



University of California  
San Francisco

# The Nursing Workforce in California: Current Challenges in Supply, Demand, and Education

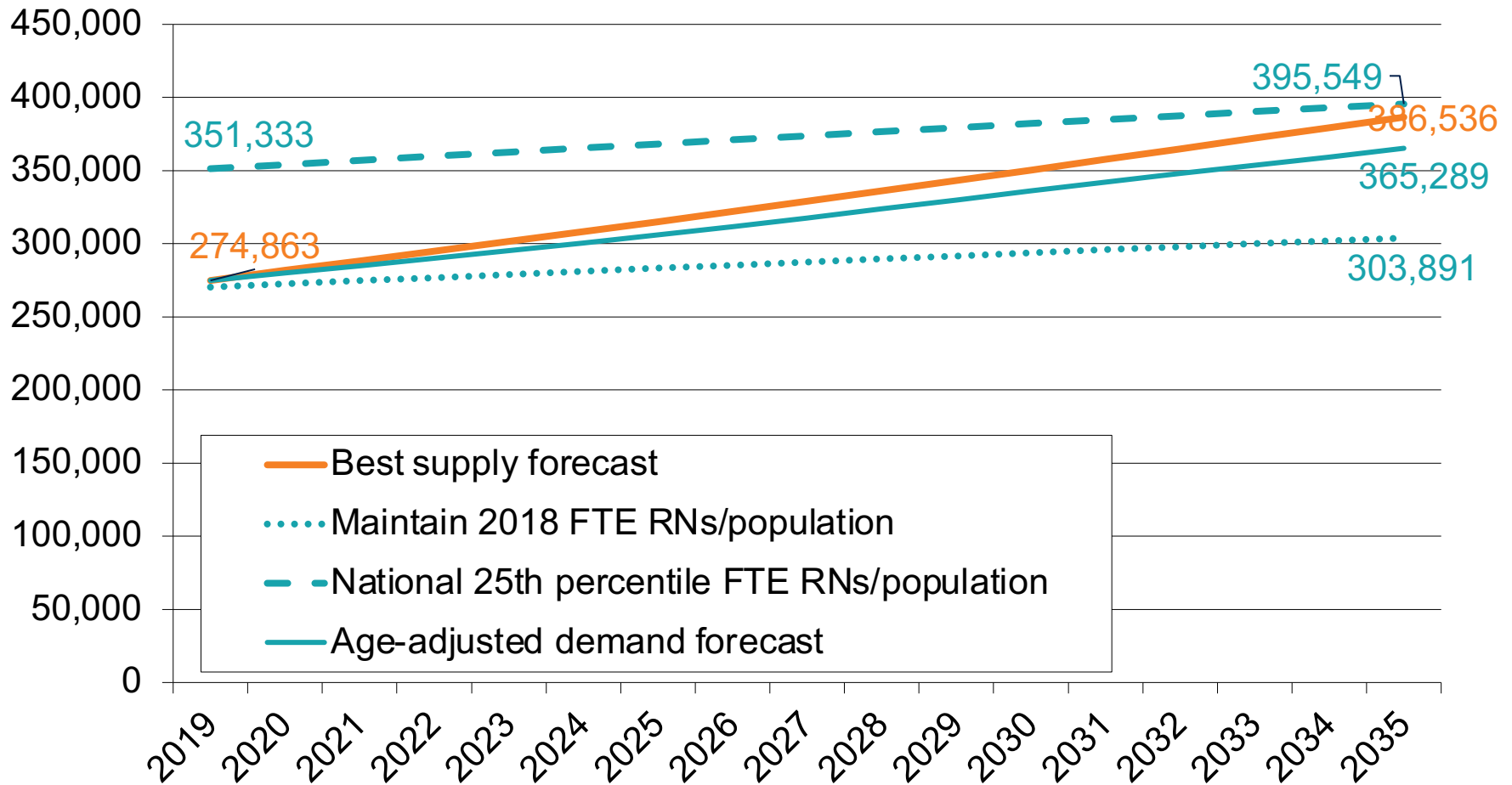
Joanne Spetz, PhD, FAAN  
Director, Philip R. Lee Institute for Health Policy Studies  
Associate Director for Research, Healthforce Center  
University of California, San Francisco

March 2022

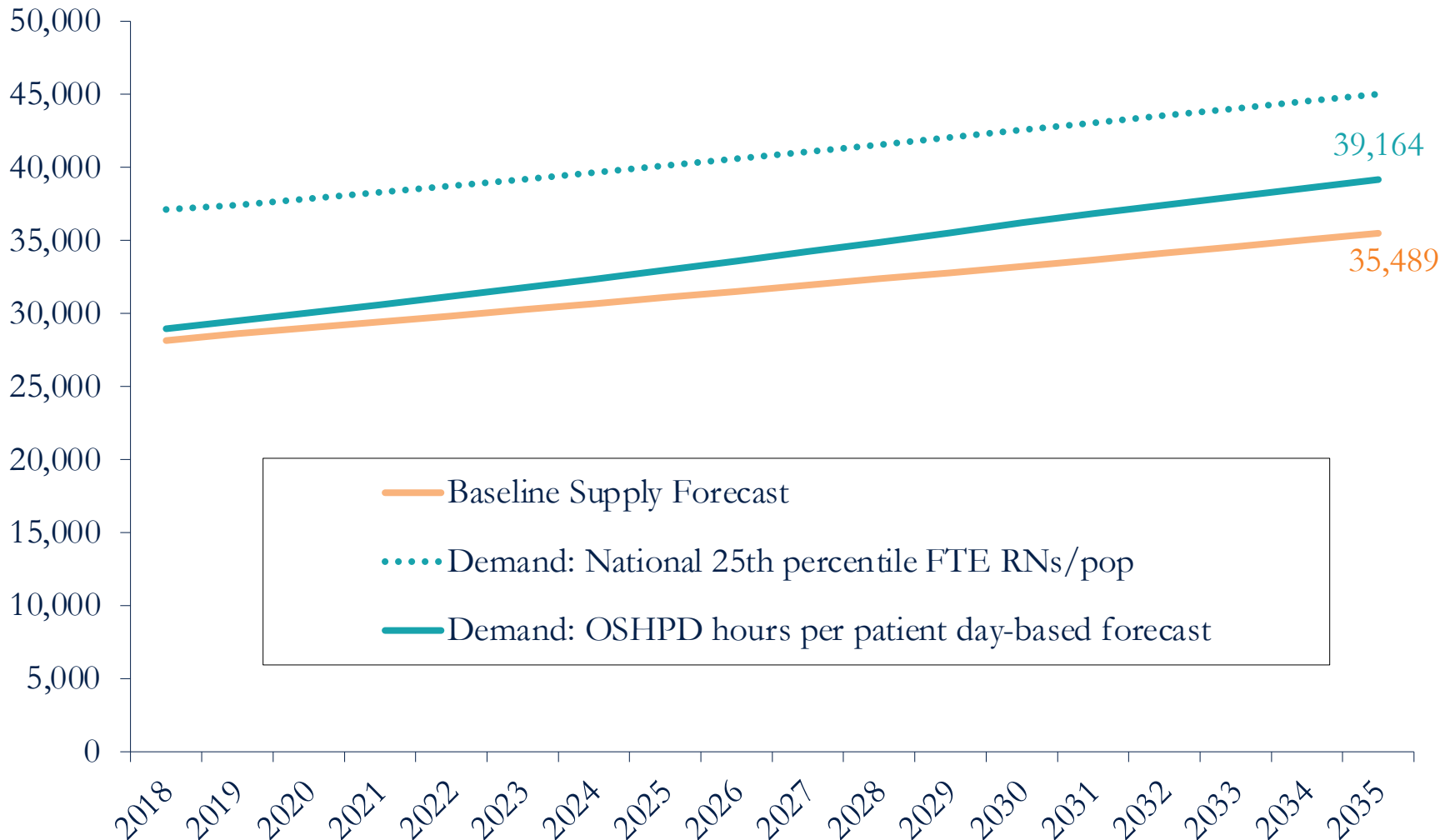
# Nursing Labor Markets: Cycles of Shortage and Surplus

