



University of California
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Supply & Demand of RNs in the LA-Orange-Ventura region

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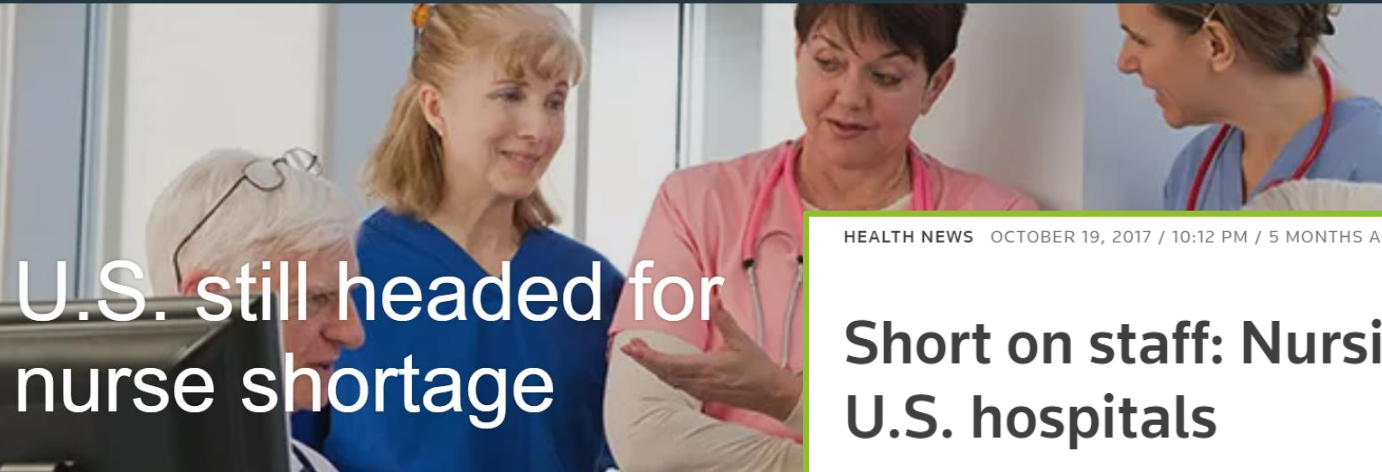
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Tales of a nursing shortage...



U.S. still headed for nurse shortage



HEALTH NEWS OCTOBER 19, 2017 / 10:12 PM / 5 MONTHS AGO

Short on staff: Nursing crisis strains U.S. hospitals

The U.S. Is Running Out of Nurses

The country has experienced nursing shortages for decades, but an aging population means the problem is about to get worse.

REBECCA GRANT | FEB 3, 2016 | HEALTH

COLUMNISTS 77,973 SHARES    

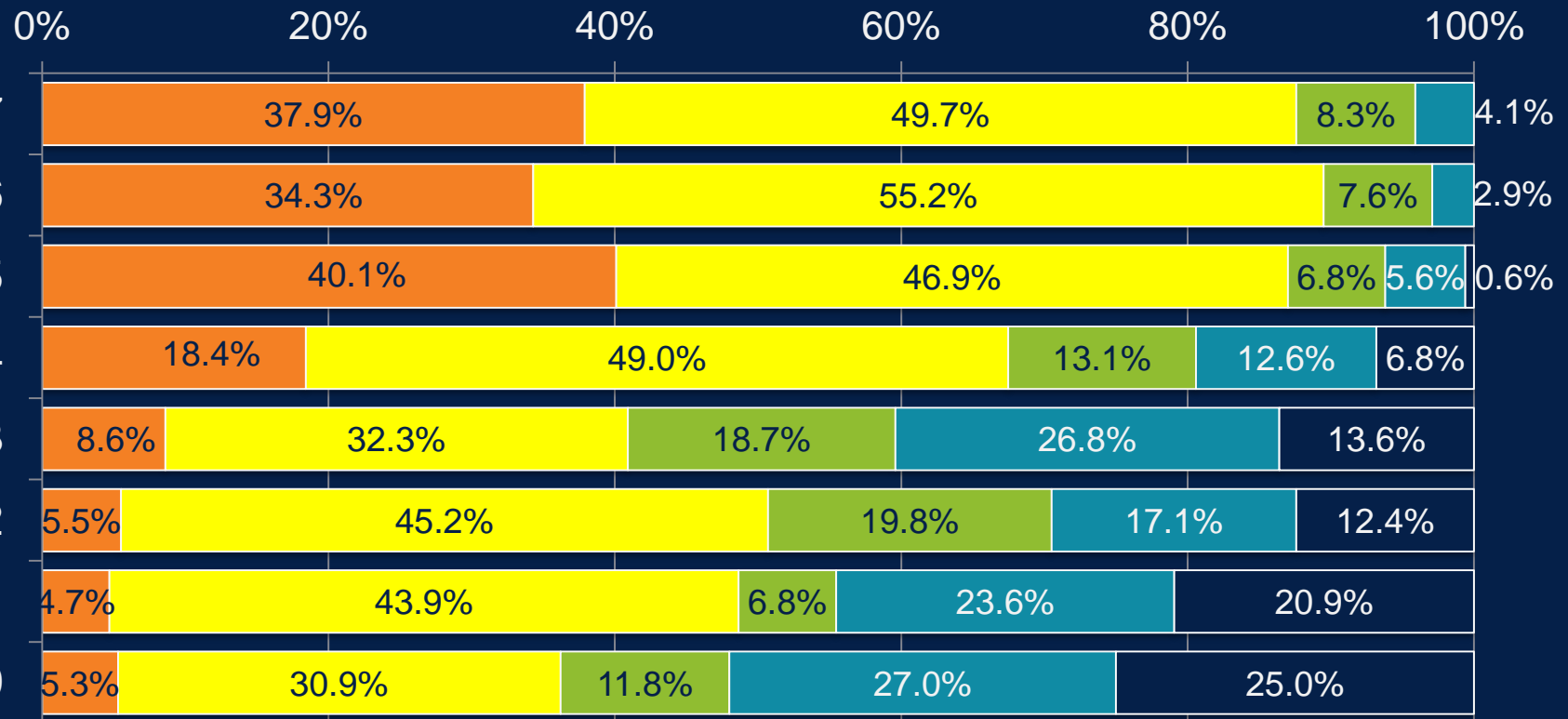
Is US headed for worst nursing shortage?

