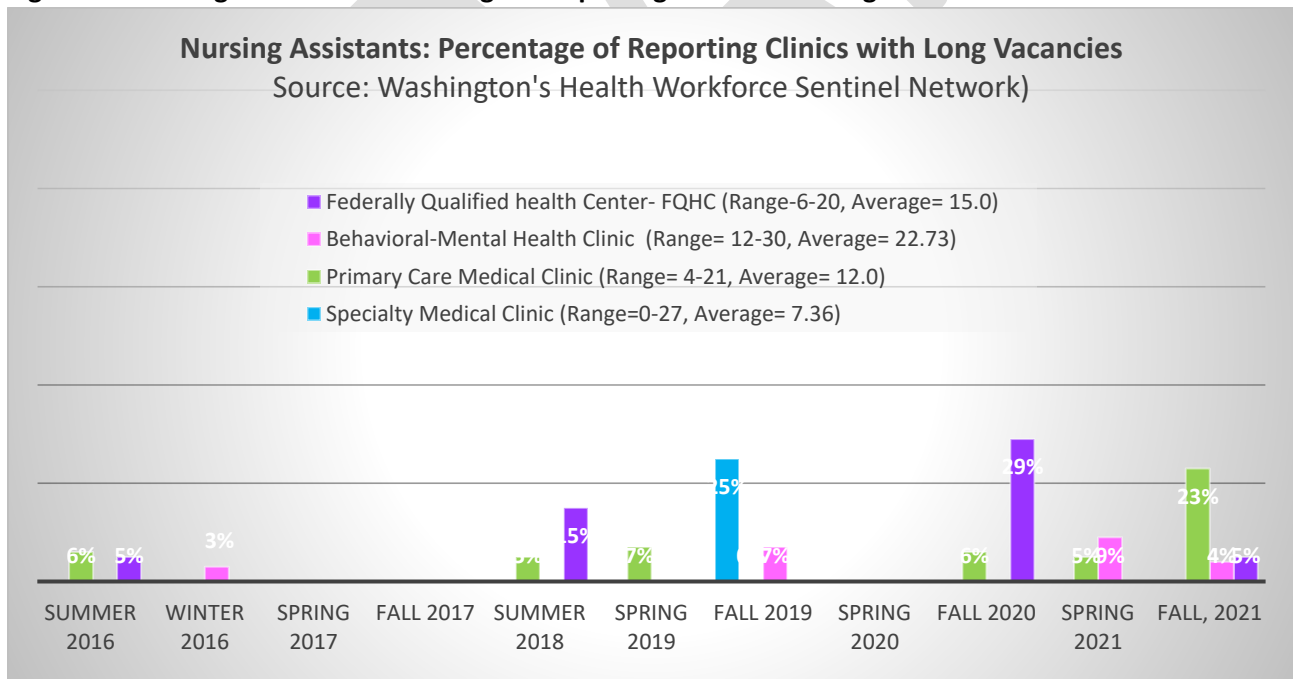
The greatest percentage of Acute Care Hospitals reporting Retention/Turnover problems for Nursing Assistants was in the Fall of 2021 (75%). The greatest percentage of Small Acute Care Hospitals reported Nursing Assistant Retention/Turnover problems was Fall of 2019 (50%) and Spring of 2021 (42%).

Figure 16: Nursing Assistant: Percentage of Reporting Hospitals with Retention/Turnover Problems



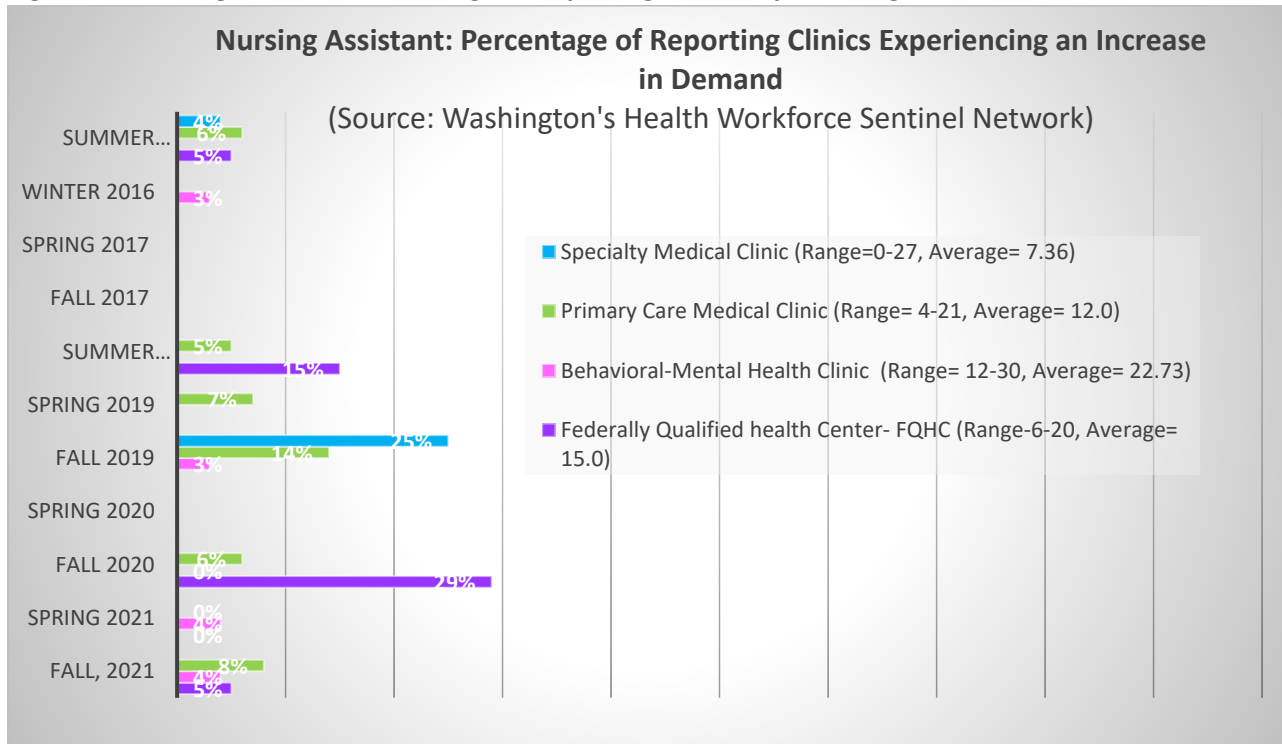
The greatest percentage of Clinics reporting Nursing Assistant Long Vacancies was Federally Qualified Health Centers (FQHC) in Fall of 2020 (29%), Specialty Medical Clinics in Fall of 2019 (25%) and Primary Care Medical Clinics in Fall, 2021 (23%). Otherwise, few clinics reported long vacancies.

Figure 17: Nursing Assistants: Percentage of Reporting Clinics with Long Vacancies



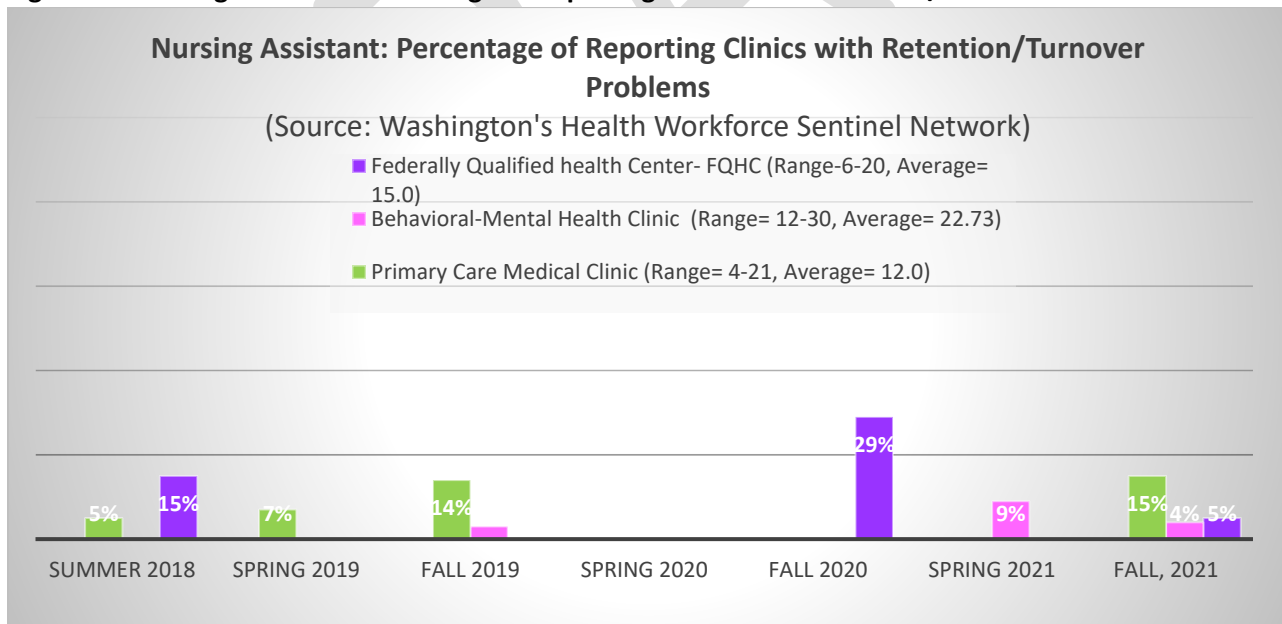
The greatest percentage of Clinics reporting an Increase in Demand for Nursing Assistants was Federally Qualified Health Centers in Fall of 2020 (29%) and Specialty Medical Clinics in Fall of 2019 (25%).

Figure 18: Nursing Assistant: Percentage of Reporting Clinics Experiencing an Increase in Demand



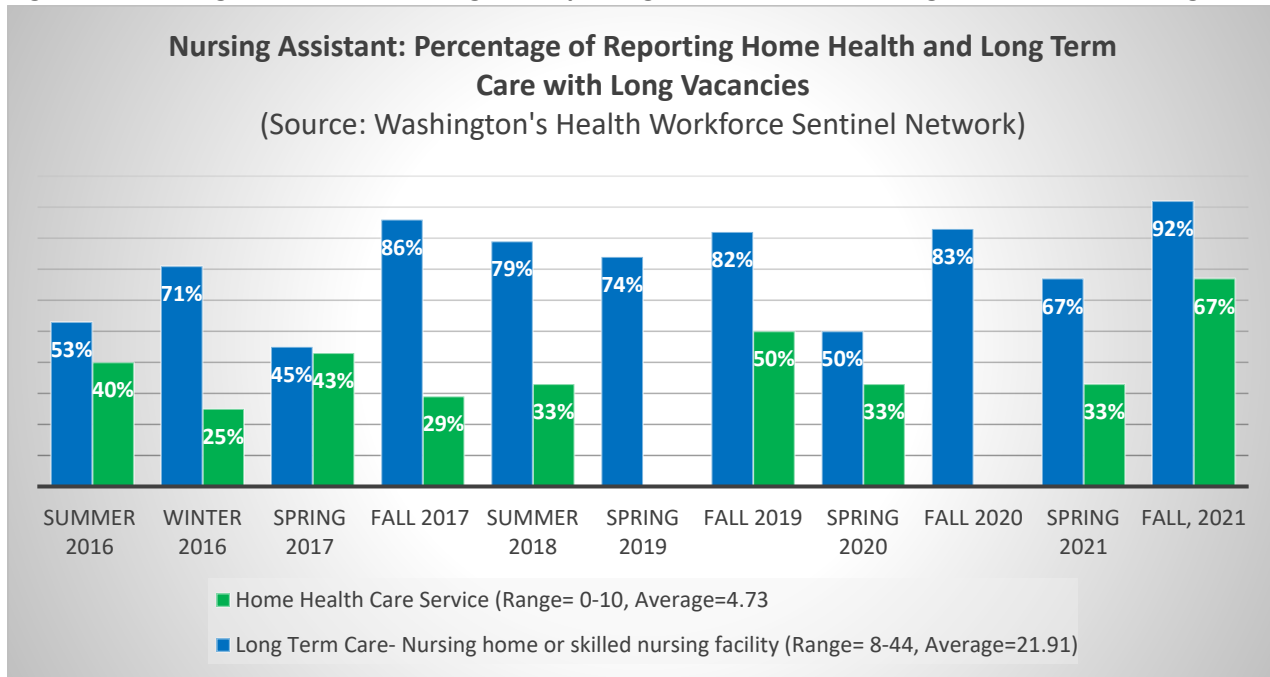
The greatest percentage of Clinics reporting Nursing Assistant Retention/Turnover problems was Federally Qualified Health Clinics in Fall of 2020 (29%).

Figure 19: Nursing Assistant: Percentage of Reporting Clinics with Retention/Turnover Problems



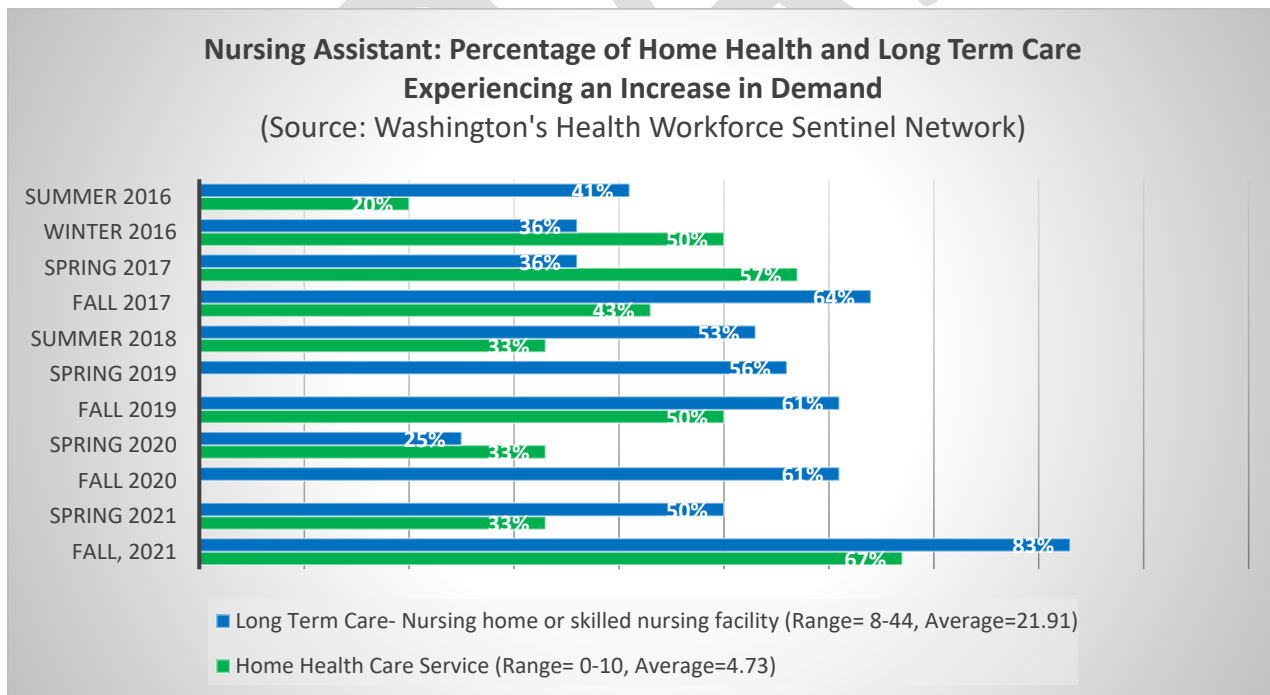
Most Long-Term Care facilities reported long Nursing Assistant vacancies from Summer 2016 to Fall of 2021 ranging from 45% of Long-Term Care facilities in Spring 2017 to 92% in Fall of 2021. About 1/3 to 1/5 of Home Health facilities reported long Nursing Assistant vacancies across most reporting periods with 67% in Fall, 2021.

Figure 20: Nursing Assistant: Percentage of Reporting Home Health and Long-Term Care with Long Vacancies



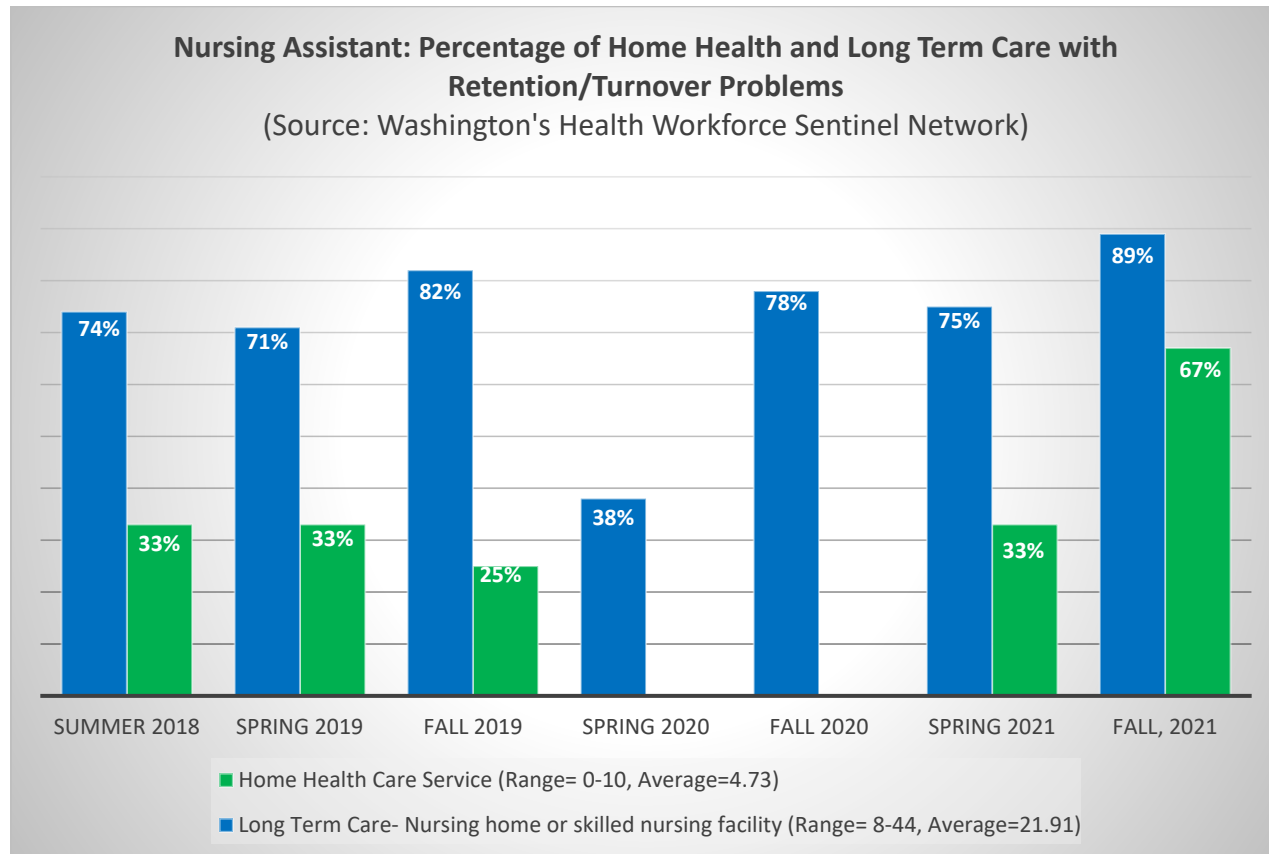
The greatest percentage of Long-Term care facilities reported an increase in demand in Fall of 2021 (83%). The greatest percentage of Home Health Care facilities also reported an increase in demand in Fall of 2021 (67%).

Figure 21: Nursing Assistant: Percentage of Home Health and Long-Term Care Experiencing an Increase in Demand



A large percentage of Long-Term care facilities reported Nursing Assistants Retention/Turnover problems across most reporting periods between 38% and 82%. Fewer Home Health facilities reported Retention Turnover problems for Nursing Assistants until Fall, 2021.

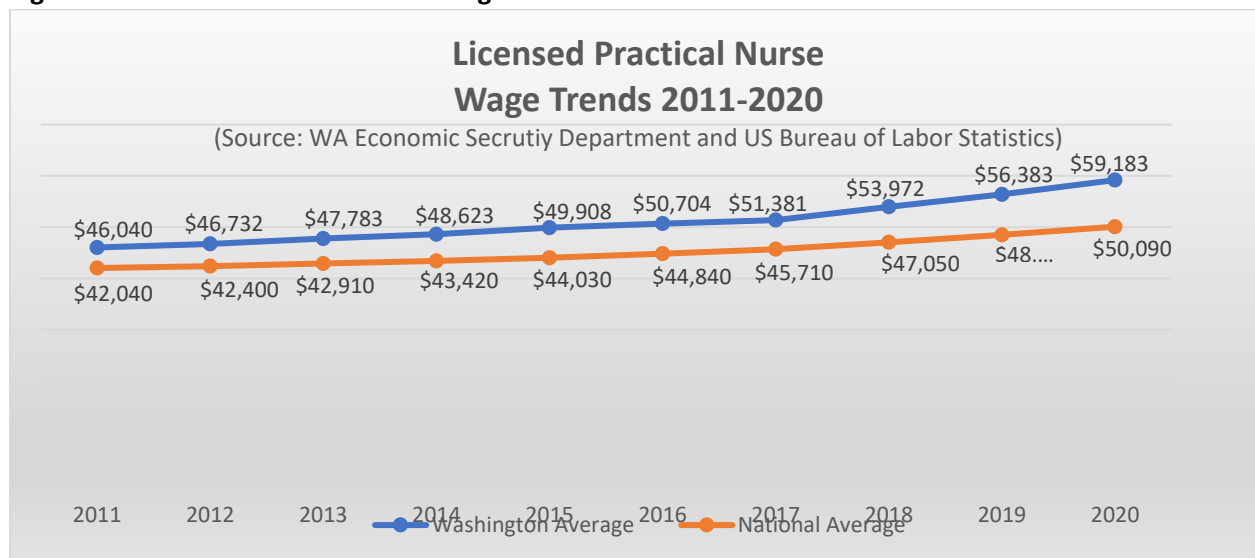
Figure 22: Nursing Assistant: Percentage of Home Health and Long-Term Care with Retention/Turnover Problems



Licensed Practical Nurse

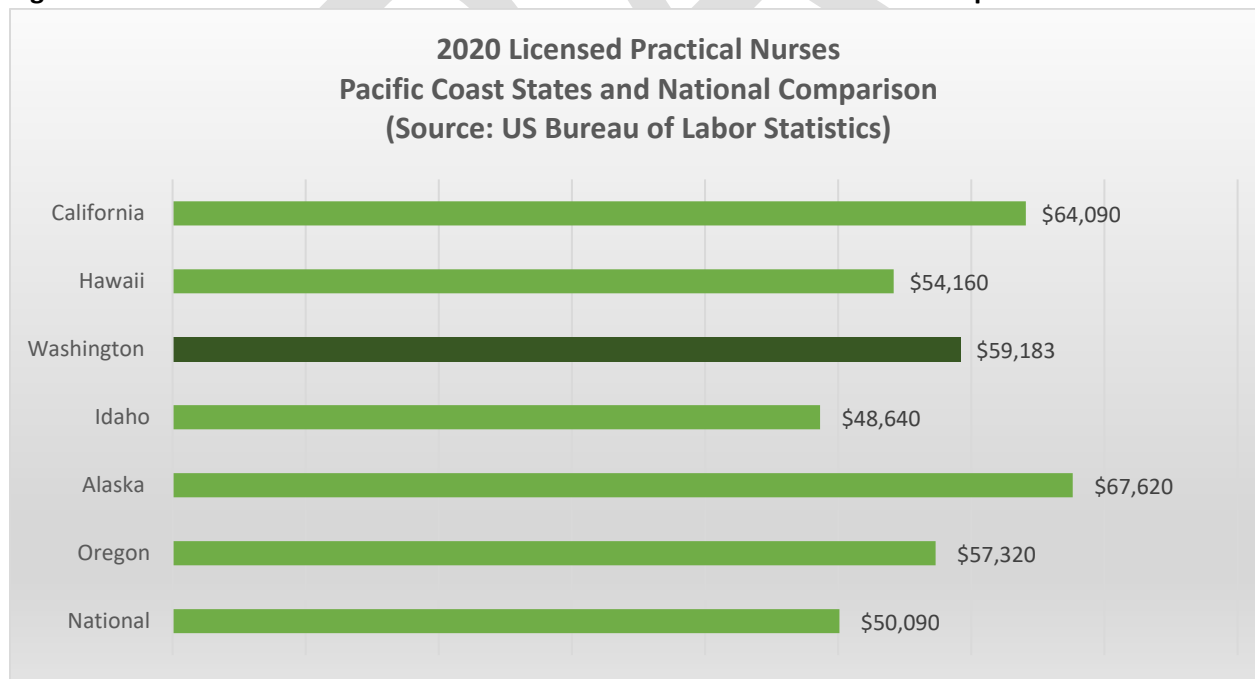
Washington's Licensed Practical Nurse annual wages have increased by 24.98% in the last ten years and have consistently exceeded the national average.

Figure 23: Licensed Practical Nurse Wage Trends 2011-2020



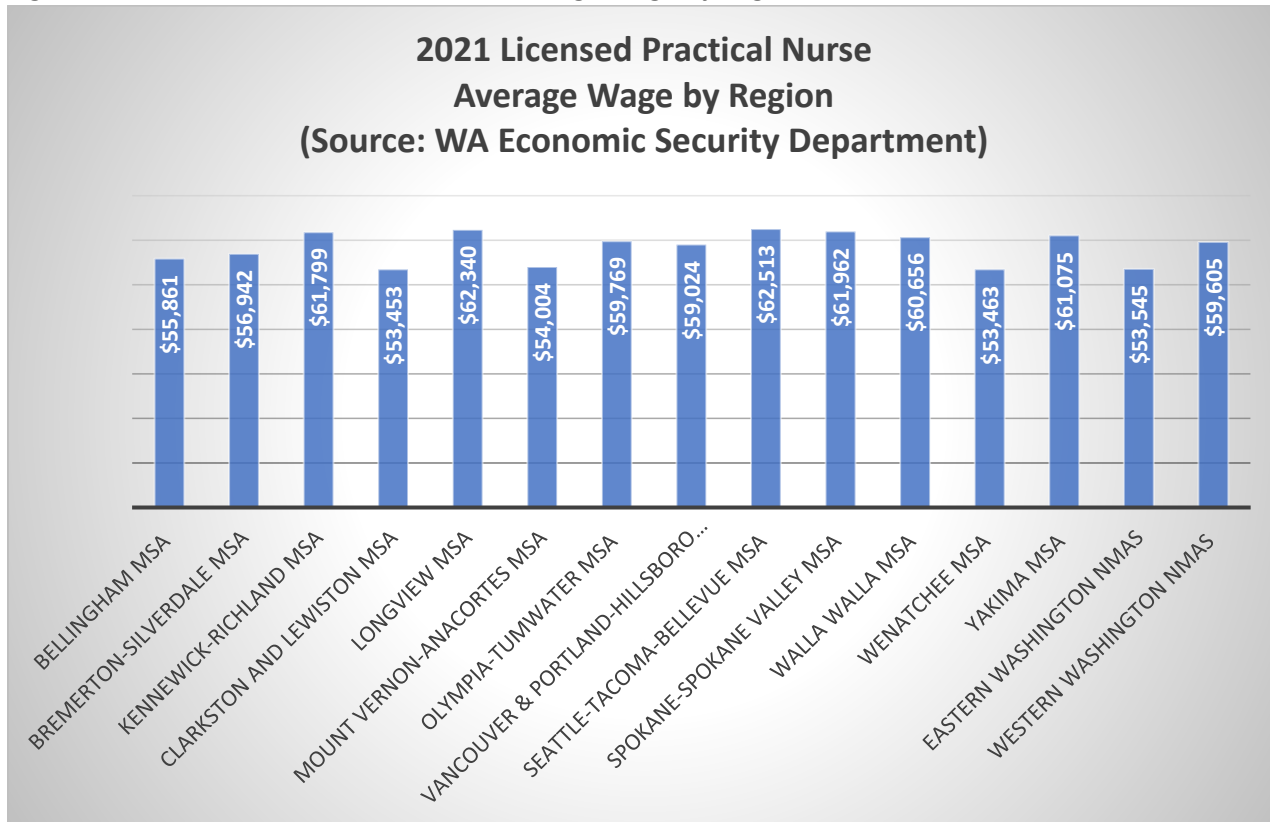
When compared with Pacific Coast states, Alaska (\$67,620) and California (\$64,090) offered higher wages for Licensed Practical Nurses in 2020 as compared to Washington State (\$59,183).

