LEGISLATIVE ANALYST'S OFFICE



# **California's Teacher Workforce in Context**

Presented to: Senate Education Committee Hon. Carol Liu, Chair





#### **Overview of Teaching Workforce**

- California Currently Has Approximately 295,000 Teachers
  - About half of California's teachers serve in elementary schools, slightly more than 40 percent serve in middle and high schools, and slightly less than 10 percent in other settings (such as alternative schools and adult schools).
  - Between 5 and 10 percent of California's teachers serve in supporting capacities, such as being reading specialists or mentor teachers.
- About 75 Percent of California's Teachers Are Female (About the Same as the National Average)
- Roughly Two-Thirds of Teachers Are White, 20 Percent Hispanic, and 15 Percent Other
- California's Average Teacher Age Is 44.5 Years Old (Slightly Higher Than the Nationwide Average Teacher Age of 42.4 Years Old)
- Almost One-Third of California's Teachers Are 50 Years Old or Older (This Is About the Same Share as Eight Years Ago)
- The State's Average Retirement Age Is 62 Years Old



#### Overview of Teaching Workforce (Continued)

- Virtually All California's Teachers Have at Least a Bachelor's Degree
  - 42 percent of teachers possess a master's degree or higher.
  - Roughly similar shares of teachers nationwide have bachelor's and master's degrees.
- California's Teachers Have an Average of 14 Years of Experience
  - 12 percent of teachers are in their first two years of teaching.
- Teacher Salaries in California Linked With Education and Experience
  - Districts negotiate salaries with unions generally on the basis of educational attainment and years of experience, with teachers typically earning the same regardless of the grade or subject(s) they teach.
  - 55 percent of California's school districts offer salary premiums for holding a master's degree.
  - California's teachers tend to earn more in urban areas than rural areas.
- Average Teacher Salary in California Higher Than Most Other States
  - California's average teacher salary (\$74,090 in 2014-15) is higher than most other states, though its class sizes tend to be larger and its cost of living higher.



#### Pathways to Becoming a Teacher

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## California Has Both Traditional and Alternative Ways of Becoming a Teacher

- Vast majority (81 percent in 2013-14) of teachers complete traditional pathway.
- Of those completing an alternative pathway in 2013-14,
   84 percent used university-run programs whereas 16 percent used district-run preparation programs.

## Traditional Teacher Pathway Consists of Preliminary and Clear Credential

- Preliminary credential requirements: (1) obtain a bachelor's degree, (2) complete a teacher preparation program, and (3) pass several state-required tests.
- Clear credential requirements: (1) complete a state-approved induction program and (2) complete advanced training in health education, instruction for students with disabilities, and the use of education technology.

## Alternative Pathways Mix Preparation With On-the-Job Teaching

 Internship credential allows credential holder to teach while enrolled in a preparation program.

## One-Year Permits Intended to Help Address Staffing Emergencies

One-year teaching permit allows an individual to teach under special conditions. Typically, affected districts must demonstrate to the Commission on Teacher Credentialing (CTC) that they have made a good faith effort to recruit a qualified teacher before being granted a one-year permit. Districts must reapply for permits annually.



#### Pathways to Becoming a Teacher (Continued)



The State Grants Waivers as a Last Resort



#### **Changing Credential Requirements Affects Teacher Supply**

- Increasing credential requirements results in at least a shortterm reduction in teacher supply, as fewer individuals meet the higher requirements.
- When requirements for teachers increase, districts may cope with associated staffing shortages by requesting additional one-year permits.
- Reducing credential requirements or having more flexible requirements results in an increase in teacher supply, with more individuals meeting the modified requirements.

	Valid for:	Attain Bachelor's Degree	Pass Basic Skills Exam	Pass Subject Matter Exam(s)	
Clear credential	5 Years <sup>a</sup>	<b>√</b>	$\checkmark$	$\checkmark$	
Internship credential	2 Years <sup>b</sup>	$\checkmark$	<b>√</b>	<b>√</b>	

Comparing Teaching Credential and Permit Requirements

1 Year

Waiver 1 Year 

Substitute permit 1 Year<sup>a</sup> 

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One-year permit<sup>c</sup>

<sup>&</sup>lt;sup>a</sup> May be renewed.

b May be extended for one additional year if extenuating circumstances.

<sup>&</sup>lt;sup>C</sup> The state has two types of one-year permits: (1) Provisional Internship and (2) Short-Term Staff Permits. Requirements for these two permits are the same, but the first type is designed for schools with anticipated staffing needs whereas the second type is designed for schools with unanticipated staffing needs.