- Since WW2, there have been cycles of nursing shortages
  - Cycles have been studied by policymakers and economists
- Recent history of shortage cycles
  - Shortage ~1988-1992
  - Surplus ~ 1993-1997
  - Shortage ~ 1998-2008 (longest one, perhaps ever)
  - Surplus ~ 2009-2013?
  - Shortage?? 2014-2019
  - Terrible shortage??? 2020-future??

# Pre-pandemic California supply and demand forecasts for RNs, 2019-2035

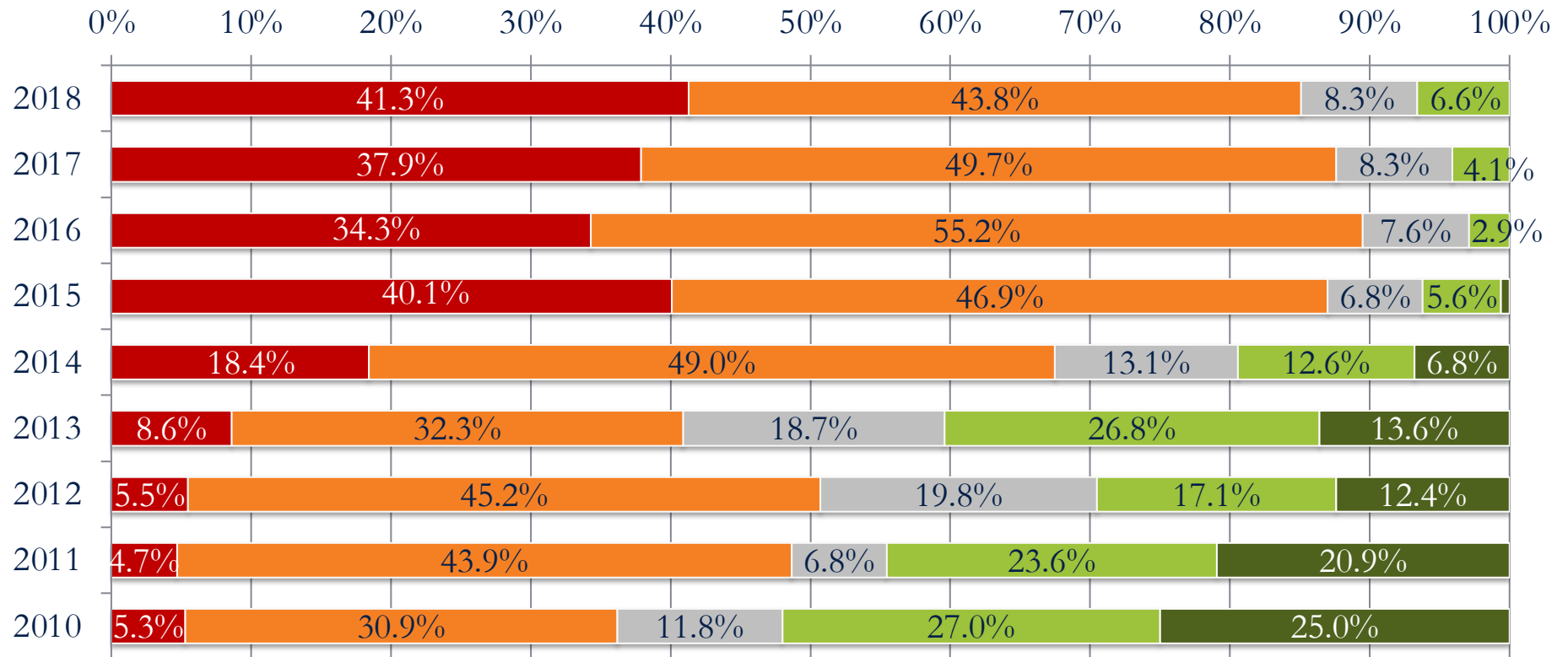


# Regional differences are important: Pre-Pandemic Forecasts for Central Valley & Sierra



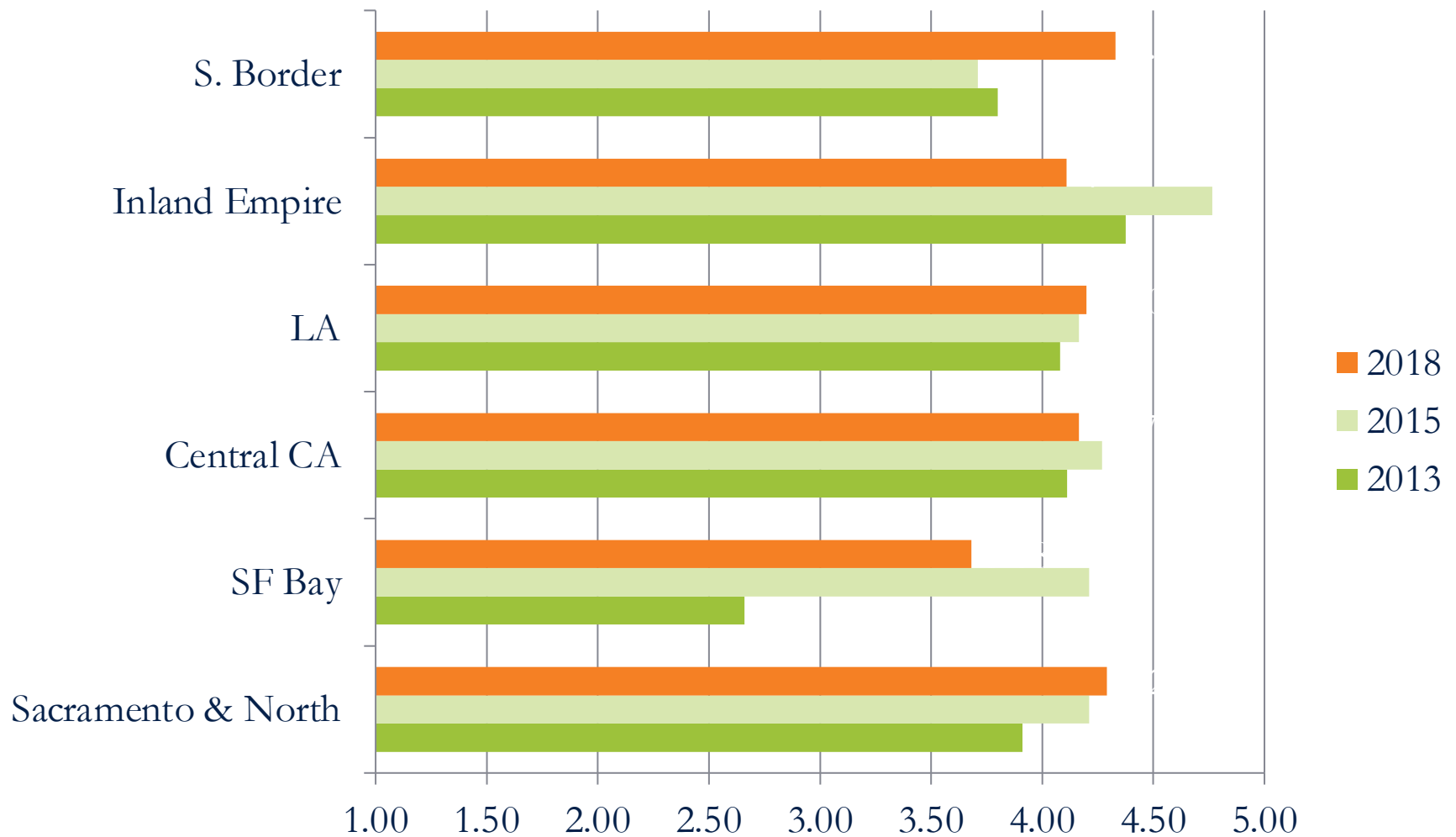
Was there really not a statewide shortage before the pandemic?