Figure 24: 2020 Licensed Practical Nurses Pacific Coast States and National Comparison



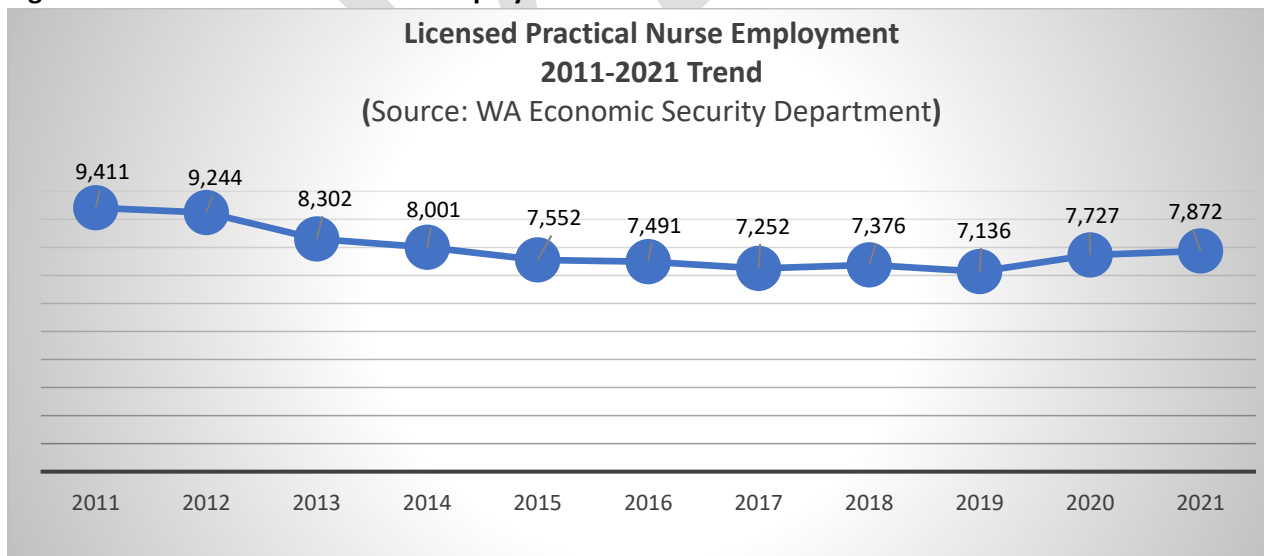
When divided by region, 2021 Licensed Practical Nurse annual wages were highest in the Seattle-Tacoma-Bellevue MSA region (\$65,213) and lowest in the Clarkson and Lewiston MSA (\$53,453). A map depicting regions is available in the appendix.

Figure 25: 2021 Licensed Practical Nurse Average Wage by Region



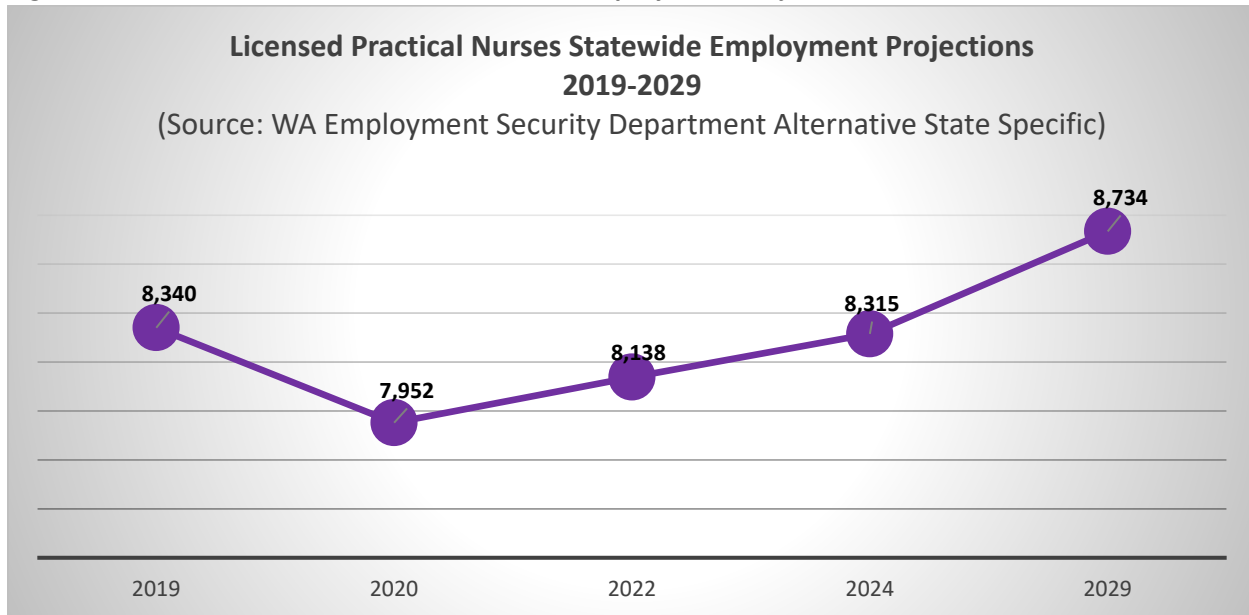
Employment of Licensed Practical Nurses has decreased by 17.81% from 9,411 (2011) to 7,872 (2021).

Figure 26: Licensed Practical Nurse Employment 2011-2021 Trend



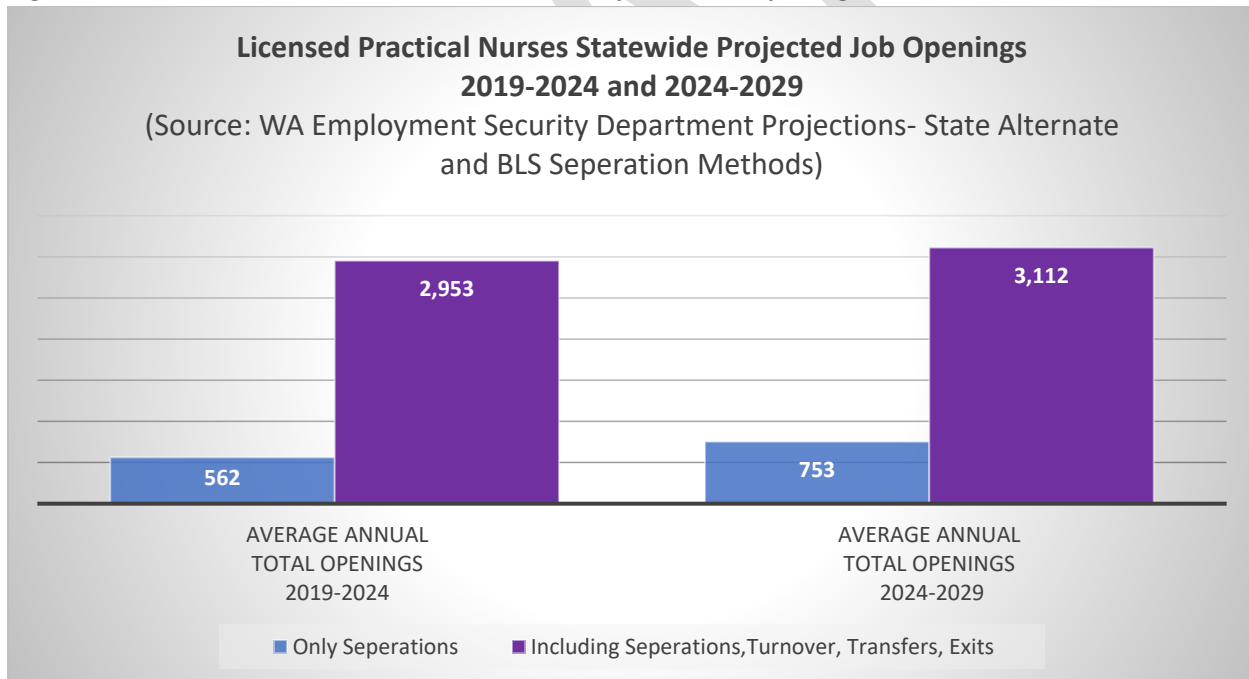
Licensed Practical Nurse employment is projected to increase by 4.62% from 8,340 (2019) to 8,734 (2029).

Figure 27: Licensed Practical Nurses Statewide Employment Projections 2019-2029



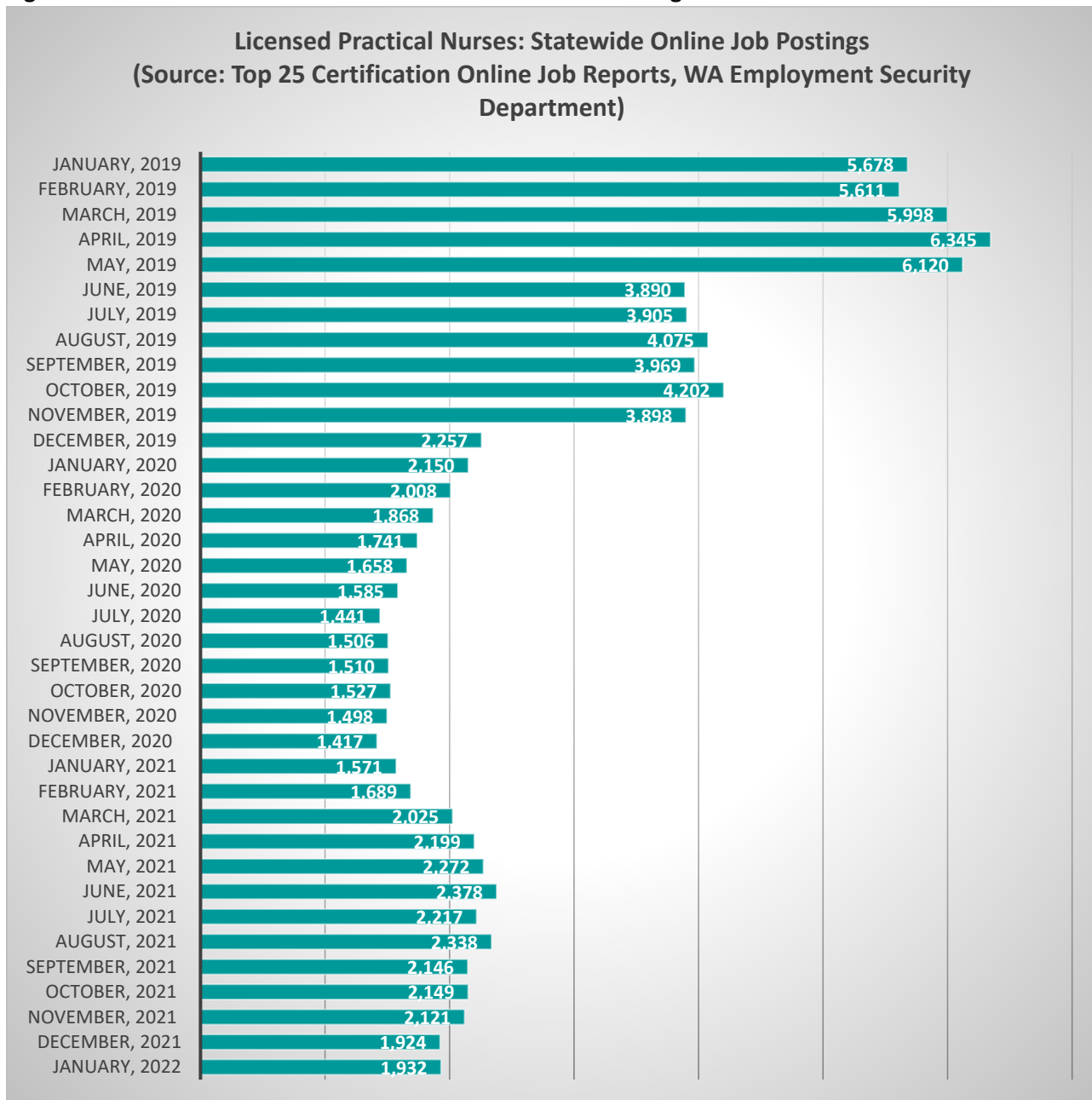
Average Licensed Practical Nurse annual job openings including separations, turnovers, transfers and exits is projected to compose 35.51% by 2024 and 35.63% in 2029 openings when divided by total employment.

Figure 28: Licensed Practical Nurses Statewide Projected Job Openings 2019-2024 and 2024-2029



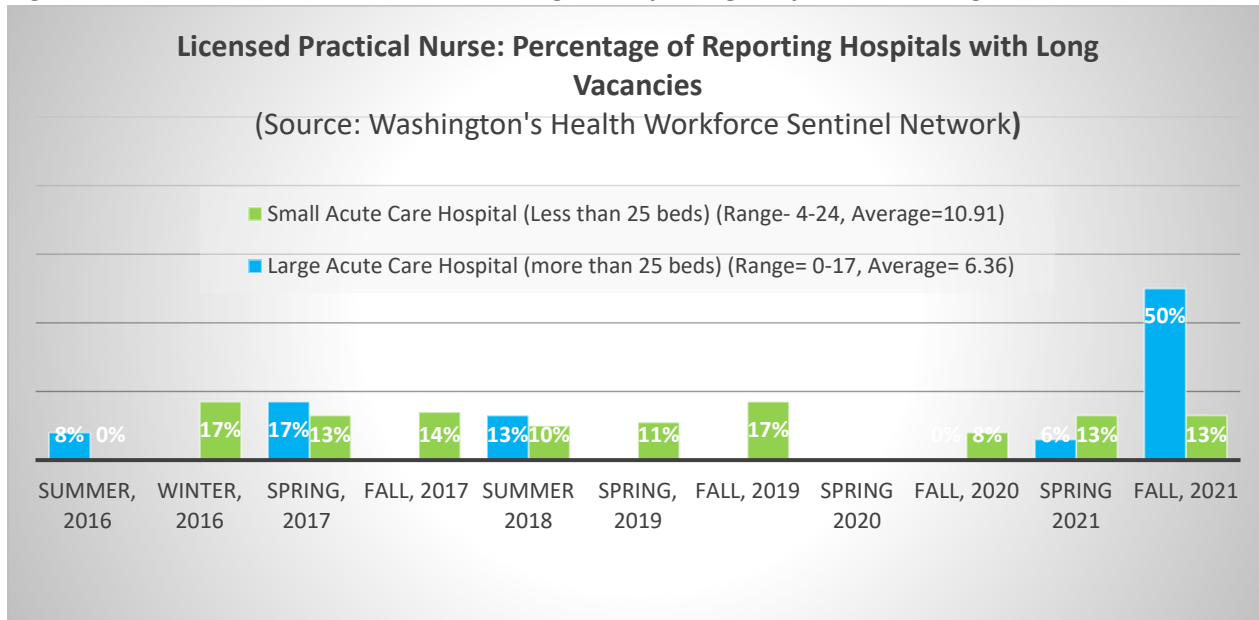
Licensed Practical Nurse Job Postings decreased by 65.97% between January 2019 (5,678 jobs) and January 2022 (1,932 jobs). Please note that each monthly report reflects the number posted in the last three months.

Figure 29: Licensed Practical Nurses Statewide Online Job Postings



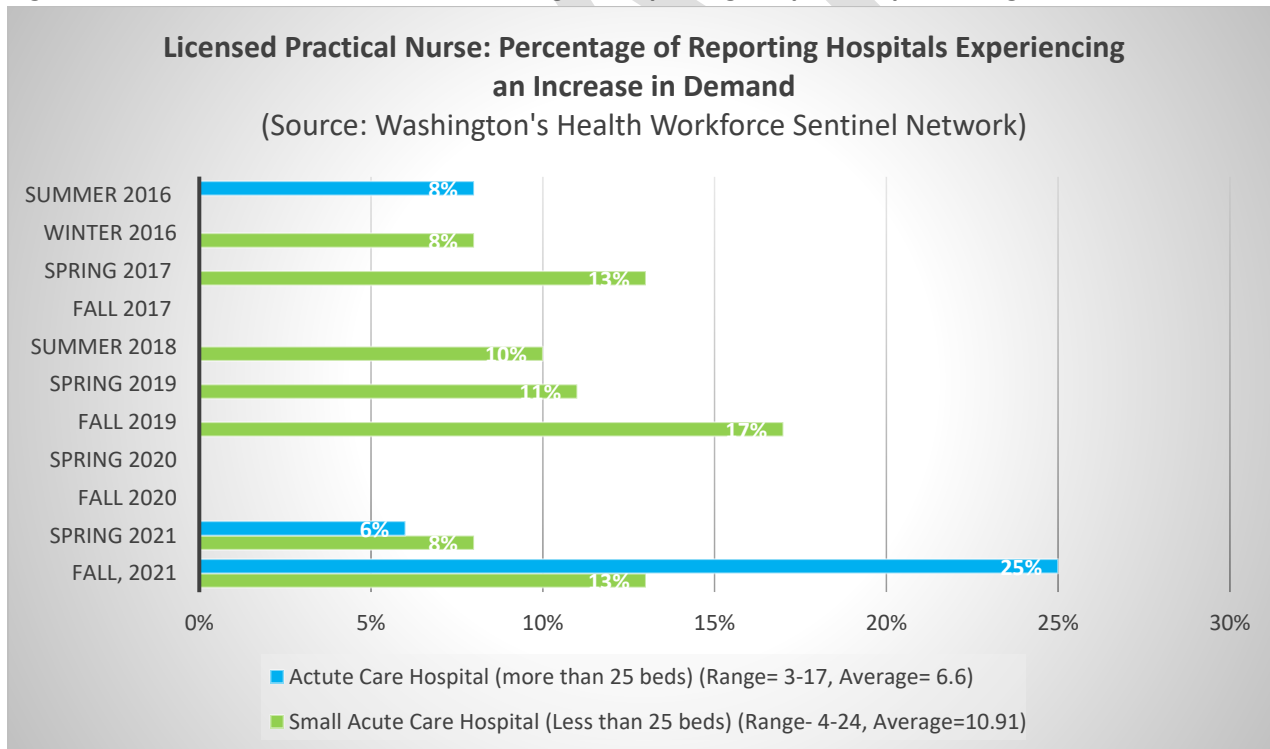
Few Small and Large Acute Care Hospitals reported long Licensed Practical Nurse vacancies until Fall of 2021 when 50% of Large Acute Care Hospitals reported Long Vacancies.

Figure 30: Licensed Practical Nurse: Percentage of Reporting Hospitals with Long Vacancies



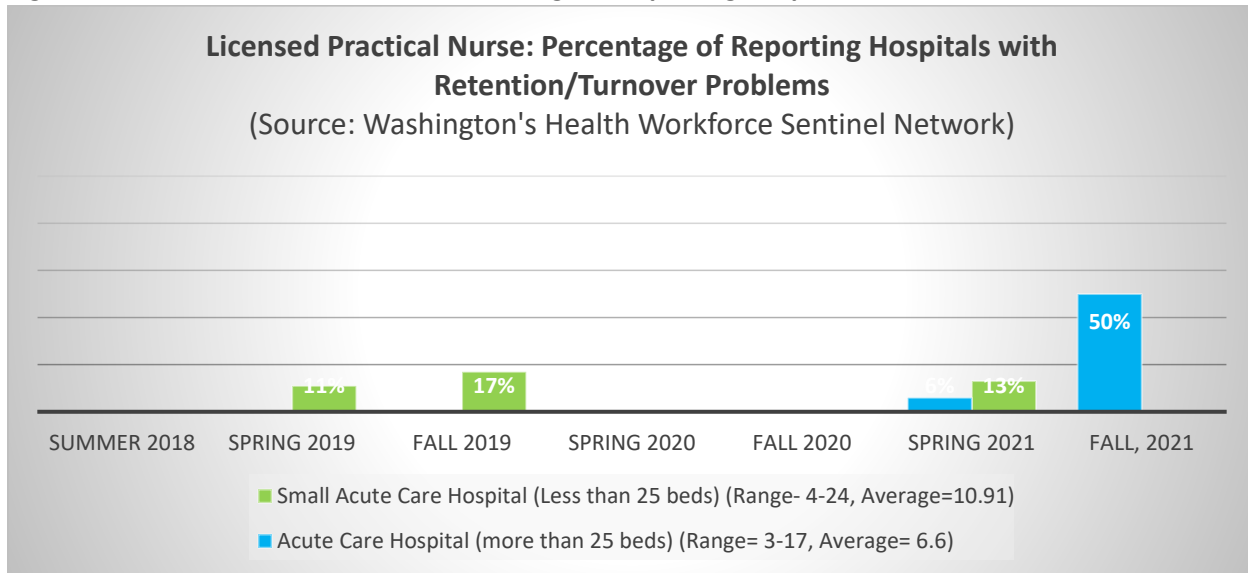
Few Small and Large Acute Care Hospitals reported Increased Demand for Licensed Practical Nurses across reporting periods.

Figure 31: Licensed Practical Nurse: Percentage of Reporting Hospitals Experiencing and Increase in Demand



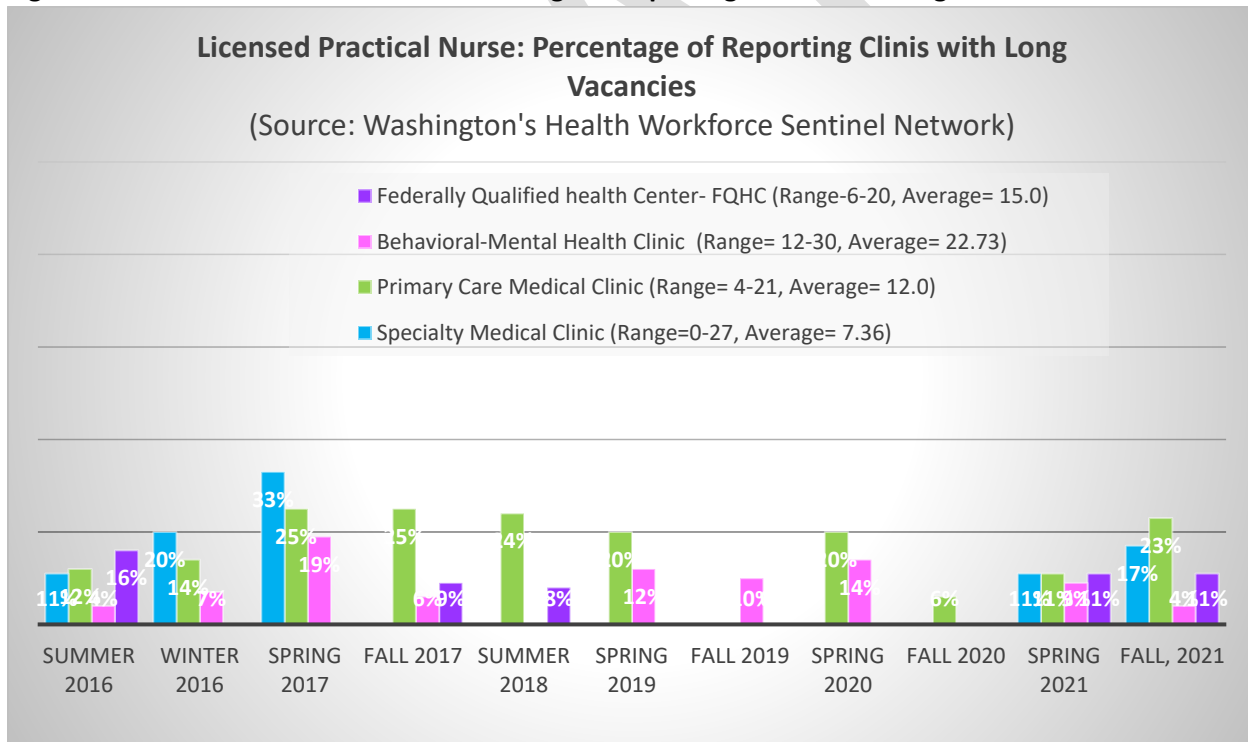
Few Small and Large Acute Care Hospitals reported Retention/Turnover Problems for Licensed Practical Nurses. In Fall of 2021, 50% of large Acute Care Hospitals reported Retention/Turnover Problems.

Figure 32: Licensed Practical Nurse: Percentage of Reporting Hospitals with Retention/Turnover Problems



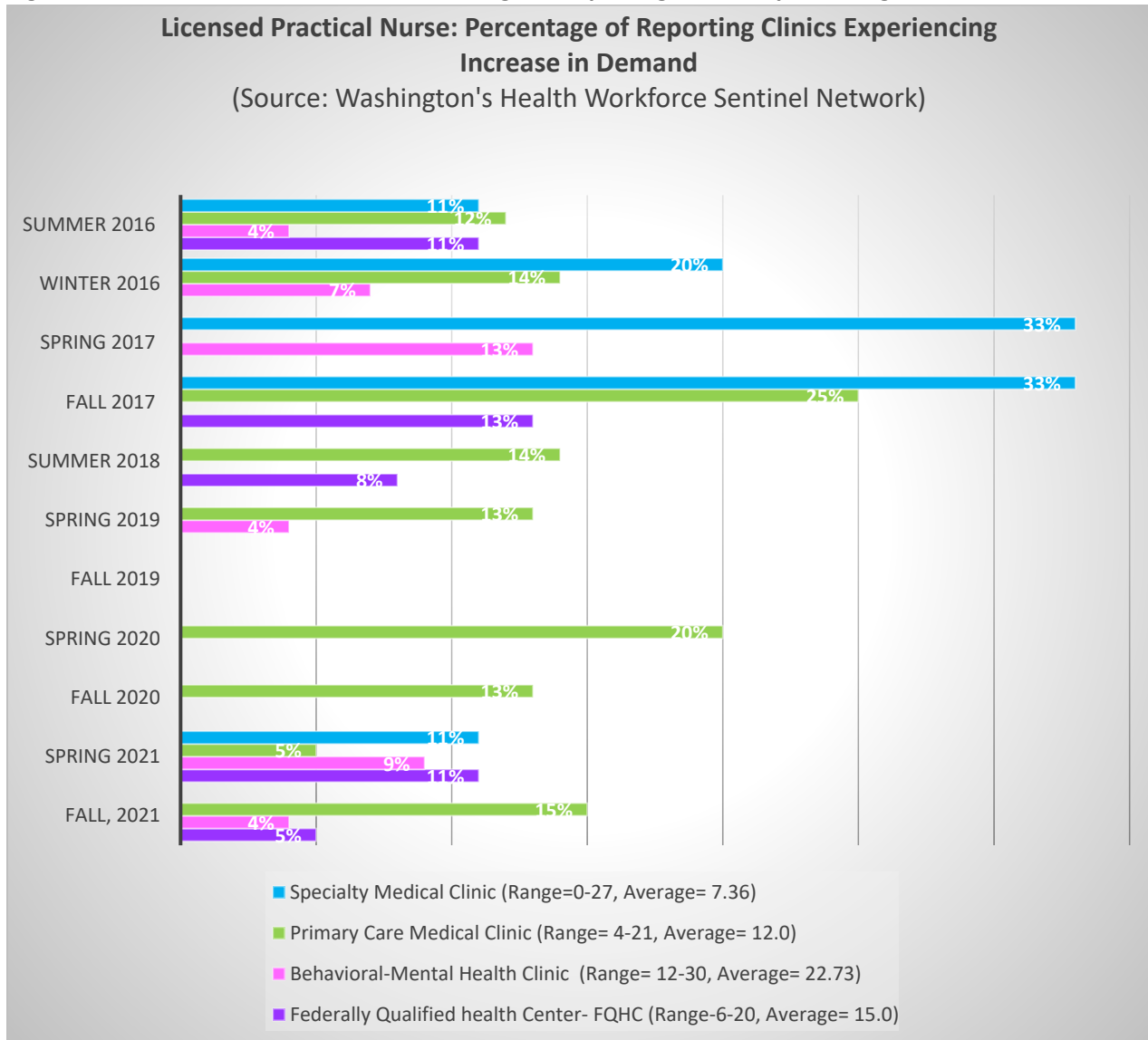
The greatest percentage of clinics reporting Long Licensed Practical Nurse Vacancies were Specialty Medical Clinics with 33% reporting in Spring 2017. About one-quarter of Primary Medical Clinics reported long Licensed Practical Nurse vacancies in Spring 2017 through Summer 2018 and then in Fall, 2021.

Figure 33: Licensed Practical Nurse: Percentage of Reporting Clinics with Long Vacancies



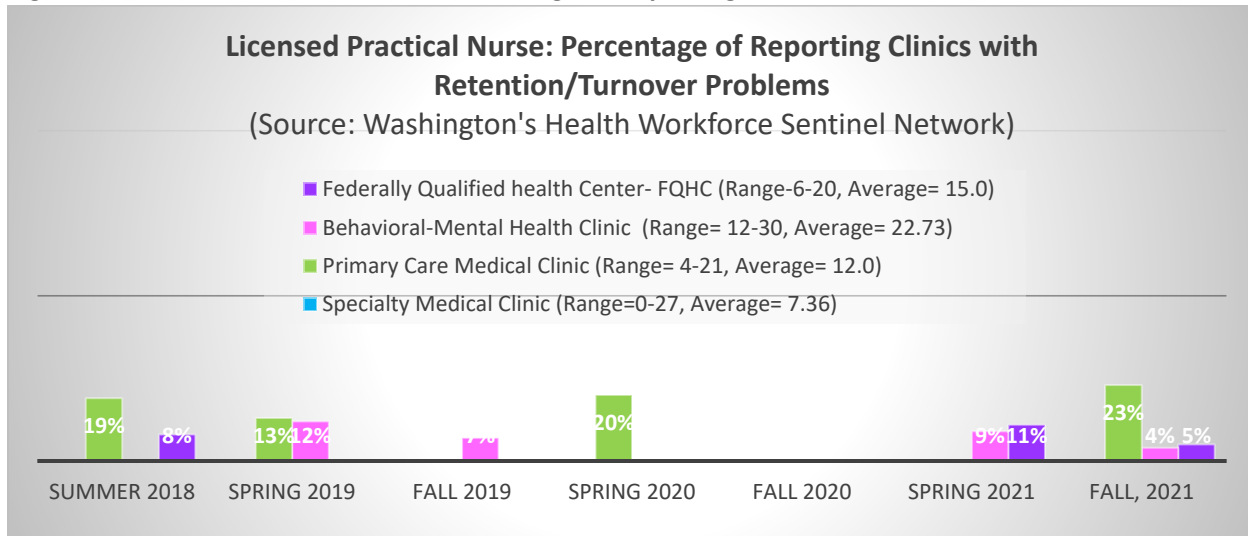
One-third of Specialty Medical Clinics reported an Increase in Demand in the Spring and Fall of 2017. One-quarter of Primary Care Medical Clinics reported an Increase in Demand in Fall of 2017 and one-fifth in Spring of 2020.