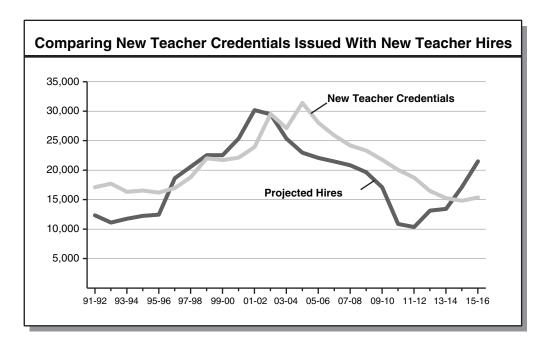


#### **Statewide Teacher Workforce Trends**



## **Longstanding Disconnect Between New Credentials Issued and New Hires**

- 1990-91 1996-97: New credentials outpace hires.
- 1996-97 2002-03: Hires outpace new credentials.
- 2002-03 2013-14: New credentials outpace hires.
- 2013-14 Present: Hires outpace new credentials.





#### **Overall Teacher Demand Trends**



## **Demand for New Teachers Fluctuates With Changes in School Funding**

- Increases (decreases) in the Proposition 98 minimum guarantee are highly correlated with increases (decreases) in projected teacher hires.
- Since 1989-90, about 70 percent of the time the guarantee increased, projected hires increased too. About 80 percent of the time the guarantee decreased, projected hires decreased too.
- The minimum guarantee is tied to state revenues and fluctuates notably over time.

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## **Demand for New Teachers Also Fluctuates Based on State Class-Size Policy**

- In 2013-14, the state provided fiscal incentives for school districts to begin reducing K-3 class sizes.
- Class sizes have been getting smaller since 2011-12 (when class sizes peaked). Student-teacher ratios have declined from about 22 students per teacher to 21 students per teacher.
- Smaller classes have increased teacher demand by an estimated 11,300 teachers.



#### **Overall Teacher Demand Trends**

(Continued)

## The Number of Projected Hires Is More Than Double in 2015-16 Compared to 2011-12

■ The Proposition 98 minimum guarantee in 2015-16 is also much higher than in 2011-12.

#### Important to Consider Key Interactions

State and local decisions regarding total school funding, teacher pay, and class sizes have key interactions. Some combinations of decisions can eliminate a teacher shortage whereas other combinations can exacerbate a shortage.



#### **Overall Teacher Supply Trends**

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## California's Decrease in Teachers Outpaced Nation During the Recession

- The nationwide stock of all teachers declined by 3.5 percent from 2008-09 to 2012-13, while the stock declined by 7 percent in California.
- Within the same time frame, new teacher credentials issued nationwide declined by 17 percent, while dropping by 36 percent in California.

Traditional Teacher Supply Pipeline Declined During Recession					
	2008-09	2012-13	Percent Change		
California New credentials issued Teacher preparation enrollment	17,407	11,080	-36%		
	44,692	19,854	-56		
United States New credentials issued Teacher preparation enrollment	232,707	192,459	-17%		
	719,081	499,800	-30		

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#### **State Data Show Recent Increase in New Teacher Supply**

- New credentials issued in California increased by 4 percent from 2013-14 to 2014-15.
- More Than One-Quarter of New Hires Nationwide Are Former Teachers Re-Entering the Profession
- Many Individuals With Teaching Credentials Are Not Teaching
  - Some graduates of teacher preparation programs do not enter the teaching workforce immediately.
  - We estimate upwards of 10,000 individuals with teaching credentials in California are not teaching.



#### **Overall Teacher Supply Trends**

(Continued)



## California Recruits a Significant Share of Teachers From Other States

- 24 percent of all preliminary credentials issued in California in 2014-15 were for individuals from out-of-state credentialing programs.
- 18 percent of all preliminary credentials issued in California from 1990-91 to 2014-15 went to candidates prepared out-of-state.
- This share has fluctuated significantly over time—from a low of 11 percent in 2003-04 to a high of 33 percent in 1990-91.



#### **Teacher Turnover**



### Nationwide, About 15 Percent of Teachers Leave Their Jobs Each Year

- In 2011-12, for example, 8.1 percent switched schools and 7.7 percent left the profession.
- Younger teachers and those with less tenure are more likely to switch teaching posts or leave the profession.
- Rates of turnover tend to be highest among special education teachers.
- Research cites various factors impacting a teacher's desire to leave, including lack of access to effective induction programs, lack of support by administrators and parents, dissatisfaction with current salary levels, and a high prevalence of student misbehavior/tardiness.
- Research finds relatively high turnover in schools with high percentages of low-income students. Research also finds higher turnover in urban schools compared to suburban schools.

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#### **Reducing Turnover Can Reduce Workforce Pressures**

- Fewer teachers leaving the state or profession reduces the need to replenish the current statewide stock of teachers.
- Fewer teachers leaving their current positions reduces each district's need to hire.
- We estimate the number of Californian teachers leaving the state or profession in 2014-15 was slightly higher than the number of projected district hires that year.



#### **Persistent Shortage Areas**



## California Perennially Experiences Teacher Shortages in Certain Subject Areas

- The California Department of Education produces an annual list of shortage areas using a federal methodology based largely on the number of vacant positions, misassigned teachers, and teachers on temporary teaching permits.
- The most common shortage areas in California (and the rest of the nation) are in science, bilingual education, special education, and math.
- Shortages may arise in certain areas for various reasons. For example, shortages might arise in science because of uncompetitive salaries whereas shortages might arise in special education because of certain job challenges (such as dealing with disputes between families and districts over students' individual education plans).
- Even within one shortage area, such as special education, the reasons underlying staffing difficulties can vary.