By: [Howard Gerber](#) - @inquirerdotnet INQUIRER.net US Bureau / 01:51 AM November 30, 2017

Forecasting future RN supply & demand

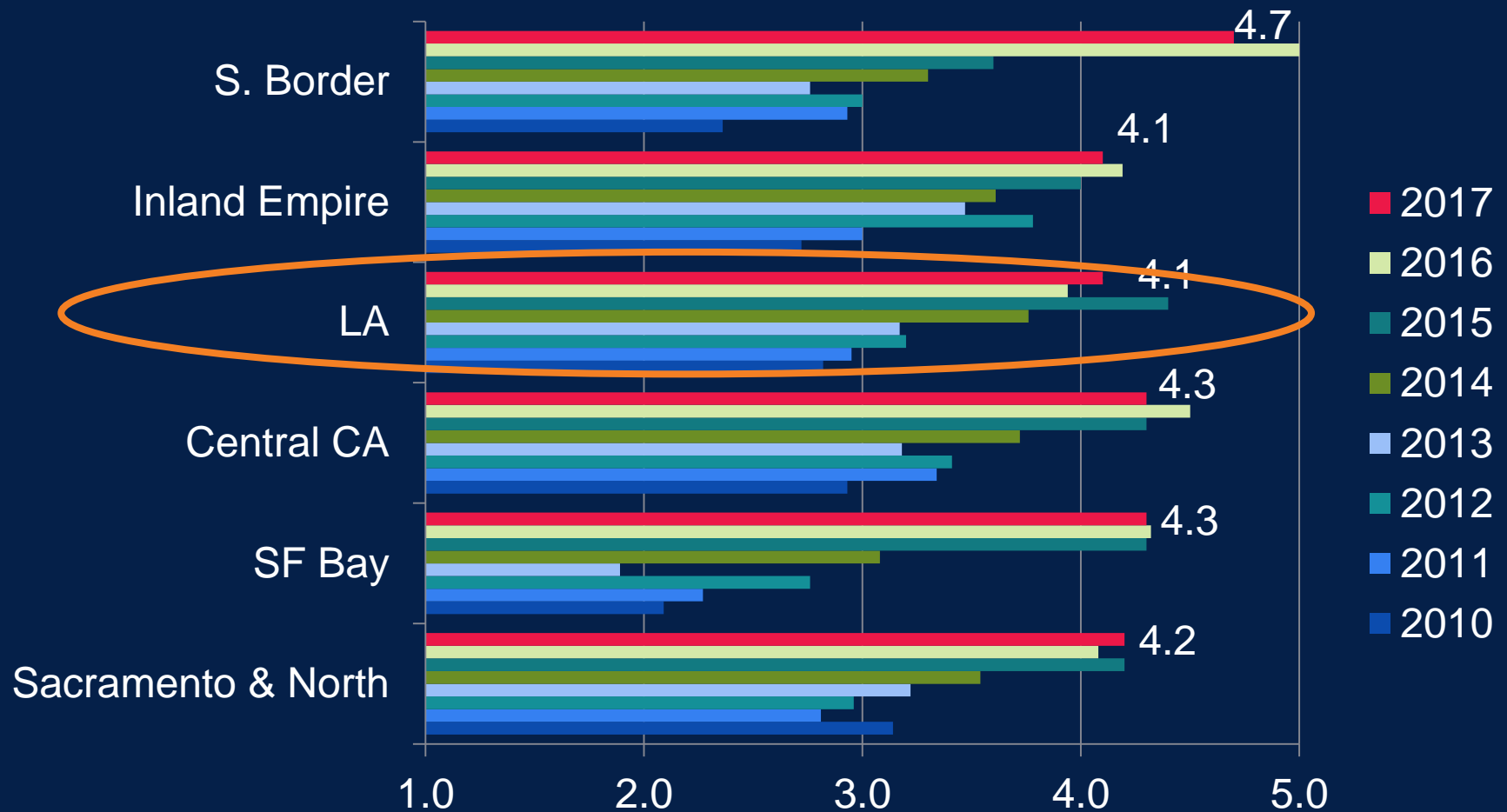
- **National forecasts:** market is balanced
 - National Center for Health Workforce Analysis, 2017
 - National surplus of 293,800 RNs by 2030 (8.2%)
 - Assumes supply = demand in 2014
 - Auerbach et al. 2015 – 128,000 RN shortage by 2025 (4%)
- **California**
 - NCHWA 2017 – 44,500 short (11.5%)
 - Auerbach et al. 2017 – only 0.7% per capita supply growth in Pacific region
 - Spetz 2017 – no shortage overall, but skills & regional imbalance

