



Chart Book

Addressing California's Emerging Teacher Shortage: *An Analysis of Sources and Solutions*

Linda Darling-Hammond, Roberta Furger, Patrick M. Shields, and Leib Sutcher

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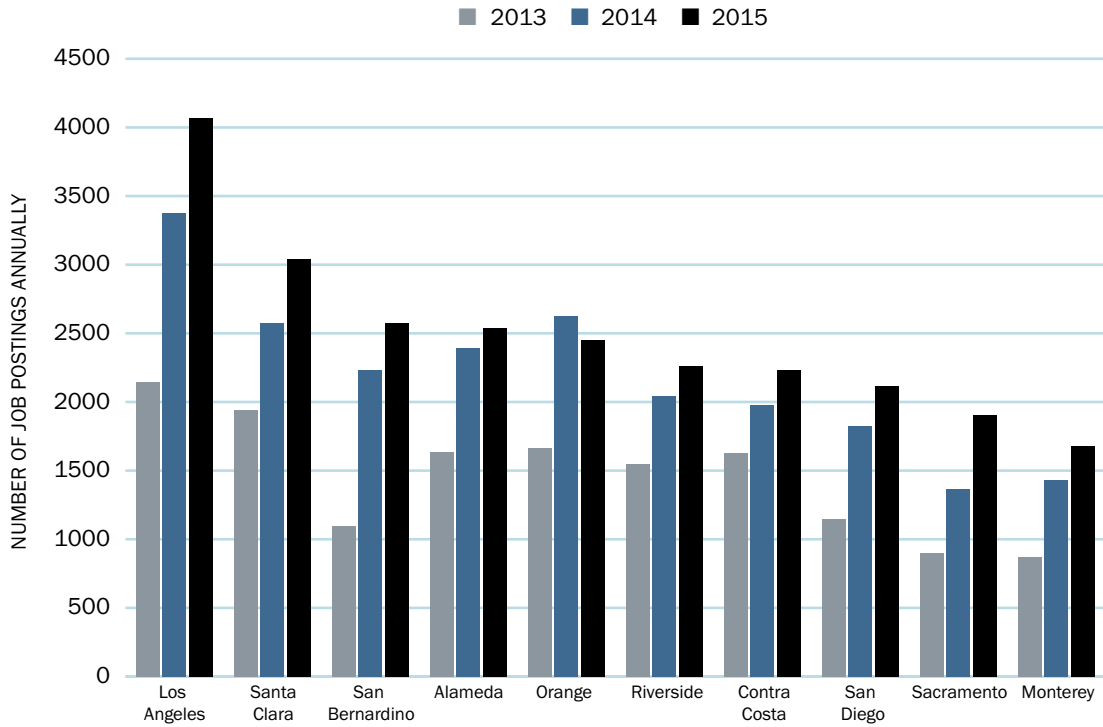
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Demand for Teachers Is Growing