Figure 34: Licensed Practical Nurse: Percentage of Reporting Clinics Experiencing Increase in Demand



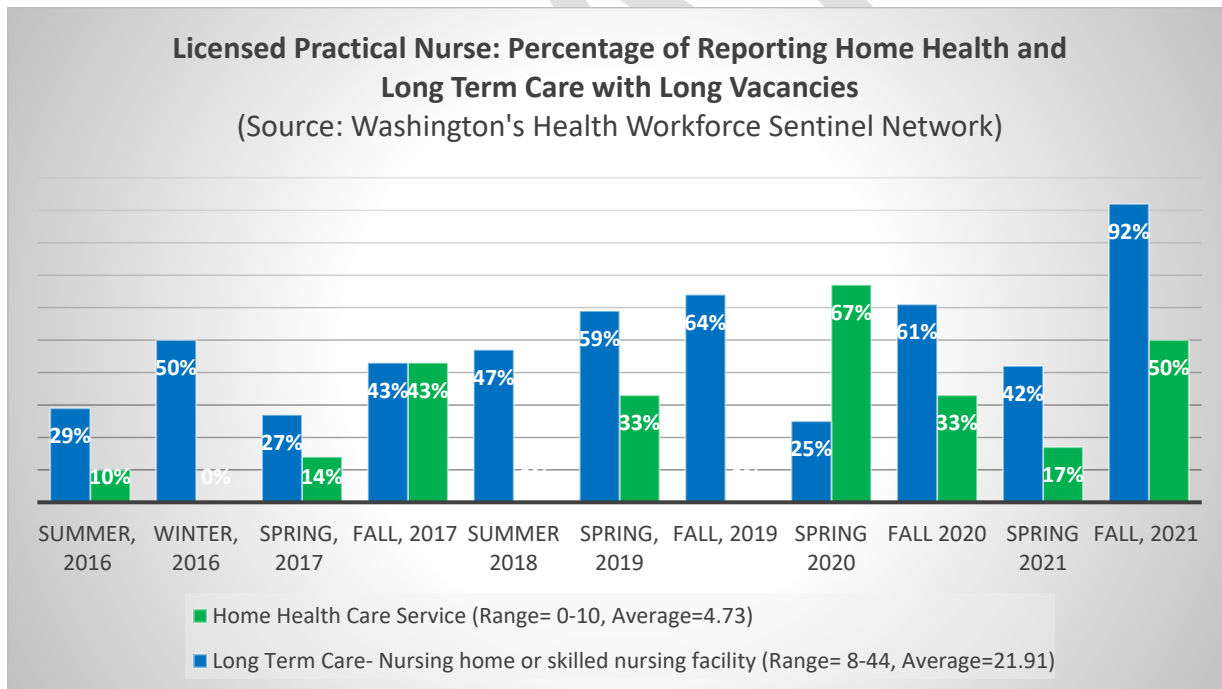
Almost 1/4 of Primary Care Medical Clinics reported Retention/Turnover problems for Licensed Practical Nurses in Fall of 2021. Few other clinics reported retention/turnover problems.

Figure 35: Licensed Practical Nurse: Percentage of Reporting Clinics with Retention/Turnover Problems



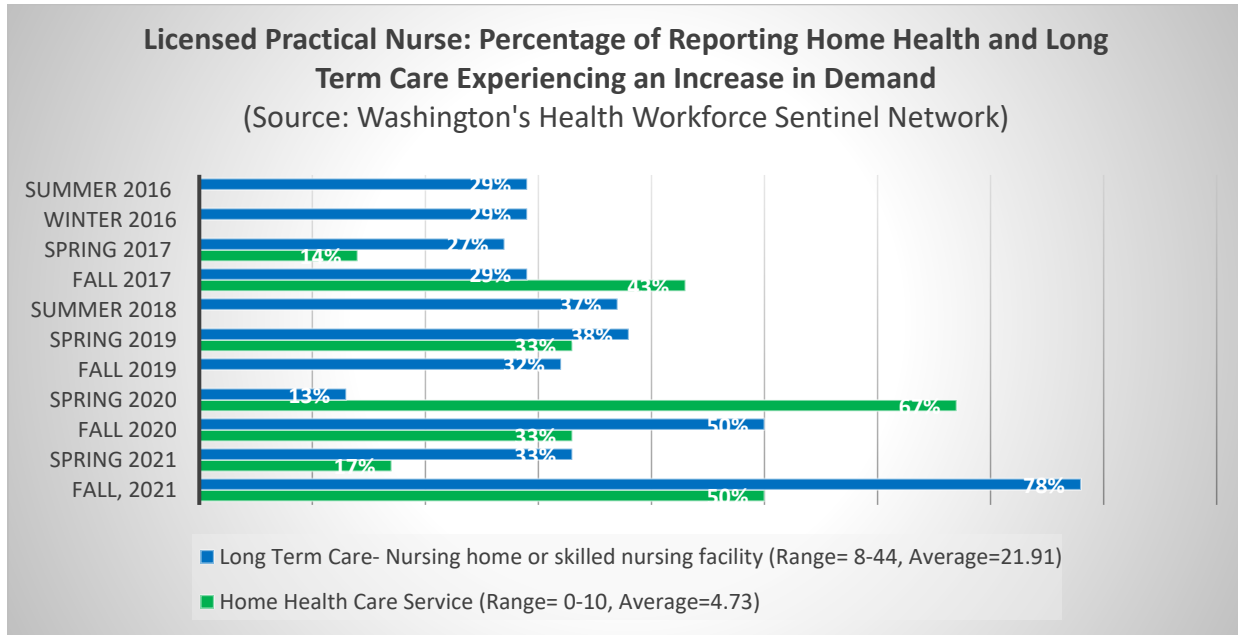
Over half of Long-Term Care Facilities reported long Licensed Practical Nurse Vacancies across several reporting periods with the highest in Fall, 2021. The greatest percentage of Home Health facilities reported Long Licensed Practical Nurse vacancies in Spring, 2020.

Figure 36: Licensed Practical Nurse: Percentage of Reporting Home Health and Long-Term Care with Long Vacancies



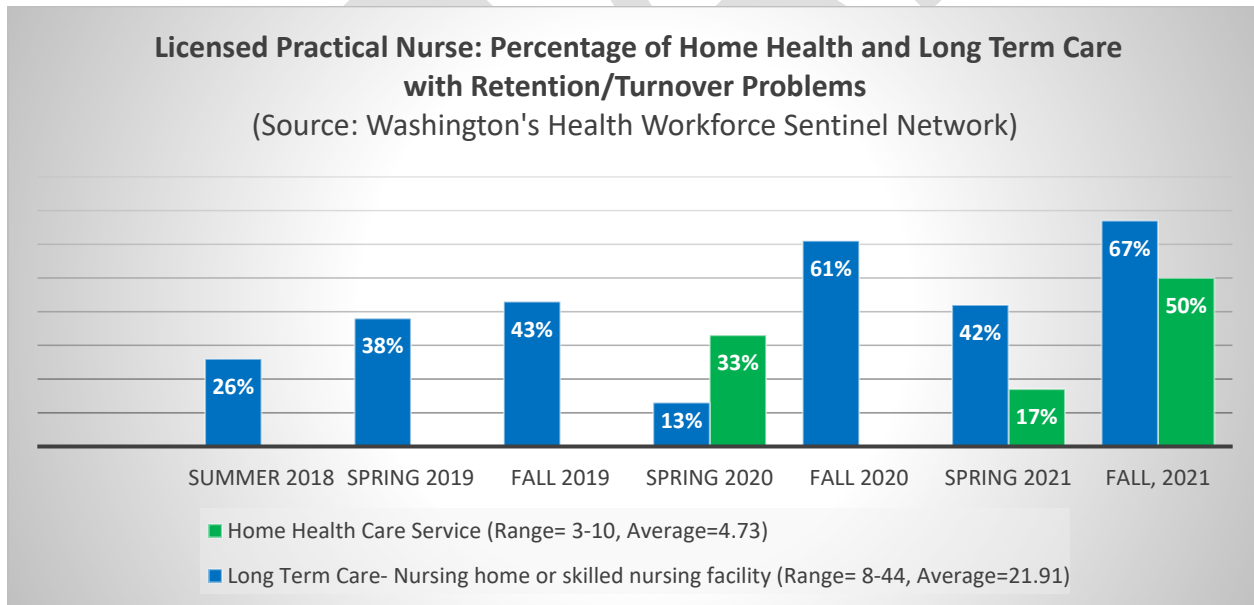
Seventy-eight percent of Long-Term Care facilities reported an Increase in Demand for Licensed Practical Nurses in Fall of 2021. The greatest percentage of Home Health facilities experienced an Increase in Demand in Spring, 2020.

Figure 37: Licensed Practical Nurse: Percentage of Reporting Home Health and Long-Term Care Experiencing an Increase in Demand



The greatest percentage of Long-Term Care facilities and Home Health Care Services reported Retention/Turnover problems for Licensed Practical Nurses in the fall of 2021.

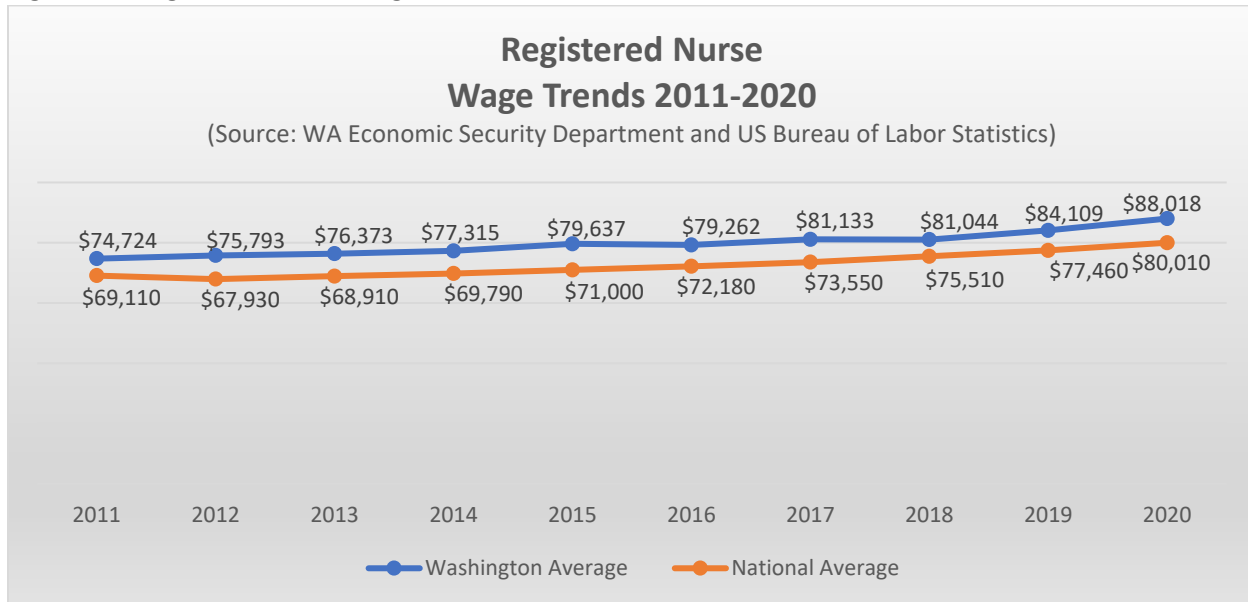
Figure 38: Licensed Practical Nurse: Percentage of Home Health and Long-Term Care with Retention/Turnover Problems



Registered Nurse

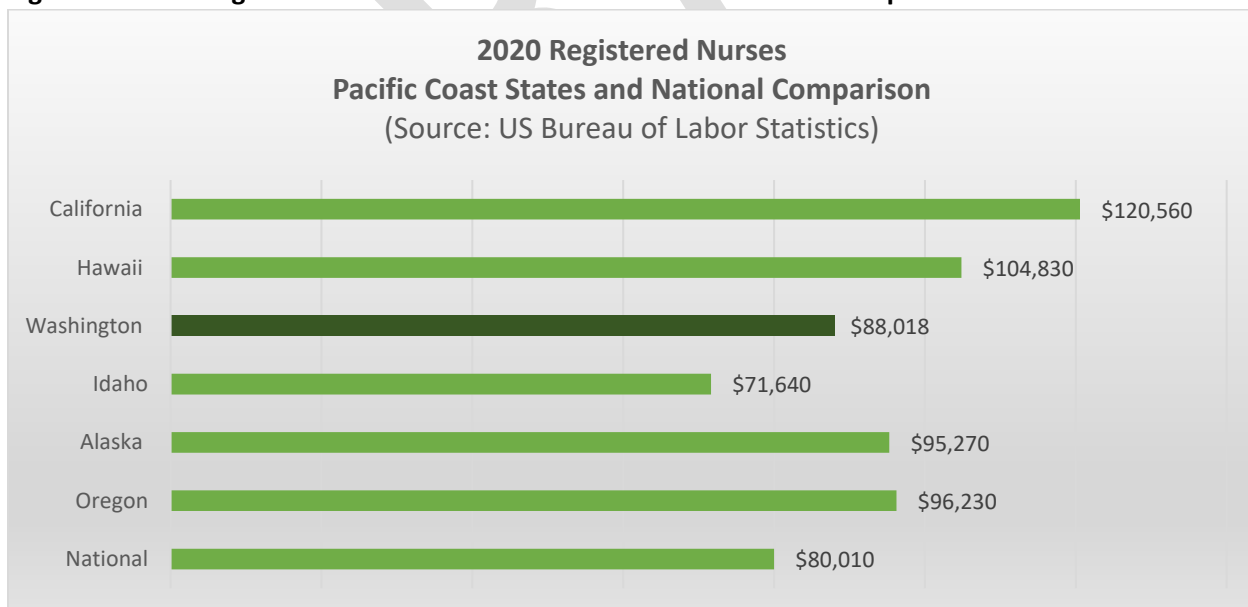
Washington's Registered Nurse annual wages have increased by 16.34% in the last ten years and have consistently exceeded the national average.

Figure 39: Registered Nurse Wage Trends 2011-2020



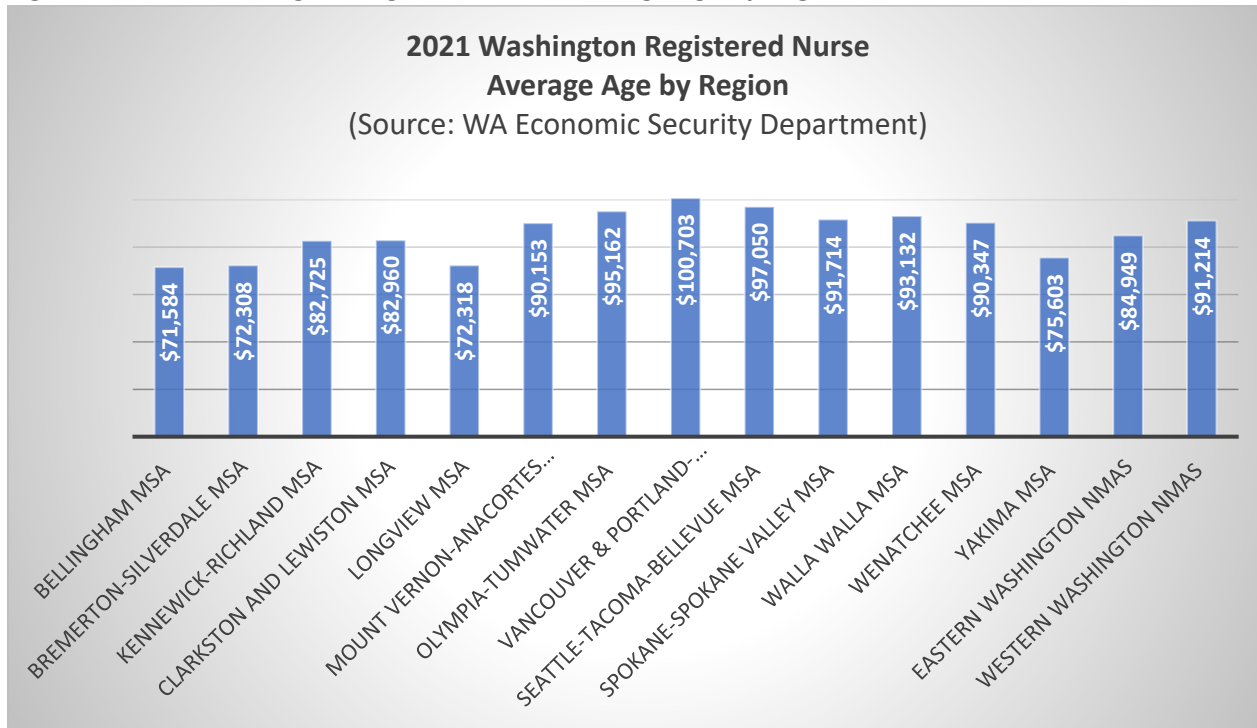
When compared with Pacific Coast states, and California (\$120,560), Hawaii (\$104,830), Oregon (\$96,230) and Alaska (\$95,270) offered higher wages for Registered Nurses in 2020 as compared to Washington State (\$88,018).

Figure 40: 2020 Registered Nurses Pacific Coast States and National Comparison



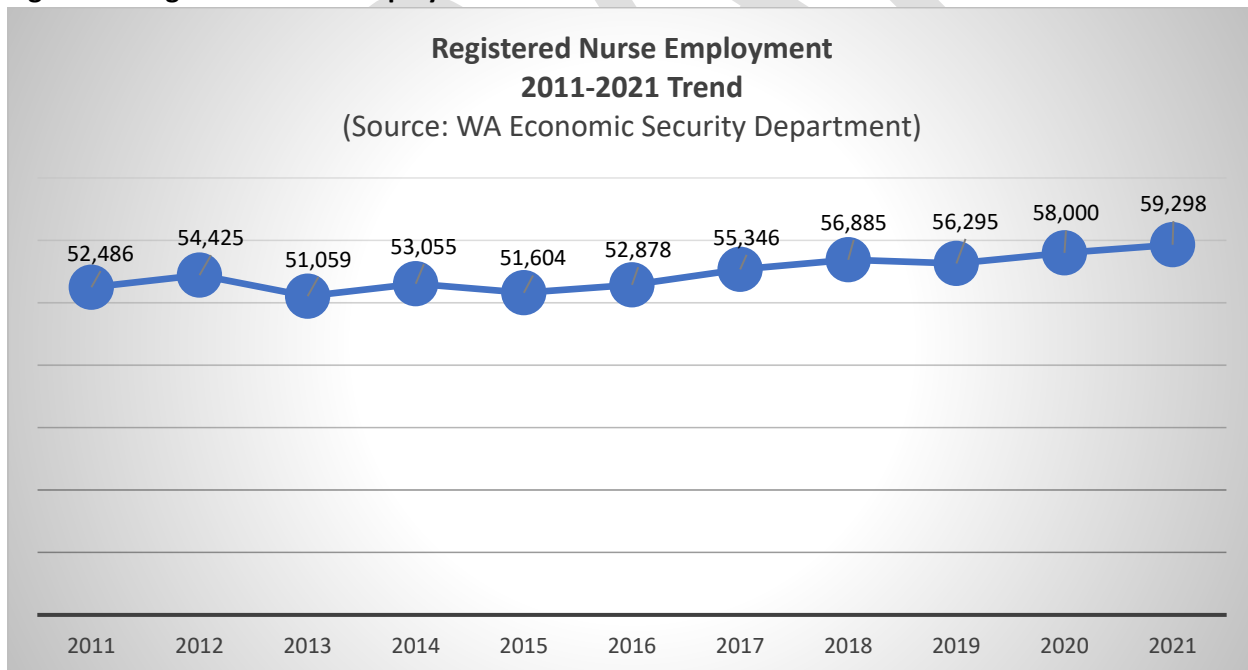
When divided by region, 2021 Registered Nurse annual wages were highest in the Vancouver & Portland MSA region (\$100,703) and lowest in the Bellingham MSA (\$71,584). A map depicting regions is available in the appendix.

Figure 41: 2021 Washington Registered Nurse Average Age by Region



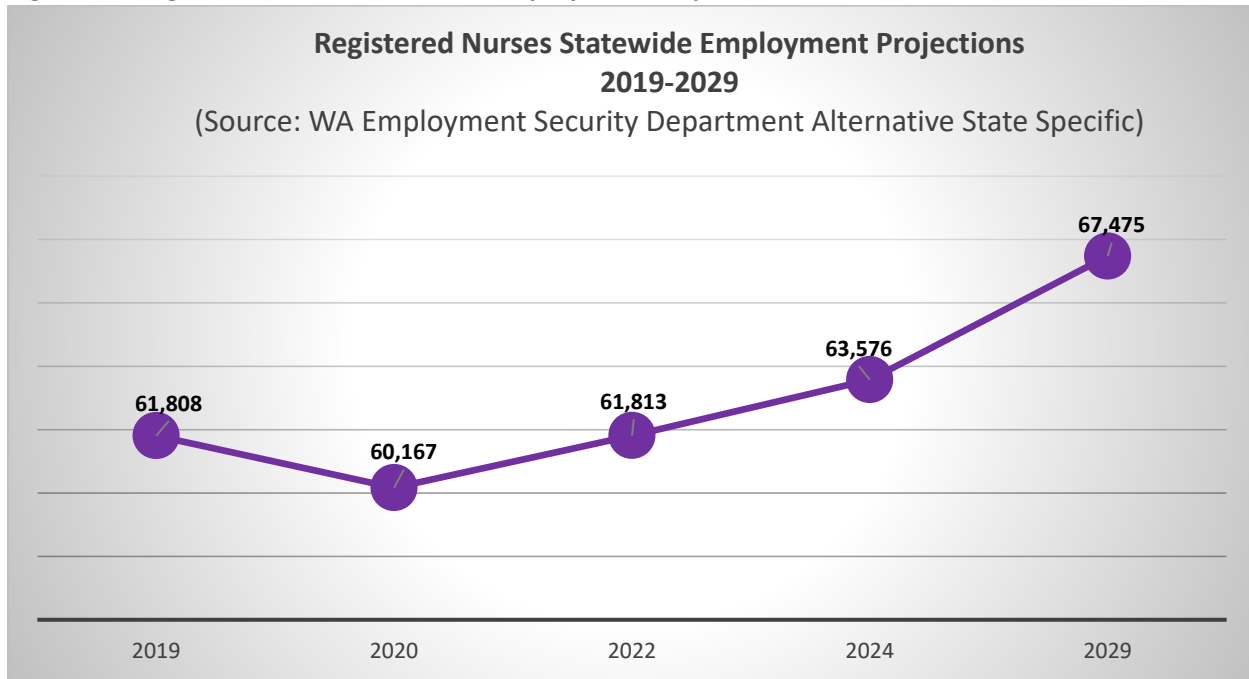
Employment of Registered Nurses has increased by 12.19% from 52,486 (2011) to 59,298 (2021).

Figure 42: Registered Nurse Employment 2011-2021 Trend



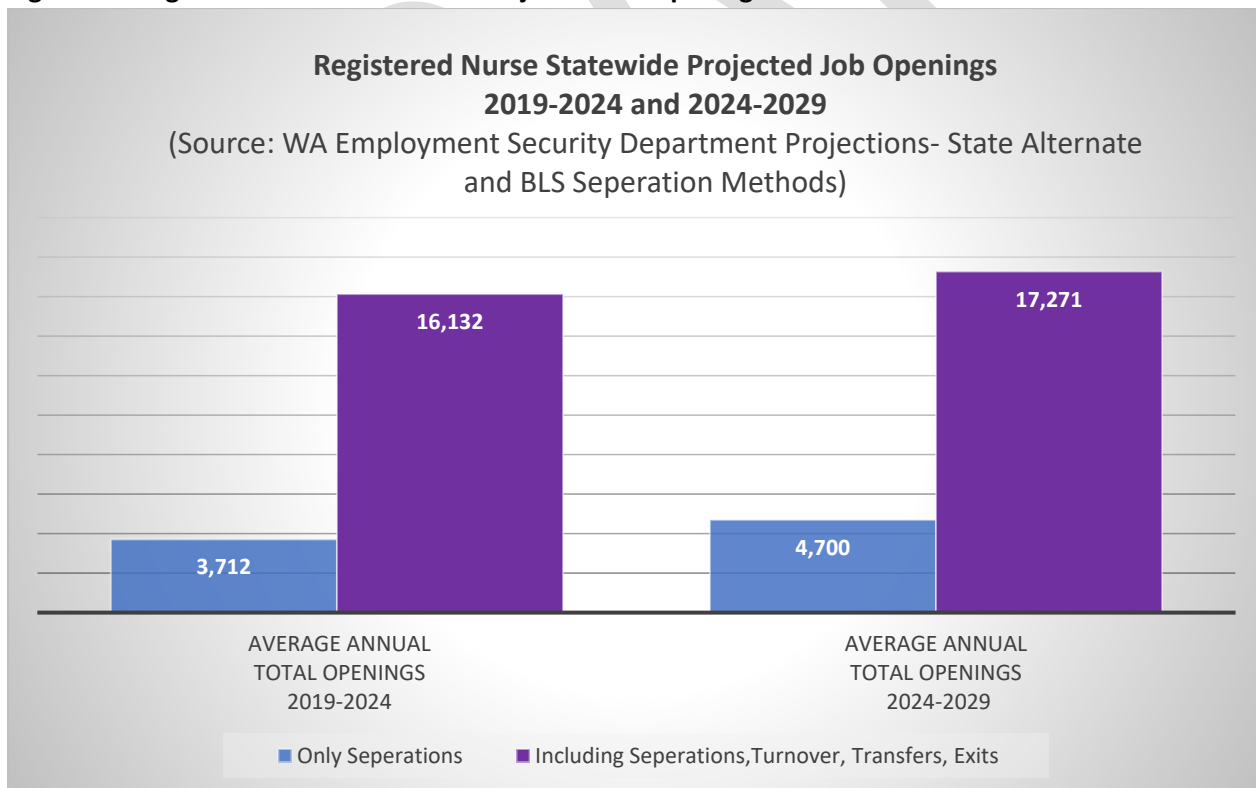
Registered Nurse employment is projected to increase by 8.77% from 61,808 (2019) to 67,475 (2029).

Figure 43: Registered Nurses Statewide Employment Projections 2019-2029



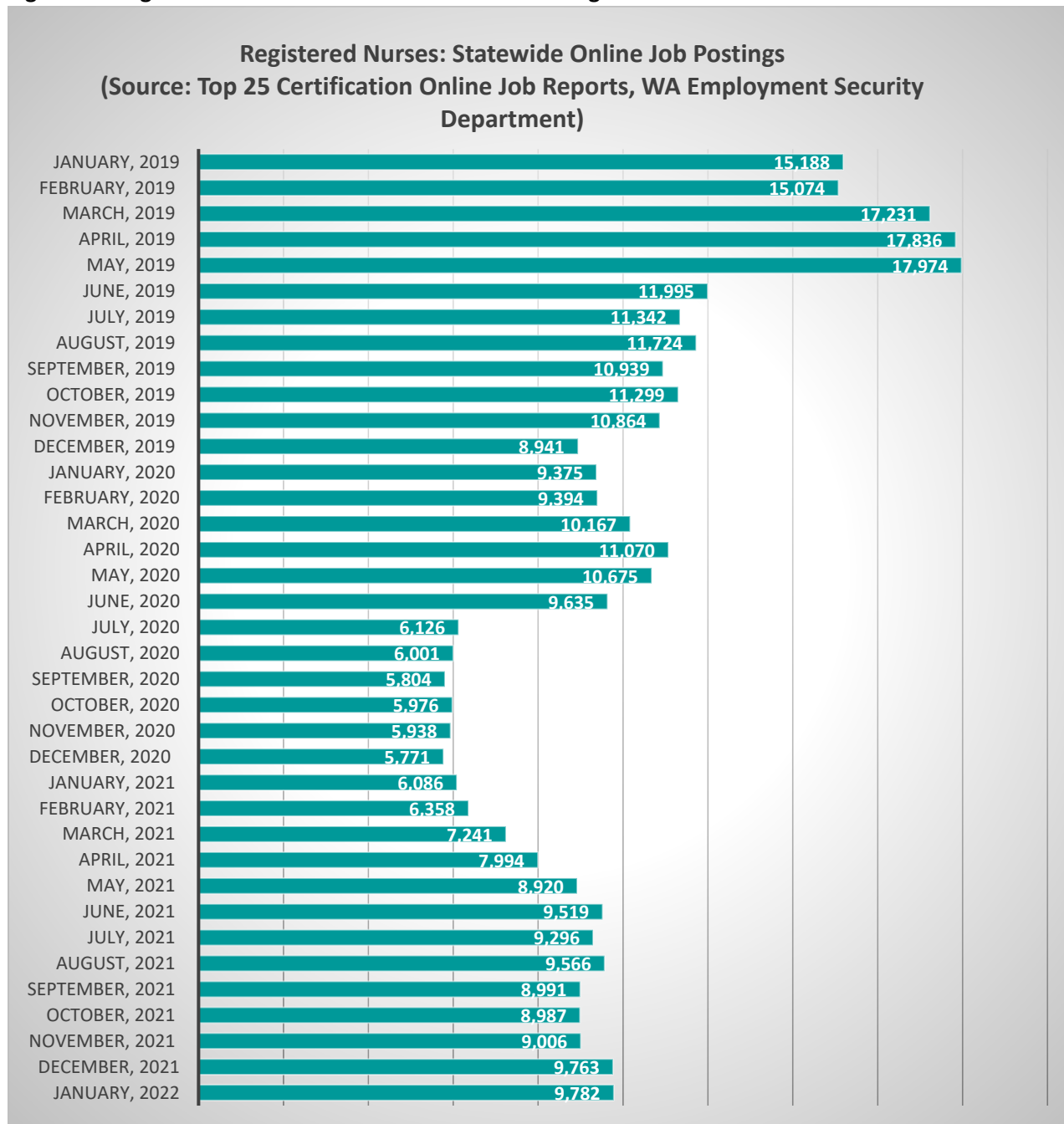
Average Registered Nurse annual job openings including separations, turnovers, transfers and exits is projected to compose 25.37% by 2024 and 25.60% in 2029 openings when divided by total employment.