# Perceptions of employers: Overall labor market

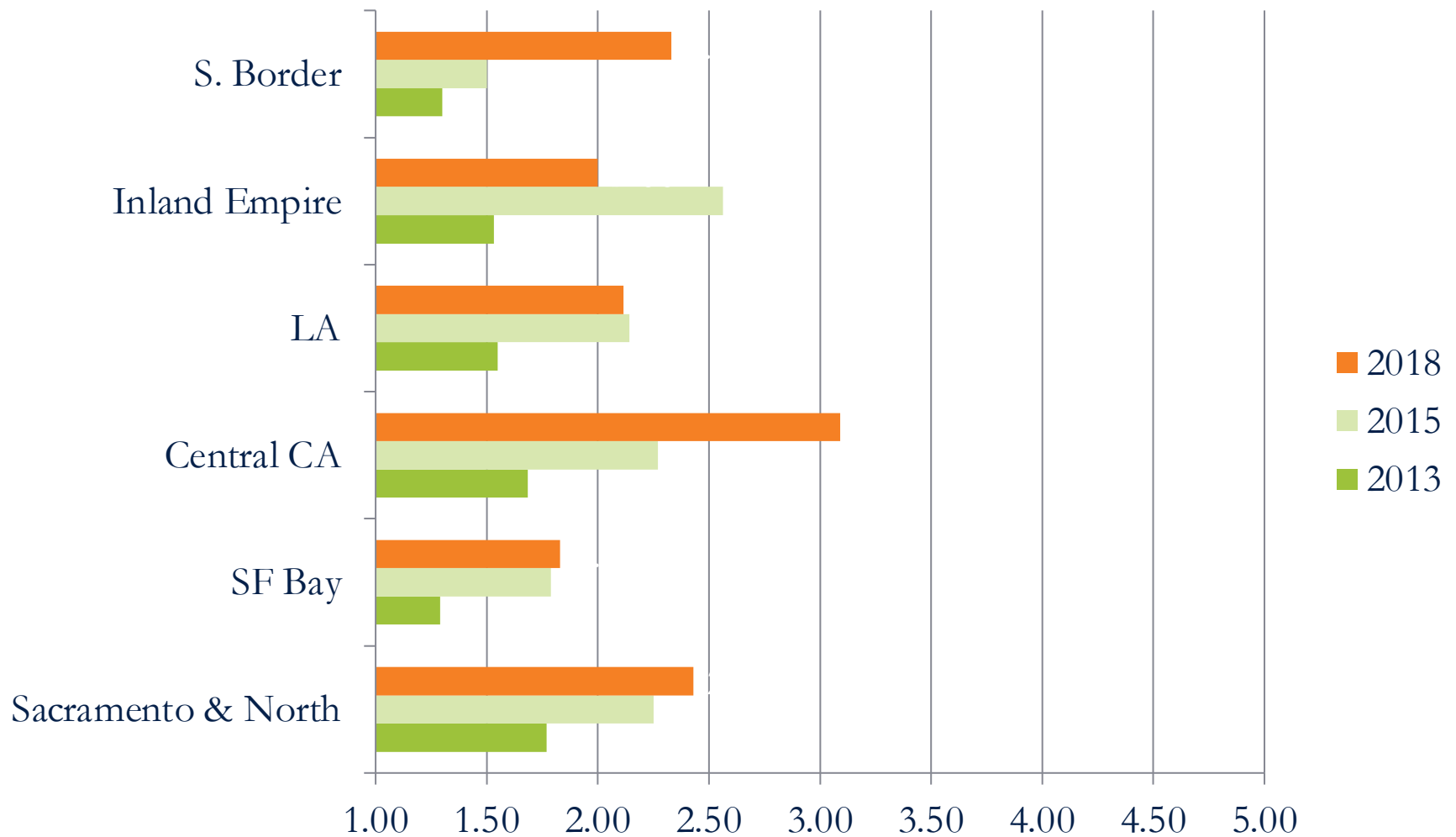


- High demand: difficult to fill open positions
- Moderate demand: some difficulty filling open positions
- Demand is in balance with supply
- Demand is less than supply available
- Demand is much less than supply available

# Differences across regions: Experienced RNs



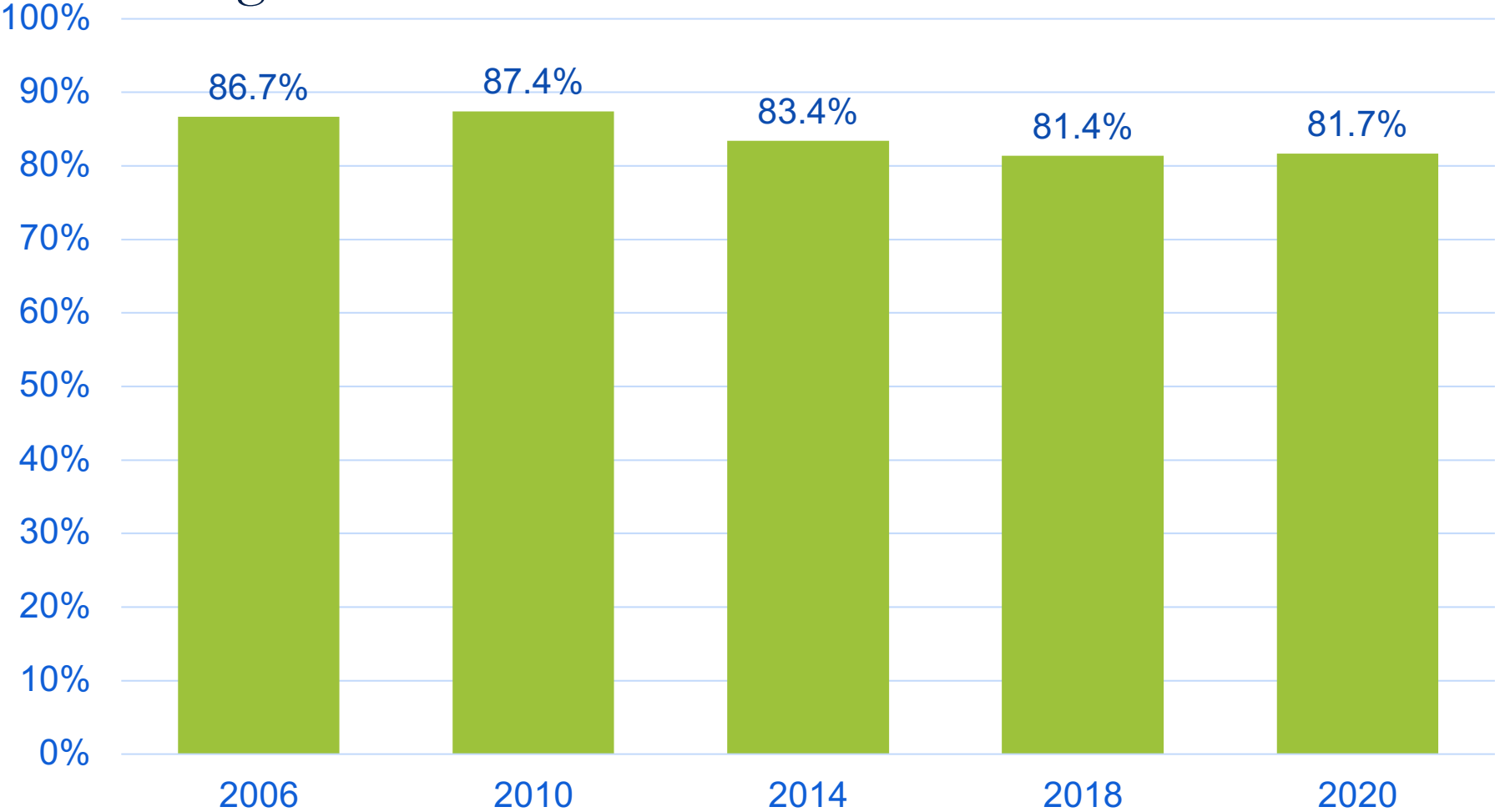
# Differences across regions: New Grad RNs