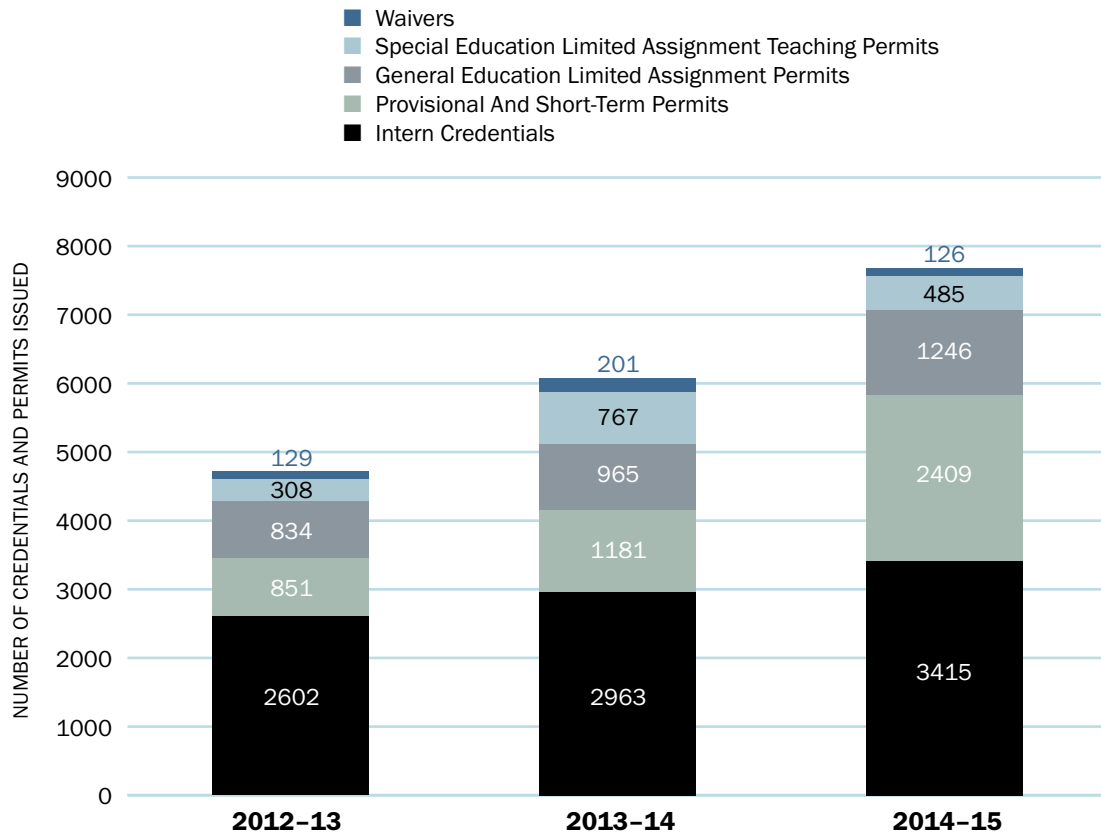


Note: Numbers reflect open teaching positions advertised on EdJoin over 12-month period, beginning October 16 and ending October 15.

Source: EdJoin data on postings for 12-month period, provided to LPI.

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Substandard Permits and Credentials Are Increasing, 2012-13 to 2014-15

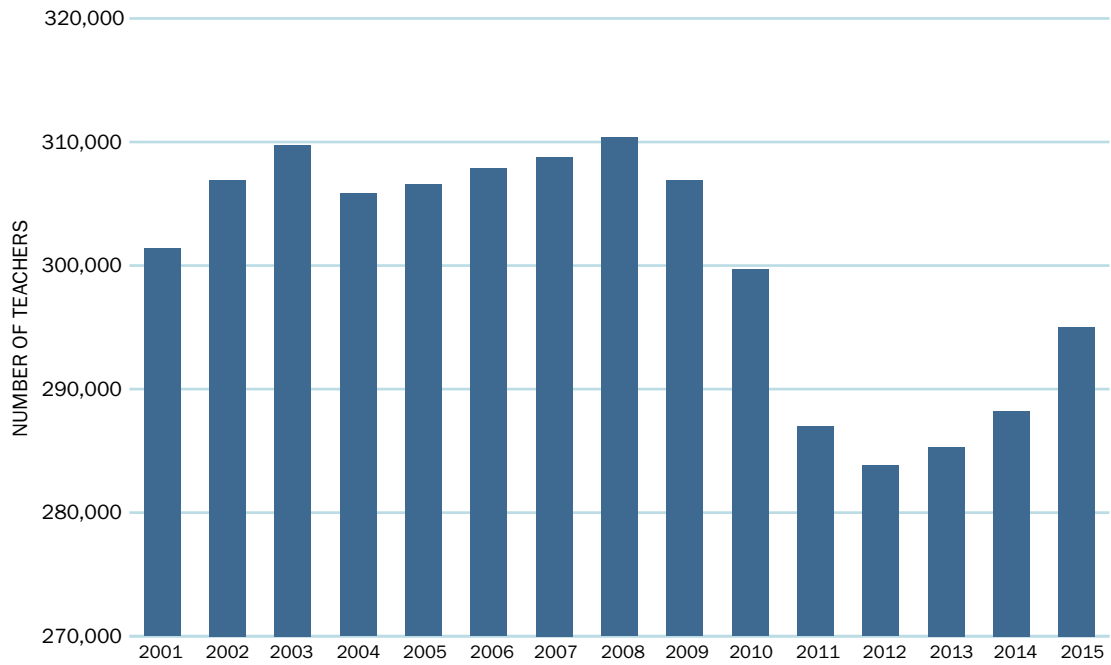


Note: Number of credentials issued between July 1st of each year and June 30 of the following year. (See Appendix B.)

Source: Data provided by the California Commission on Teacher Credentialing through a special request.