Figure 44: Registered Nurse Statewide Projected Job Openings 2019-2024 and 2024-2029



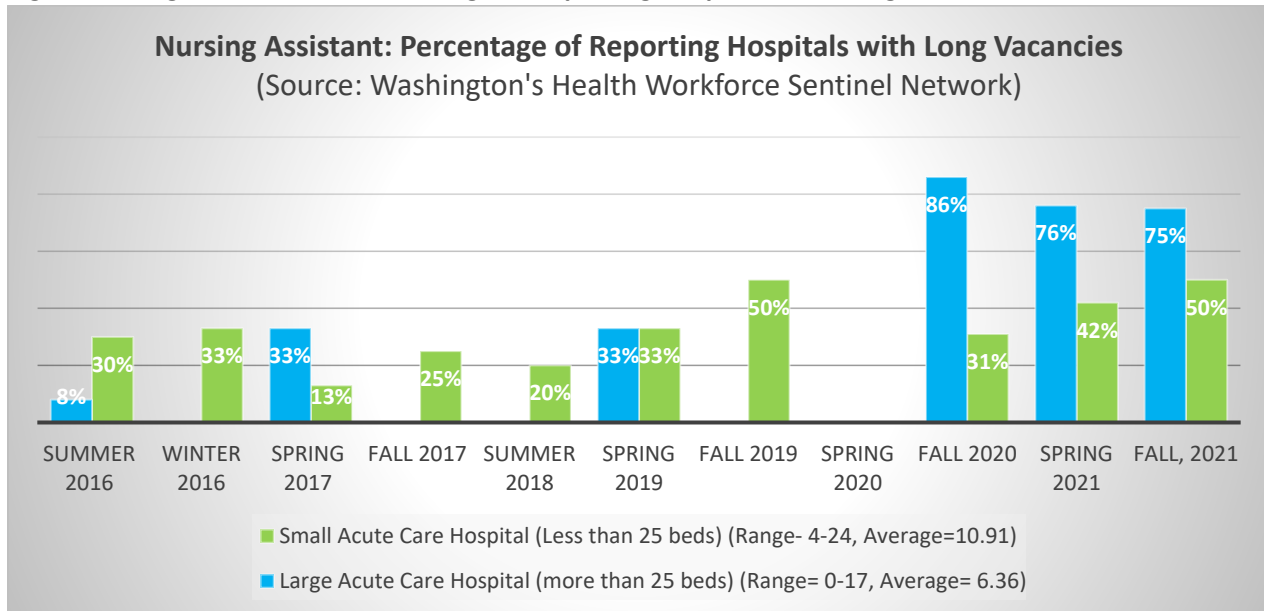
Registered Nurse Job Postings decreased by 35.59% between January 2019 (15,188 jobs) and January 2022 (9,782 jobs). Please note that each monthly report reflects the number posted in the last three months.

Figure 45: Registered Nurses Statewide Online Job Postings



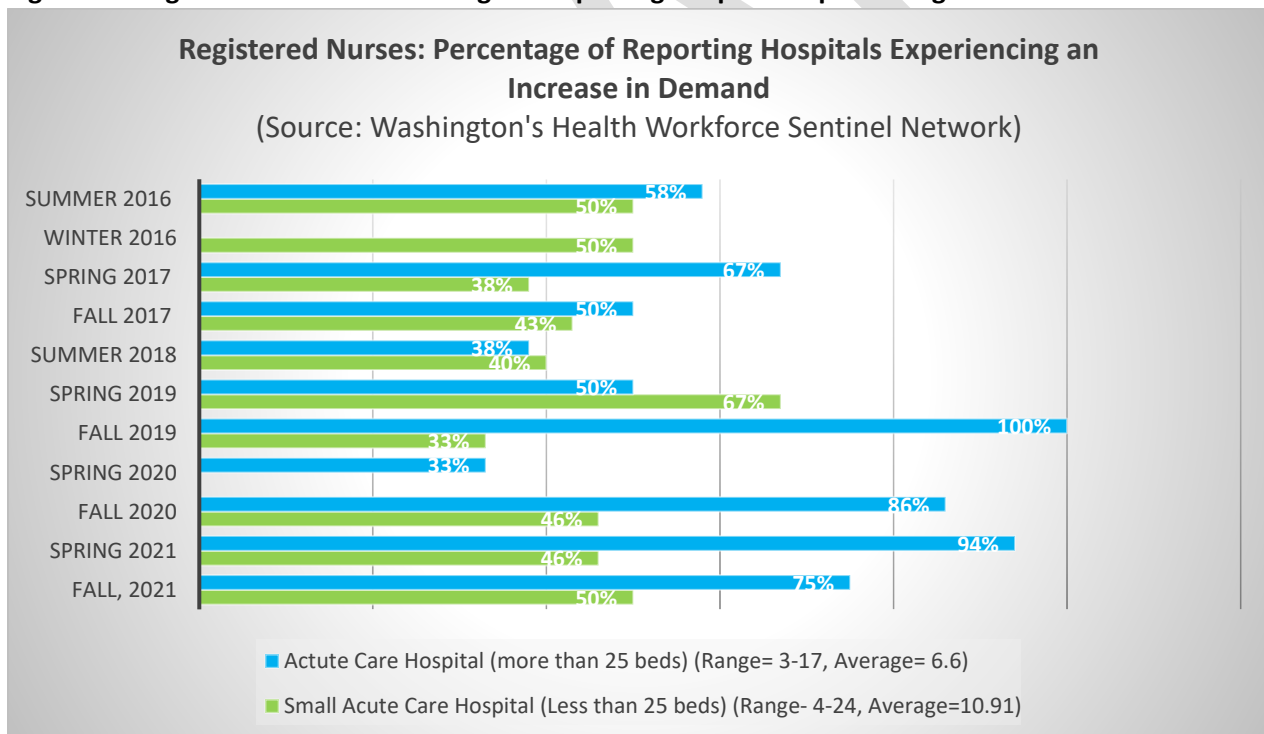
Most small and large Acute Care Hospitals reported Long Registered Nurse Vacancies with 100% of Large Acute Care Hospitals in Fall of 2019 and Fall of 2020.

Figure 46: Registered Nurse: Percentage of Reporting Hospitals with Long Vacancies



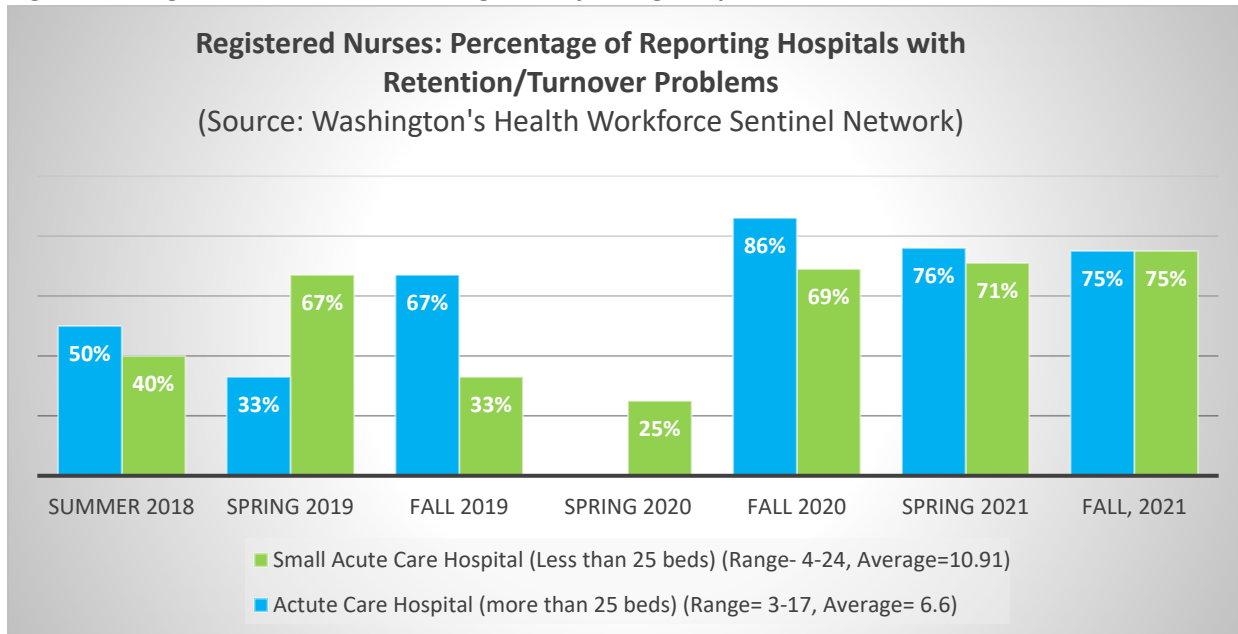
One hundred percent of Large Acute Care Hospitals reported an Increase in Demand for Registered Nurses in Fall of 2019. Many Large and Small Acute Care Hospitals reported an Increase in Registered Nurse Demand over all reporting periods.

Figure 47: Registered Nurses: Percentage of Reporting Hospitals Experiencing an Increase in Demand



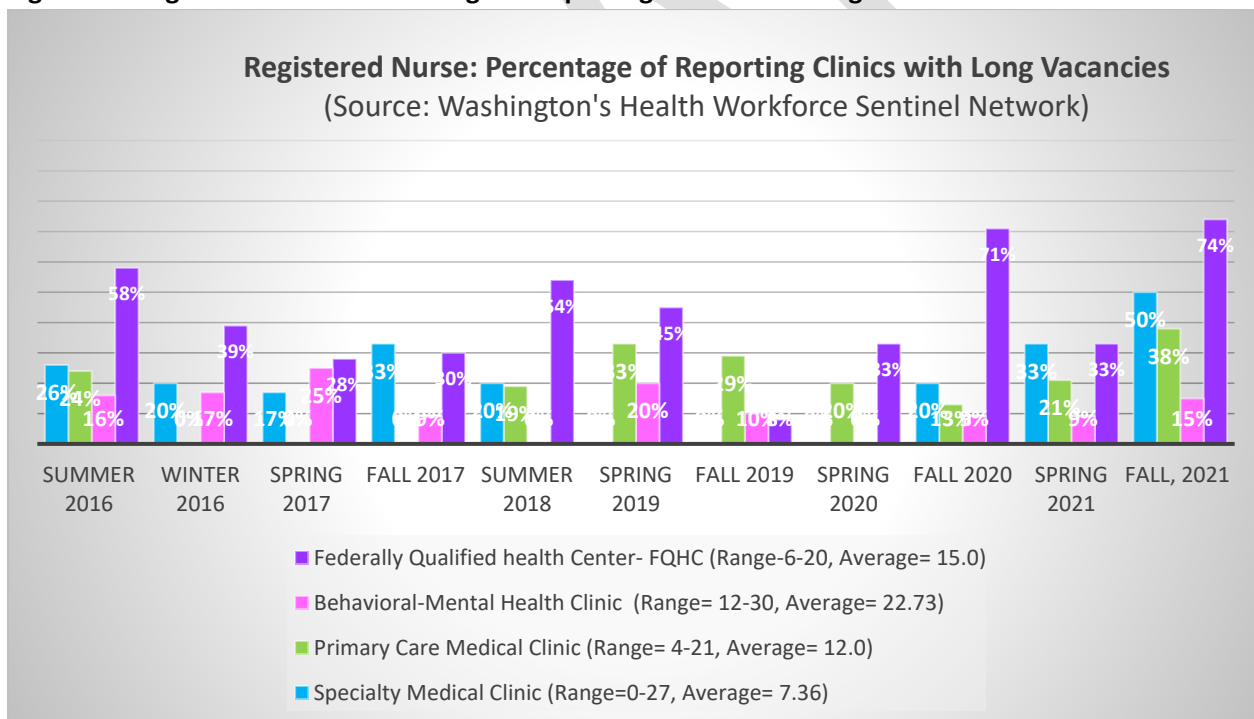
The greatest percentage of Large Acute Care Hospitals reported Retention/Turnover Problems for Registered Nurses in Fall of 2020 (86%). A wide range of Small Acute Care Hospitals reported Retention/Turnover Problems for Registered Nurses ranging from 25% to 75%.

Figure 48: Registered Nurses: Percentage of Reporting Hospitals with Retention/Turnover Problems



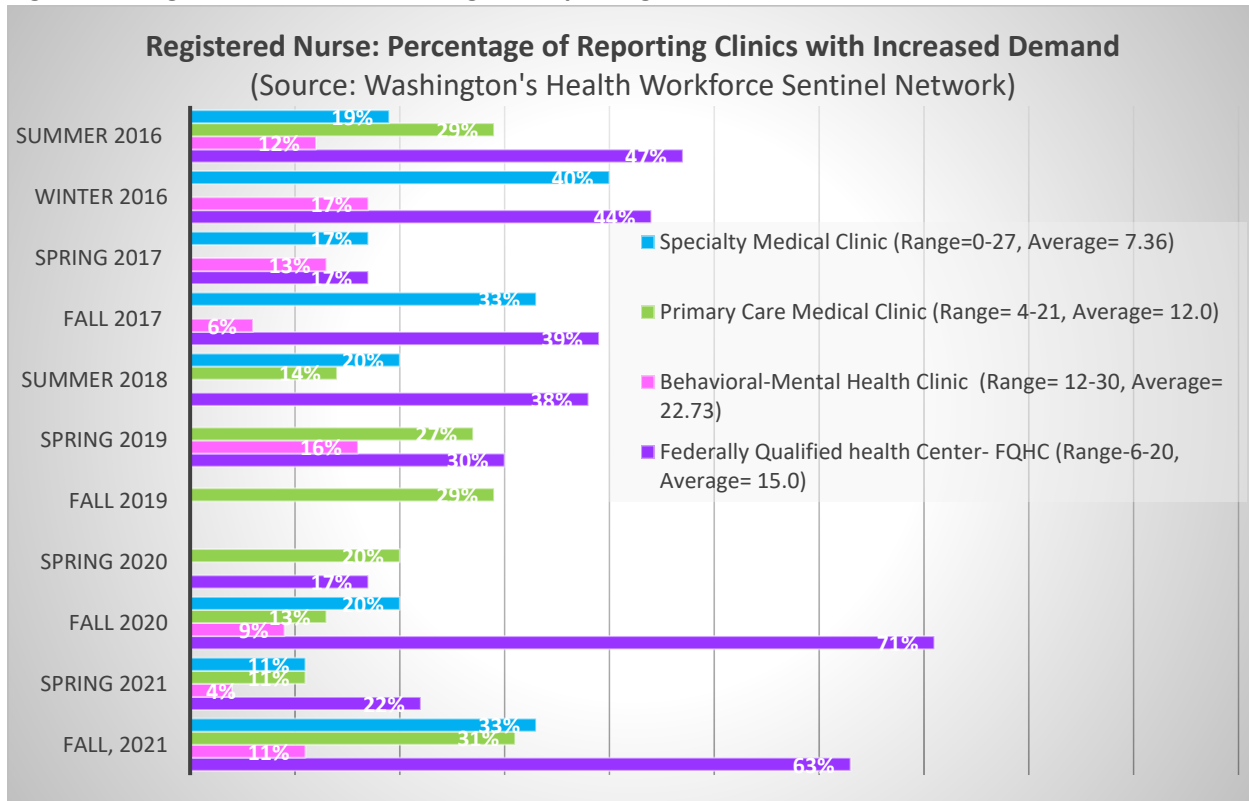
The greatest percentage of Clinics reporting Long Vacancies for Registered Nurses was Federally Qualified Health Centers with 74% in Fall of 2021.

Figure 49: Registered Nurse: Percentage of Reporting Clinics with Long Vacancies



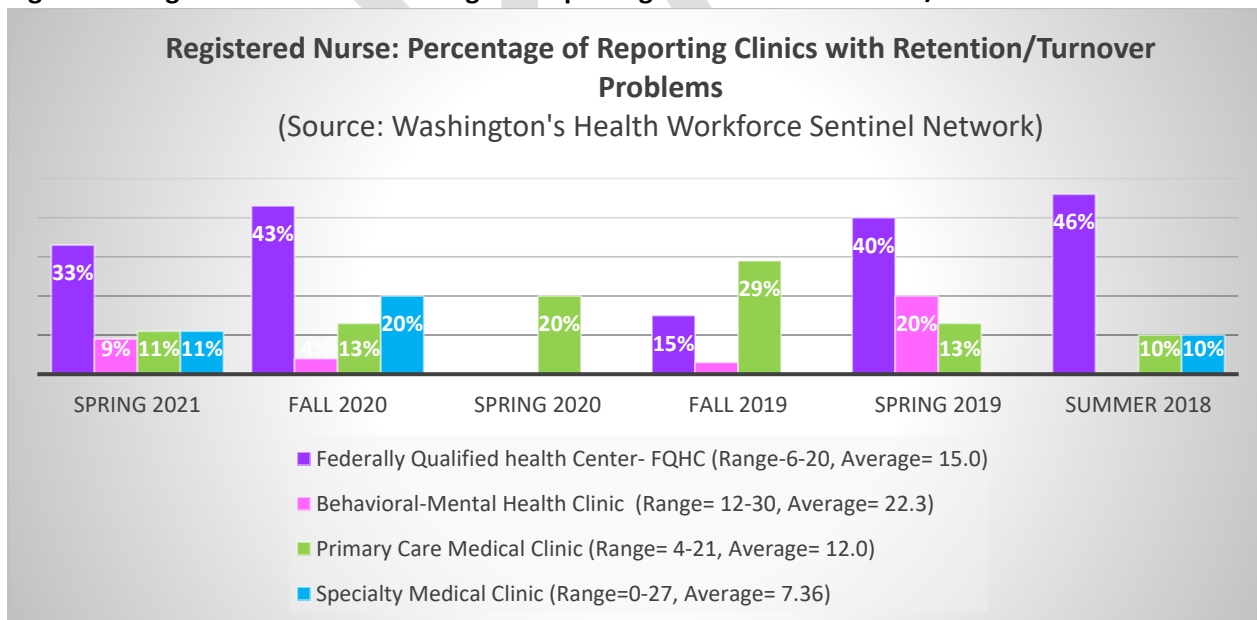
Federally Qualified Health Clinics reported the greatest Increase in Demand for Registered Nurses with 71% in Fall of 2020.

Figure 50: Registered Nurse: Percentage of Reporting Clinics with Increased Demand



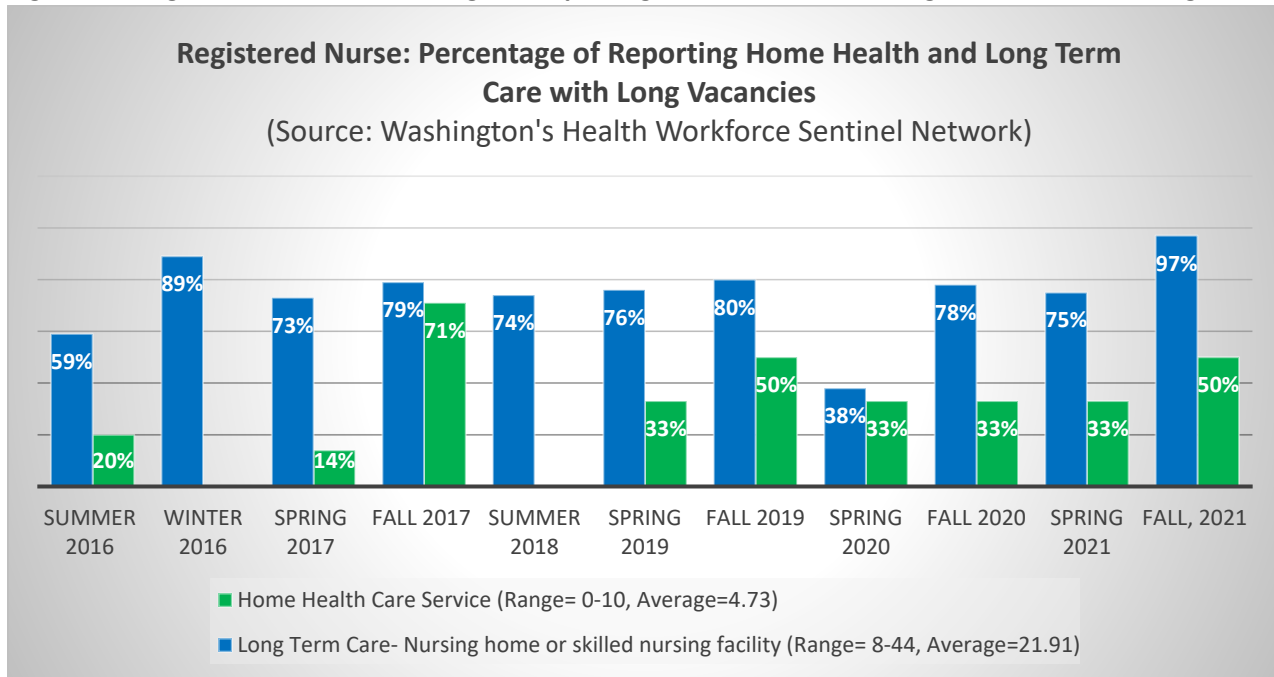
The greatest percentage of Federally Qualified Health Centers reported Retention/Turnover Problems in Fall of 2021.

Figure 51: Registered Nurse: Percentage of Reporting Clinics with Retention/Turnover Problems



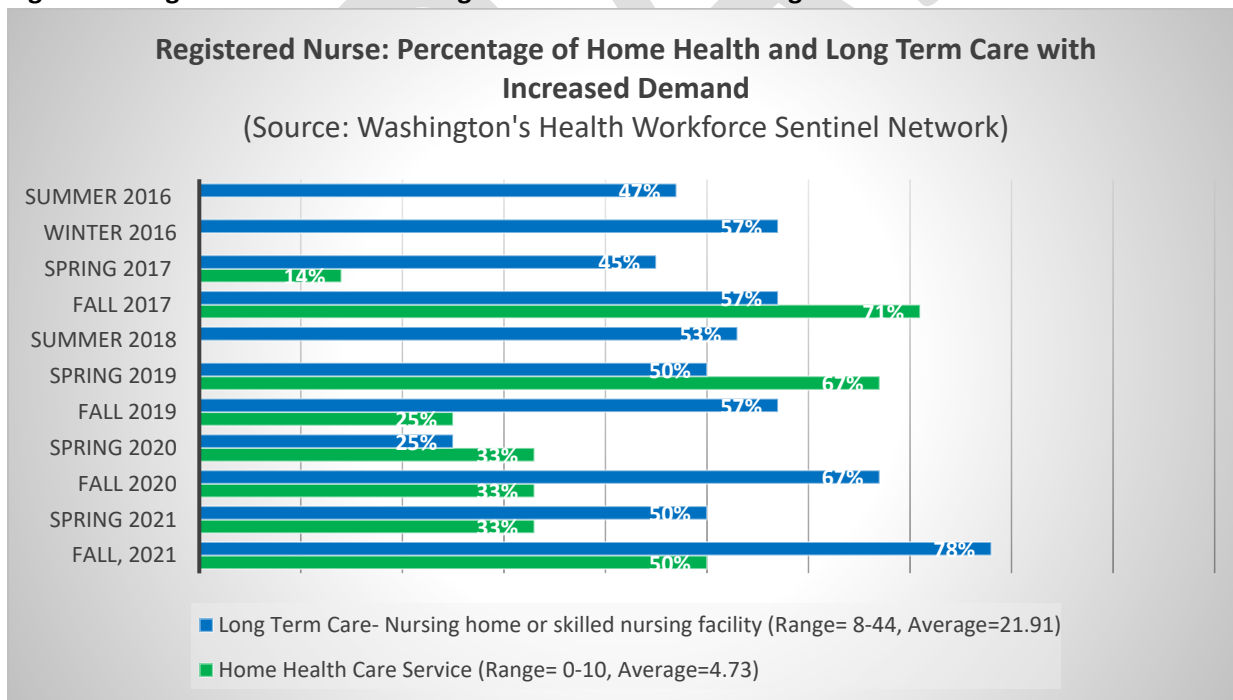
Most Long-Term Care facilities reported Long Registered Nurse Vacancies. The greatest percentage of Home Health Care services reported Long Registered Nurse Vacancies in Fall of 2017.

Figure 52: Registered Nurse: Percentage of Reporting Home Health and Long-Term Care with Long Vacancies



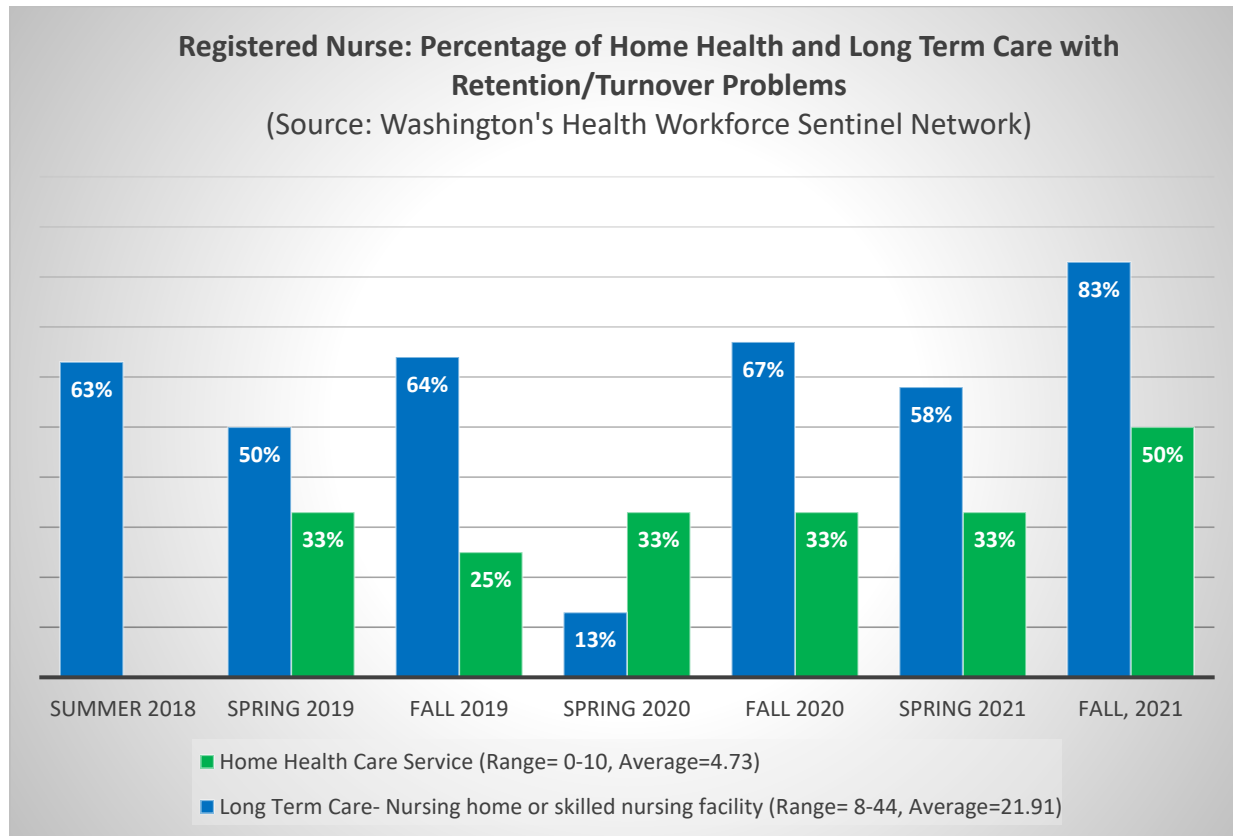
Most Long-Term Care facilities reported increased Demand for Registered Nurses across all reporting periods. The greatest percentage of Home Health Care services reporting Increased Demand for Registered Nurses was during the Fall of 2017.

Figure 53: Registered Nurse Percentage of Home Health and Long-Term Care with Increased Demand



Most Long-Term Care Facilities reported Registered Nurse Retention/Turnover Problems for all reporting periods except Spring of 2020. Most Home Health Care Services reported Registered Nurse Retention/Turnover Problems for all reporting periods except Summer of 2018.