Perceptions of employers: Overall labor market

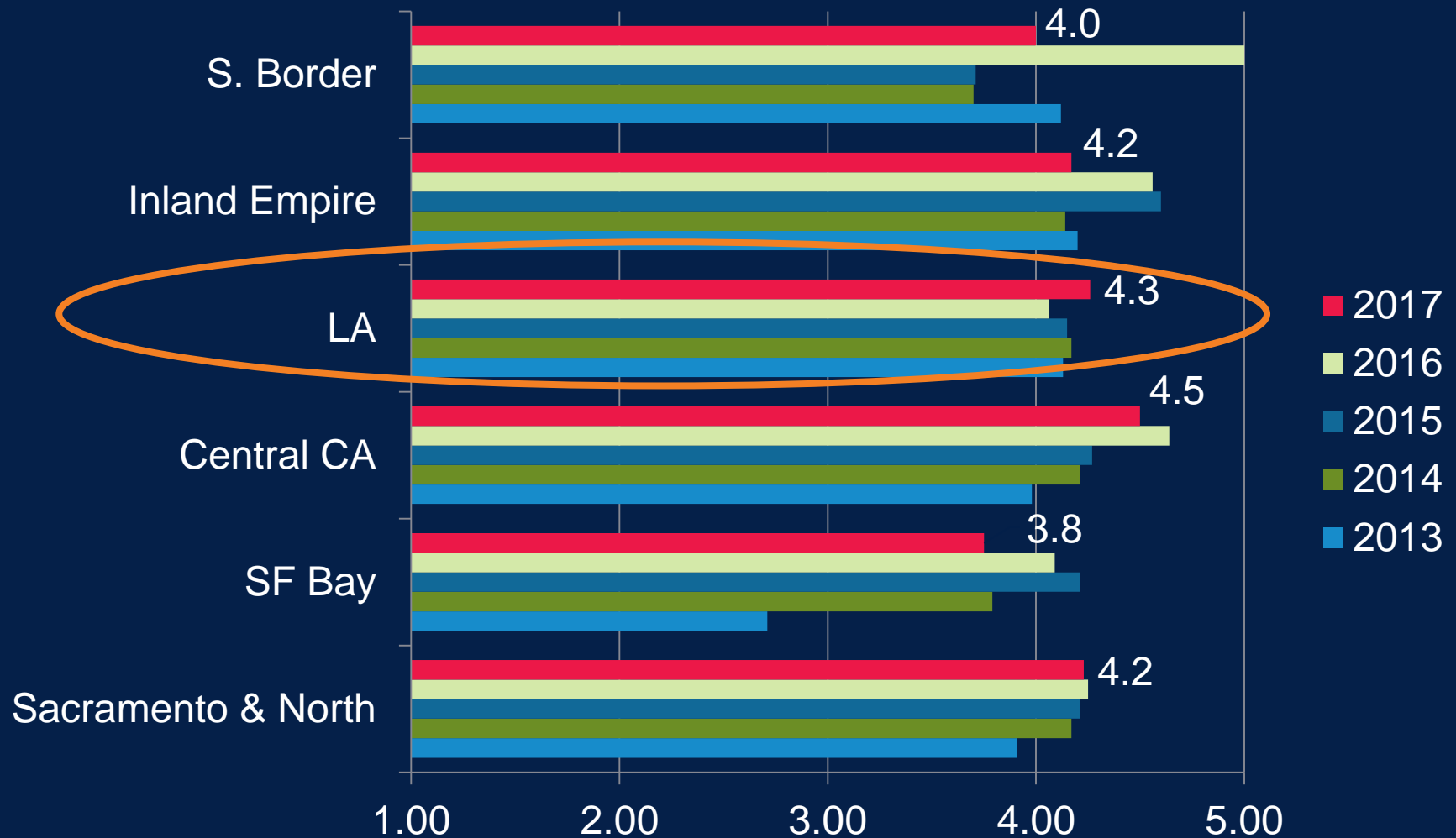


- High demand: difficult to fill open positions
- Moderate demand: some difficulty filling open positions
- Demand is in balance with supply
- Demand is less than supply available
- Demand is much less than supply available

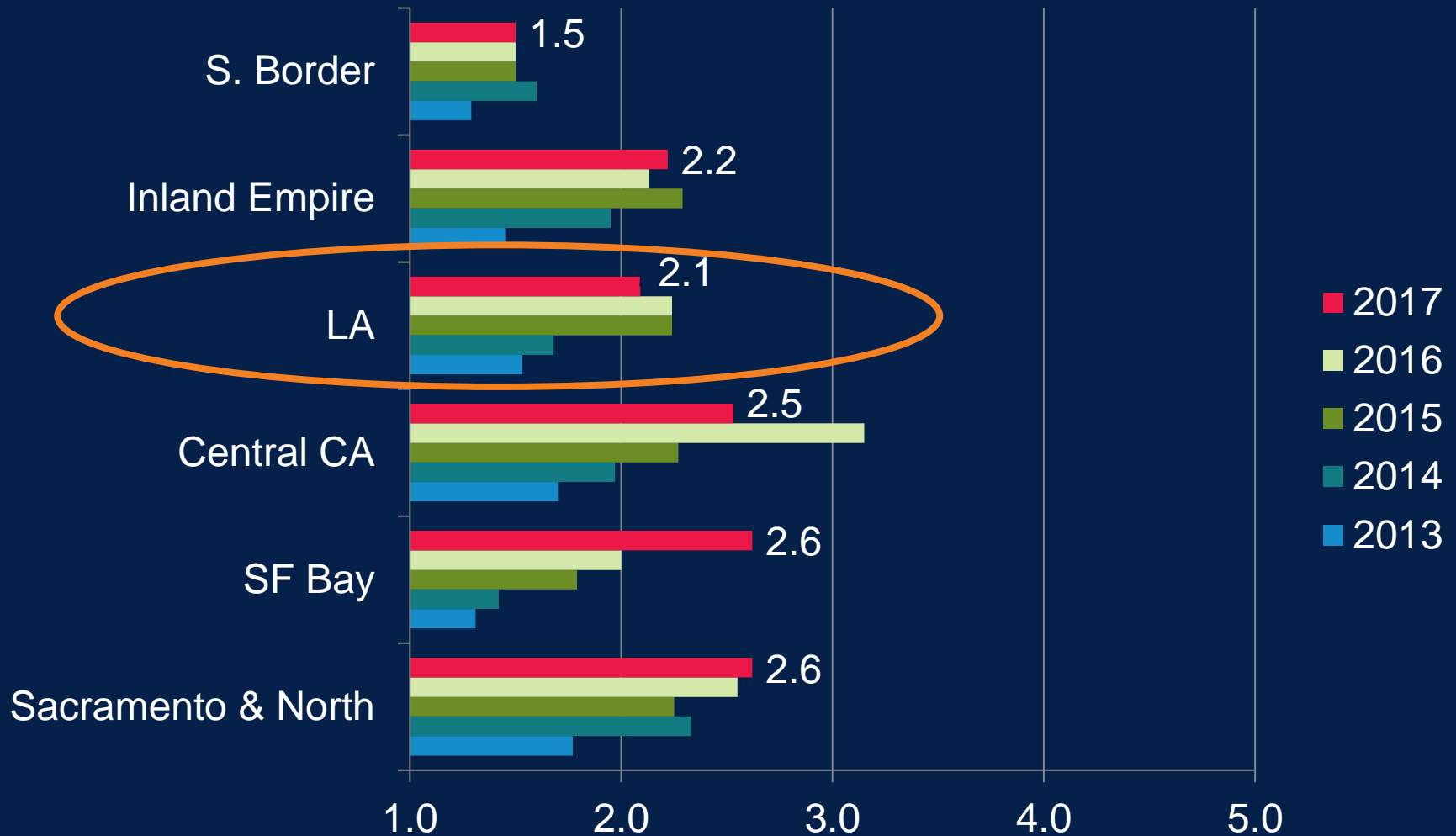
Differences across regions: Overall RN labor market