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The Teacher Workforce Is Expanding Again

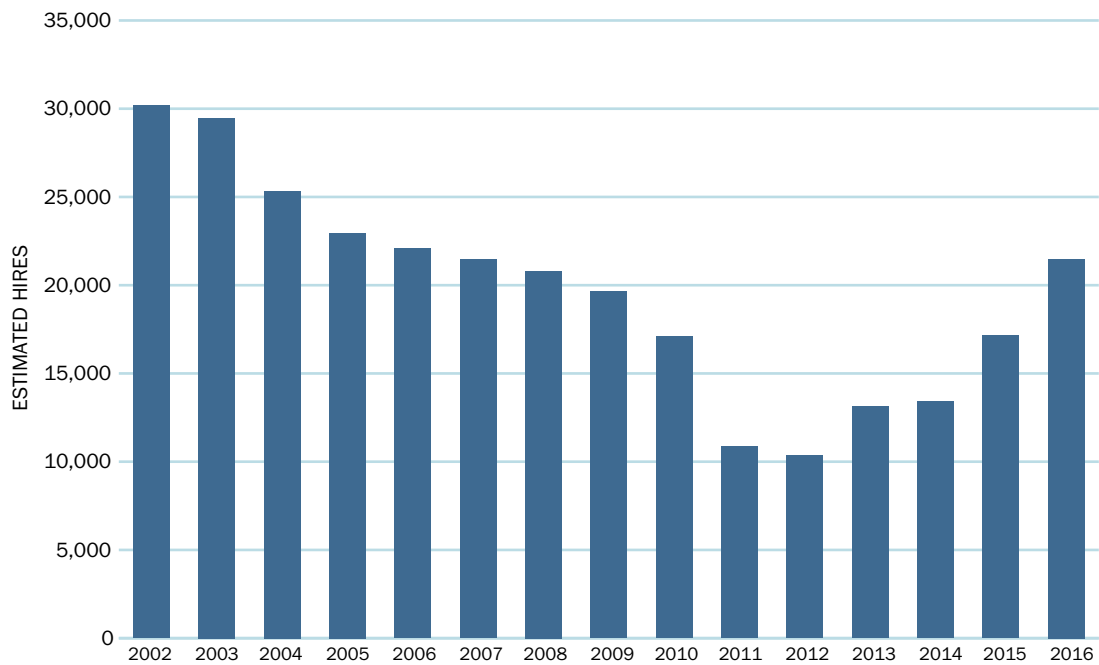


Number of California public school teachers, 2000-01 to 2014-15

Source: California Department of Education 2001-2015. Data available at <http://data1.cde.ca.gov/dataquest/>.

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District Hiring Is on the Rise

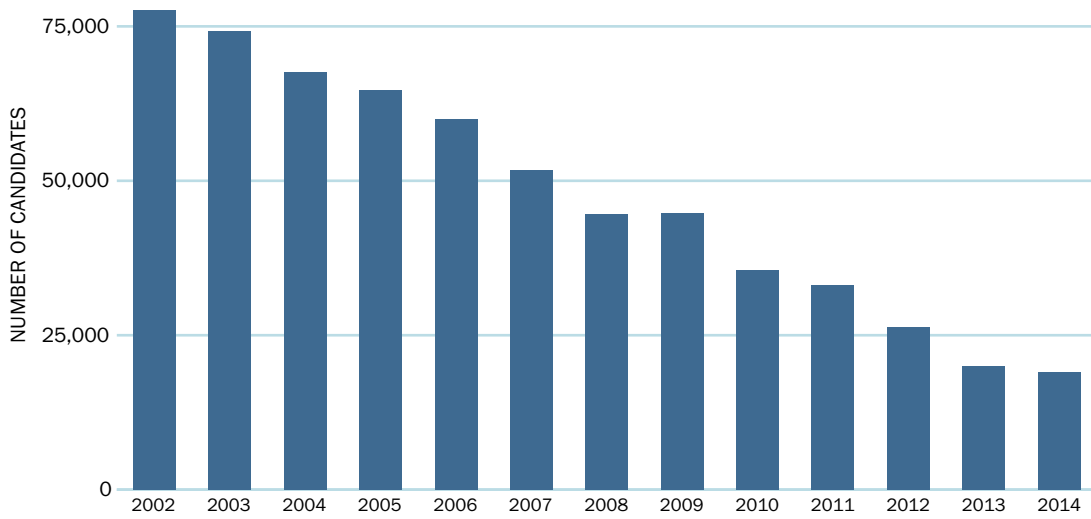


Estimated new hires in California, 2001-02 to 2015-16

Source: California Department of Education 2002-2016. Data available at <http://data1.cde.ca.gov/dataquest/>.

