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# **An Overview of California's Nursing Workforce**

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# Why Nursing Workforce Development Matters

- Education capacity
  - Forward planning for nursing education needed to ensure adequate supply in the long-term
  - Significant regional variation in education capacity
- Retention and advancement
  - Nurse burnout and turnover undermine stability and capacity of the workforce
  - Need for career ladders and advancement opportunities
- Job opportunities and equity
  - Equity in health care services is linked to workforce diversity
  - We need a diverse pipeline to achieve workforce diversity that matches our state's population

# Outline

- Defining the nursing workforce
- Demographics of California's nurses
- Employment of California's nurses
- California's nursing pipeline
- Conclusions and Recommendations

# Defining the Nursing Workforce

# The Nursing Workforce



- Registered Nurses (RNs)
  - Licensed professional who provides hands-on care in different healthcare and community settings
  - Associate, bachelor's, or master's degree, and pass the NCLEX-RN exam
- Advanced Practice Registered Nurses (APRNs): RNs with advanced education & knowledge
  - Nurse-midwife (NM or CNM if nationally certified)
  - Clinical nurse specialist (CNS)
  - Nurse practitioner (NP)
  - Nurse anesthetist (NA or CRNA if nationally certified)
- Licensed Vocational Nurses (LVNs)
  - 12-18 months of education and pass the NCLEX-PN exam
  - Scope of practice is more limited: Cannot assess patients or create nursing care plan, cannot administer some medications (e.g., "IV push")
- Certified Nursing Assistants (CNAs)
  - 60 hours of classroom instruction & 100 hours of supervised training, plus pass the National Nurse Aide Assessment Program (NNAAP) exam
  - Provides basic patient care directed at the safety, comfort, personal hygiene, and protection of elderly, disabled, or injured individuals

# Demographics of California's Nurses

# Availability of Data

- Substantial amount of data available about RNs and APRNs
- Limited data on LVNs
- Very limited data on CNAs

# Licensees include non-residents

- LVNs: 132,737 licenses on 9/1/2022
  - 124,792 with California addresses (94%)
- RNs: 466,874 licenses on 3/18/2022
  - 389,597 with California addresses (83.4%)
  - Note: increase of 20,000 RNs between 3/18 and 5/11/22
  - Data reflect large pool of traveling RNs
- NPs: 29,699 on 5/11/22
  - 27,121 with California addresses (91.3%)
- NMs: 1,368 on 5/11/22
  - 1,235 with California addresses (90.3%)
  - 582 of those with CA addresses were also NPs (47.1%)
- CNAs: 128,327 on 7/1/22
  - 126,475 with California addresses (98.5%)



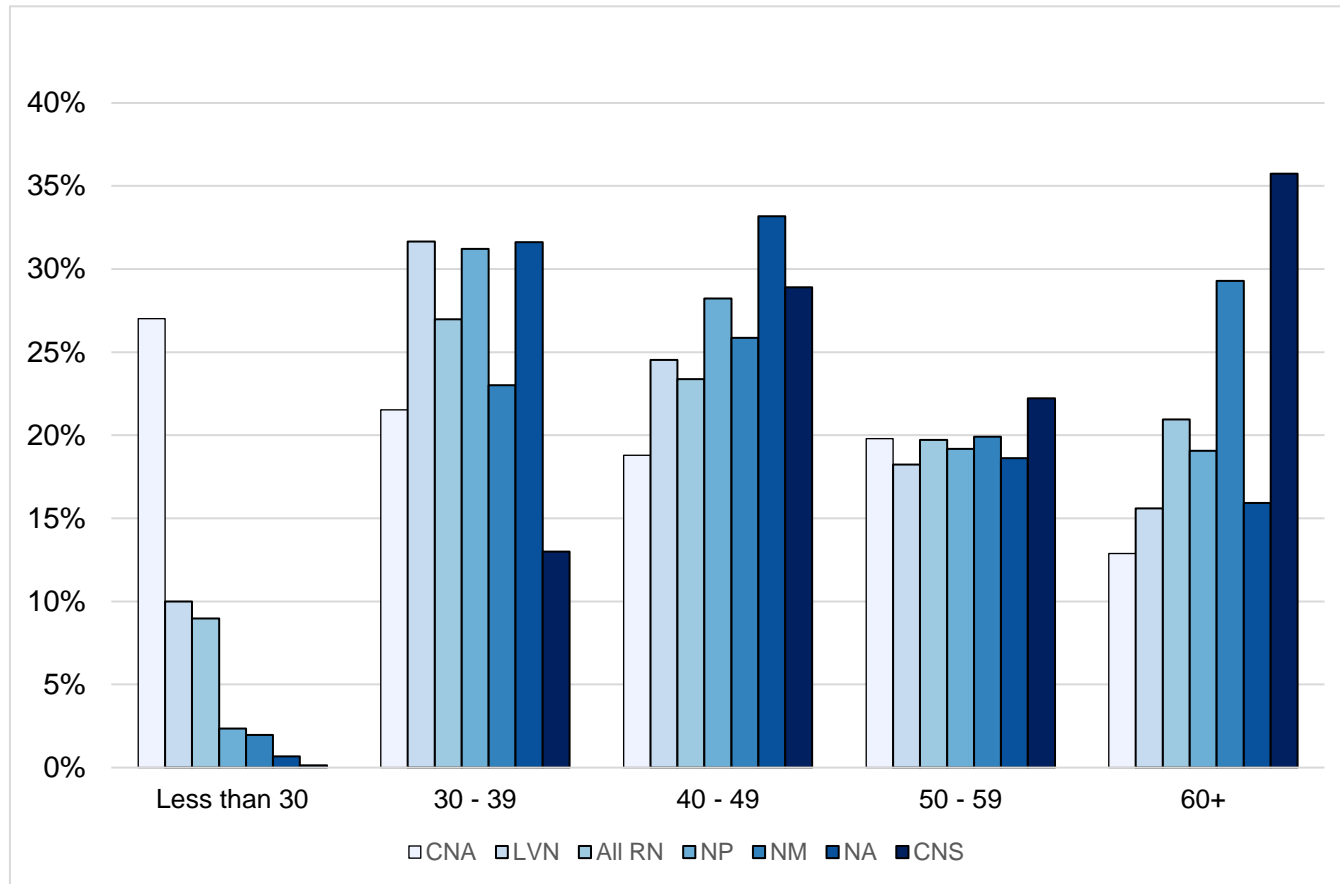
# Actively Licensed Nurses per 100K Population by Region, 2022

Region	CNA	LVN	RN	NP	NM	CNS	NA
Central Coast	346.6	170.7	955.9	57.5	4.0	5.4	3.1
Greater Bay Area	321.5	176.8	1072.3	82.5	5.1	13.0	5.6
Inland Empire	367.0	371.9	965.7	58.7	1.5	4.5	5.3
Los Angeles	429.9	293.2	922.6	69.0	2.1	5.8	5.1
Northern & Sierra	390.8	239.6	950.8	66.9	5.5	3.0	4.0
Orange	272.5	213.2	1020.9	83.7	3.0	6.1	6.1
Sacramento Area	286.1	194.3	1201.1	69.2	3.3	6.5	9.1
San Diego Area	415.9	195.9	1064.9	82.8	4.4	12.3	6.1
San Joaquin Valley	432.0	247.8	868.5	56.5	1.7	3.5	4.4
<b>California</b>	<b>372.8</b>	<b>259.5</b>	<b>991.3</b>	<b>70.7</b>	<b>3.2</b>	<b>7.4</b>	<b>5.8</b>