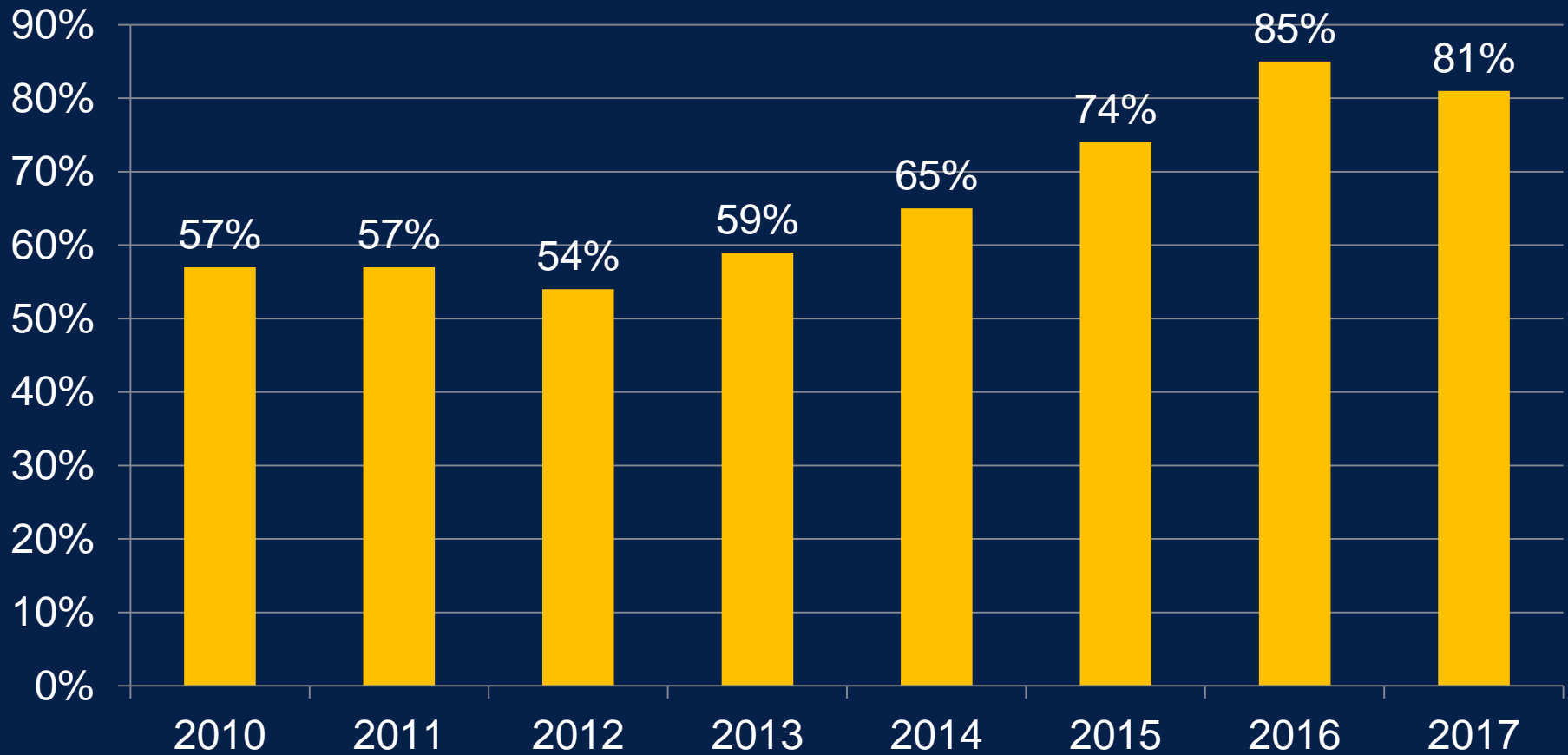
Differences across regions: Experienced RNs