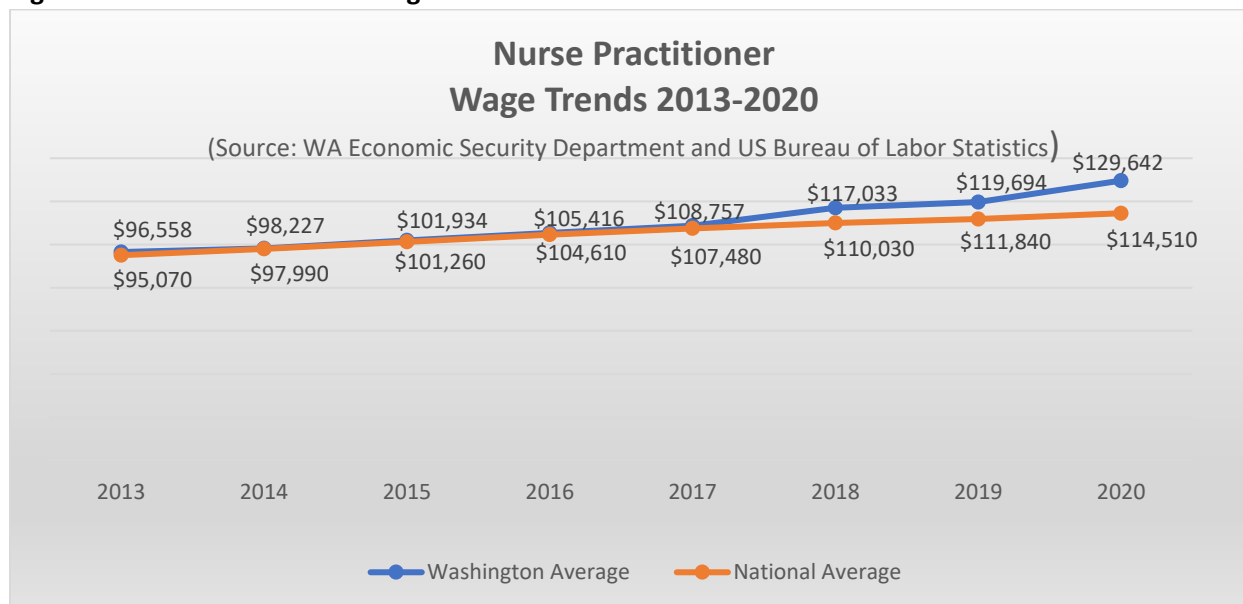
Figure 54: Registered Nurse: Percentage of Home Health and Long Term Care with Retention/Turnover Problems



Nurse Practitioner

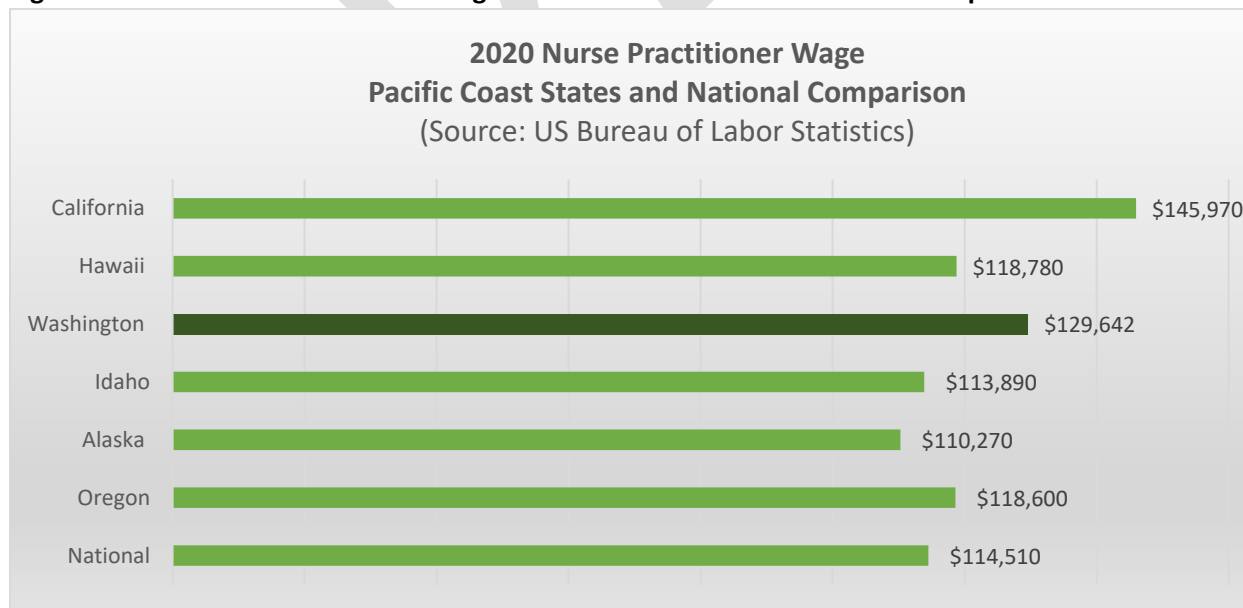
Washington's Nurse Practitioner annual wages have increased by 29.25% in the last ten years with the greatest difference with the national average in the last three years.

Figure 55: Nurse Practitioner Wage Trends 2013-2020



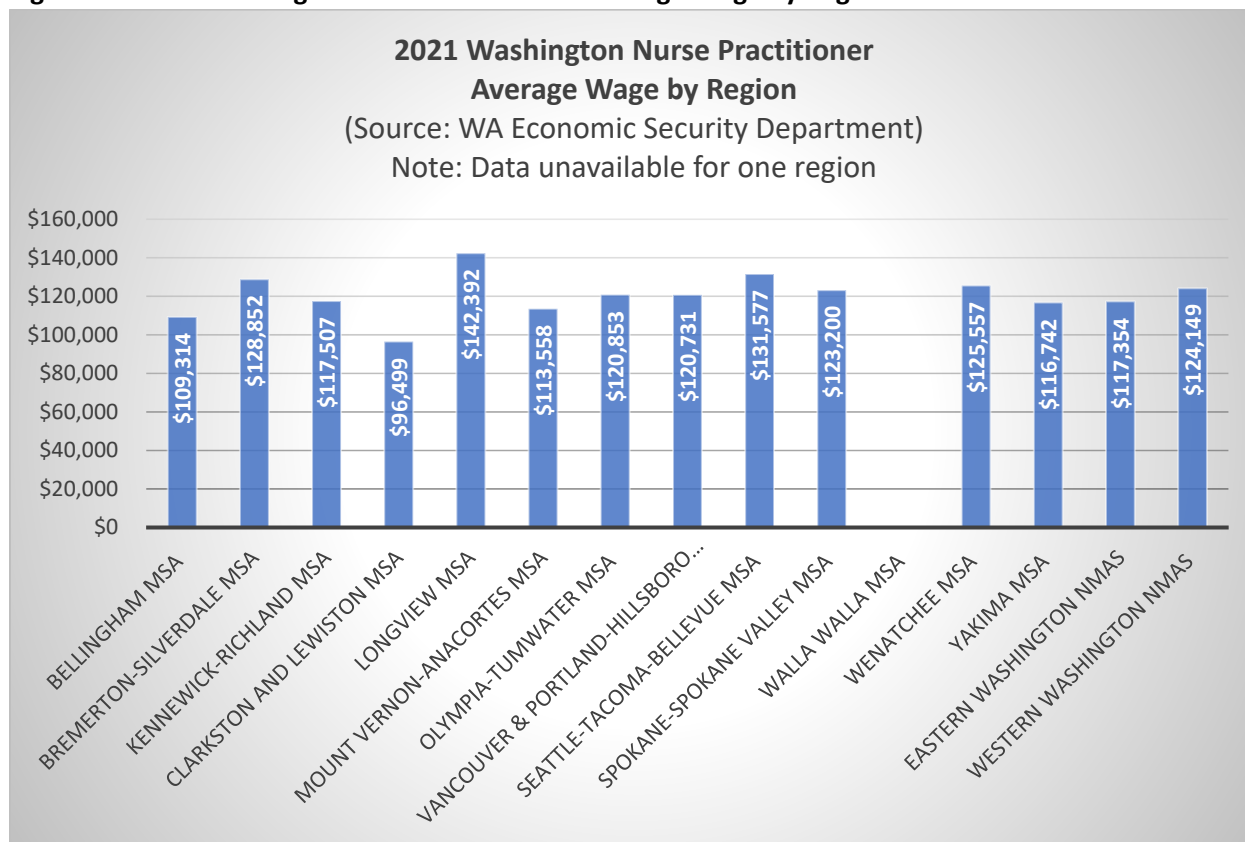
When compared with Pacific Coast states, California (\$145,970) offered higher wages for Nurse Practitioners in 2020 as compared to Washington State (\$129,642).

Figure 56: 2020 Nurse Practitioner Wage Pacific Coast States and National Comparison



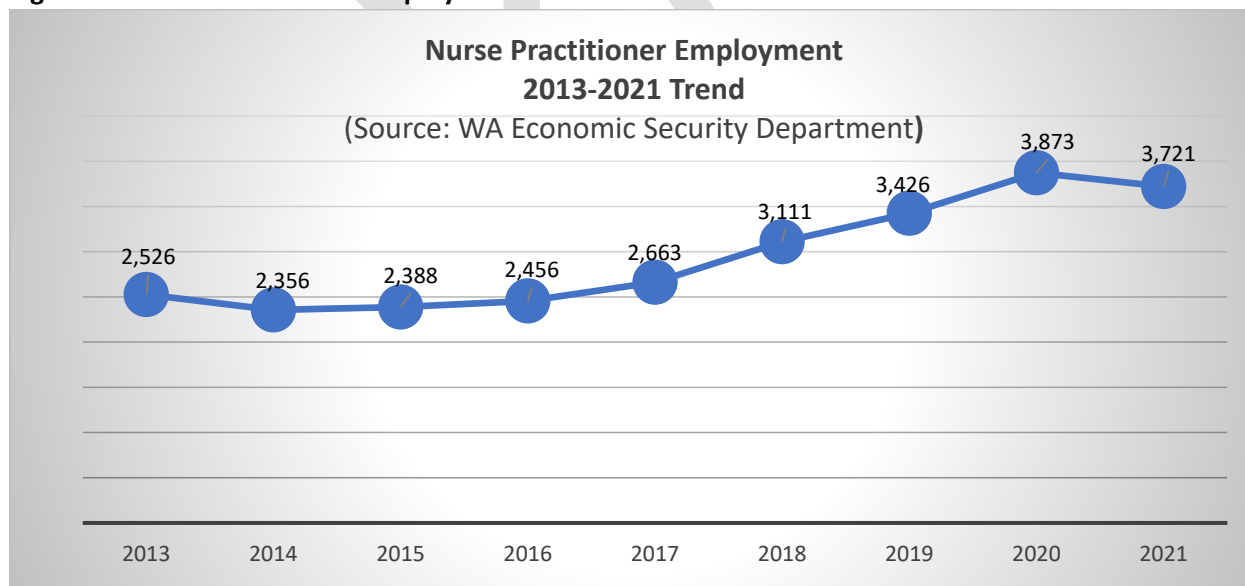
When divided by region, 2021 Nurse Practitioner annual wages were highest in the Longview MSA region (\$142,392) and lowest in the Clarkston and Lewiston MSA (\$96,499). A map depicting regions is available in the appendix.

Figure 57: 2021 Washington Nurse Practitioner Average Wage by Region



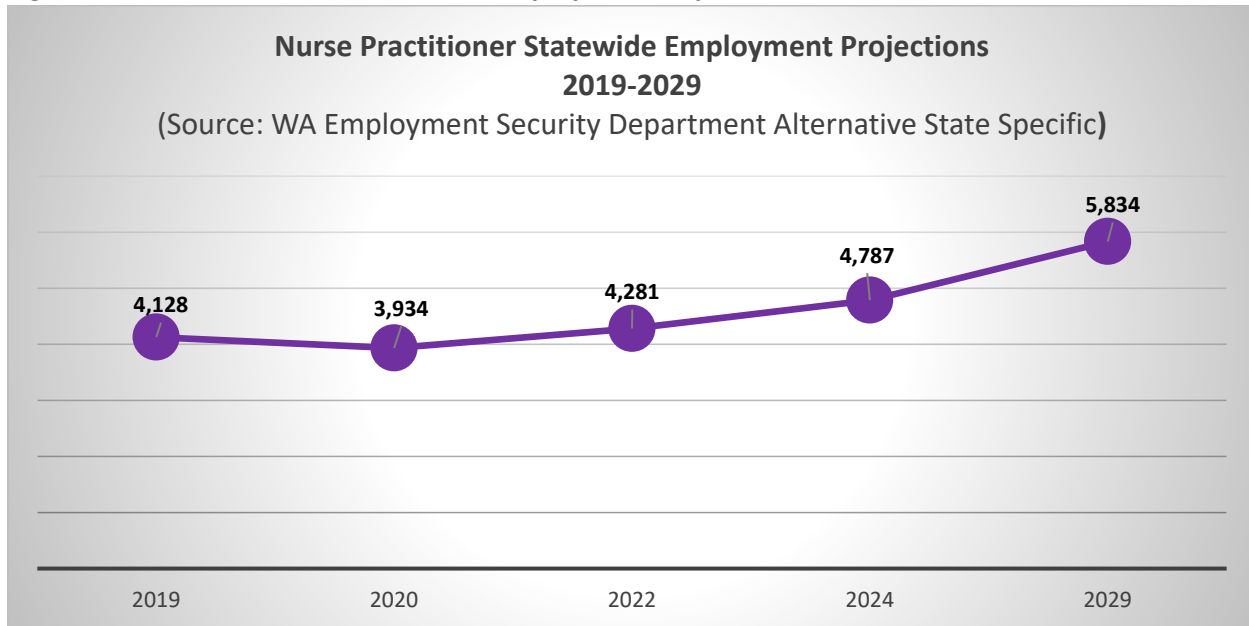
Employment of Nurse Practitioners has increased by 38.26% from 2,526 (2011) to 3,721 (2021).

Figure 58: Nurse Practitioner Employment 2013-2021 Trend



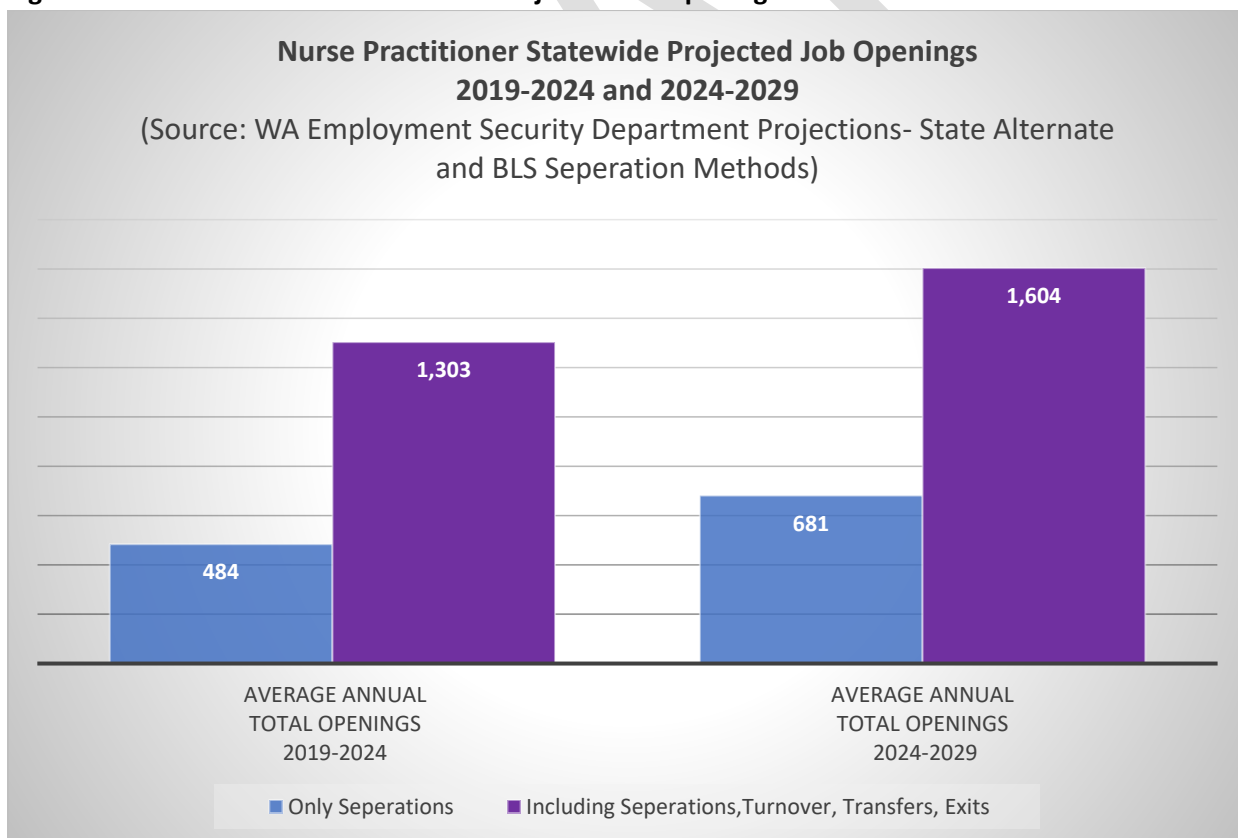
Nurse Practitioner employment is projected to increase by 34.28% from 4,128 (2019) to 5,834 (2029).

Figure 59: Nurse Practitioner Statewide Employment Projections 2019-2029



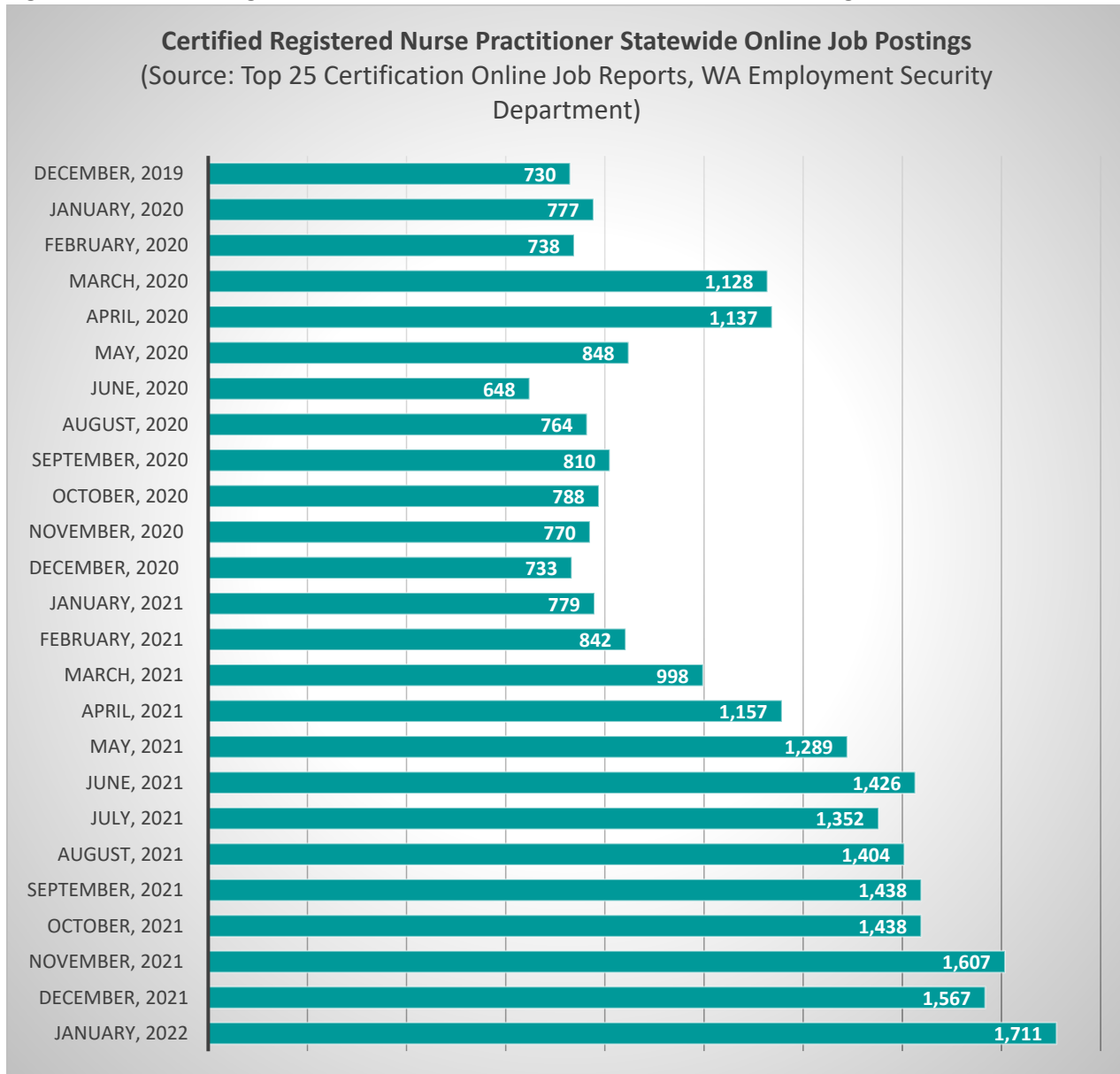
Average Nurse Practitioner annual job openings including separations, turnovers, transfers, and exits is projected to compose 27.22% by 2024 and 27.49% in 2029 openings when divided by total employment.

Figure 60: Nurse Practitioner Statewide Projected Job Openings 2019-2024 and 2024-2029



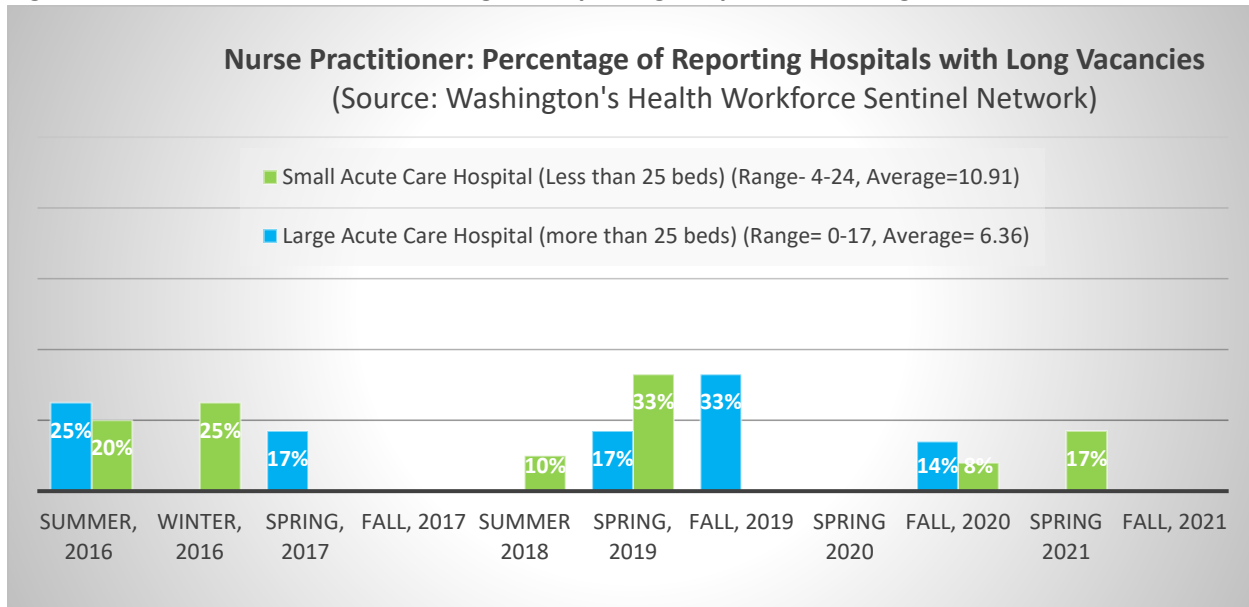
Nurse Practitioner Job Postings increased by 134.39% between December 2019 (730 jobs) and January 2022 (1,711 jobs). Please note that each monthly report reflects the number posted in the last three months.

Figure 61: Certified Registered Nurse Practitioner Statewide Online Job Postings



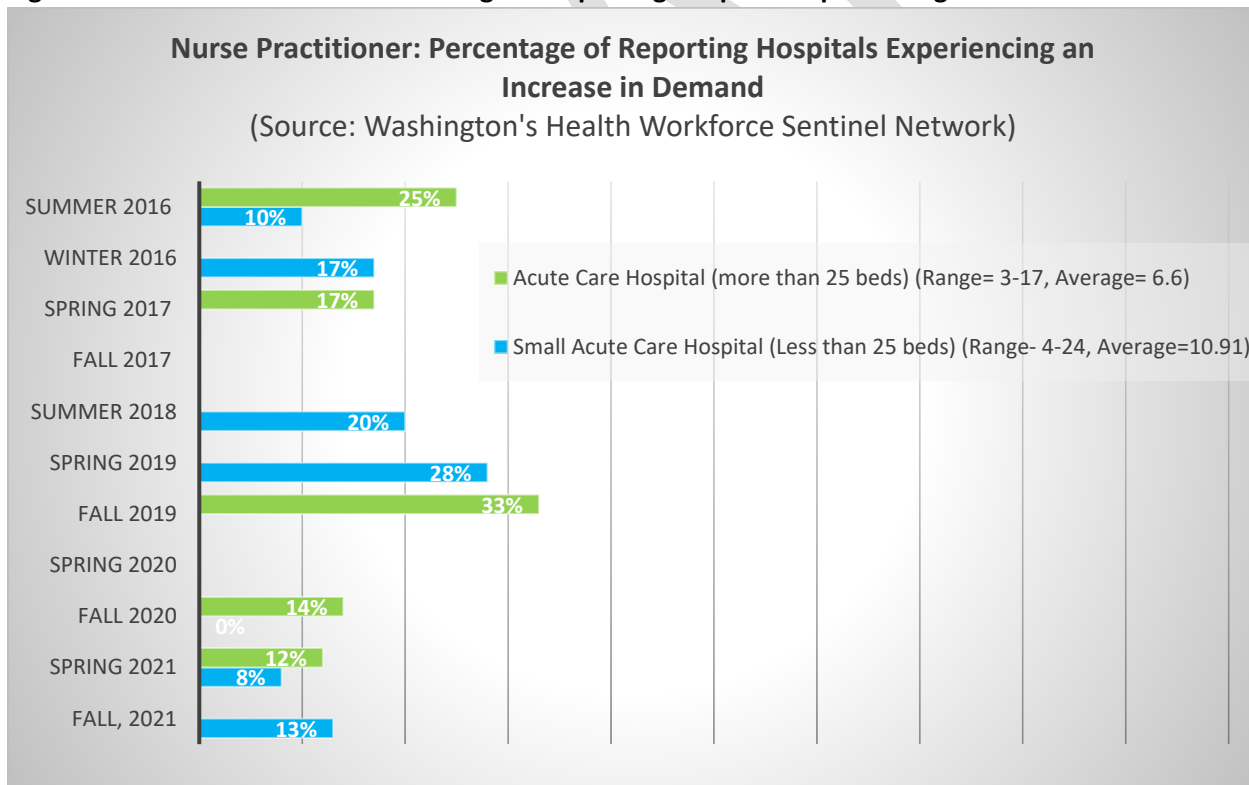
Few Large and Small Acute Care Hospitals reported Long Vacancies of Nurse Practitioners.

Figure 62: Nurse Practitioner: Percentage of Reporting Hospitals with Long Vacancies



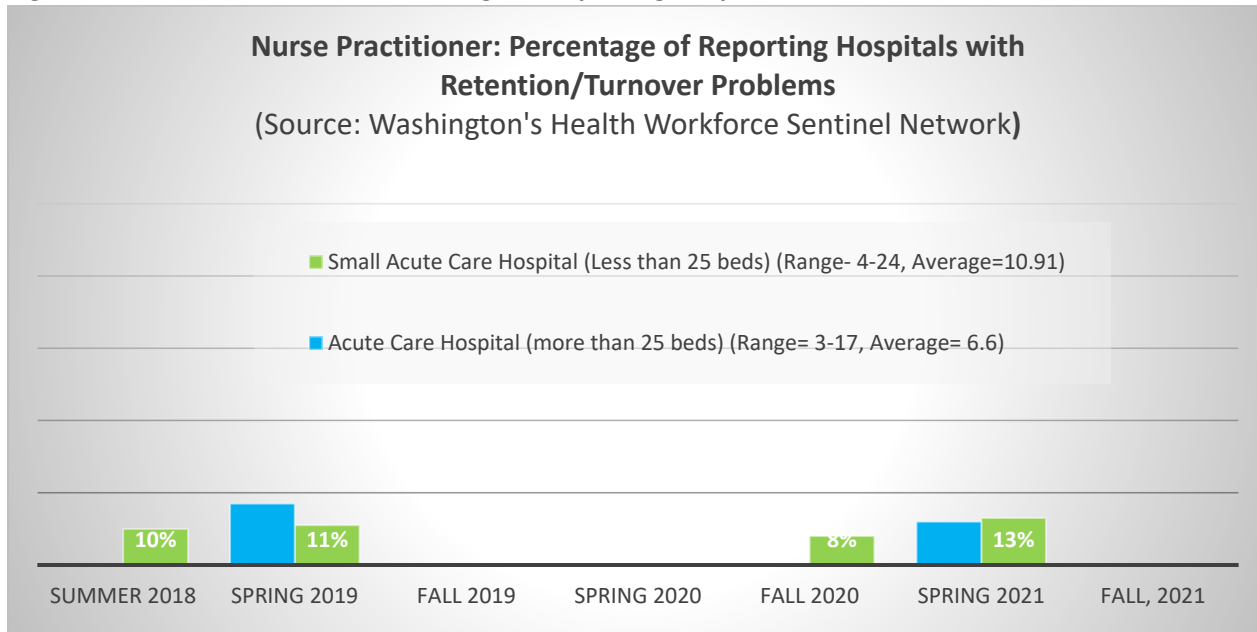
Few Large and Small Acute Care Hospitals reported an Increase in Demand of Nurse Practitioners. One-quarter of Small Acute Care Hospitals reported an Increase in Demand of Nurse Practitioners in Summer of 2016 and 33% in Fall of 2019.