Source: Department of Consumer Affairs, Public Information Licensee Lists

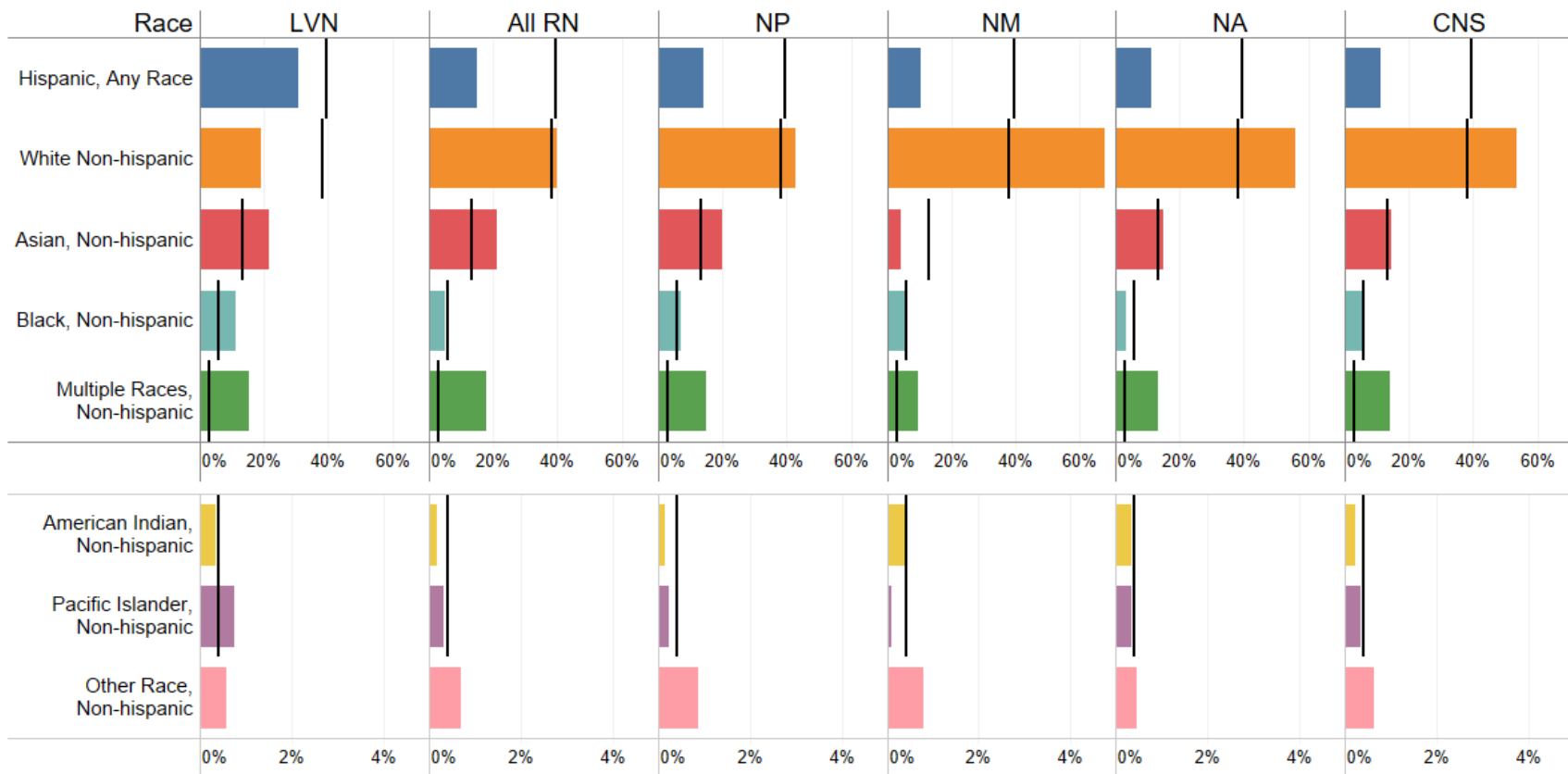
# Nursing Workforce: Age Distribution

Age Distribution of California Nurses (2022)



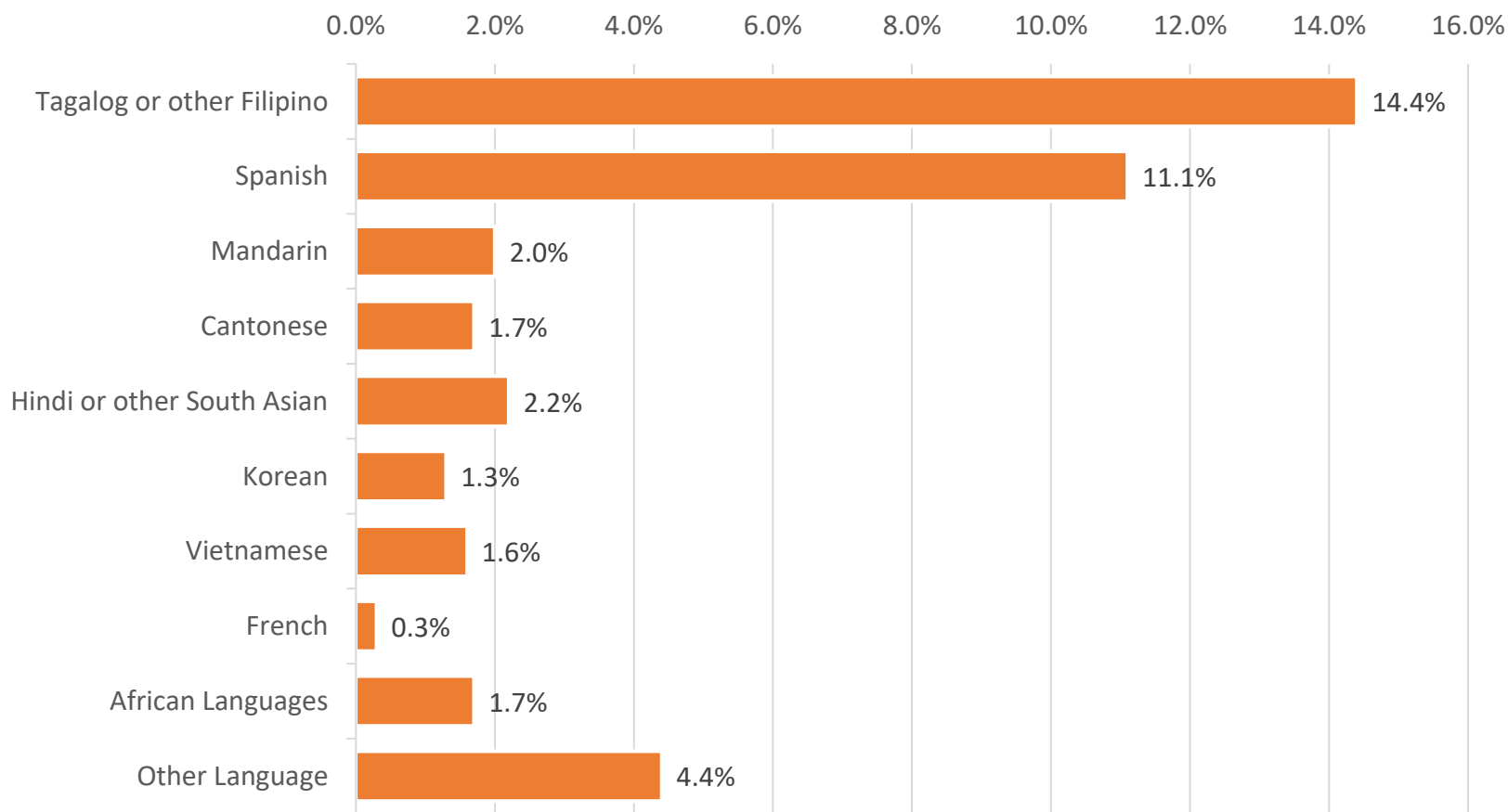
# Nursing Workforce: Race/Ethnicity

## Race/Ethnicity of California Nurses (2022)



Source: Department of Consumer Affairs Healing Arts Survey (response rate: 71-85%)

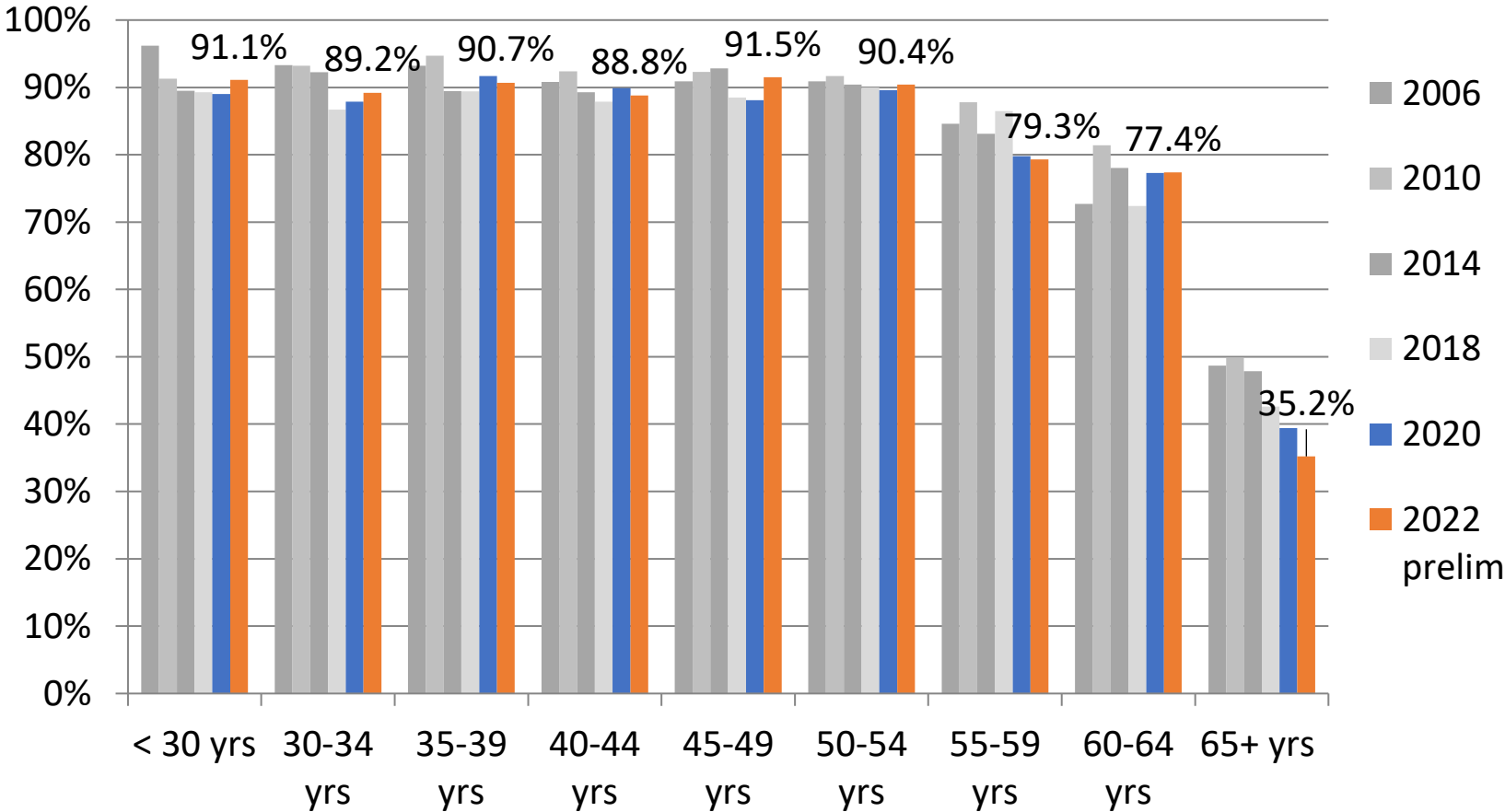
# Languages spoken by California RNs, 2020