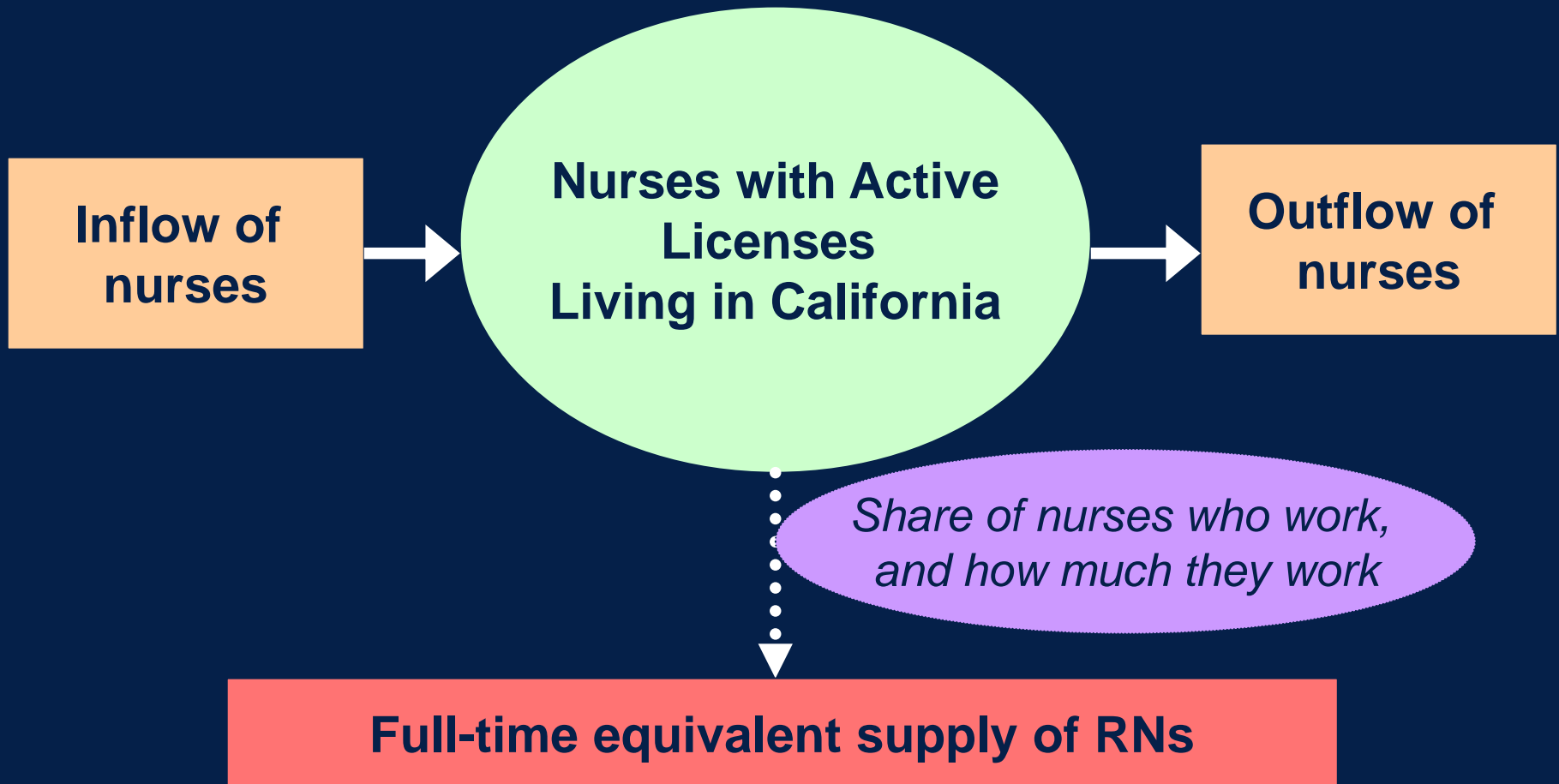
Differences across regions: New Grad RNs