Figure 63: Nurse Practitioner: Percentage of Reporting Hospitals Experiencing an Increase in Demand



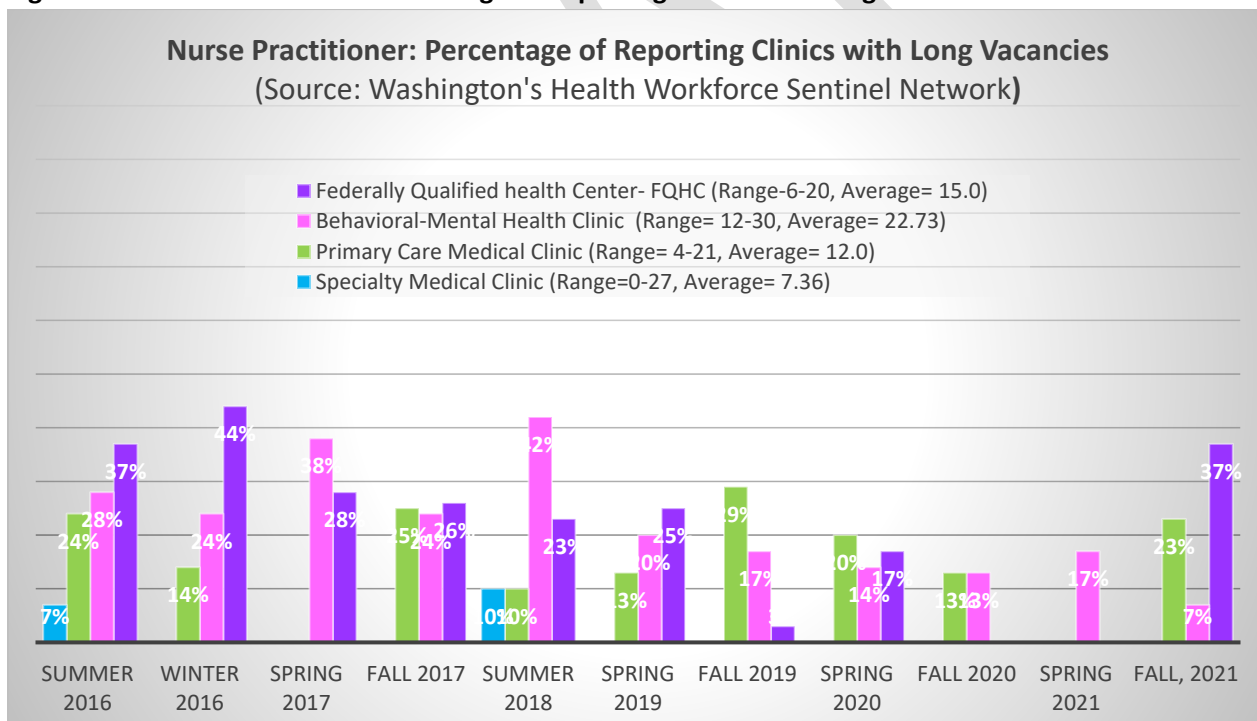
Few Large and Small Acute Care Hospitals reported Retention/Turnover Problems of Nurse Practitioners.

Figure 64: Nurse Practitioner: Percentage of Reporting Hospitals with Retention/Turnover Problems



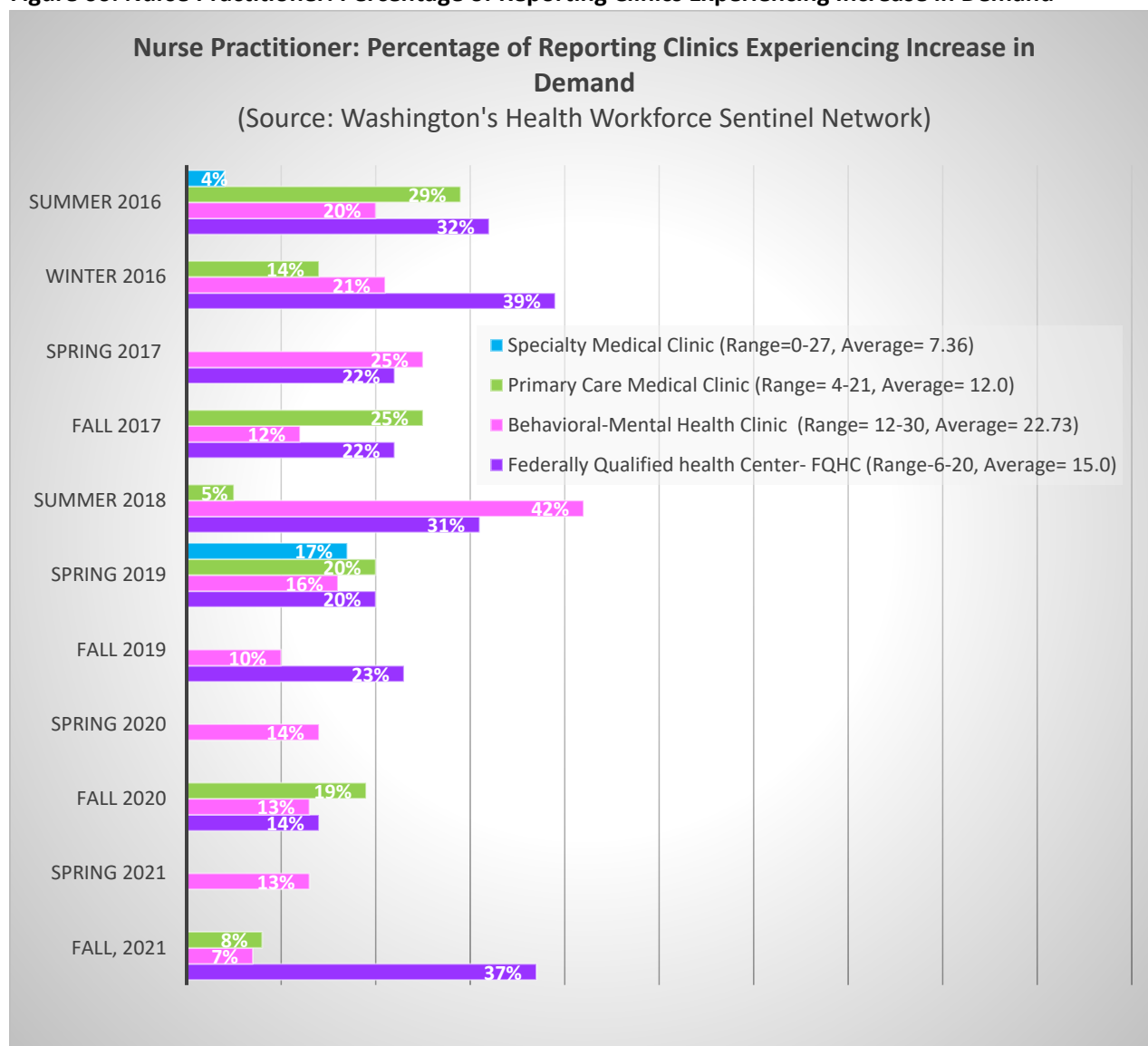
The greatest percentage of Federally Qualified Health Centers and Behavioral-Mental Health Clinics reported Long Vacancies of Nurse Practitioners.

Figure 65: Nurse Practitioner: Percentage of Reporting Clinics with Long Vacancies



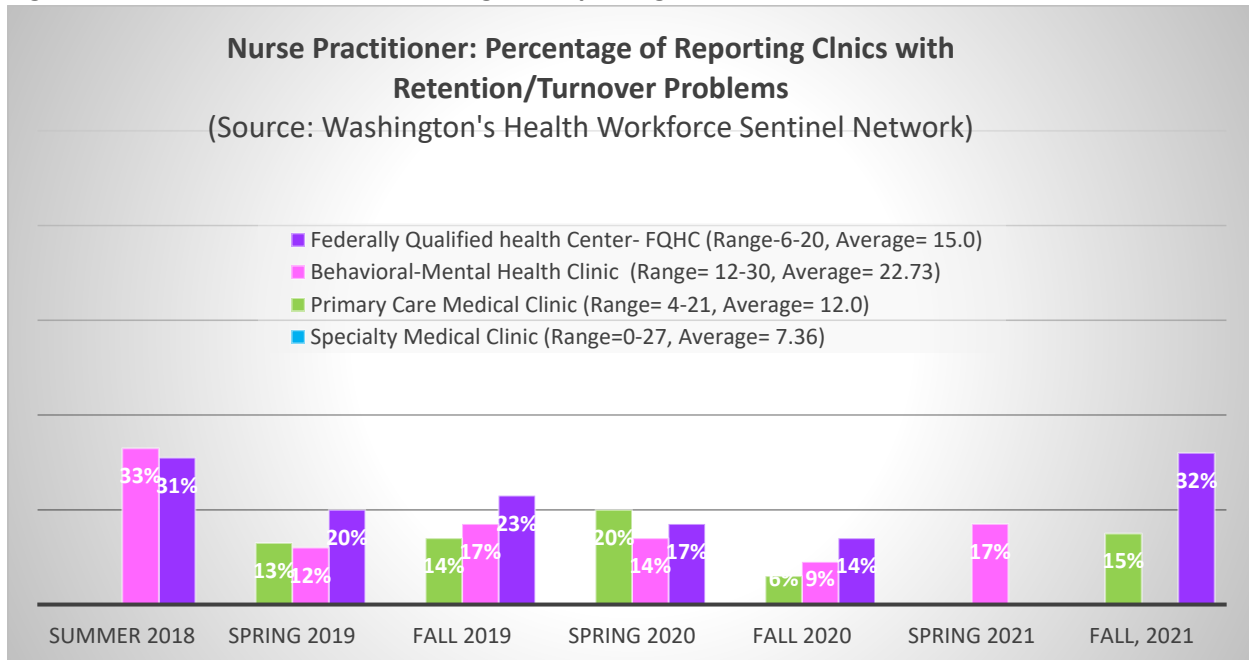
Behavioral-Mental Health Clinics and Federally Qualified Health Centers most frequently reported an Increase in Demand of Nurse Practitioners.

Figure 66: Nurse Practitioner: Percentage of Reporting Clinics Experiencing Increase in Demand



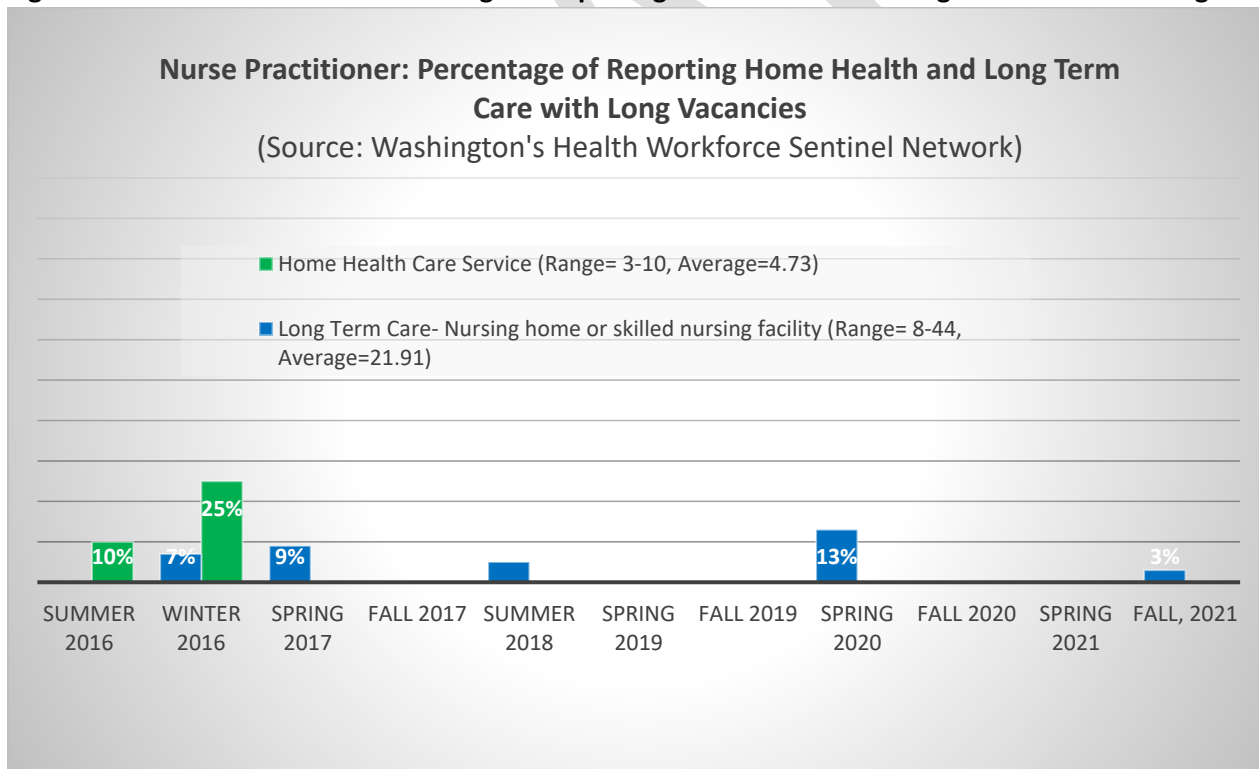
The greatest percentage of Federally Qualified Health Centers and Behavioral-Mental Health Clinics reported Nurse Practitioner Retention Turnover Problems during Summer of 2018 and then Fall of 2021 by FQHCs.

Figure 67: Nurse Practitioner: Percentage of Reporting Clinics with Retention/Turnover Problems



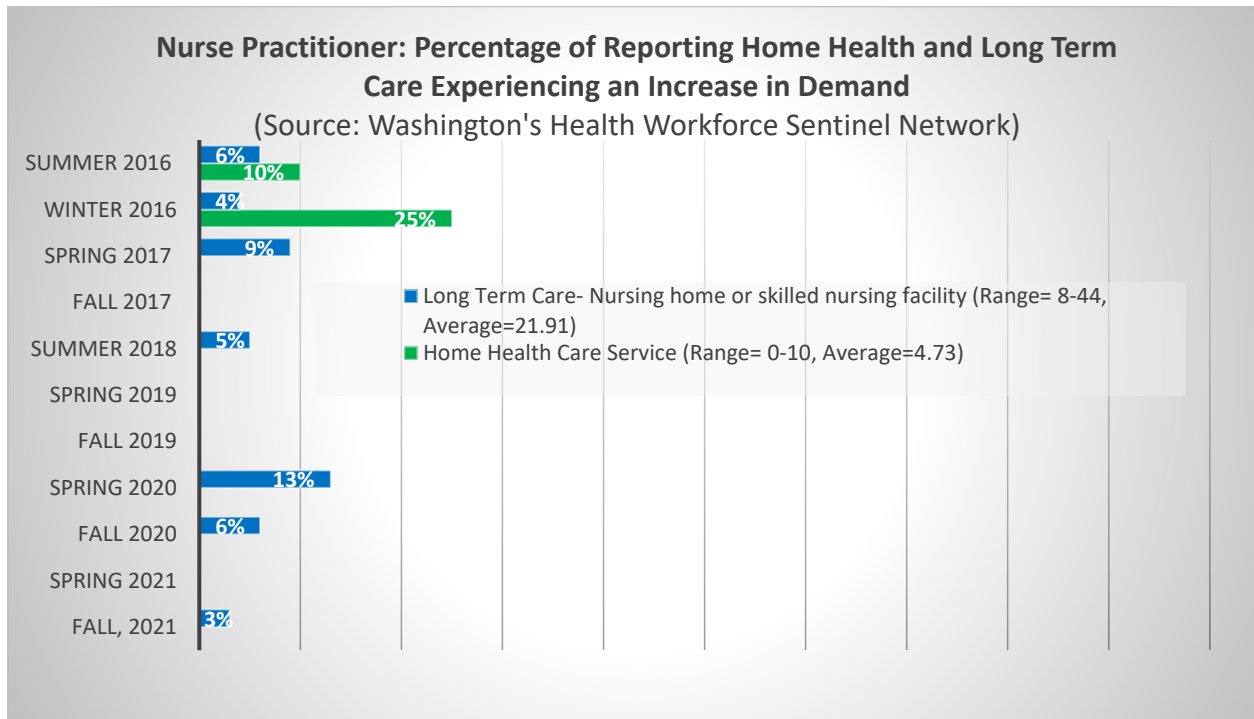
Few Home Health and Long Term Care Facilities reported Long Vacancies of Nurse Practitioners.

Figure 67: Nurse Practitioner: Percentage of Reporting Home Health and Long Term Care with Long Vacancies



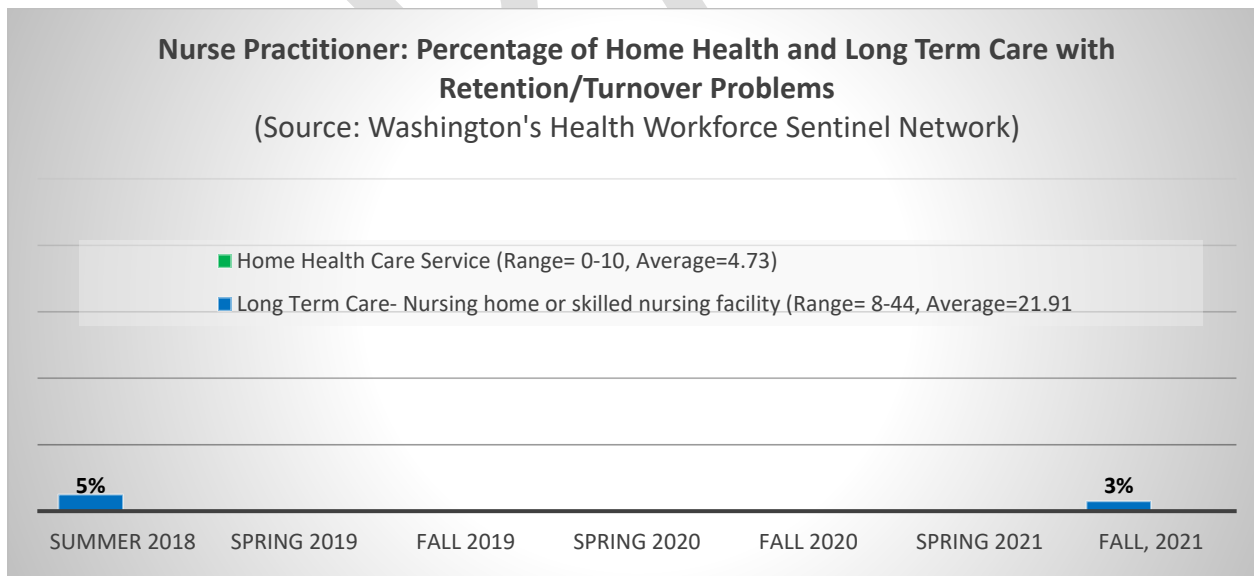
Few Home Health and Long Term Care Facilities reported an Increase in Demand of Nurse Practitioners. Twenty-five percent of Home Health Care Services reported an Increase in Demand in Winter of 2016.

Figure 68: Nurse Practitioner: Percentage of Reporting Home Health and Long Term Care Experiencing an Increase in Demand



Only a few Long-Term Care Facilities reported Long Vacancies of Nurse Practitioners during Summer of 2018 and Fall of 2021.

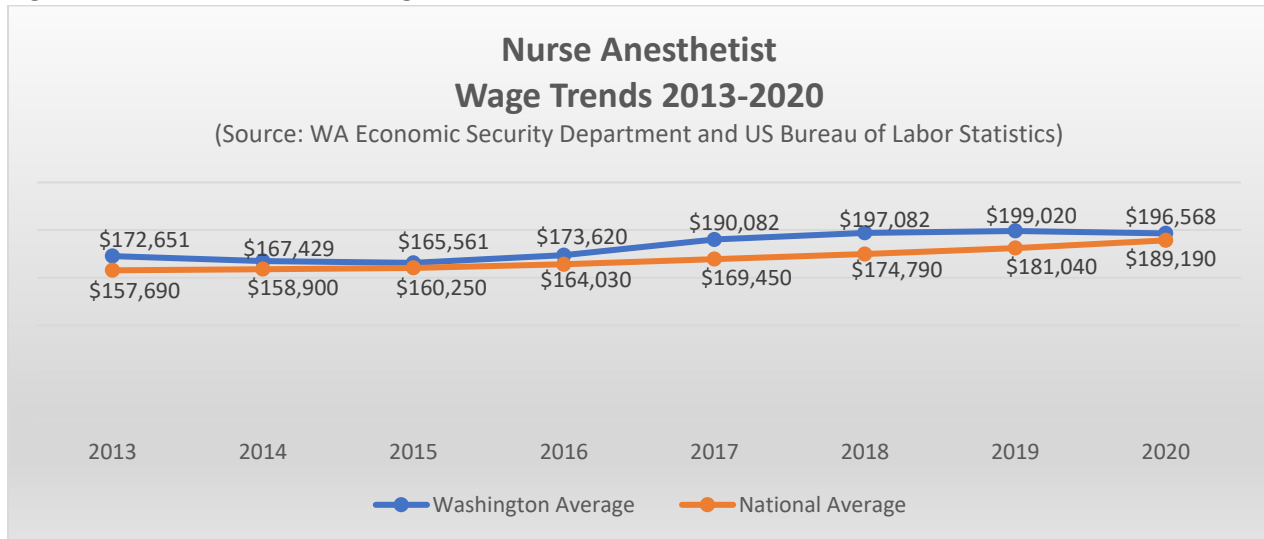
Figure 69: Nurse Practitioner: Percentage of Home Health and Long Term Care with Retention/Turnover Problems



Nurse Anesthetist

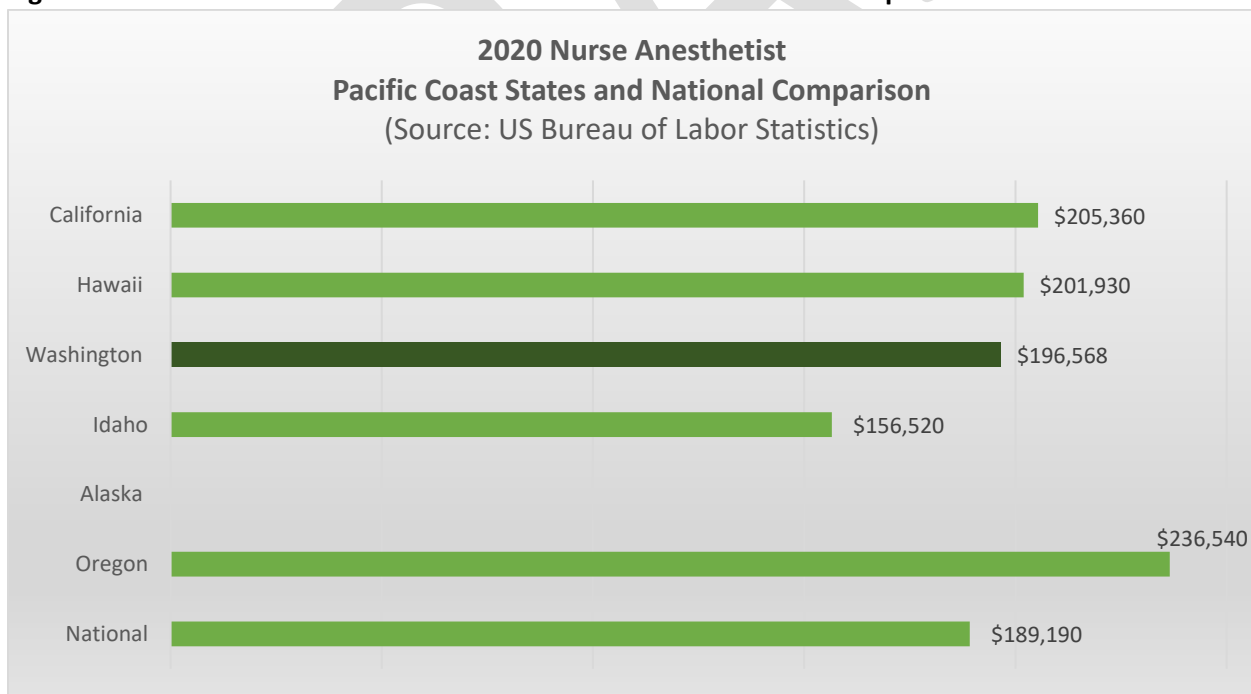
Washington's Nurse Anesthetist annual wages have increased by 13.85% in the last ten years with the greatest difference with the national average in 2017-2019.

Figure 70: Nurse Anesthetist Wage Trends 2013-2020



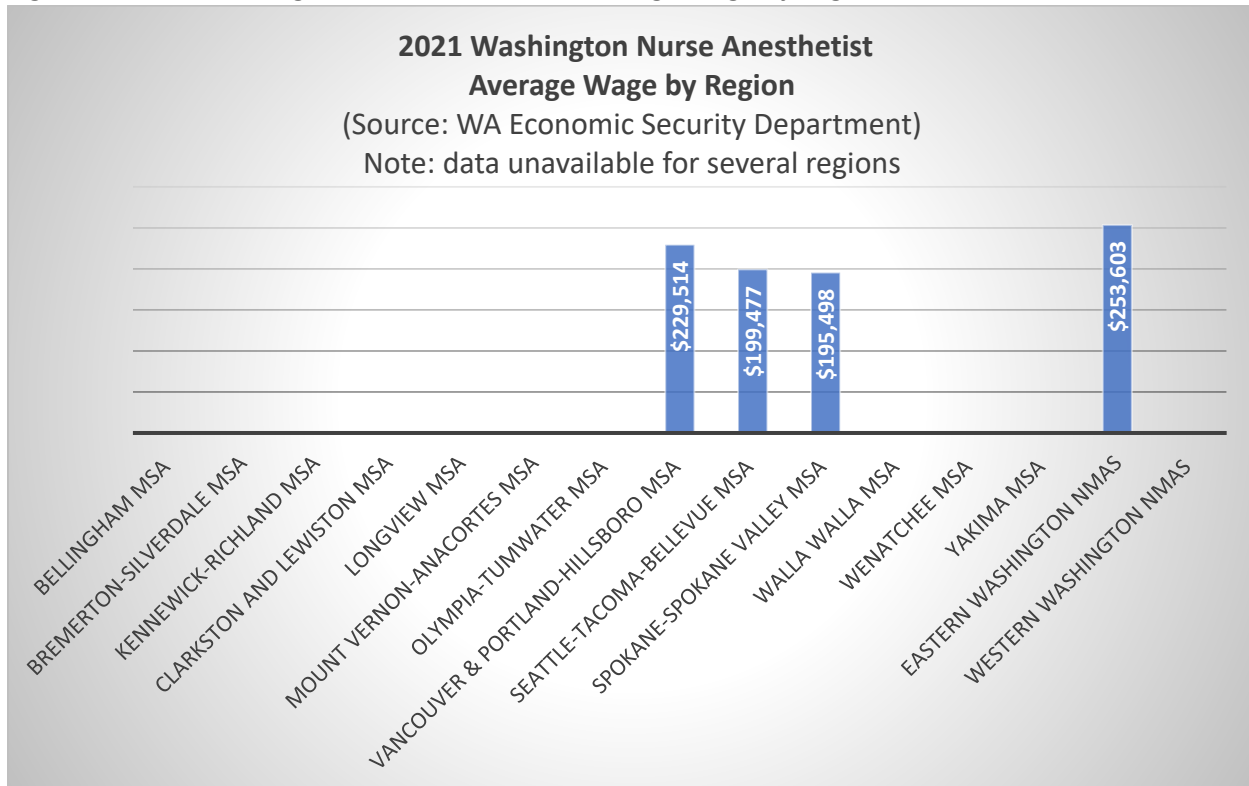
When compared with Pacific Coast states, Oregon (\$236,540), California (\$205,360) and Hawaii (\$201,930) offered higher wages for Nurse Anesthetists in 2020 as compared to Washington State (\$196,568).