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Enrollment in Teacher Preparation Programs Has Declined

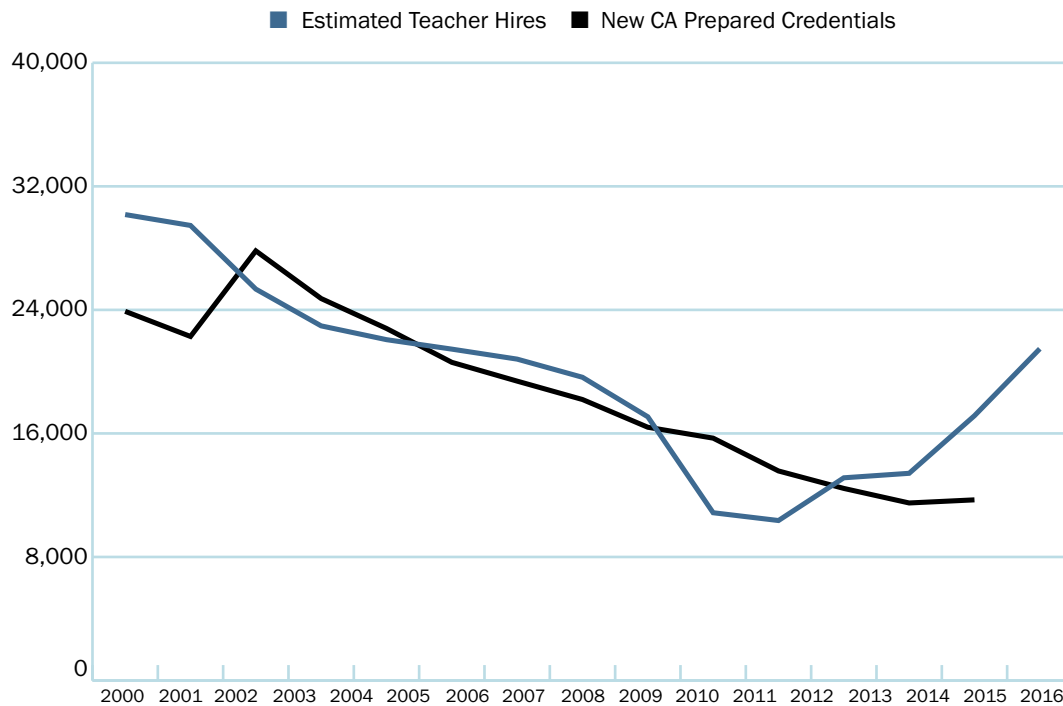


Number of candidates enrolled in California teacher preparation programs, 2001-02 to 2013-14

Source: California Commission on Teacher Credentialing, 2002-2014. Teacher Supply in California: A Report to the Legislature. Data available at <http://www.ctc.ca.gov/reports/all-reports.html>; 2014 Title II State Program Information. Data available at <https://title2.ed.gov/Public/Report/StateHome.aspx>.

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Teacher Demand Is Outpacing Supply



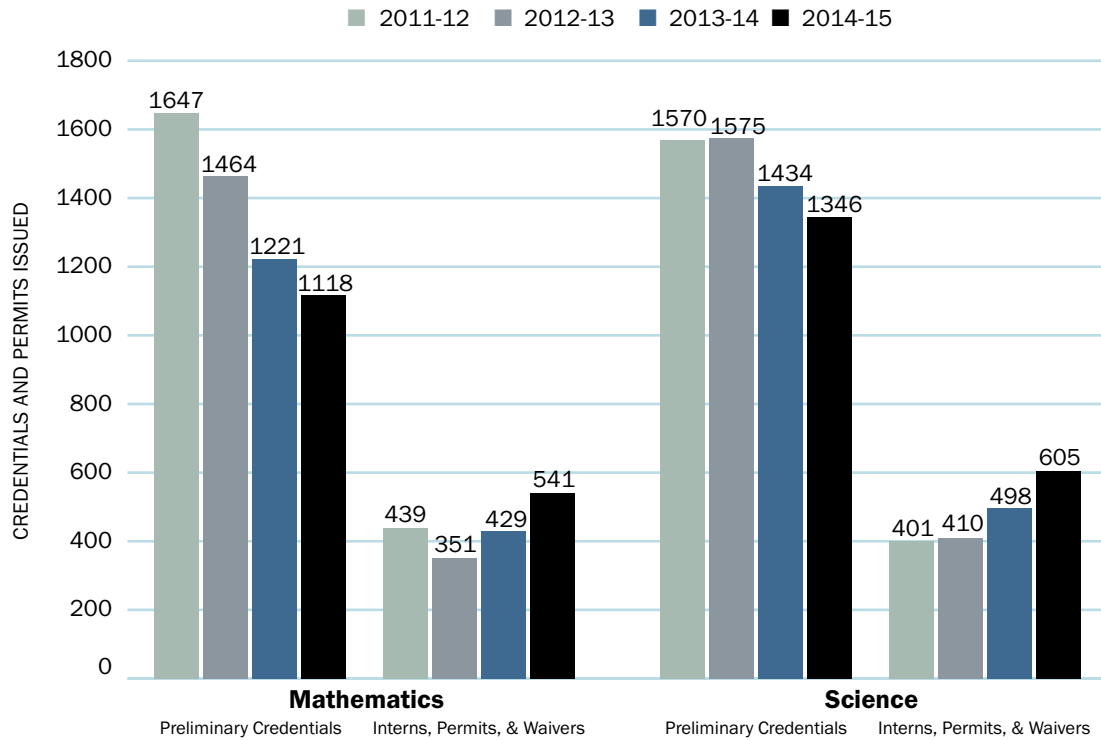
Number of preliminary new teaching credentials issued and district-estimated new hires, 1999-2000 to 2015-16