New Graduate Employment



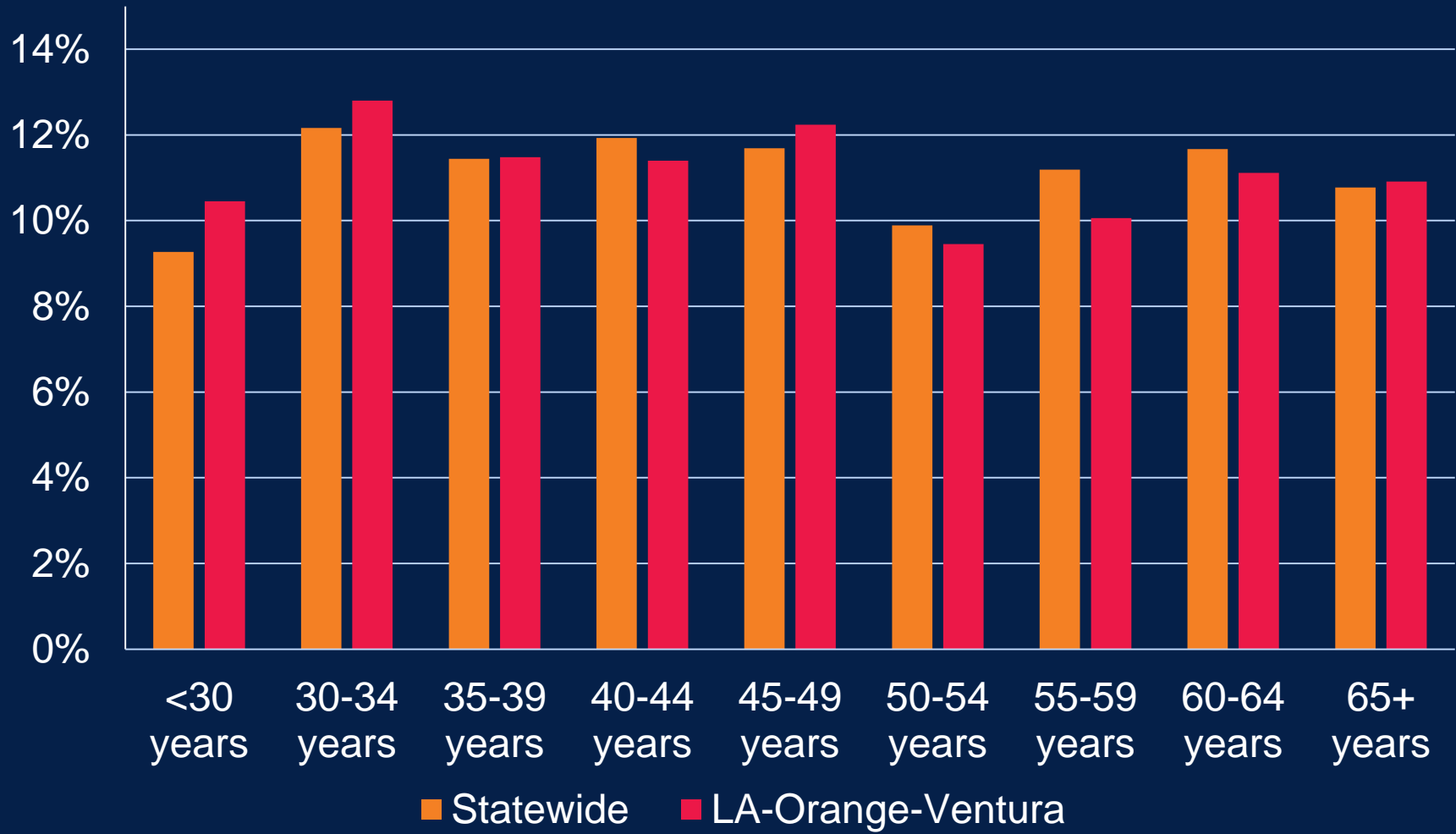
A model of the supply of RNs



Forecasting demand is harder

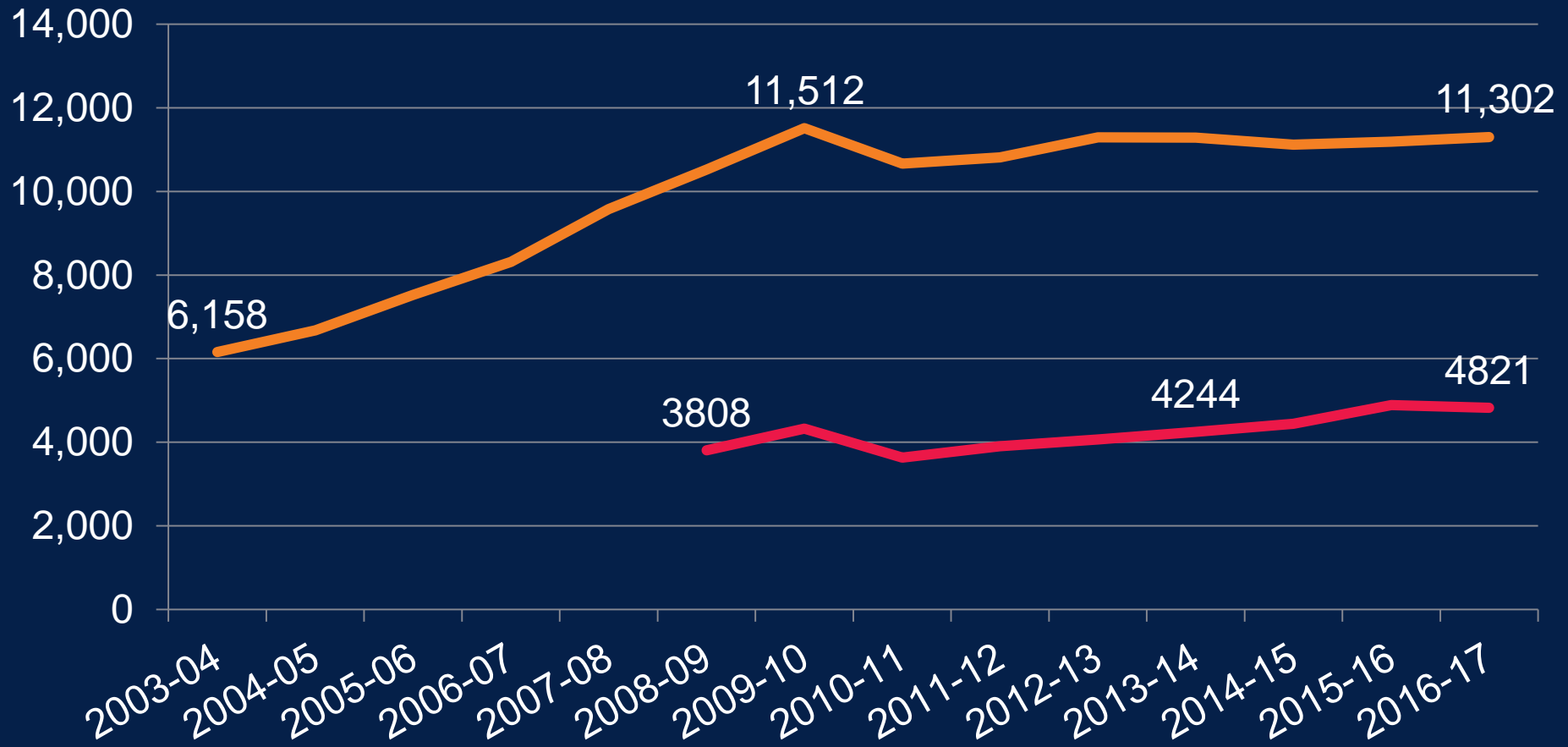
- Number of nurses per capita
 - What is the target?
 - National average?
 - Some arbitrary benchmark?
 - Estimates of how many providers are needed to provide XYZ?
- Demand-based models can be based on economic demand models
 - Easier said than done....