Figure 71: 2020 Nurse Anesthetist Pacific Coast States and National Comparison



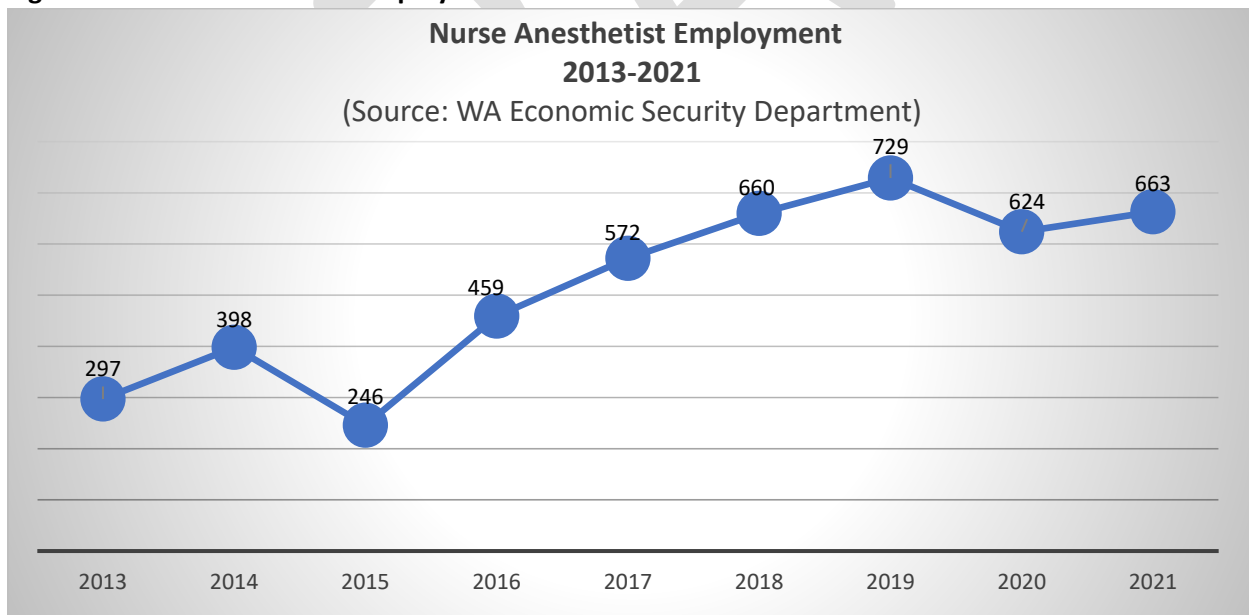
When divided by region, 2021 Nurse Anesthetist annual wages were highest in Eastern Washington NMAAS region (\$253,603) and lowest in the Spokane-Spokane Valley MSA (\$195,698). A map depicting regions is available in the appendix.

Figure 72: 2021 Washington Nurse Anesthetist Average Wage by Region



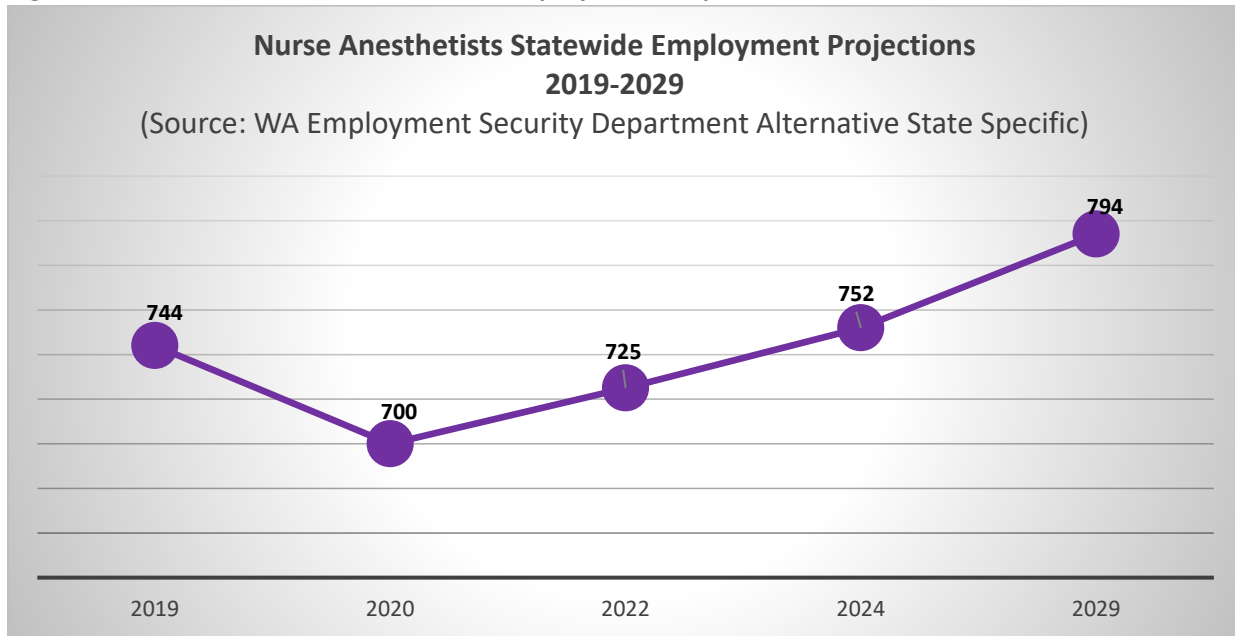
Employment of Nurse Anesthetists has increased by 123.23% from 297 (2011) to 663 (2021).

Figure 73: Nurse Anesthetist Employment 2013-2021



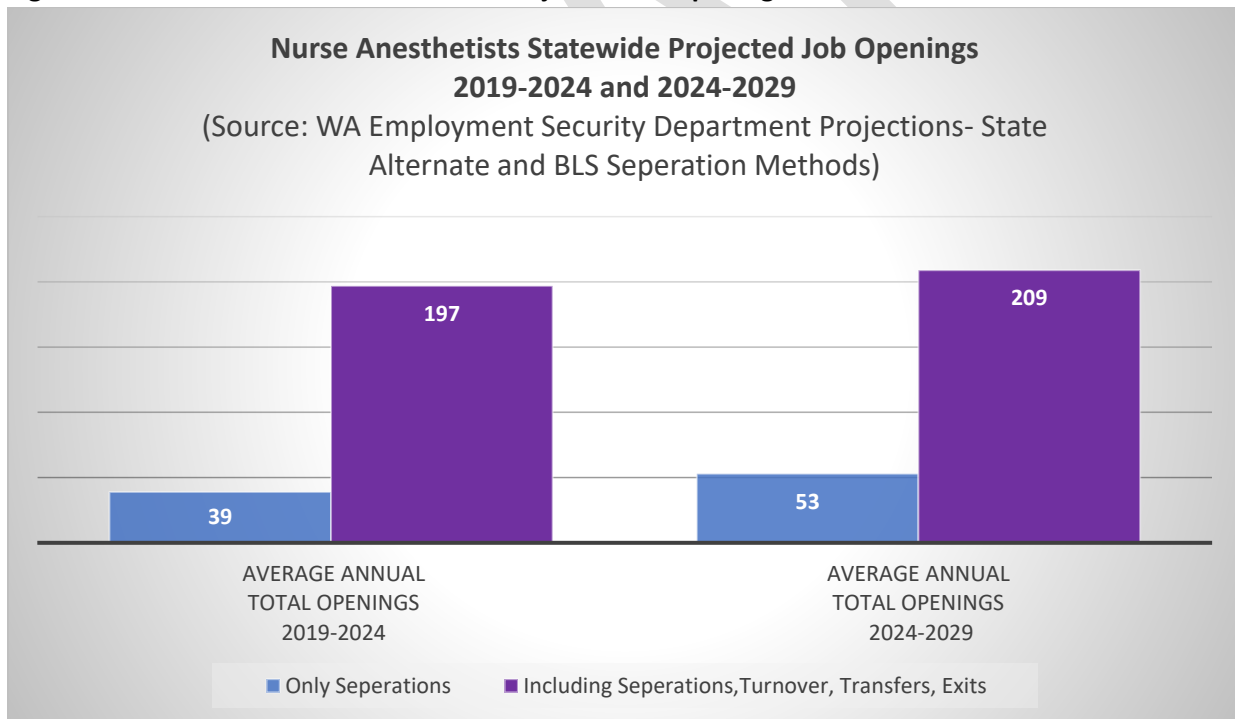
Nurse Anesthetist employment is projected to increase by 6.72% from 744 (2019) to 794 (2029).

Figure 74: Nurse Anesthetists Statewide Employment Projections 2019-2029



Average Nurse Anesthetist annual job openings including separations, turnovers, transfers, and exits is projected to compose 26.20% by 2024 and 26.32% in 2029 openings when divided by total employment.

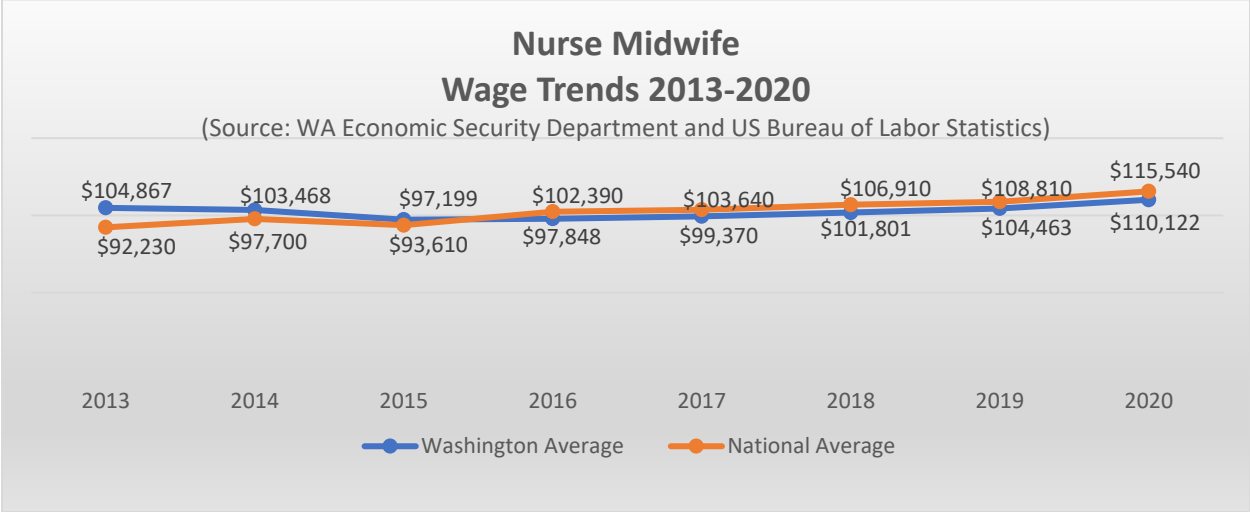
Figure 75: Nurse Anesthetists Statewide Projected Job Openings 2019-2024 and 2024-2029



Nurse Midwife

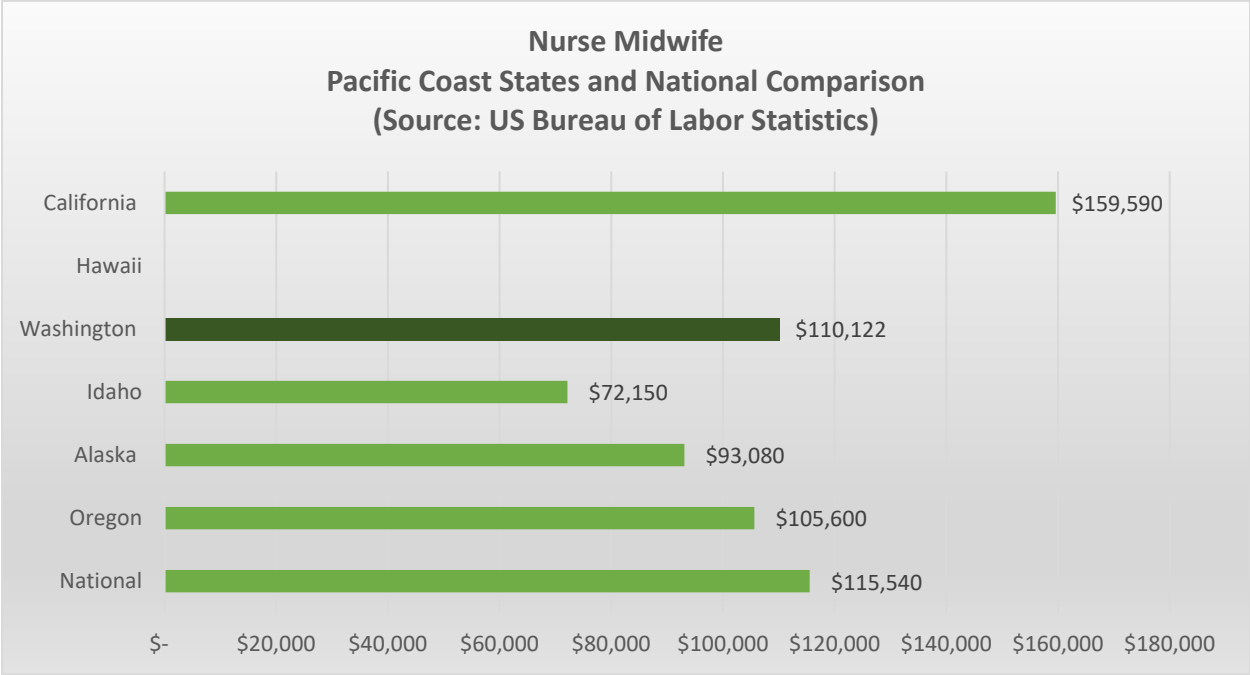
Washington’s Nurse Midwife annual wages have increased by 5.01% with below national average wages from 2016-2020.

Figure 76: Nurse Midwife Wage Trends 2013-2020



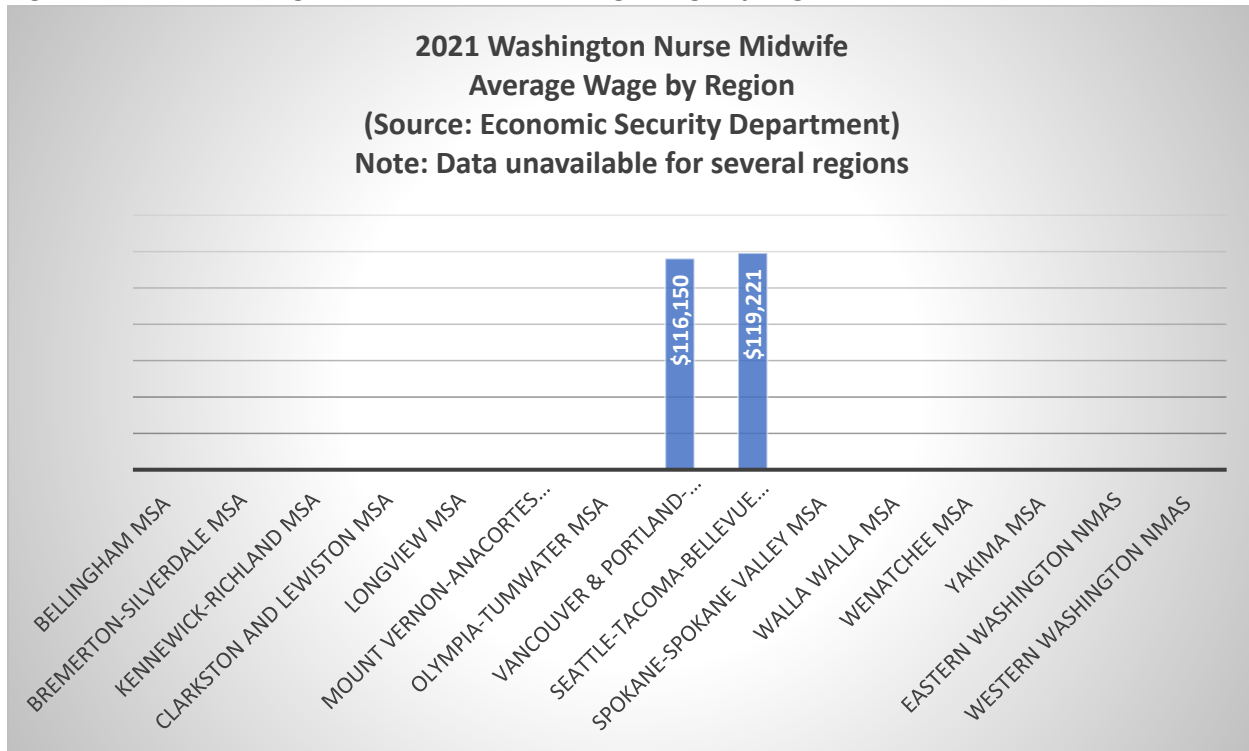
When compared with Pacific Coast states, California (\$159,590) offered higher wages for Nurse Midwives in 2020 as compared to Washington State (\$110,122).

Figure 77: Nurse Midwife Pacific Coast States and National Comparisons



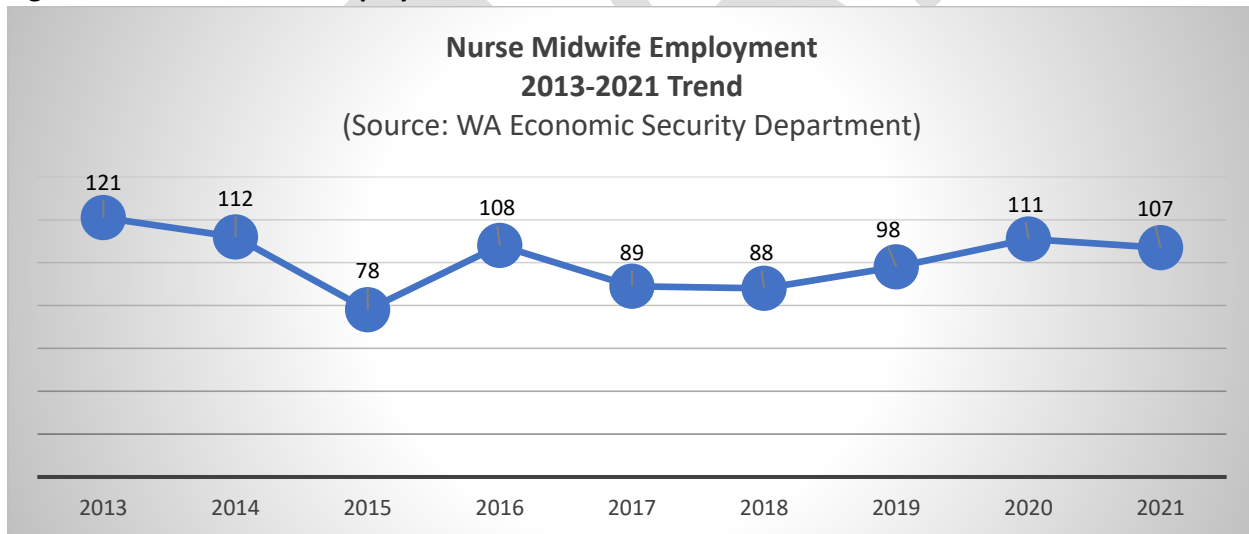
When divided by region, 2021 Nurse Midwife annual wages were highest in Seattle-Tacoma-Bellevue MSA region (\$119,221) and lowest in the Vancouver & Portland-Hillsboro MSA (\$116,150). A map depicting regions is available in the appendix.

Figure 78: 2021 Washington Nurse Midwife Average Wage by Region



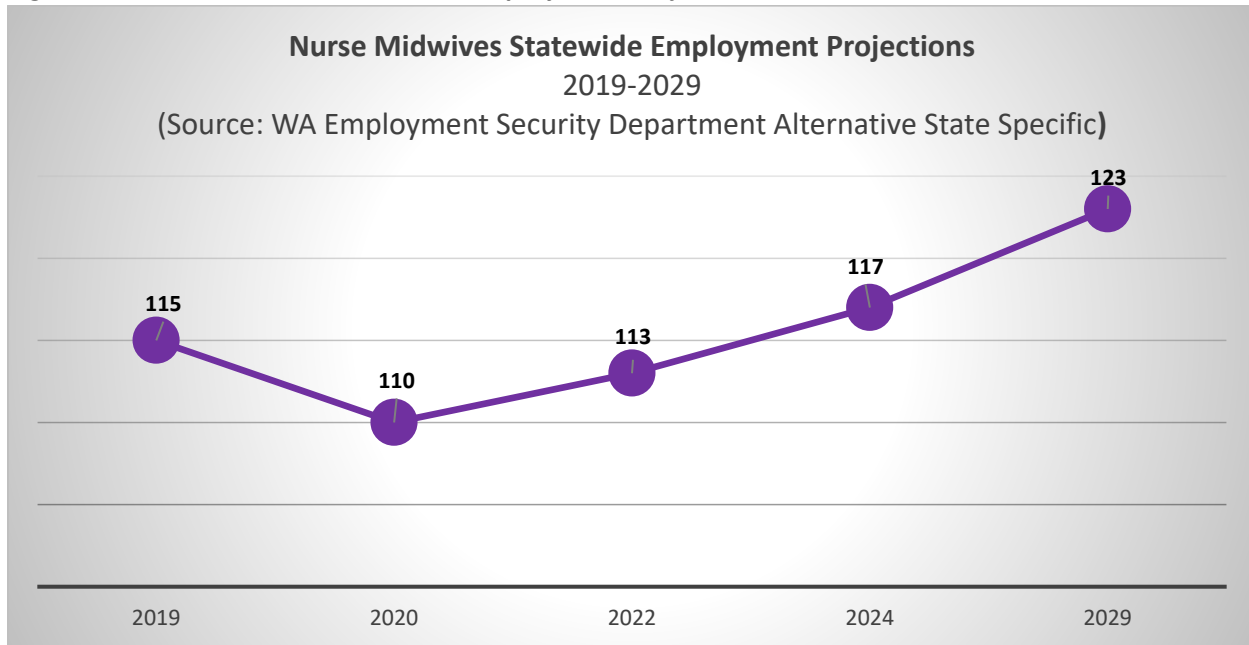
Employment of Nurse Midwives has decreased by 11.57% from 121 (2011) to 107 (2021).

Figure 79: Nurse Midwife Employment 2013-2021 Trend



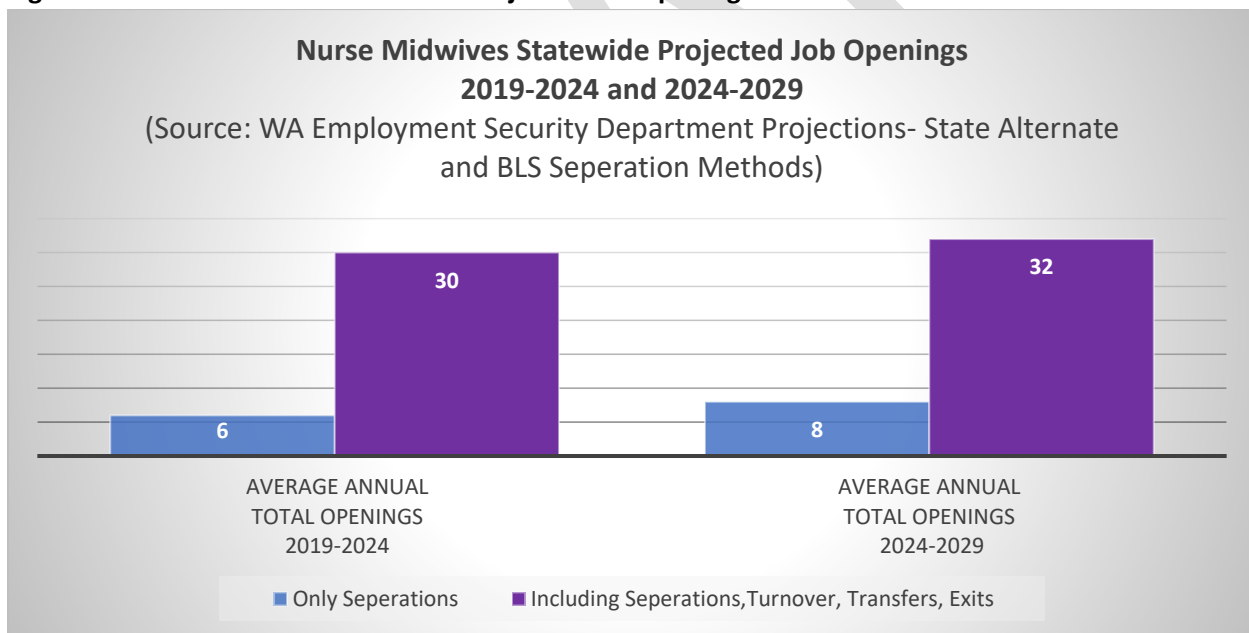
Nurse Midwife employment is projected to increase by 6.96% from 115 (2019) to 123 (2029).

Figure 80: Nurse Midwives Statewide Employment Projections 2019-2029



Average Nurse Midwife annual job openings including separations, turnovers, transfers, and exits is projected to compose 25.64% by 2024 and 26.02% in 2029 openings when divided by total employment.

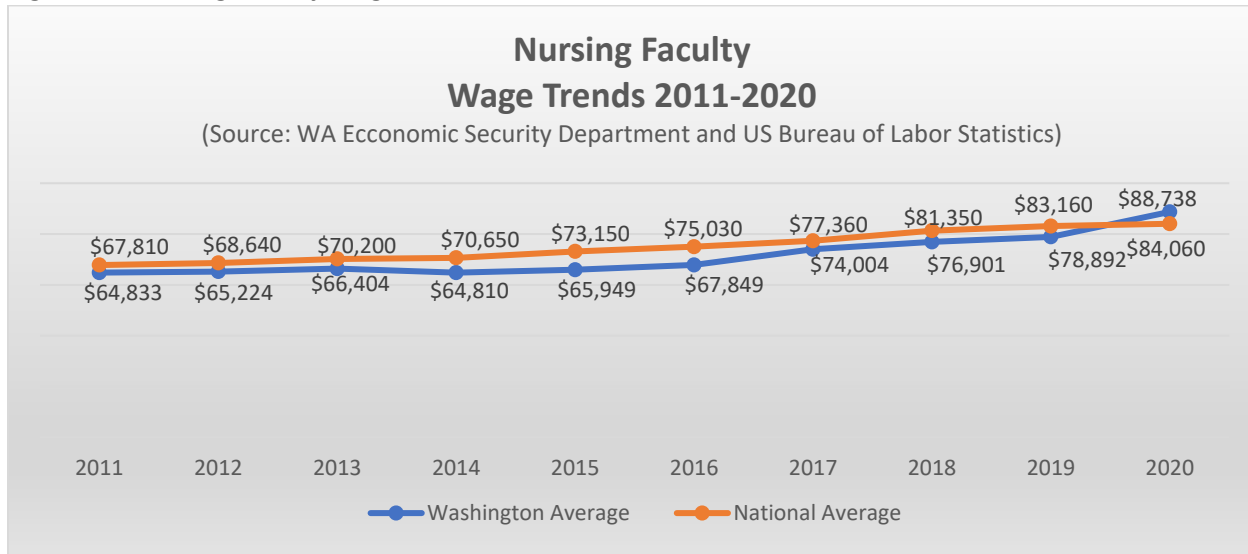
Figure 81: Nurse Midwives Statewide Projected Job Openings 2019-2024 and 2024-2029



Nursing Faculty

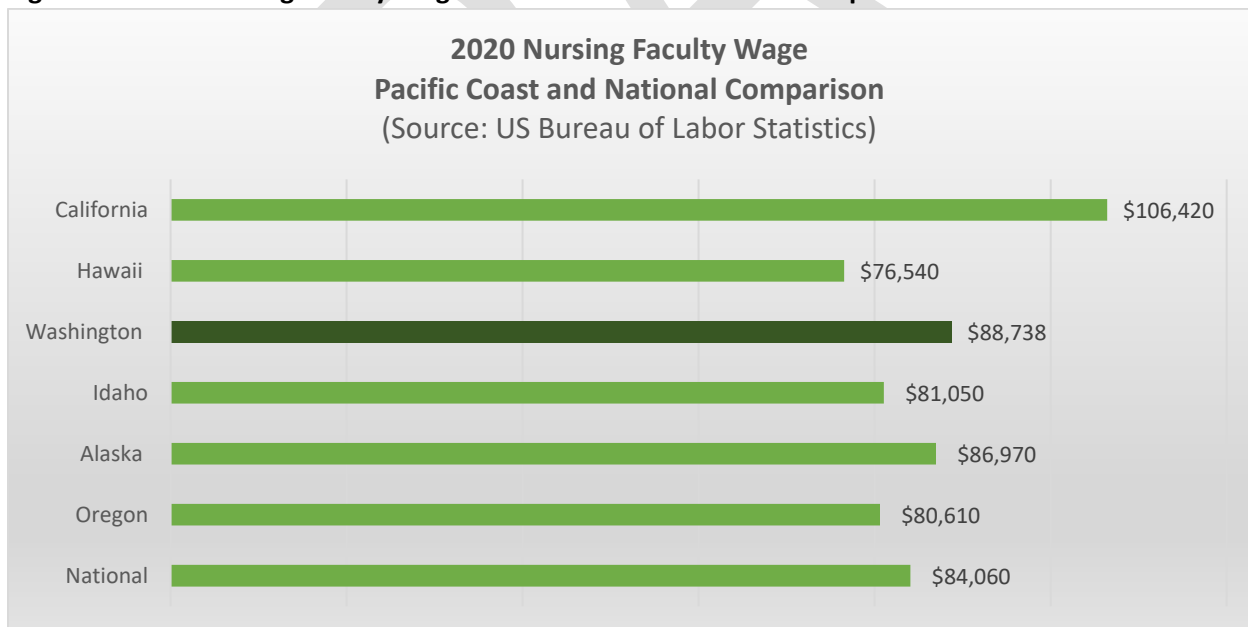
Washington's Nursing Faculty annual wages have increased by 36.87% with below national average wages from 2011 until 2019.