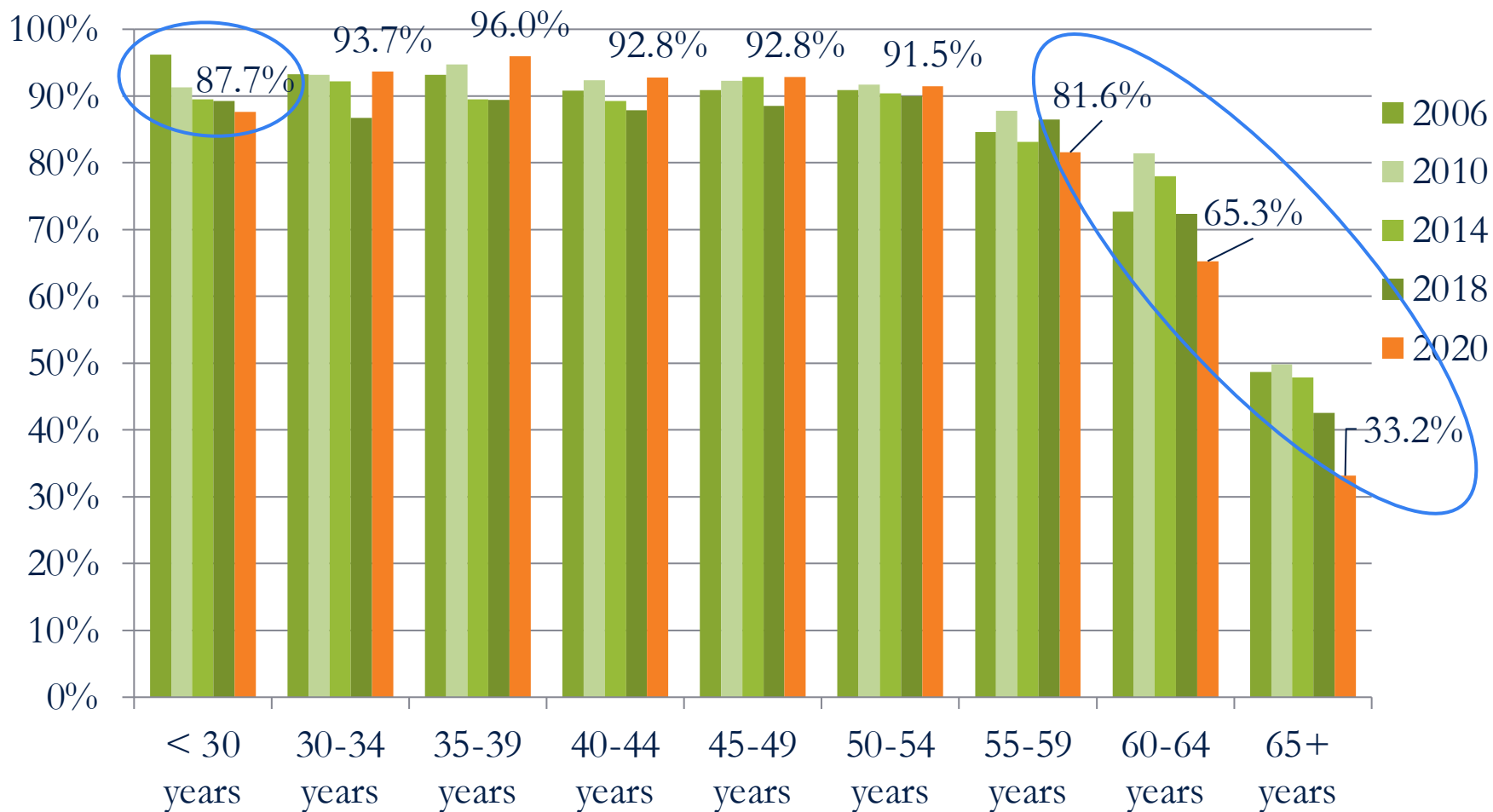
What about the pandemic?

# Percentage of California-resident RNs employed in nursing



**12.2% of working nurses have more than one RN job. (10.8% in 2018)**

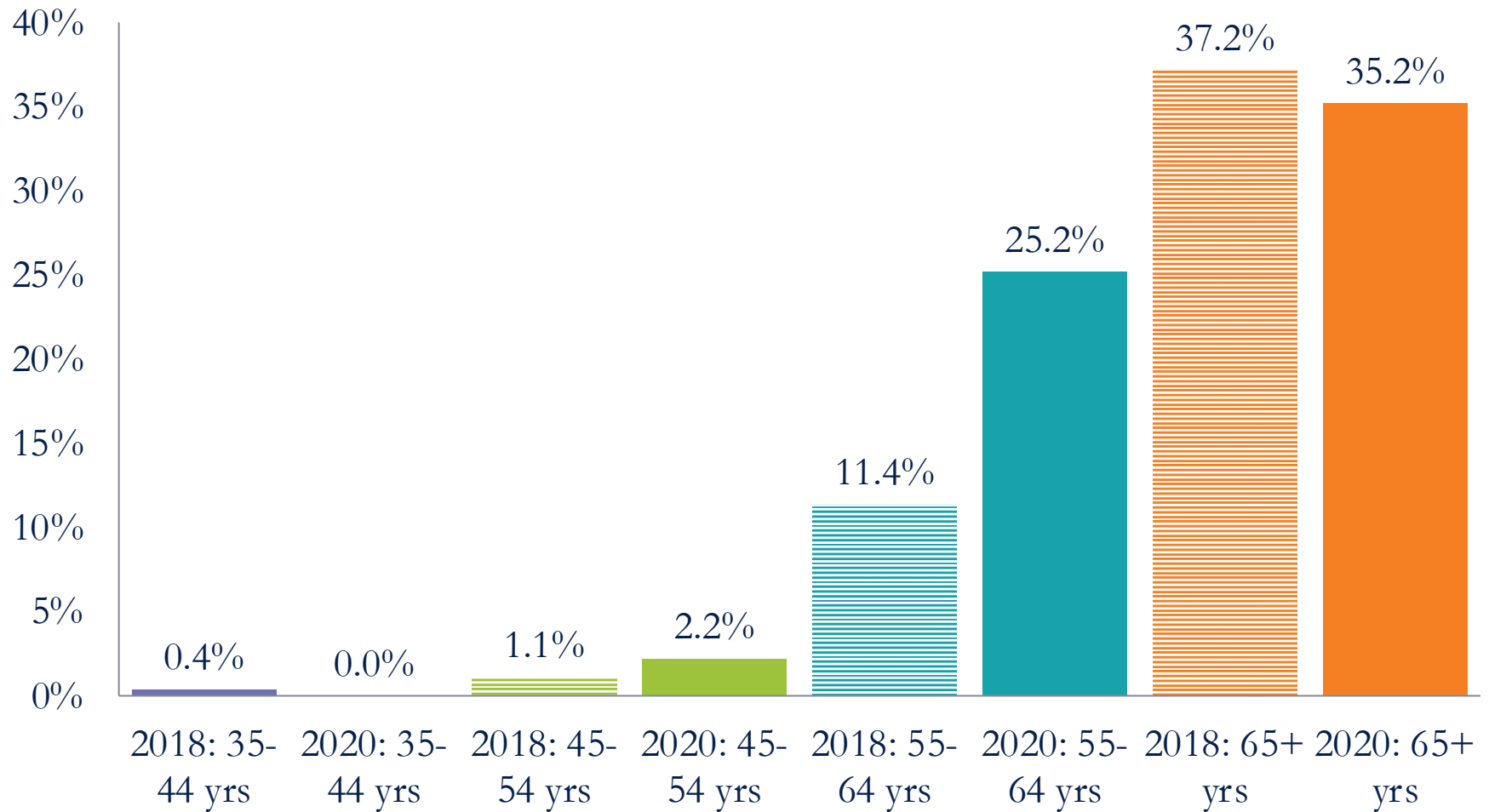
# Share of RNs employed in nursing by age