Age distribution of licensed RNs



Source: Spetz et al., 2016 California Survey of RNs

RN graduations per year



These numbers do not include satellite campuses

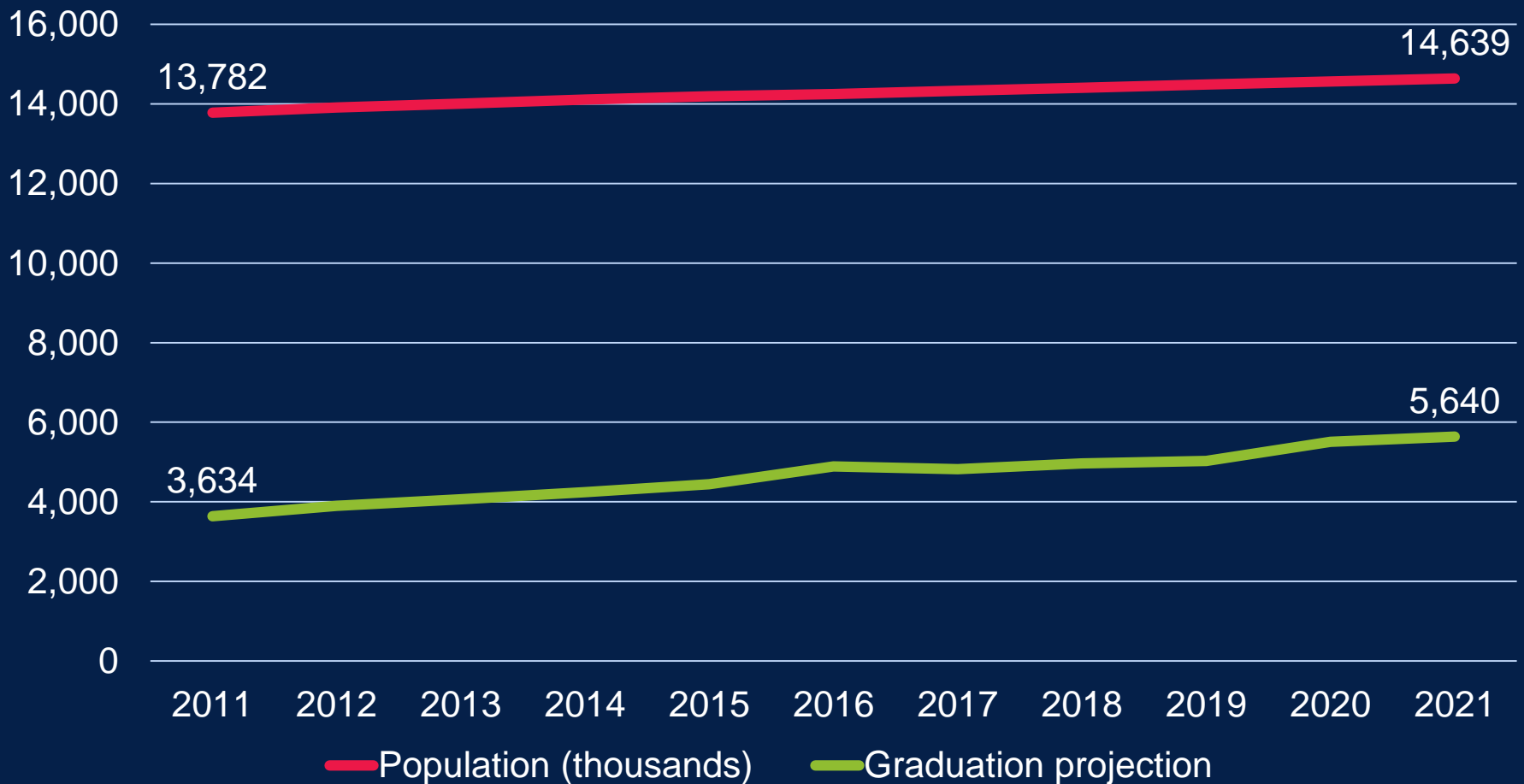
Statewide graduations are expected to hold steady

	New enrollment	Projected enrollment from 1 yr	Projected enrollment from 2 yrs	Graduations
2014-2015	13,318	12,162	13,347	11,119
2015-2016	13,152	13,110	12,177	11,191
2016-2017		13,862	13,236	10,761
2017-2018			14,219	10,627
2018-2019				11,200
2019-2020				11,489

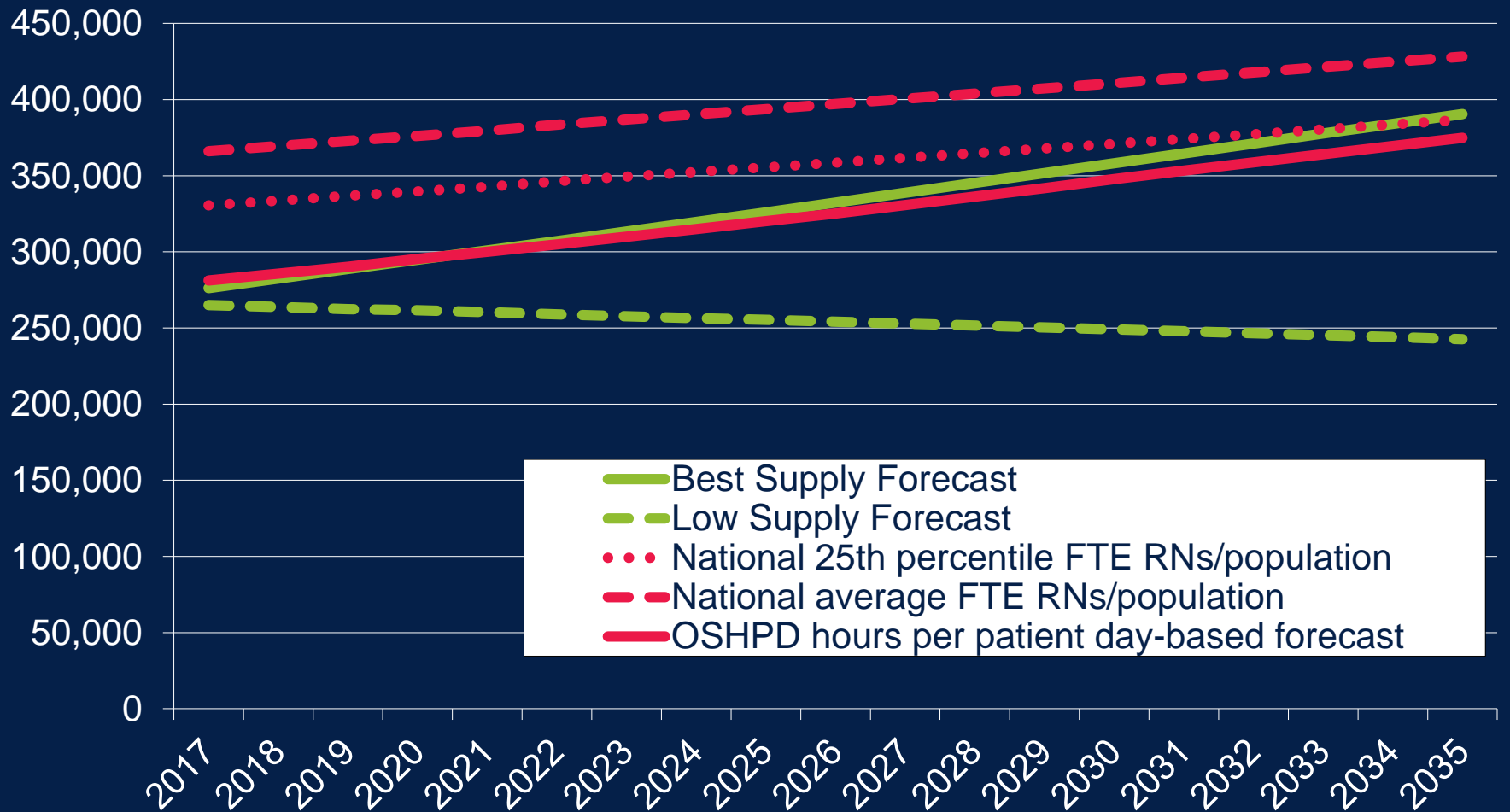
LA-Orange-Ventura graduations are projected to continue to grow