Figure 82: Nursing Faculty Wage Trends 2011-2020



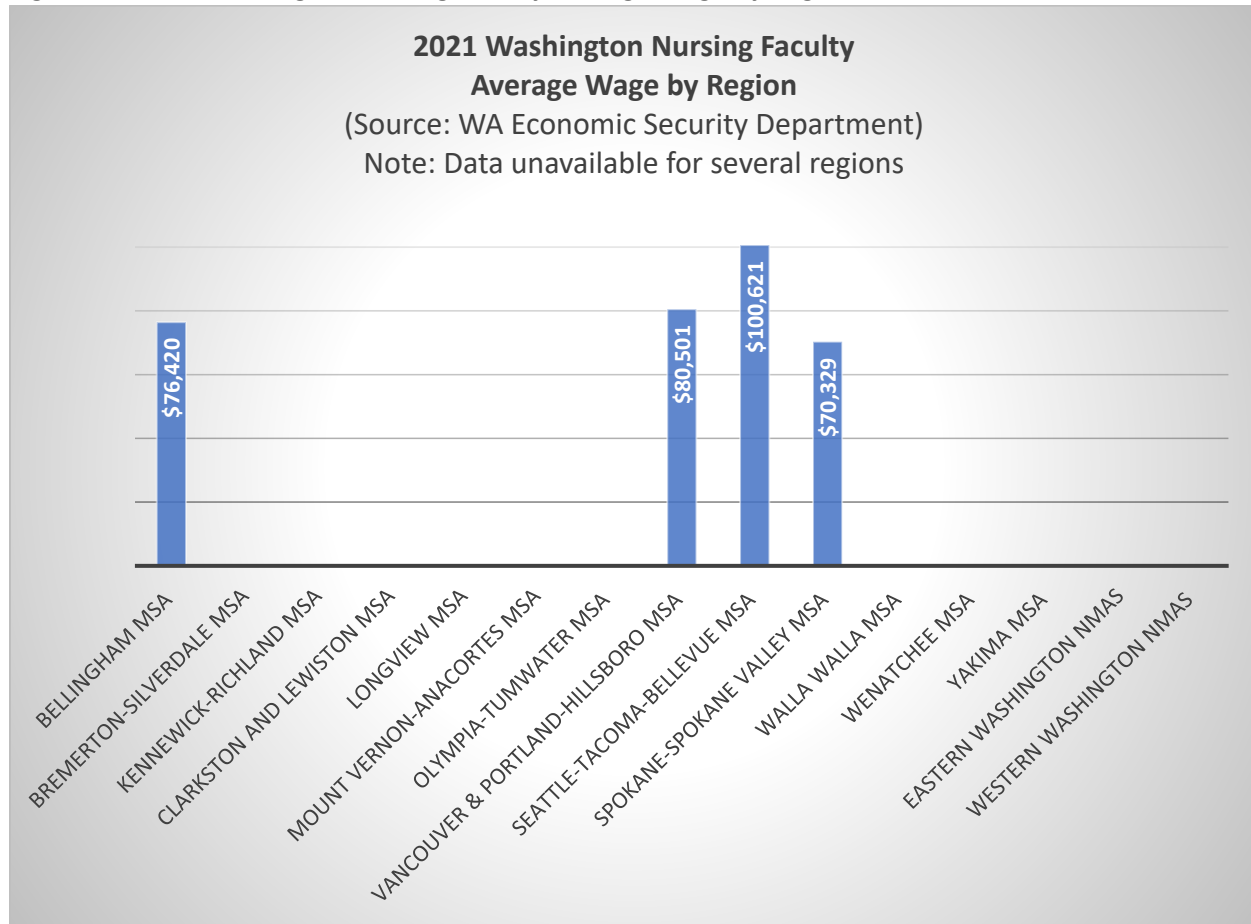
When compared with Pacific Coast states, California (\$106,420) offered higher wages for Nursing Faculty in 2020 as compared to Washington State (\$88,738).

Figure 83: 2020 Nursing Faculty Wage Pacific Coast and National Comparisons



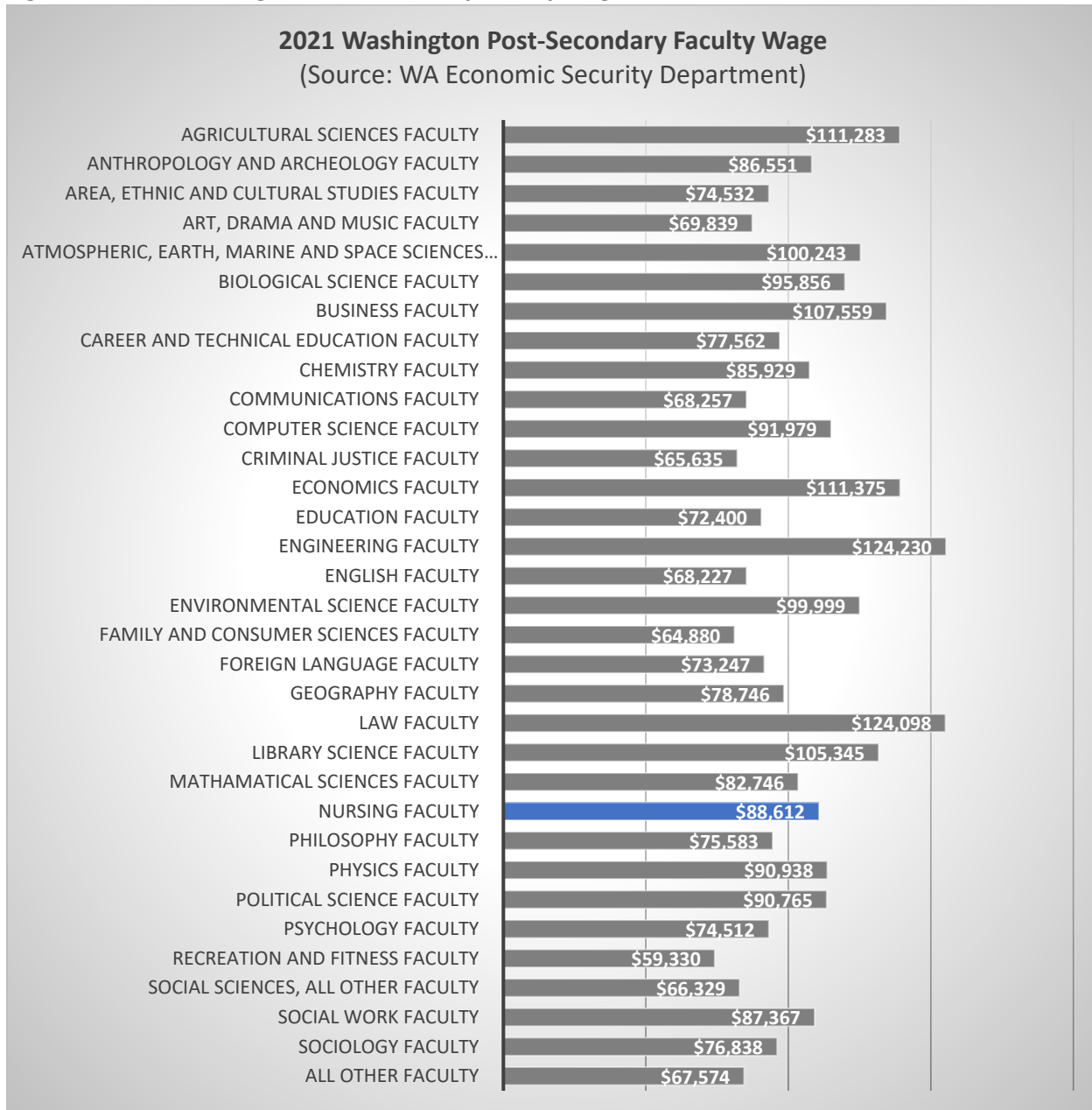
When divided by region, 2021 Nursing Faculty annual wages were highest in Seattle-Tacoma-Bellevue MSA region (\$100,621) and lowest in the Spokane-Spokane Valley MSA (\$70,329). A map depicting regions is available in the appendix.

Figure 84: 2021 Washington Nursing Faculty Average Wage by Region



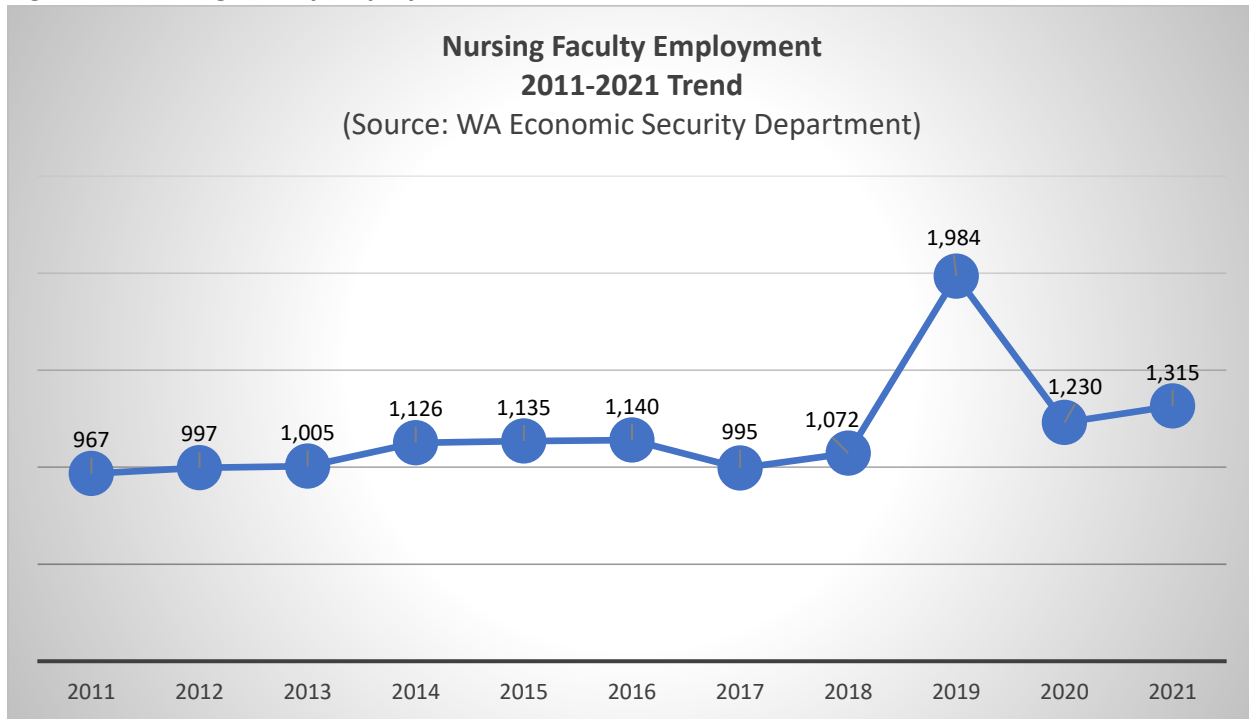
When compared with other Post-Secondary Faculty Wages in Washington, Nursing Faculty wages (\$88,612) were lower than multiple other disciplines faculty.

Figure 85: 2021 Washington Post-Secondary Faculty Wage



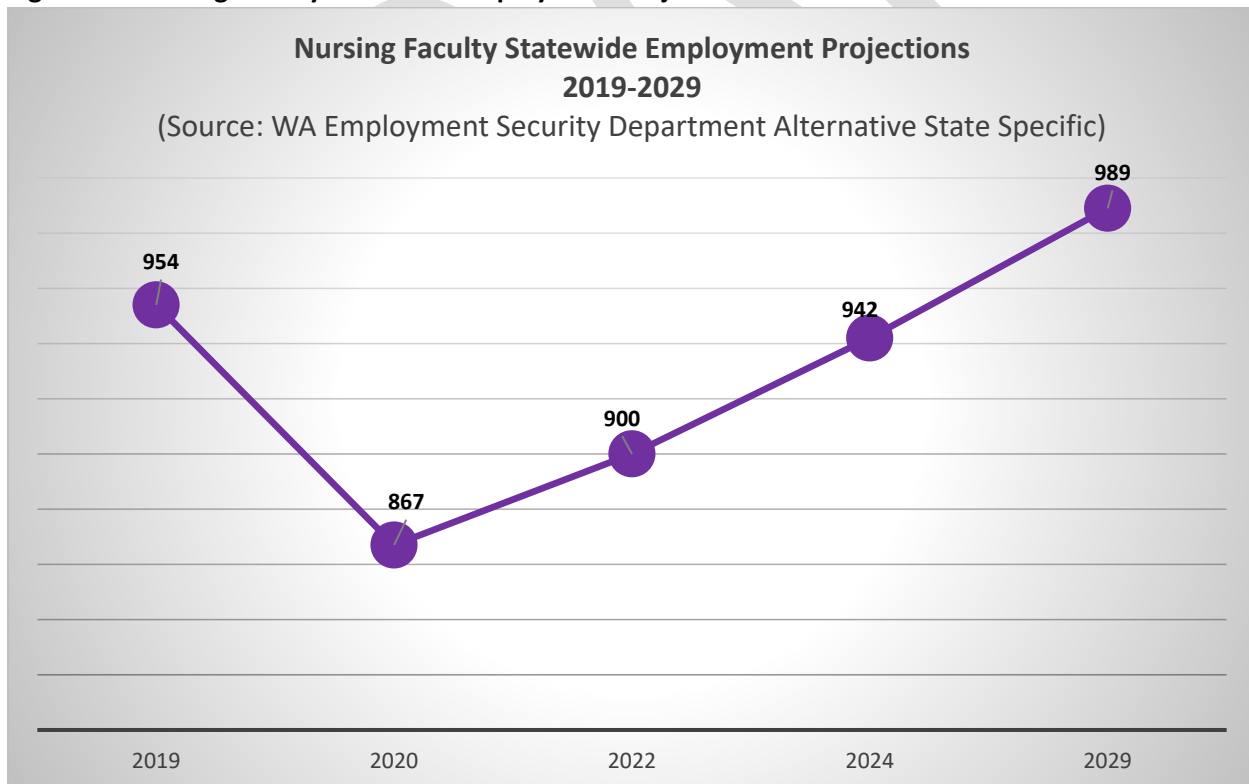
Employment of Nursing Faculty has increased by 35.99% from 967 (2011) to 1,315 (2021).

Figure 86: Nursing Faculty Employment 2011-2021 Trend



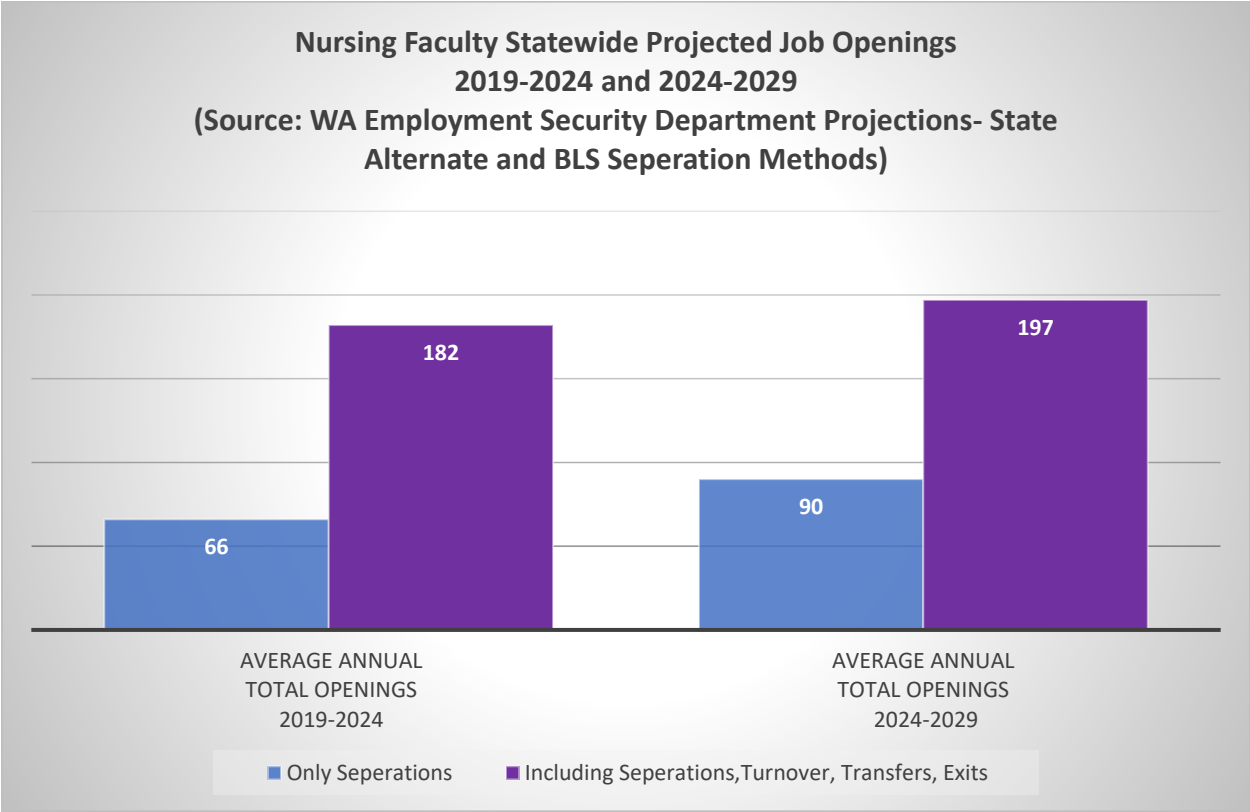
Nursing Faculty employment is projected to increase by 3.67% from 954 (2019) to 989 (2029).

Figure 87: Nursing Faculty Statewide Employment Projections 2019-2029



Average Nursing Faculty annual job openings including separations, turnovers, transfers, and exits is projected to compose 19.32% by 2024 and 19.92% in 2029 openings when divided by total employment.

Figure 88: Nursing Faculty Statewide Projects Job Openings 2019-2024 and 2024-2029



Policy Recommendations from Stakeholder Groups

DRAFT

Future Studies

In March 2021, WCN conducted a stakeholder survey to inform the WCN Research Agenda. The table below lists the stakeholder recommendations for demand-related research topics in the first column. The Washington State Nursing Demand Data Environment Scan summarizes results analyzed and fulfills 38% of the listed recommendations from stakeholders. The Future Studies column lists recommendations where data was not readily available or recommendations beyond the scope of this report.

For example, many of the recommendations could be collected through an employer demand survey following the National Forum of State Nursing Workforce Centers Demand Minimum Data set https://nursingworkforcecenters.org/wp-content/uploads/2021/12/Nurse_Demand_MDS_RevisedDecember2020.pdf with additional specific questions.

Table 2: Stakeholder Feedback and Future Studies

2021 WCN Research Stakeholder Survey: Demand Recommendations	2022 WCN Demand Report	Potential Future Studies
CRNA Needs in the Future	Included in report	Employer Survey for Community Health, Public Health and School Nursing. Include vacancies, turnover rates and salaries by specialty.
Demand Data for nurse Types, such as Sentinel Network	Included from Sentential network and Labor data	
Community Health Nursing, Public Health Nursing, School Nursing. Turnover rates by specialty, including school nurse and public health nurse.	Data not available.	
Data concerning comparison of BIPOC nurses employed to various employers throughout the city and the state. Hiring process of the various employers in relation to BIPOC staff.	Data not available.	Employer survey collecting diversity data including salaries.
Support for education attainment like tuition reimbursement by practice setting, why nurses chose a particular practice setting to work, factors that would make certain practice settings more attractive to nurses seeking work	Data not available	Employer survey for settings (hospital, long-term care, ambulatory care, home health etc.) collecting vacancy, turnover, travel nurse data and information about recruitment and retention strategies, skills needed and recognitions strategies. Include question about new nurse wages and data about direct care nurses versus nurses in leadership

		positions. Could examine magnet versus non-magnet.
Demand data for ARNPs	Included in report	
Where are there more nurses than jobs and where are there employment opportunities not being filled in any practice setting?	Job openings included in report-regional data available but included in report. Would also need a comparison with supply by region.	
Nursing supply and demand with rapidly changing nursing workforce and modern healthcare.	Not included in report. Follow-up documents will include both supply and demand information.	
Salaries of nursing faculty across the state of WA.	Included in report	
Continue to provide employment data	Included in report.	
Racial diversity and salaries	Data not available.	
How many open positions are there and what is the current status of our agency nurses? Are the agency nurses WA residents or from out of state with WA licenses	Data not available.	
Demand for RNs across settings, not just acute care	Labor Data for all settings together included in the report, Sentinel data across settings included in report.	
Hourly and salary in regard to cost of living in WA state	Salary included in report. Comparison with cost of living not calculated.	
Nursing needs (vacant positions)	Data not available.	
WA state and National data	Salary data for WA and National included in the report.	
Highest wage for new nurses, need vs. demand with area	New nurse wage not available.	
Employer demand in acute care settings. How many essential positions are open, how long they have been open, challenges, projected outcomes from our current state	Setting specific demand numbers not available.	
Salaries of School nurses	Data not available.	

If can get turnover data that would be good - both for direct care nurses as well as nurses in leadership positions	Data not available.	
How many school nursing positions go unfilled- how many nurses are working in job that they are overqualified for?	Data not available.	
The usual, but also information about needs to help retain the incumbent nurse workforce (e.g., new skills needed, ways to recognize and support professional development)	Data not available.	
Where demand is regionally and by setting, correlation w job satisfaction / pay	Data not available.	
Magnet facilities versus non magnet facilities	Data not available.	
Consistent dashboards would be so helpful so we can follow industry trends of shortages, surpluses, use of travelers, use of LPN and NACs in addition to RN and ARNPs. Consistency would really help us monitor some of these cyclical trends.	Dashboards are under development. Traveler data is not available.	
Nursing practice areas and employment in different practice areas, shortages, supply and demand for areas of nursing practice	Specific nursing practice area employment data is not available.	

References

- Buchan, J. Catton, H. & Shaffer, F. (2022). Sustain and Retain in 2022 and Beyond: The Global Nursing Workforce and the COVID-19 Pandemic. International Center on Nurse Migration <https://www.intlnursemigration.org/wp-content/uploads/2022/01/Sustain-and-Retain-in-2022-and-Beyond-The-global-nursing-workforce-and-the-COVID-19-pandemic.pdf>
- Employment Security Department: Labor Market and Analysis: Long Term Alternative Occupational Employment Projections July 2021 <https://esd.wa.gov/labormarketinfo/projections>
- Employment Security Department: Labor Market and Analysis: Long Term BLS Occupational Separations Method Employment Projections July 2021 <https://esd.wa.gov/labormarketinfo/projections>
- Employment Security Department: Labor Market and Analysis: Occupational Employment and Wage Estimate Reports 2011-2021 <https://esd.wa.gov/labormarketinfo/report-library>
- Employment Security Department: Labor Market and Analysis: Monthly Top 25 Certifications from Online Ads Data from December 2019-January 2022 <https://esd.wa.gov/labormarketinfo/report-library>
- NSI Nurse Staffing Solutions (2021) 2021 NSI National Health Care Retention and RN Staffing Report https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf
- Organization of Nurse Leaders (2022). The Nursing Workforce Challenges and Solutions during the COVID Era. https://onl.memberclicks.net/assets/docs/ONLWorkforceReportJan2022/ONL_Workforce_Report_Jan2022.pdf
- U.S. Bureau of Labor Statistics May 2020 Occupation Profiles https://www.bls.gov/oes/current/oes_stru.htm
- Washington's Health Workforce Sentinel Network Facility Findings Summer 2016-2021 <https://wa.sentinelnetwork.org/findings/facility/>

Appendix A:

Occupational Employment Statistics: WA Employment Security Department

Occupational Employment Statistics (OES) is a program of the U.S. Department of Labor, Bureau of Labor Statistics (BLS). This federal-state cooperative program produces employment and wage estimates for nearly 867 occupations. Each year, the Employment Security Department's Labor Market and Economic Analysis division compiles occupational employment and wage estimates for Washington state. The data are presented statewide, for metropolitan statistical areas (MSAs) and for nonmetropolitan areas (NMAs). All data are at the cross-industry level. For more information go to <https://esd.wa.gov/labormarketinfo/occupations>

Estimates for a given reference period are based on a sample of 1.1 million business establishments collected in six semiannual panels for three consecutive years. Each year, two new semiannual survey panels are added, and the two oldest panels are dropped. Older panel wage data are aged to reflect the reference date of the estimates, and employment data are benchmarked to reflect known employment for the average of the two most recent panels. Using six data panels to produce each set of estimates allows data to be produced at very detailed levels of occupation, geography, and industry, but also means that sudden changes in staffing patterns or wages are reflected in the OEWS estimates only gradually.

Employment projections provide job seekers, policy makers and training providers an idea of how many jobs exist within industries and occupations, how the number of jobs are expected to change over time and what the future demand for workers will be. Projections show expected change in employment by industry and occupation, the current and projected employment counts, estimated growth rates and average annual openings.

Two sets of estimates for average annual job openings is calculated. One set is calculated using the job opening rates the Bureau of Labor Statistics (BLS) provides and the other one using Washington state specific job opening rates that ESD creates. The former are referred as BLS occupational separations rates and the latter as Washington state alternative occupational rates.

The separations method measures job openings created by workers who leave occupations and need to be replaced by new entrants. This method data is based on national survey data. In this method, workers who exit the labor force or transfer to an occupation with a different Standard Occupational Classification (SOC) are identified as generating separations openings at the national level. This means that jobs filled by interstate movement, when workers stay within occupations, are not identified as new jobs. [Click here for separations information.](#) This BLS method does not track turnover within occupations. Turnovers within occupations occur when workers stay in occupations, but change employers.

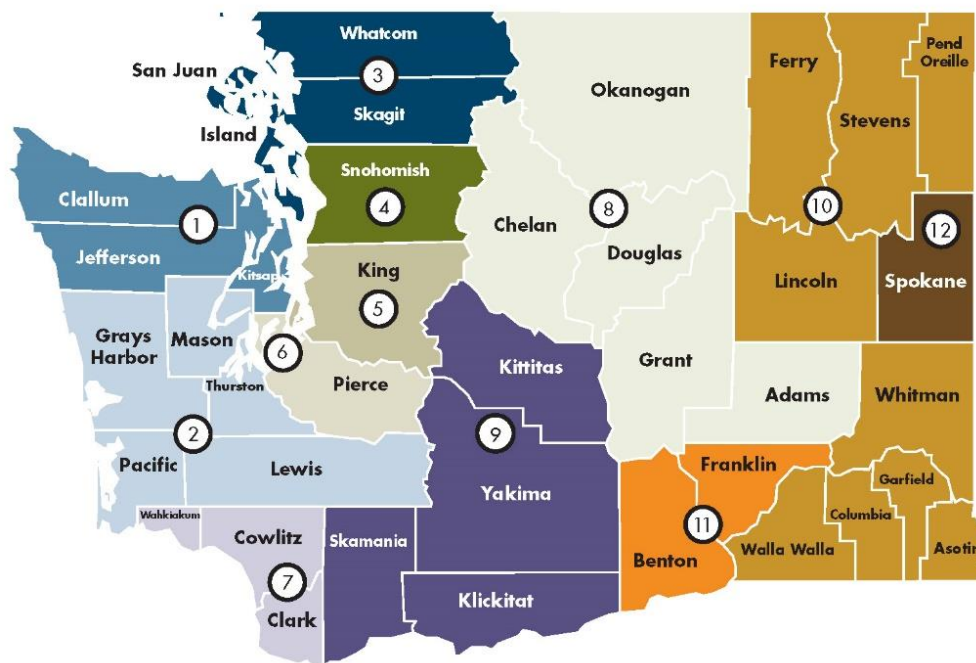
Beginning with the 2017 projections cycle, ESD created a new Washington state specific alternative occupational method to the BLS separations method. The objective was to also track job openings due to workers transferring within occupations. For simplicity we refer to this method as the alternative method and to the rates as the alternative rates. The alternative method is based on Washington state wage records, making the resulting alternative rates specific to Washington state.

The alternative rates track openings created by turnover within occupations (i.e. workers stay within occupations but transfer to different companies) and when workers leave one occupation for another or leave the workforce. [More Information can be found at the 2019 Employment Projections Technical Report](#)

Employment Data is presented by Metropolitan Statistical areas (MSA) which are groups of counties with metropolitan areas of at least 50,000 people. Nonmetropolitan areas (NMA) are all other areas in the state.

Figure 89: Washington State Workforce Development Areas

Washington State Workforce Development Areas



WDA 1 – Olympic Consortium
Clallam, Jefferson and Kitsap

WDA 2 – Pacific Mountain
Grays Harbor, Lewis, Mason, Pacific and Thurston

WDA 3 – Northwest Washington
Island, San Juan, Skagit and Whatcom

WDA 4 – Snohomish

WDA 5 – Seattle-King

WDA 6 – Tacoma-Pierce

WDA 7 – Southwest Washington
Clark, Cowlitz and Wahkiakum

WDA 8 – North Central Washington
Adams, Chelan, Douglas, Grant and Okanogan

WDA 9 – South Central Washington
Kittitas, Klickitat, Skamania and Yakima

WDA 10 – Eastern Washington
Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Stevens, Whitman and Walla Walla

WDA 11 – Benton-Franklin

WDA 12 – Spokane

Appendix B:

Washington's Health Workforce Sentinel Network

The Sentinel Network links the healthcare sector with policymakers, workforce planners and educators to identify and respond to changing demand for healthcare workers, with a focus is on identifying newly emerging skills and roles required by employers. The Sentinel Network is an initiative of Washington's Health Workforce Council, conducted collaboratively by Washington's Workforce Board and the University of Washington's Center for Health Workforce Studies. Funding to initiate the Sentinel Network came from the Healthier Washington initiative, with ongoing support from Governor Inslee's office and the Washington State Legislature.

Every six months, employers ("Sentinels") from across the state and from a wide range of healthcare sectors share their top workforce challenges. This information is used to identify signals of changes in the healthcare workforce and possible solutions. The data are compiled and made available on the Sentinel Network website and disseminated through meetings and reports so that employer needs are communicated to stakeholders who can make the necessary changes. [Click to find more information about the Health Workforce Sentinel Network.](#)

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