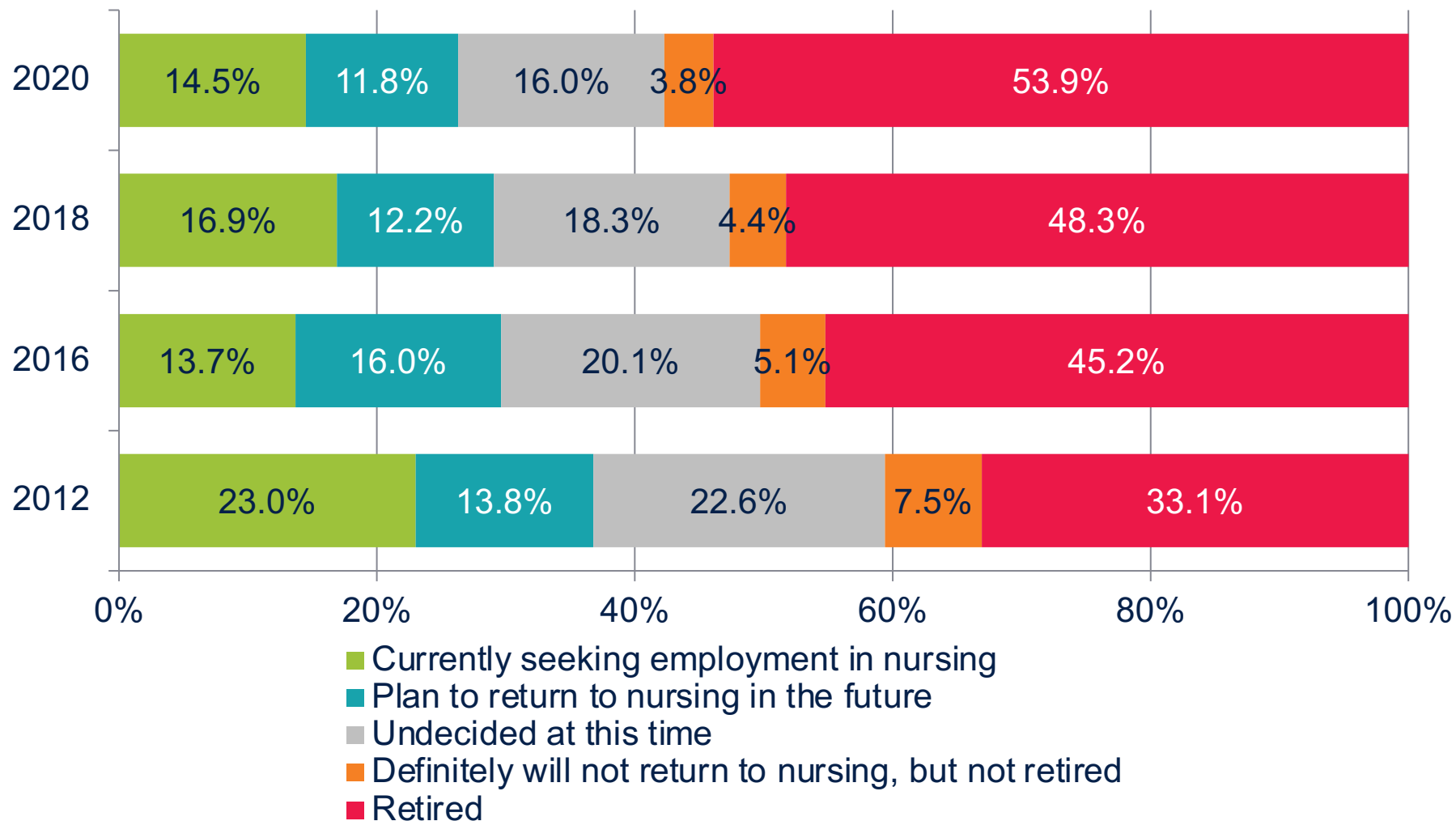
# Hours usually worked per week

	2012	2018	2020
Average number of hours	36.0	36.8	33.6
Working full-time	60.3%	60.2%	53.0%
Working part-time	21.8%	18.4%	26.8%
Working, unknown hours	3.0%	2.8%	1.7%
Not working	14.9%	18.6%	18.5%
Average hours, acute hospital		36.5	32.7
Average hours, SNF		36.3	37.1
Average hours, home health		41.0	37.5
Average hours, clinic/office		38.5	34.0