	New enrollment	Projected enrollment from 1 yr	Projected enrollment from 2 yrs	Graduations
2015-2016	5,966	5,561	4,483	4,886
2016-2017	6,040	5,837	5,590	4,821
2017-2018		6,619	6,101	4,963
2018-2019			6,780	5,024
2019-2020				5,506
2020-2021				5,640

What is projected population growth in the region?

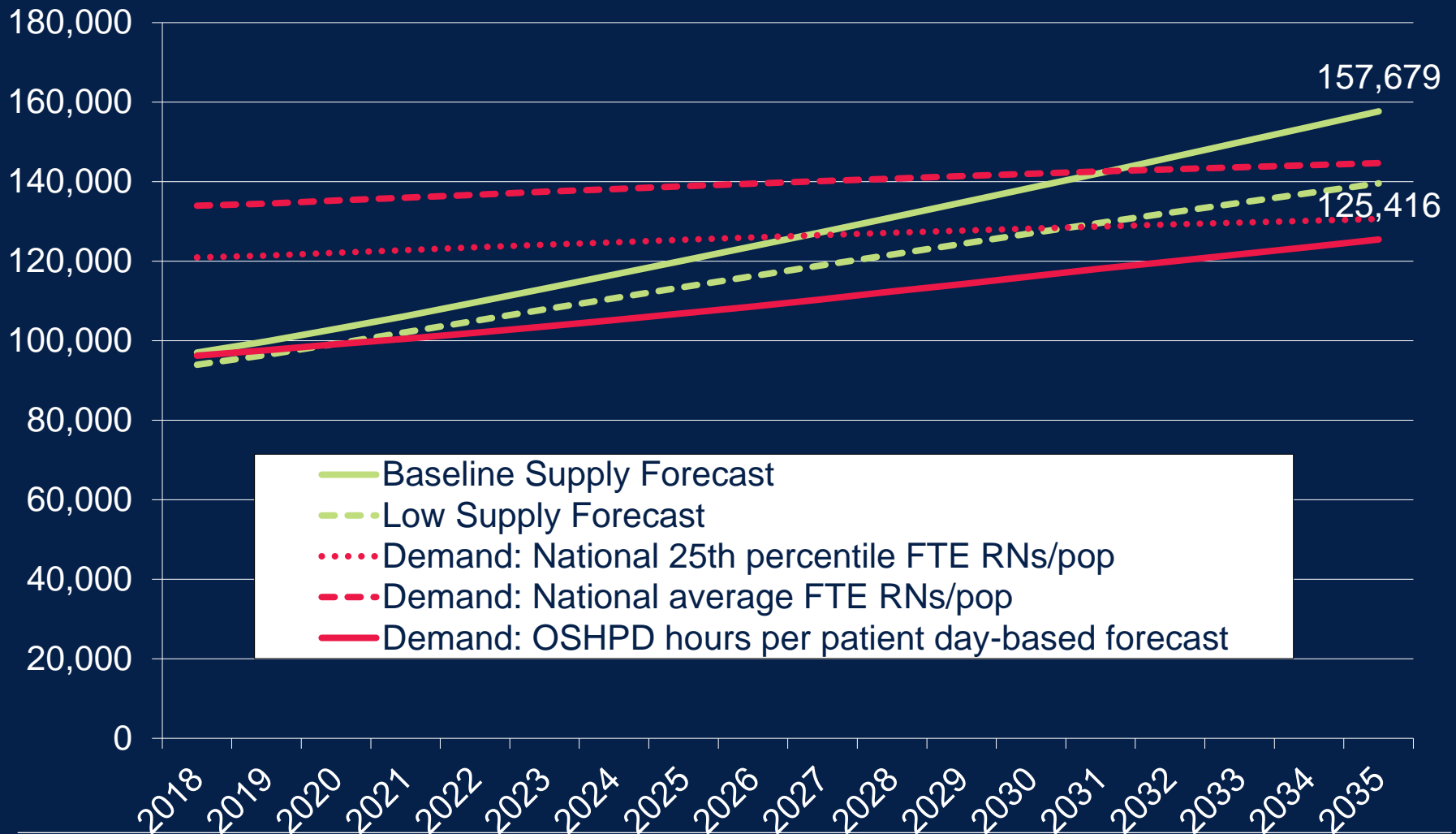


California RN supply and demand forecasts, 2017-2035



Regional differences are important

Supply & demand forecasts for LA region



Inflows and outflows for the LA region

- Inflows = 6,438 now 7,257 by 2021
 - Graduations: 4,821 in 2016-17 5,640 in 2020-21
 - Migration into the region: 896 per year 2016-2018
 - Endorsements from other states: 721 in 2017

- Outflows = 5,334 now
 - Migration out of the region/state: 2,101 per year 2016-2018
 - Lapsed licenses: 3,233 per year 2016-2018

- Conclusion: Inflows exceed outflows >2000 in a few years
 - Even with low growth the region will overshoot demand

Impact of oversupply

- Unemployed new graduates
- Greater competition for clinical space than needed
- Will these new RNs move to other regions or states?
 - >50% of recent RN grads work within 40 miles of high school
 - This can be an opportunity to address shortages in other regions

How do we address the challenge?

LA-Orange-Ventura region faces a surplus

Projected new graduate growth is much higher than needed

Competition for clinical space

Need to encourage graduates to move elsewhere