Source: Chu & Spetz, California Board of Registered Nursing 2020 Survey of RNs (in press)

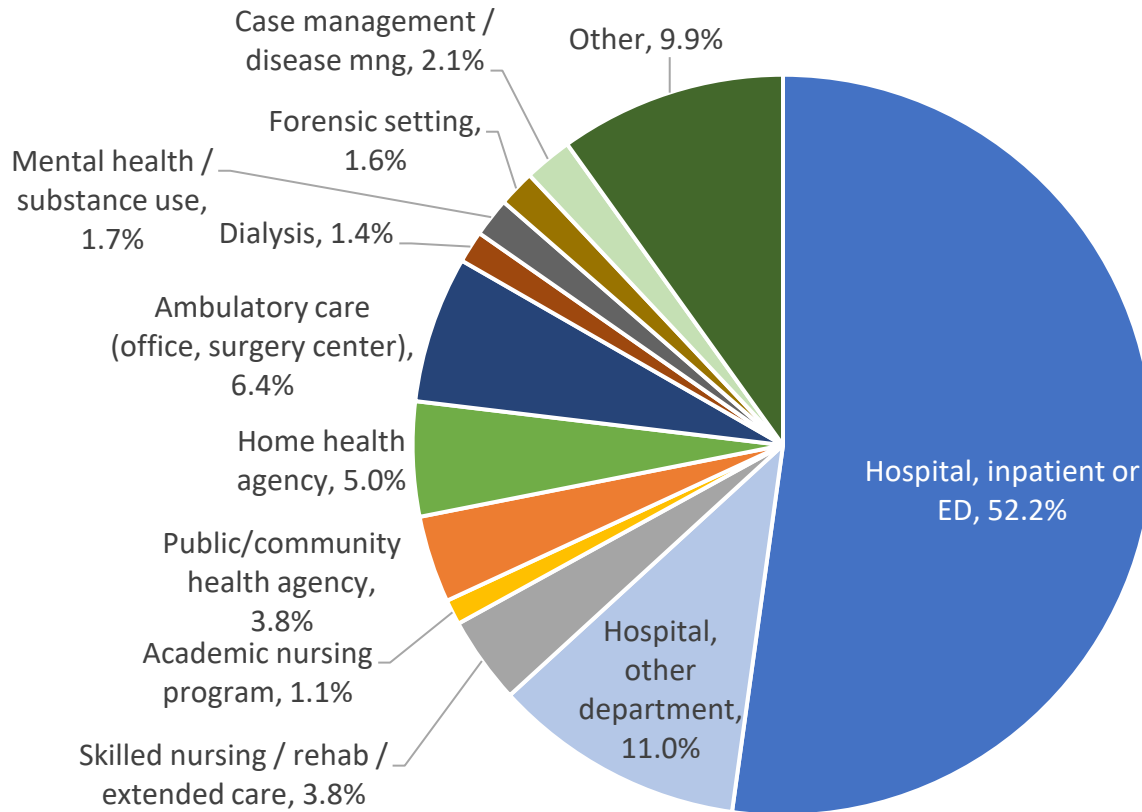
# Employment of California's Nurses

# Percentage of California-resident RNs employed in nursing, by age group, 2006-2022

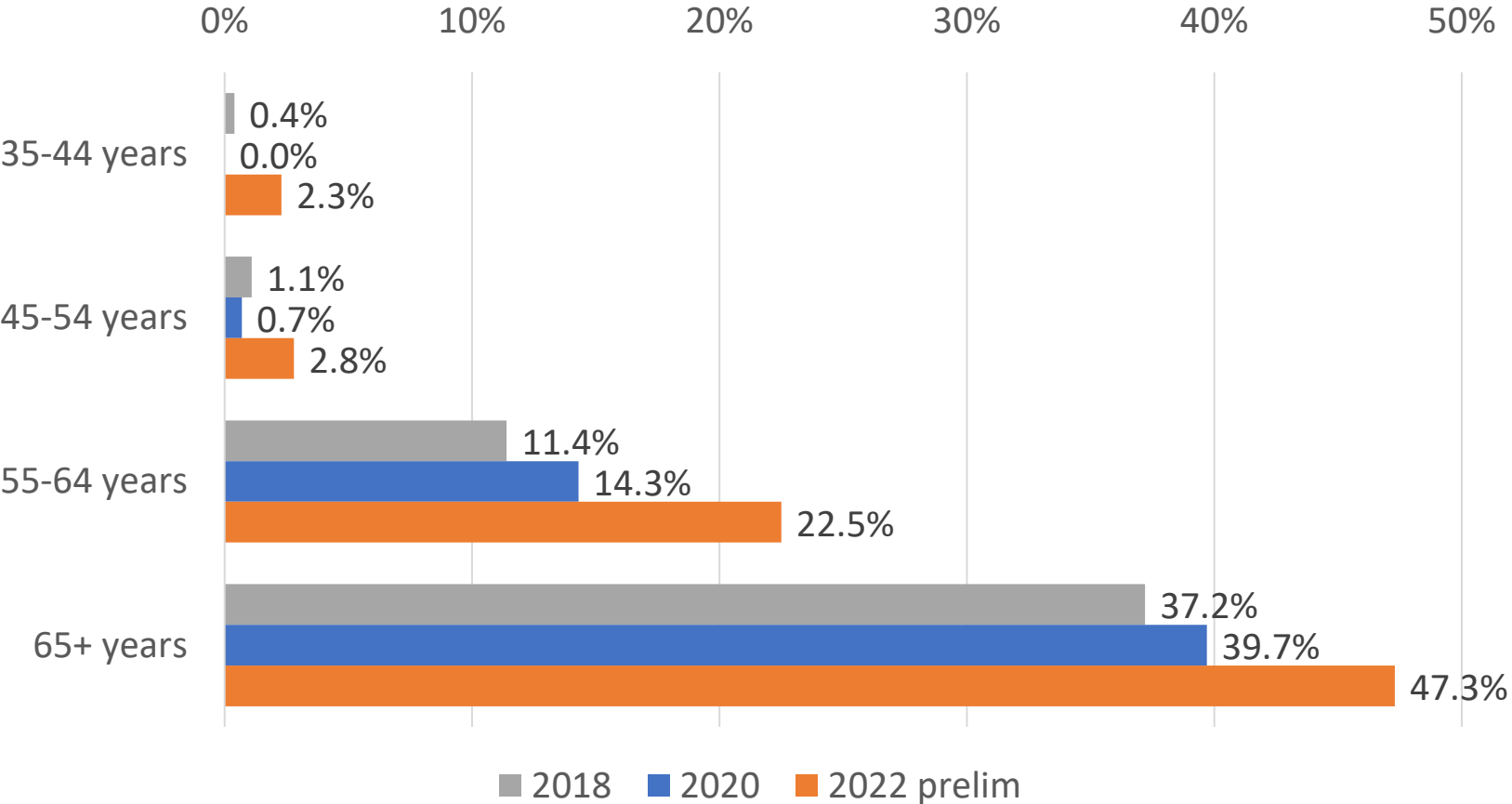


Source: Spetz, Chu, & Blash, Forecasts of the RN Workforce in California, 2022.