Frequency of Subject Area Shortages Within California				
Years of Shortage Since 1990 (26-Year Period)				
Subject	Number of Years Deemed Shortage Area			
Science Bilingual/foreign language Special education Mathematics	24 22 21 16			



#### **Persistent Shortage Areas**

(Continued)



### **Teacher Shortages Also Are Persistent in Certain Types of Schools**

- National data shows certain types of schools require more time to fill vacant positions (one indicator of staffing difficulties). Schools with increased staffing difficulties include central-city schools and schools with greater than 40 percent of students identified as low-income.
- Nationwide research also identifies higher rates of turnover in central-city and low-income schools.
- Other research and interviews suggest additional shortages exist in rural schools, though evidence is less conclusive.



Policy Category	Overriding Goal of Policy	Specific Programs
More Accessible Credentialing Programs	Increase the supply of teachers.	<ul><li>(1) Online programs (CalState TEACH).</li><li>(2) Internship programs.</li><li>(3) Programs that begin throughout the year.</li></ul>
Recruitment, Advertising, and Outreach	Increase the supply of teachers.	<ol> <li>Out-of-state recruitment (by districts).</li> <li>CalTeach recruitment centers.</li> <li>Recruit high schoolers (CSU partnerships).</li> <li>Recruit college students to become STEM teachers (UC).</li> <li>Credential reciprocity with other states.</li> </ol>
Support Programs	Reduce turnover and improve quality.	<ol> <li>(1) Beginning Teacher Support and Assessment (BTSA).</li> <li>(2) New teacher induction programs.</li> <li>(3) Peer Assessment and Review Program (PAR).</li> <li>(4) Ongoing professional development.</li> <li>(5) Additional preparation periods for certain teachers.</li> </ol>
Base Compensation Increases	Increase the supply of teachers, reduce turnover, and improve quality.	<ul><li>(1) Locally bargained salary increases.</li><li>(2) Differentiated pay by subject.</li></ul>
Bonuses	Attract people to teach in longstanding shortage areas and improve quality.	<ol> <li>(1) Annual bonuses for specific subjects.</li> <li>(2) Annual bonuses for dual-credential holders to teach specific subjects.</li> <li>(3) Annual bonuses to teach in hard-to-staff schools.</li> <li>(4) Return-to-workforce bonuses for retired teachers.</li> </ol>
Housing Subsidies	Increase the supply of teachers.	<ul><li>(1) Subsidized mortgages.</li><li>(2) Extra-Credit Teacher Home Purchase Program.</li><li>(3) Rent-controlled units (provided by districts).</li></ul>
Financial Aid for Becoming/ Working as a Teacher	Increase the supply of teachers and attract people to teach in longstanding shortage areas.	<ol> <li>(1) Assumption Program of Loans for Education (APLE).</li> <li>(2) Governor's Teaching Fellowship Program.</li> <li>(3) Cal Grant T.</li> <li>(4) Federal Teacher Loan Forgiveness Program.</li> <li>(5) Teacher cancellation of federal Perkins loans.</li> </ol>
More Flexible Credential Requirements	Increase the supply of teachers.	<ul><li>(1) Programs that allow individuals to test or waive out of requirements.</li><li>(2) Reductions in number or types of requirements.</li></ul>



#### **Assessing Effectiveness of Policies**



#### **Limited Evidence on Effectiveness**

- California has funded few independent evaluations of its programs designed to address teacher shortages.
- California has funded no comparative study to assess the relative cost-effectiveness of these programs.



#### **Research Finds Some Fiscal Incentives Are Effective**

- Research generally finds that higher base salaries for teachers increases teacher supply and retention. (California has not yet systematically tried this approach for persistent shortage areas, such as science and special education teachers.)
- Research generally finds that bonuses can attract people to teach in shortage areas.
- Research suggests that bonuses targeted to shortage areas may be more effective than overall salary increases for all teachers.

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## Research Finds That Support Programs Are Generally Effective

- Beginning teacher support programs that have certain components (such as regular contact with a mentor teacher) are associated with higher retention. One recent national study found 80 percent of teachers who began teaching in 2007-08 and participated in an induction program with a mentor teacher continued to teach after 5 years, compared to 64 percent who did not participate in such a program.
- Support from local administrators, additional preparation periods, and greater autonomy over curriculum also are associated with higher teacher retention.



#### **Assessing Effectiveness of Policies**

(Continued)



## **Out-of-State Recruitment Another Effective Strategy for Increasing Teacher Supply in the Short-Term**

- California's districts often recruit from out of state, especially when facing hiring challenges. Over the past 25 years, annual out-of-state teacher hires have ranged from about 2,500 to about 5,500.
- Other states, such as New York, credential more teachers than California while demanding far fewer. Less than half of program graduates in New York find jobs within the state after graduation.