# Percent of working RNs who plan to retire or leave nursing in next 2 years



# Intentions of RNs not working in nursing

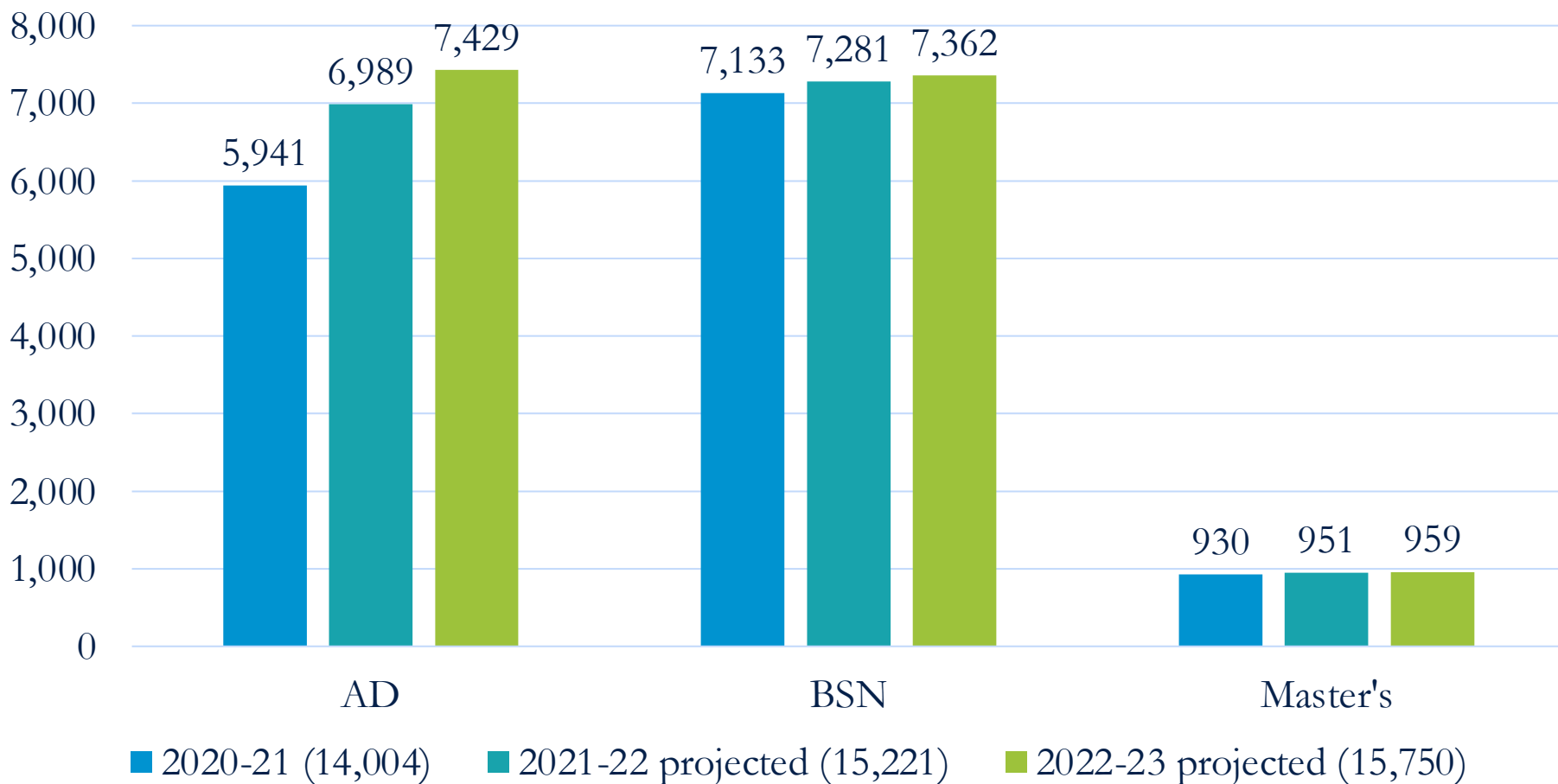


# What is happening in RN education?

BRN Survey of California Nursing Schools, 2020-2021	2018-19 new enrollment	2019-20 new enrollment	2020-21 new enrollment	Change 2018-19 to 2020-21
Spaces available	14,897	15,204	14,368	-3.6%
Total enrollments	15,150	15,007	14,004	-7.6%
Associate degree enrollments	7,014	6,852	5,941	-15.3%
Bachelor's degree enrollments	7,266	7,242	7,133	-1.8%
Master's degree enrollments	870	913	930	6.9%
Public college/university enrollments	8,103	7,944	6,866	-15.3%
Private college/university enrollments	7,047	7,063	7,138	1.3%

- Reasons for program enrollment declines:
  - Admitted students did not enroll
  - Unable to secure clinical placements
  - Insufficient faculty
  - Skipped a cohort or decreased size of cohort
  - Concerns about safety of students/faculty in clinical settings
  - Challenges converting to online/simulation platforms