# Employment settings of California-resident RNs, 2020



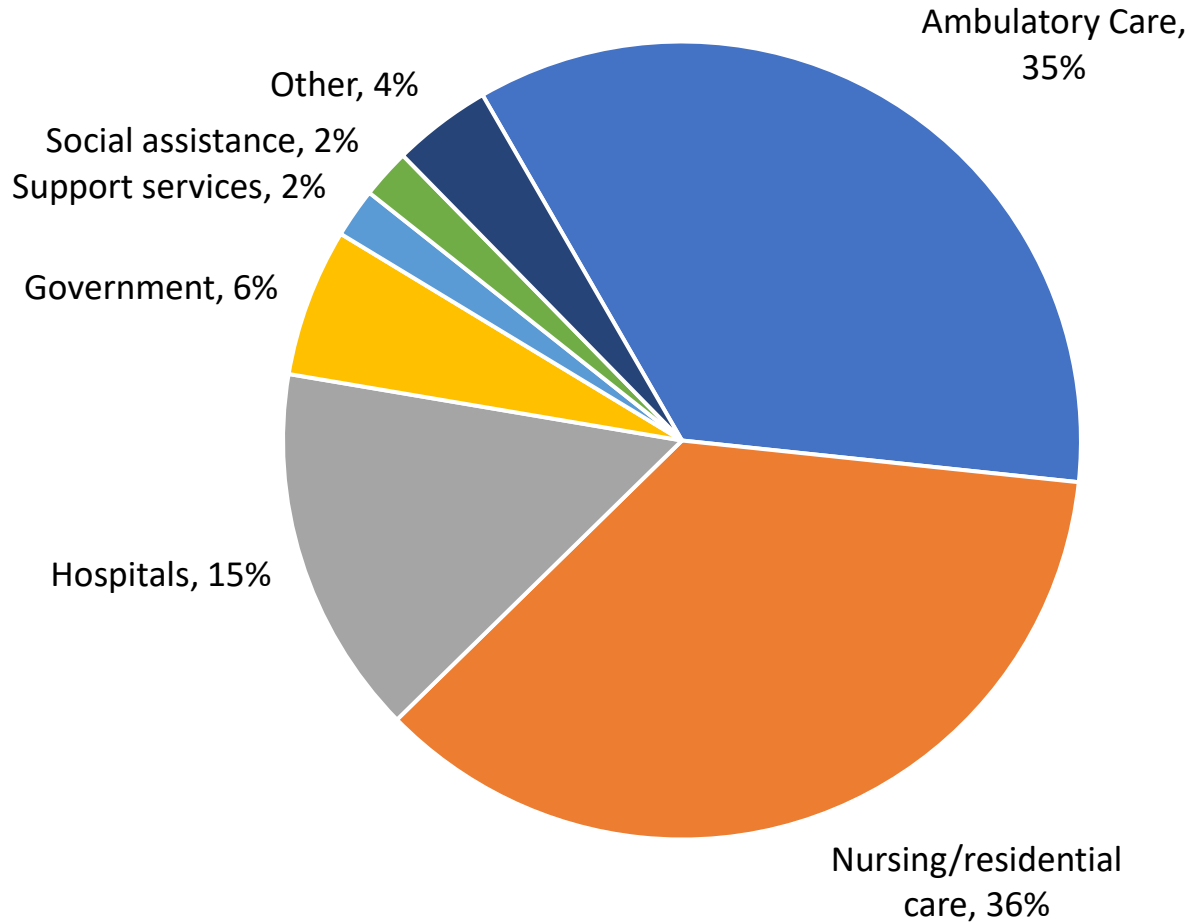
# Percentage of California-resident RNs who plan to retire or leave nursing in next two years, 2018-2022



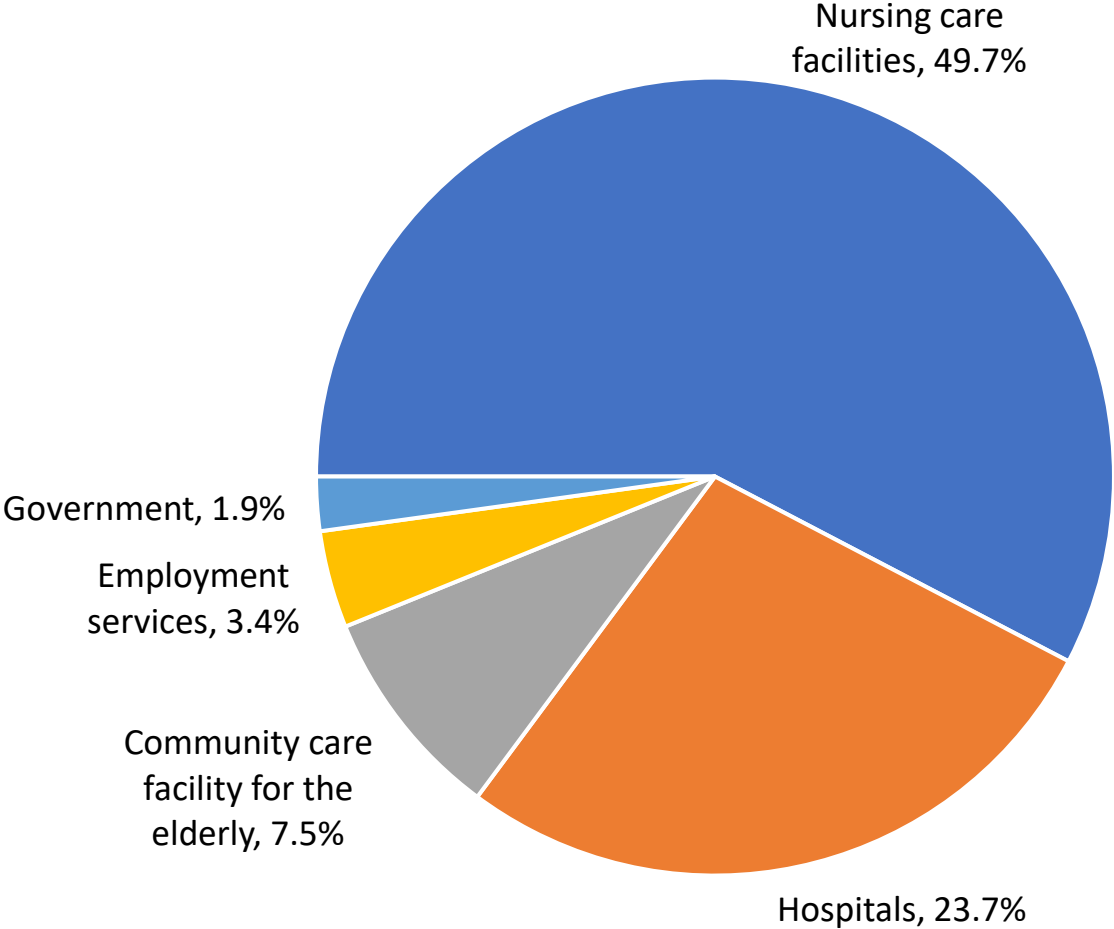
Source: Spetz, Chu, & Blash, Forecasts of the RN Workforce in California, 2022.



# LVN Employment Settings, 2019



# CNA Employment Settings



Source: California Employment Development Department, Occupation Guide, downloaded September 2022

# Other nurse employment data

	# Licensed / Certified with CA addresses, 2022	EDD estimate: # Employed 2020
LVNs	124,792	72,400
NPs	27,121	17,300
NMs	1,235	1,200
CRNAs	2,260	2,000
Nursing Assistants	128,327	97,300
Home health & personal care aides		766,000

Source: California Employment Development Department Long-Term Occupational Employment Projections, 2022.

# California's nursing pipeline

# Nursing Education Pathways

Type of nurse	Education options	Number & types of approved programs	# Grads
Certified Nursing Assistant	60 hours of classroom & 100 hours of supervised training 40 hours of instruction if already a certified HHA	434 freestanding 115 facility-based	N/A
Licensed Vocational Nurse	1,530 hours of training	148 in 2022 16 in adult education (11%) 80 in private schools (54%) 4 in regional occupational centers (3%) 48 in community colleges (32%)	4,993 in 2019
Registered Nurse	Associate, bachelor's, or master's from approved program	92 AD programs (78 public) 43 BSN programs (19 public) 12 Entry-master's programs (5 public)	12,304 in 2020-21
Nurse Practitioner	Master's Degree or Doctor of Nursing Practice (DNP)	31 schools (15 private)	1,558 in 2020-21
Nurse Midwife	Master's Degree or DNP	3 schools (all public)	33 in 2020-21
Nurse Anesthetist	Doctor of Nursing Practice	5 schools (all private)	27 in 2020-21
Clinical Nurse Specialist	Master's Degree	11 schools in California (meet requirements; no official approval for CNS programs)	60 in 2020-21

Source: California Department of Public Health; California BVNPT; California BRN

# Types of Specialization of NP Education Programs

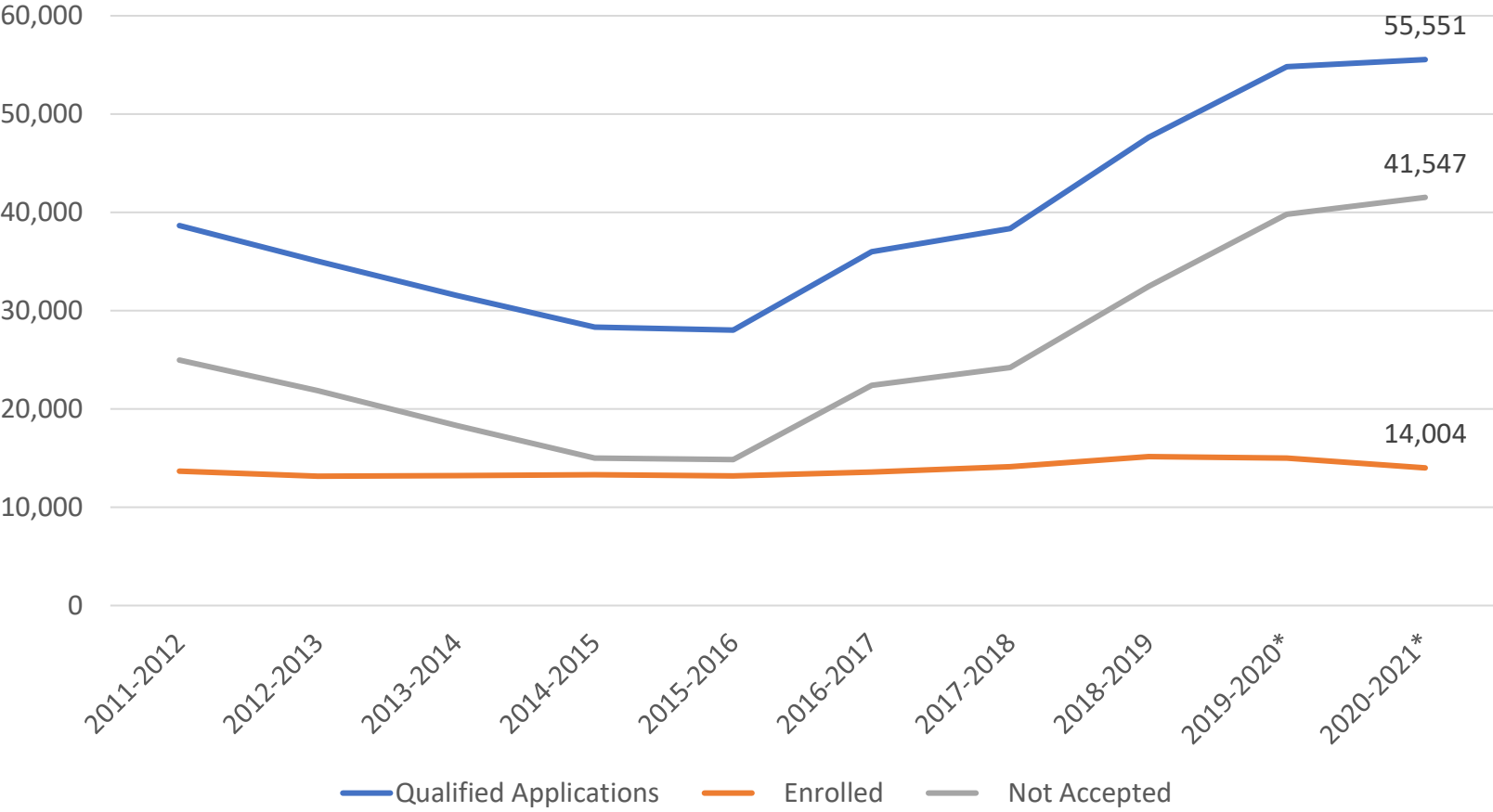
Specialty	Number of Schools	Percent of Grads 2020-21	Geographic Locations
Family Primary Care	29	68.9%	Fresno, LA region, Inland Empire, San Diego, SF Bay Area, Bakersfield, Davis, Stanislaus
Psych-Mental Health	13	8.7%	Fresno, LA region, Inland Empire, SF Bay Area
Pediatric Primary Care	6	1.1%	LA region, Inland Empire, SF Bay Area
Adult-Gero Primary Care	7	5.8%	LA region, Inland Empire, San Diego, SF Bay Area
Women's Health	3	1.1%	LA region, SF Bay Area
Acute Care – Adult/Gero	6	5.8%	LA region, Inland Empire, SF Bay Area
Acute Care – Pediatric	3	0.7%	LA region, Inland Empire, SF Bay Area

# Graduates of Nursing Education Programs by Race/Ethnicity, 2019

	Asian	Black	Latino/a	Native American	Hawaiian / Pacific Islander	Filipino	White	Two or More / Other	Unknown
Licensed Vocational Nurse (2019)	25%	9%	38%	<1%	2%		18%	2%	4%
Registered Nurse (2021)	22%	4%	23%	<1%		6%	25%	5%	15%
Nurse Practitioner (2021)	29%	13%	16%	<1%	3%	5%	30%	1%	
CNM (2021)	40%	13%	7%	0%	0%	0%	37%	0%	
CRNA (2021)	35%	8%	15%	0%	0%	0%	42%	0%	

**Source:** Integrated Postsecondary Education Data System; BRN Annual Schools Report, 2020-2021

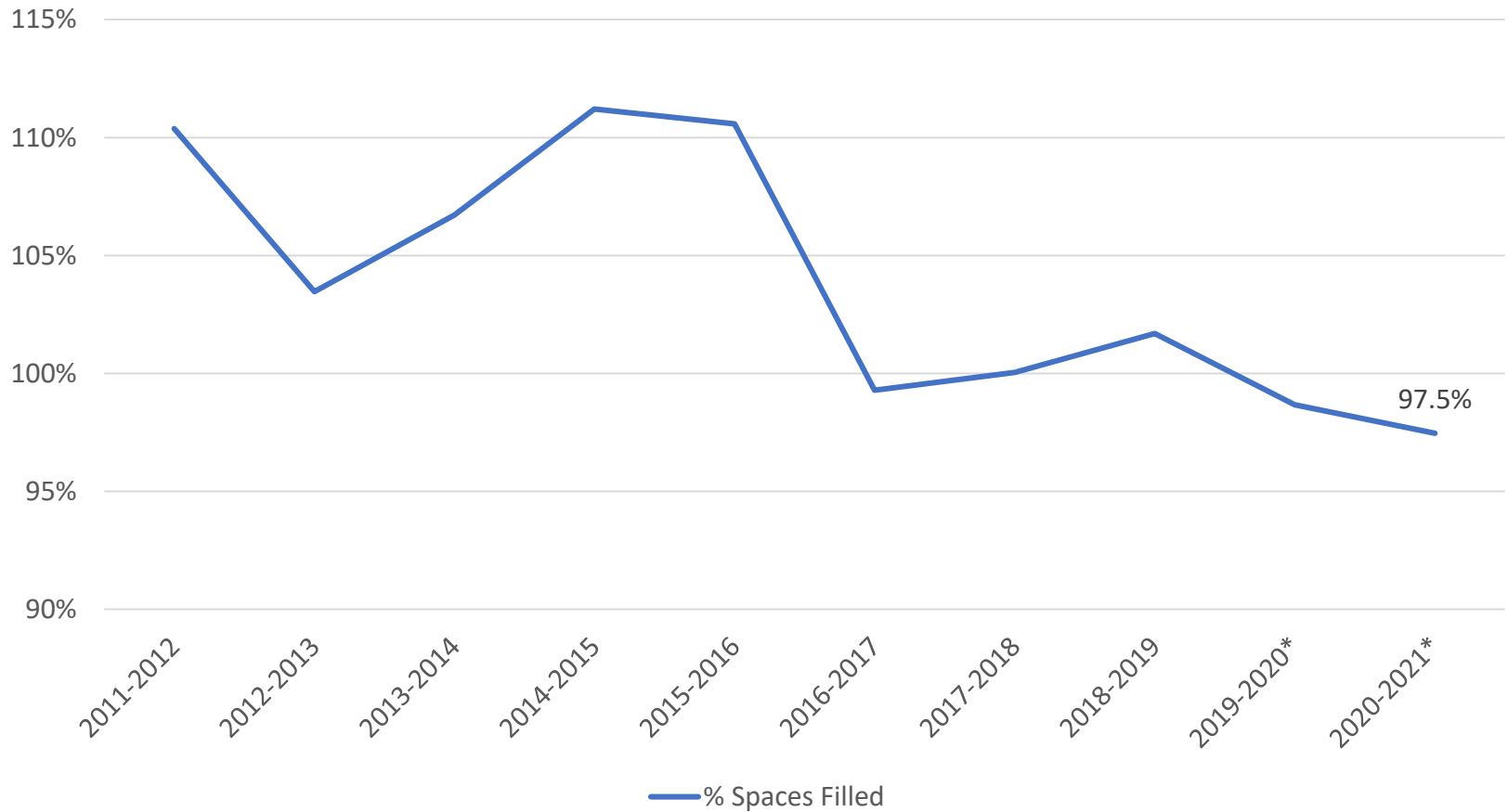
# Qualified applications accepted and not accepted to RN programs