# What about enrollments for the future?



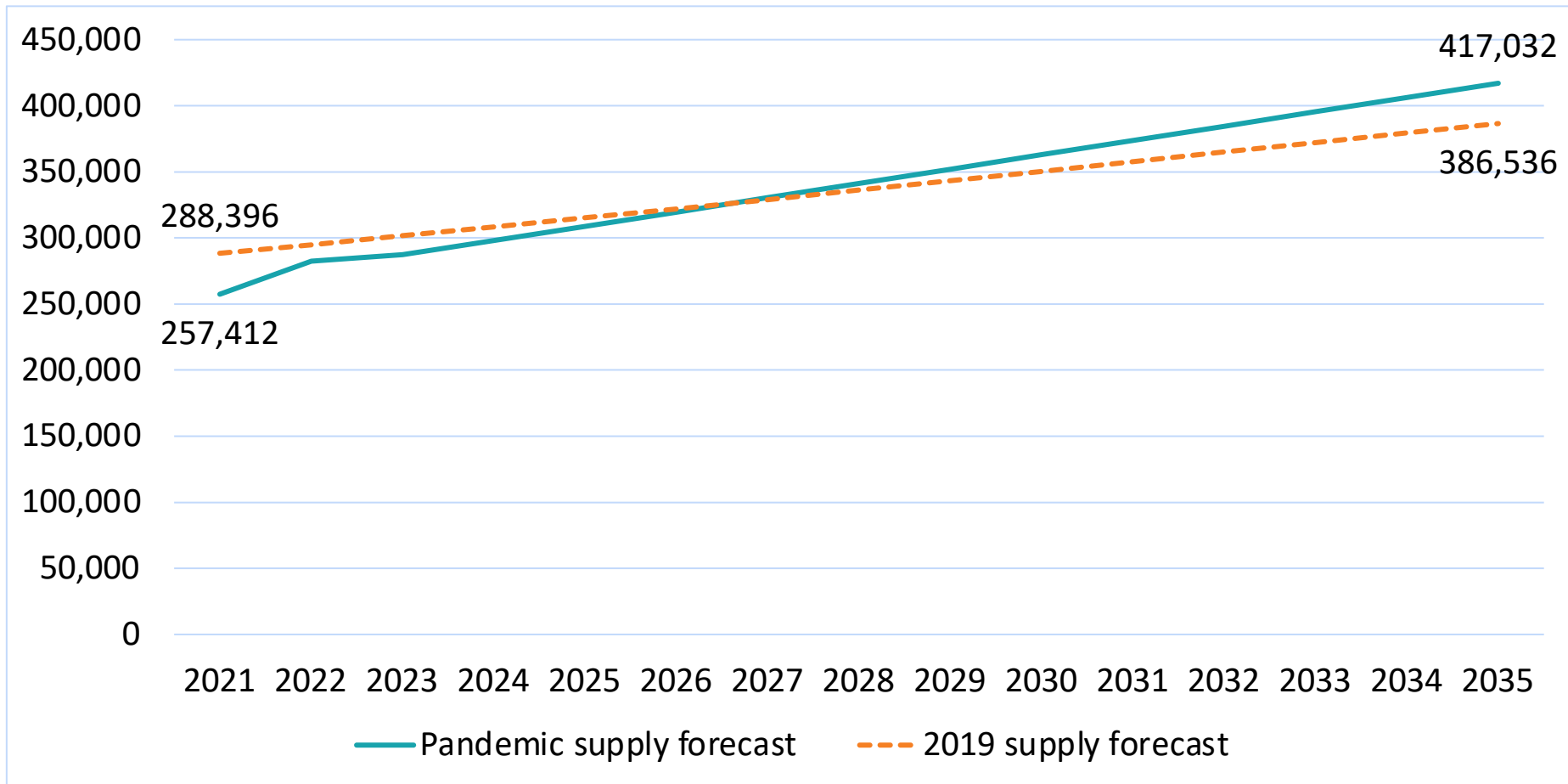


# Implications for future supply

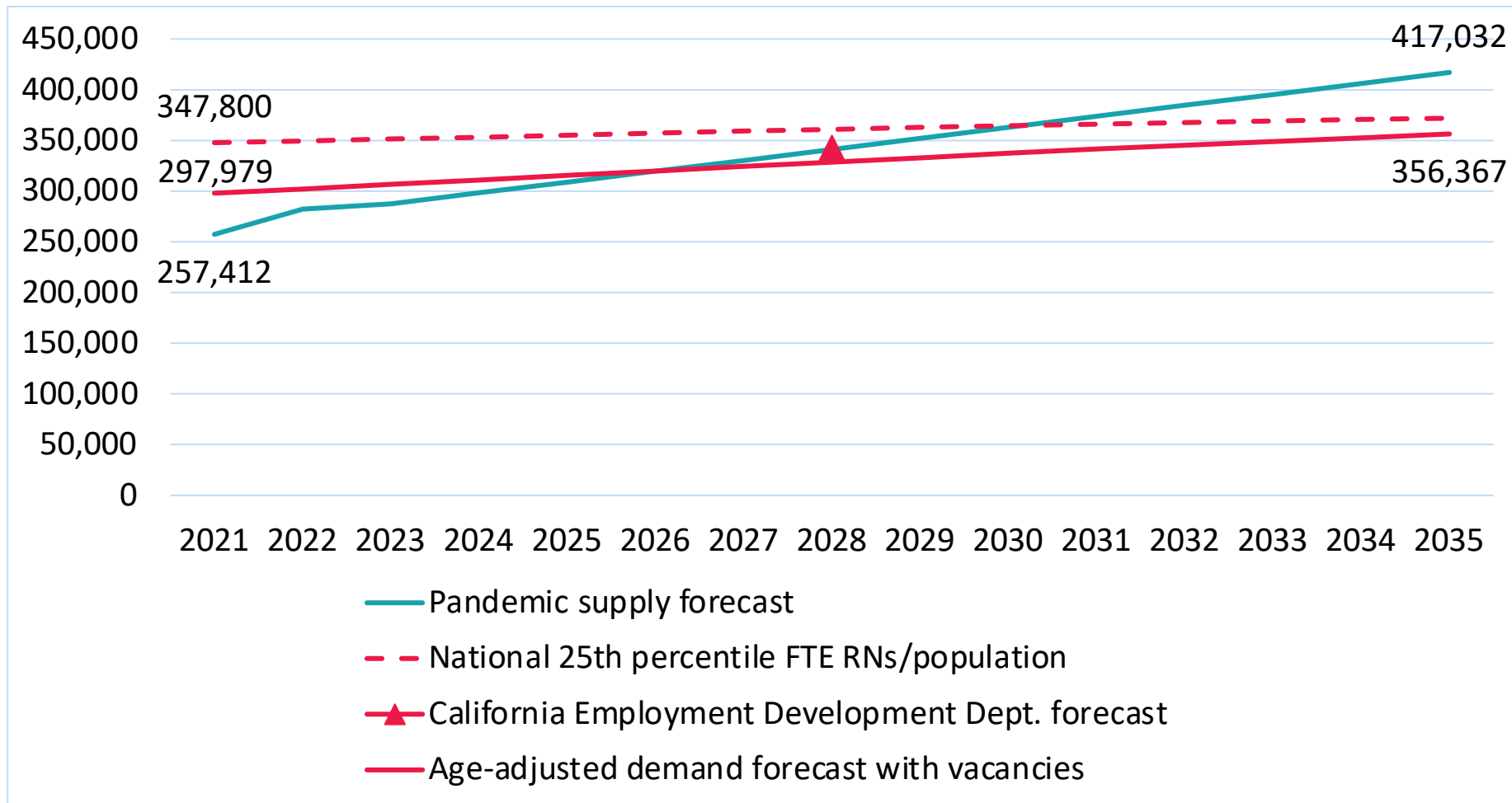
- Supply modeling approach: stock-and-flow
- Short-term impacts
  - Loss of older RNs – increased license lapse rate for 3 years
  - Lower graduation numbers as projected by schools
- Longer-term impacts
  - School enrollments will recover
  - Once older RNs leave, we assume departures from workforce will stabilize

# What does all this portend for the future?

## Projections of RN FTE supply (using last year's enrollment data)



# Comparing RN FTE demand & supply



## How big is the gap?

Year	Pandemic supply forecast	Age-adjusted demand with vacancies	Gap between supply and demand	Percentage gap
2021	257,412	297,979	40,567	13.6%
2026	319,598	319,696	98	0.0%
2031	373,695	341,365	-32,330	-9.5%

### Note:

We estimate that ~8,500 RNs were looking for jobs in late 2020.  
30% of these were <30 years old

# Implications for the future

- RNs changed their employment during the pandemic
  - Older RNs left or plan to leave
  - Younger RNs were more likely to be unemployed
- Over the next 5 years, we will have a shortage of RNs in California
  - The shortage will dissipate as new graduates enter the labor market
- We need to retain our new graduates
  - Comparisons of graduations to numbers of new licenses between 2018 and 2020 indicate that we may be losing 1000 new younger graduates per year
- Employers need to address burnout and stress to retain their RNs

UCSF

University of California  
San Francisco