Source: California BRN Annual Schools Report 2020-21

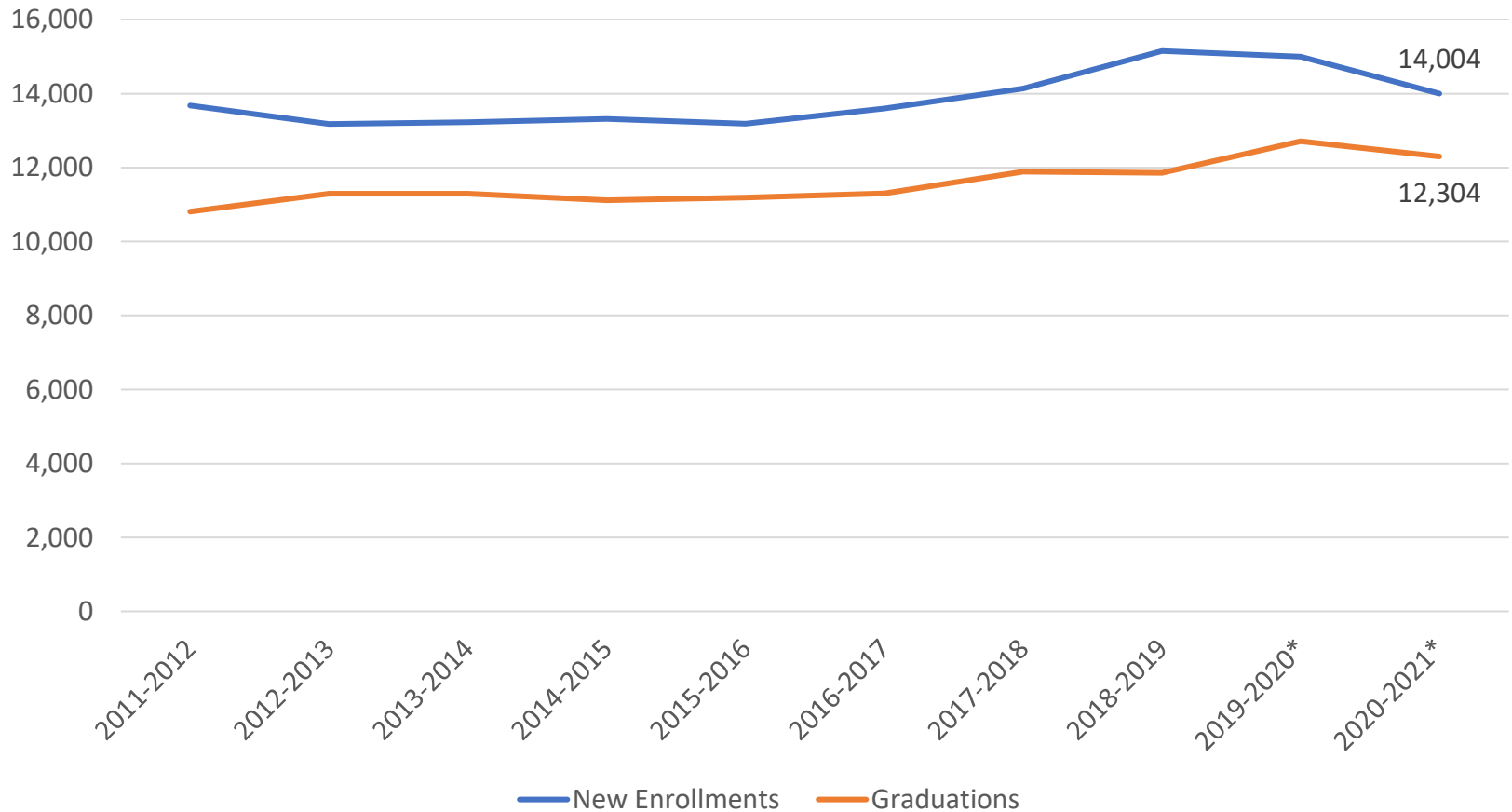


# Percent of RN Education Spaces Filled

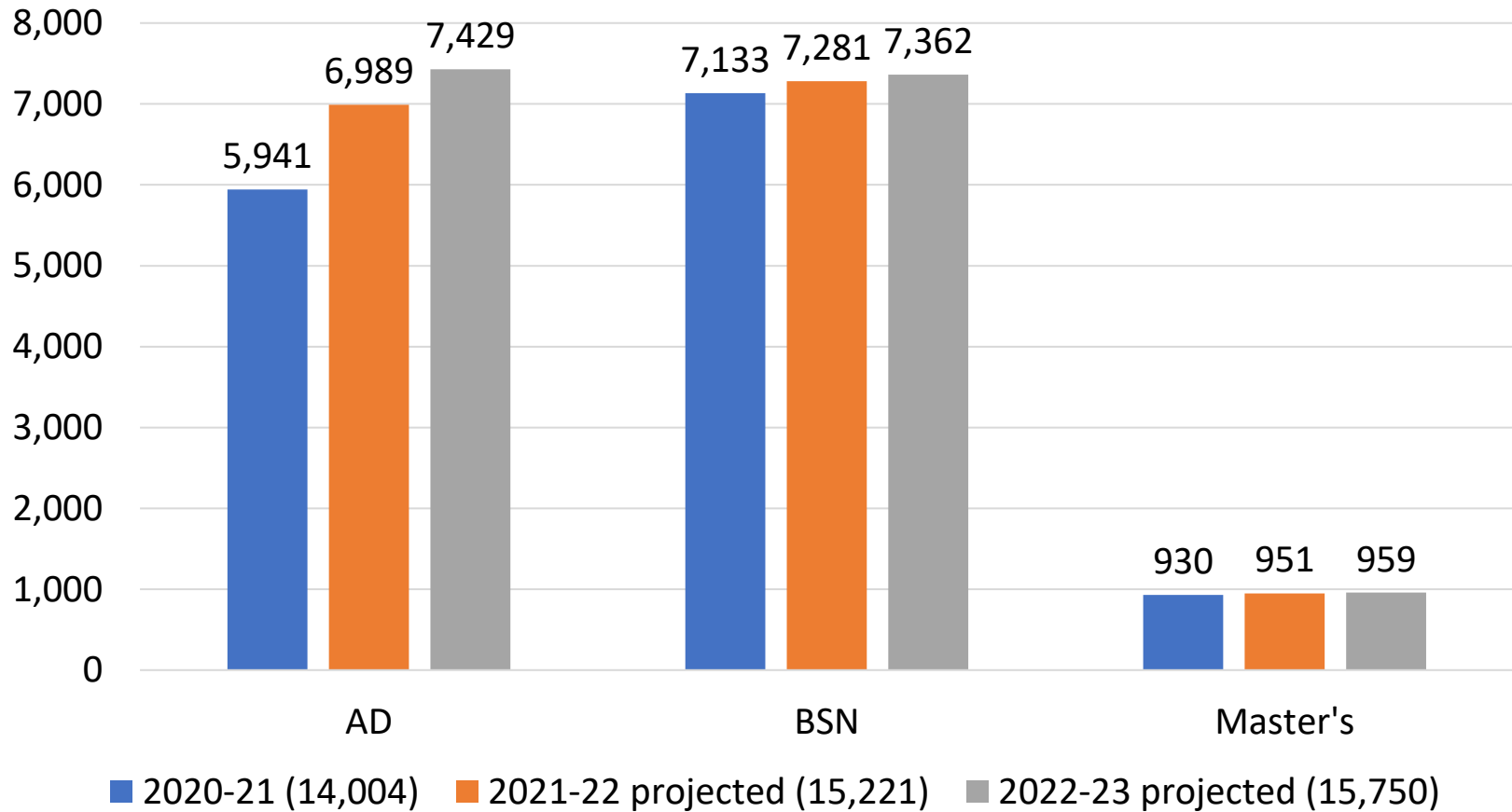


Source: California BRN Annual Schools Report 2020-21

# New RN Student Enrollments and Graduations

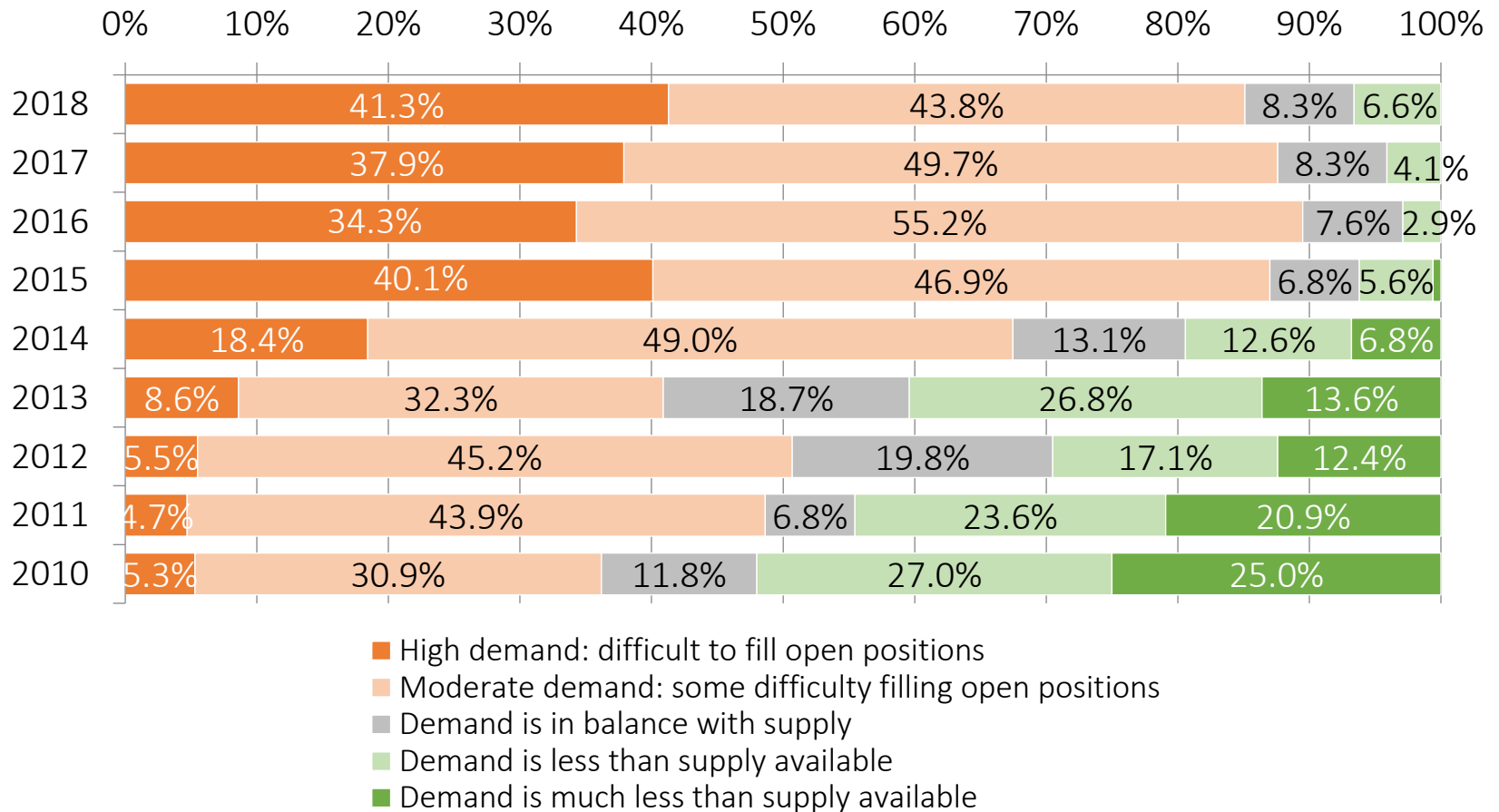


# Projected RN Program Enrollments



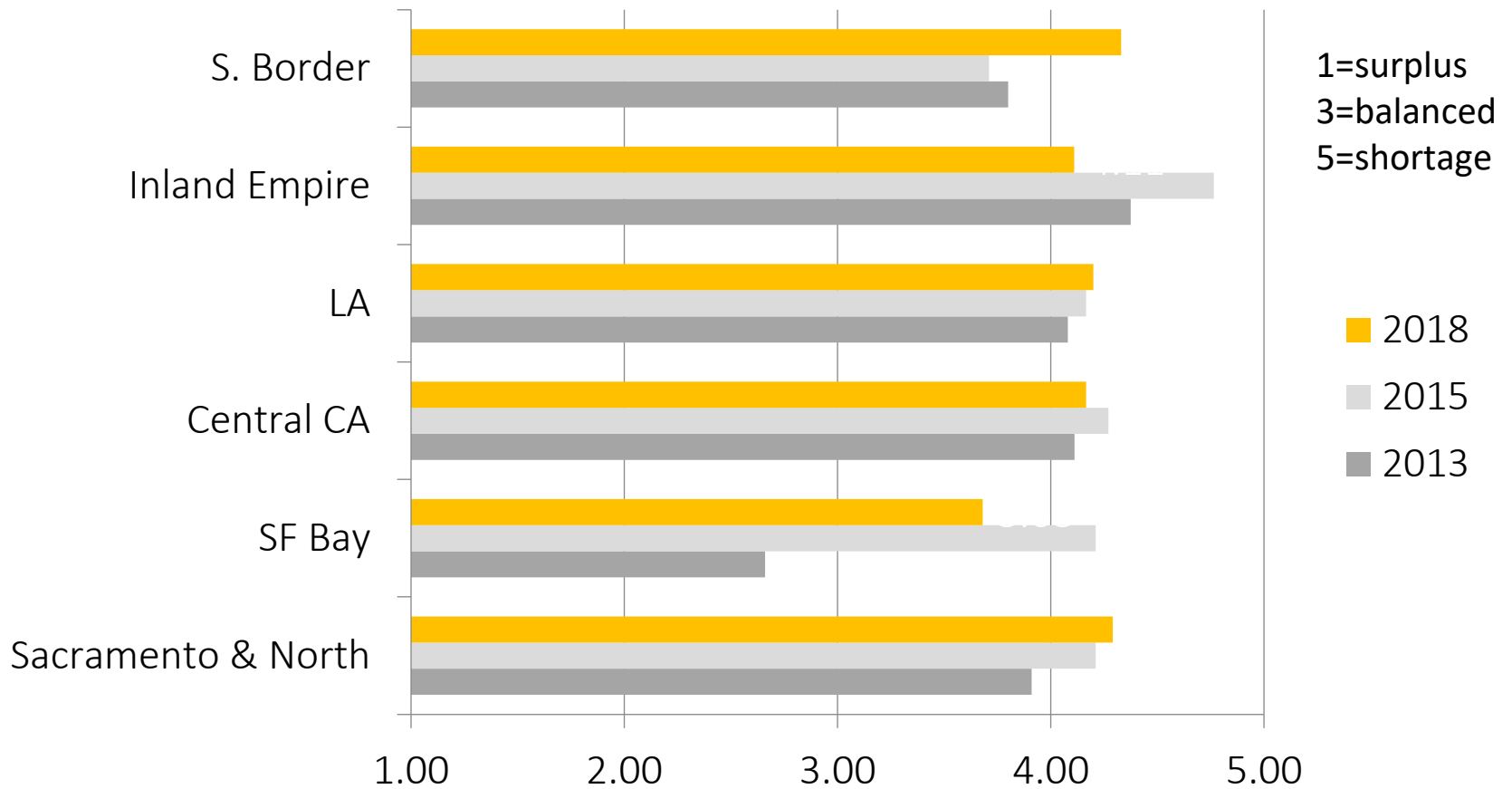
# Forecasts of future demand & supply

# Perceptions of employers: Overall labor market, 2010-2018

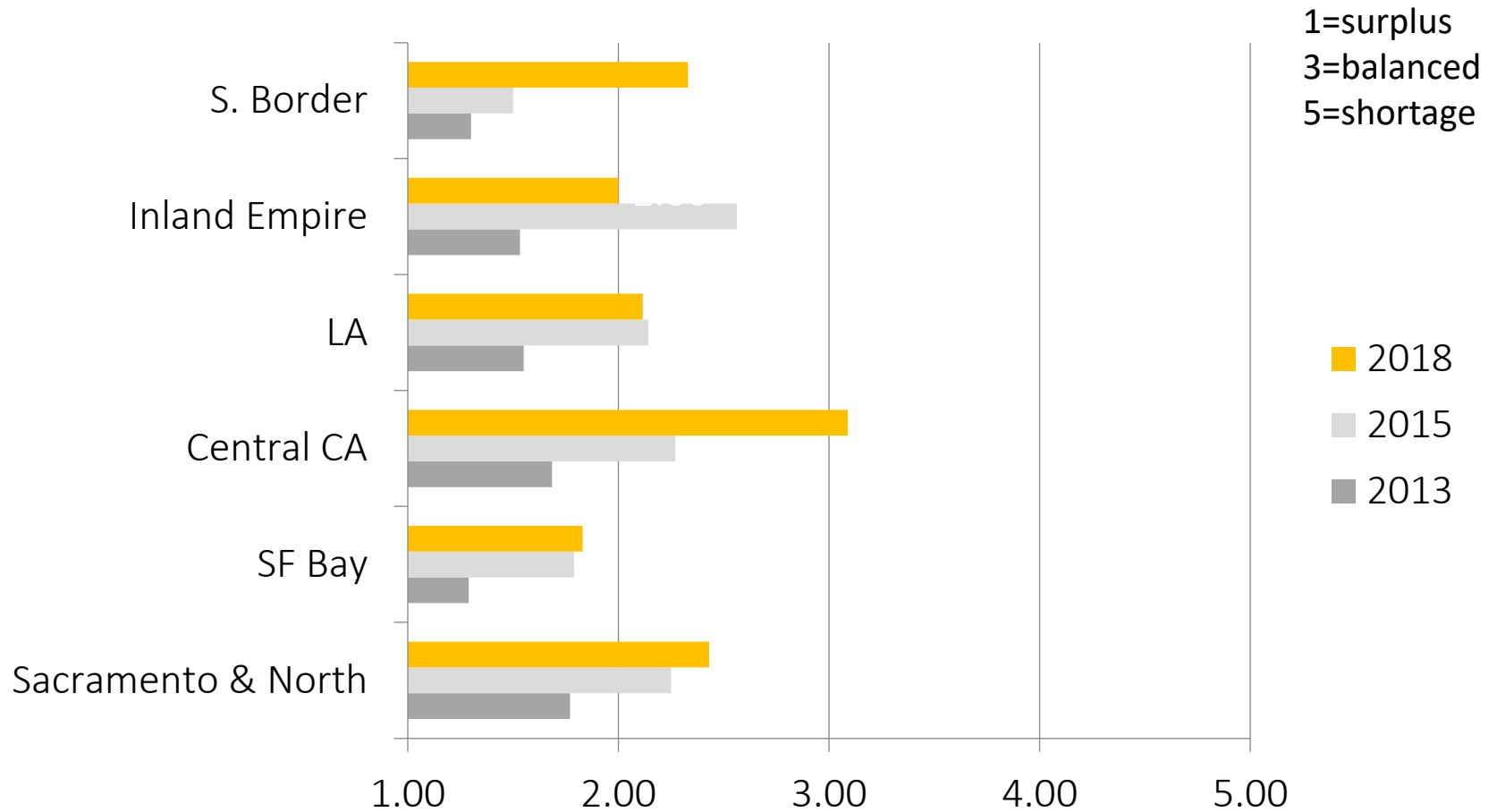


Source: Chu, Spetz, & Bates, 2019, Survey of Nurse Employers Fall 2018

# Differences across BRN regions: Experienced RNs

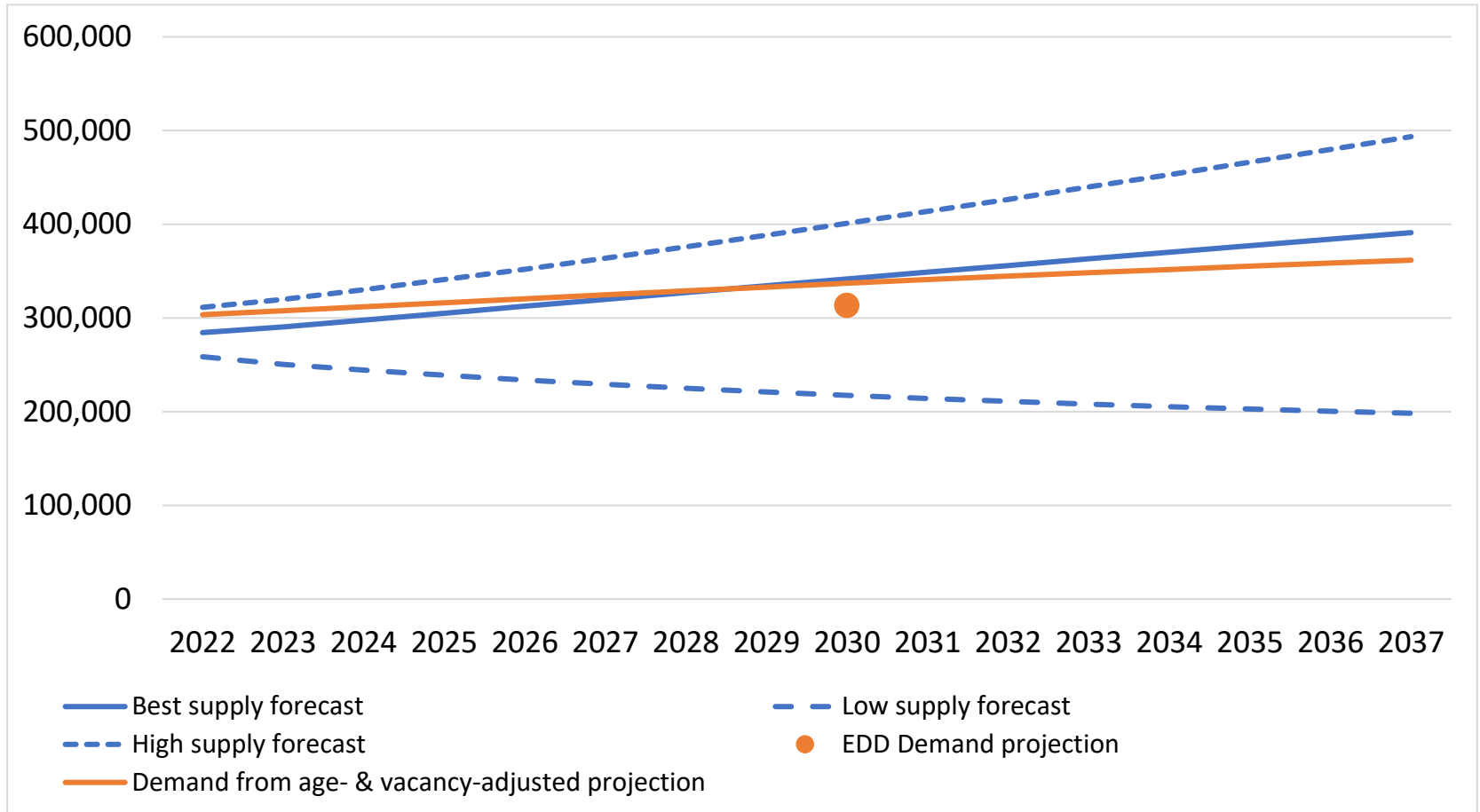


# Differences across BRN regions: New Grad RNs



Source: Chu, Spetz, & Bates, 2019, Survey of Nurse Employers Fall 2018

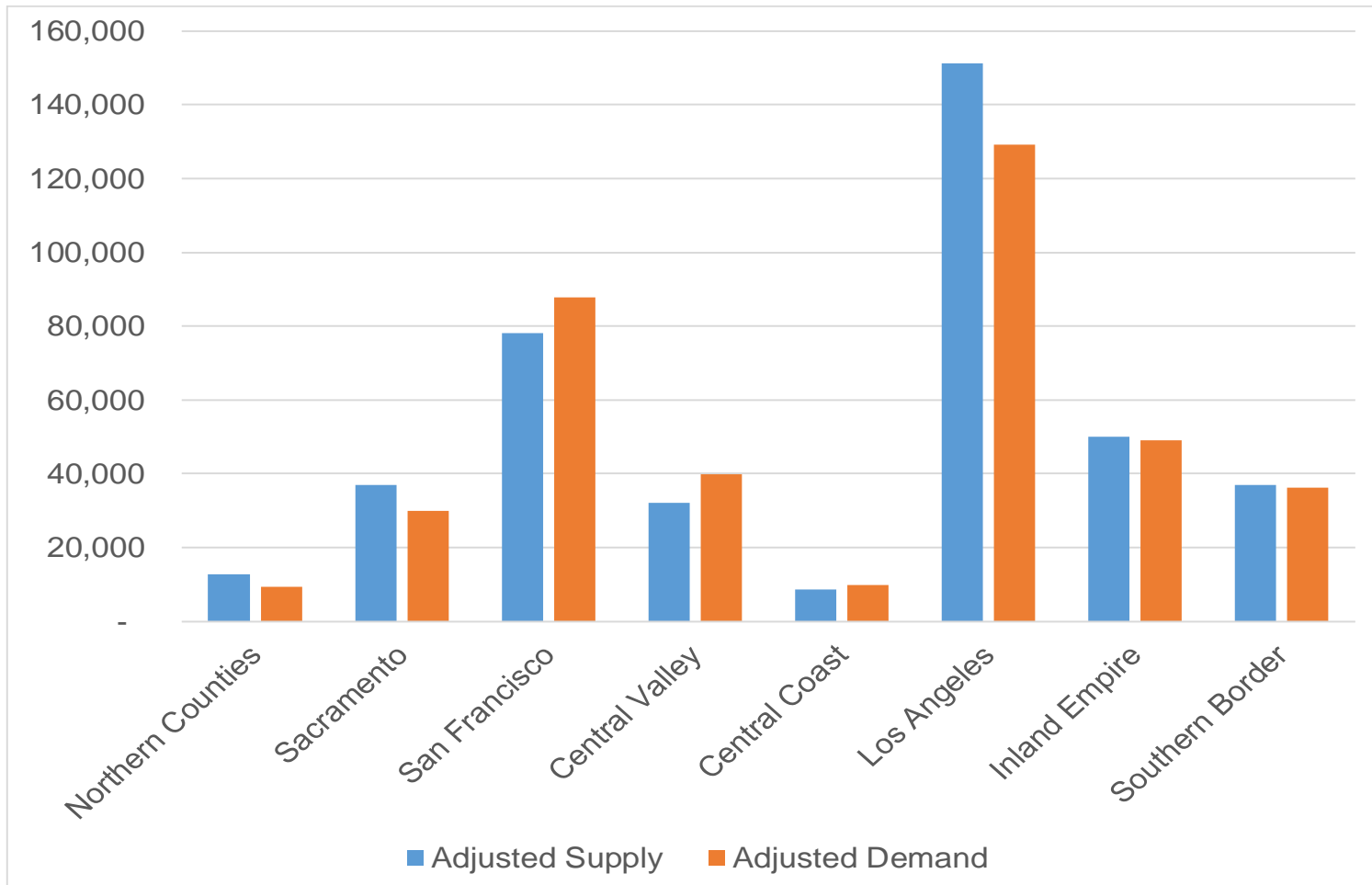
# Projected RN Supply and Demand, 2022-2037, Full-time Equivalent Employment



Source: Spetz, Chu, & Blash, Forecasts of the RN Workforce in California, 2022.



# RN supply and demand projections across regions, 2035 (regions defined by BRN)



Source: Spetz, Regional Forecasts of the RN Workforce in California, 2018.

# Other nursing employment projections

	# Employed 2020	Projected Employment 2030	% Change
LVNs	72,400	83,500	15.3%
NPs	17,300	26,900	55.5%
NMs	1,200	1,400	16.7%
CRNAs	2,000	2,400	20.0%
Nursing Assistants	97,300	110,000	13.1%
Home health & personal care aides	766,000	985,800	28.7%

Source: California Employment Development Department Long-Term Occupational Employment Projections, 2022.

# Conclusions and Recommendations

# Conclusions

- Notable variation in supply of nurses across regions of California
- Education capacity varies across the state – less capacity in Central Valley
- LVN workforce has more people of color than other licensed nurses
- Latino/a are under-represented among RNs and APRNs
- RN education programs have had declining enrollments during the pandemic
- Faster retirement rates for older RNs
- Shortages projected through 2030, and then supply should catch up
- Existing sources of data are not sufficient to fully assess California's nursing workforce, apart from RNs

# Recommendations: Data Needs

- Develop data system for certified health professionals (CNAs & HHAs)
- Improve data on the LVN workforce – leverage the new survey data
- Maintain detailed RN surveys
  - This is the largest group of nurses and important to all healthcare sectors
- Consider adding regular APRN surveys
  - Particularly for NPs and NMs

# Recommendations

- K-12 pipeline
  - Educate counselors about the pathways into nursing
  - Incorporate LVN and CNA training into vocational programs
- Pre-licensure education
  - RN education programs have some unused capacity
    - Regional variation is important
    - Be thoughtful about where to expand RN programs
  - LVN education capacity is not well-understood
  - Adapt to increasing roles of licensed nurses in community settings
- Leverage diversity of LVN (and presumably CNA) workforces to create more diverse pipelines into RN and APRN education

# Recommendations

- Expand APRN education capacity in regions with the greatest shortfalls
  - APRNs are important to filling primary care and behavioral health shortages, particularly in rural and inner-city regions, but education isn't in these places
- Improve new graduate transition into practice
  - This is a crucial period to keep nurses in the profession
  - Significant stress on system with precipitous retirements of experienced RNs
  - Creates a bottleneck that limits clinical placements for pre-licensure students
- Identify strategies to bring “retired” nurses back for specific roles
  - Mentors to support new grad onboarding
  - Clinical faculty

Questions?  
Comments?