Note: Estimated teacher hires are reported annually by each California school district for the upcoming school year. New credentials are preliminary credentials issued to California-prepared teachers. 2014-15 credential data are preliminary.

Source: Estimated hires data are from California Department of Education DataQuest Web Page, at <http://data1.cde.ca.gov/dataquest/>. New credentials data were provided from the California Commission on Teacher Credentialing upon request.

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Trends in Mathematics and Science Teacher Supply

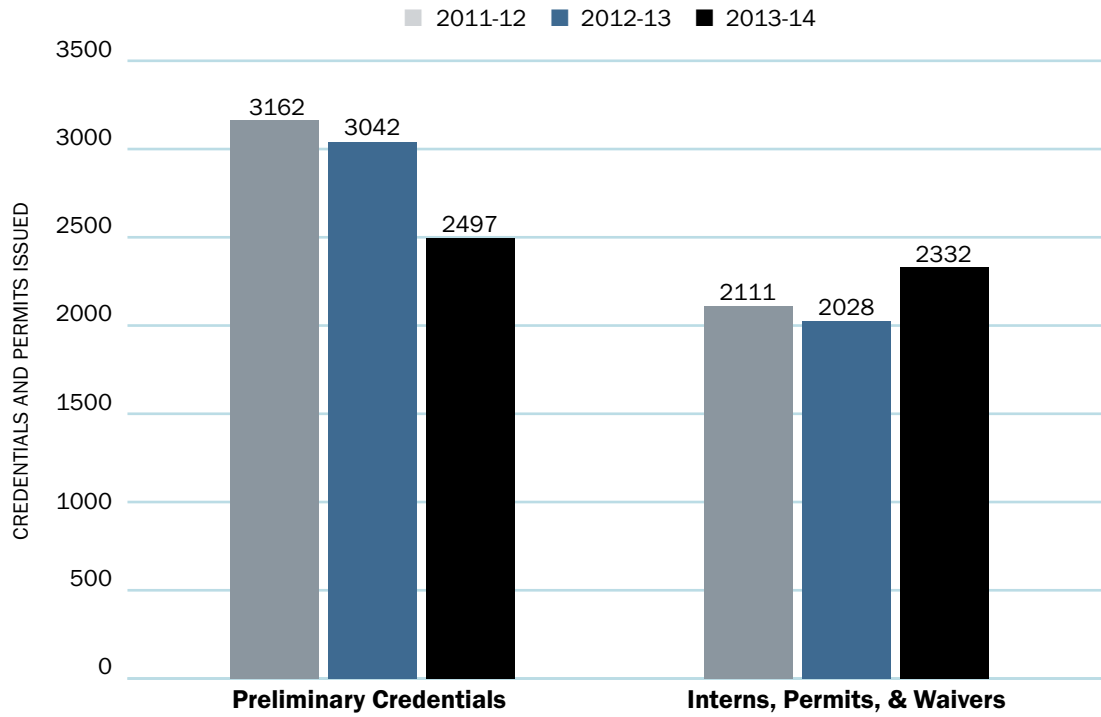


Credentials and permits issued, 2011-12 to 2014-15

Source: California Commission on Teacher Credentialing.

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Trends in Special Education Teacher Supply

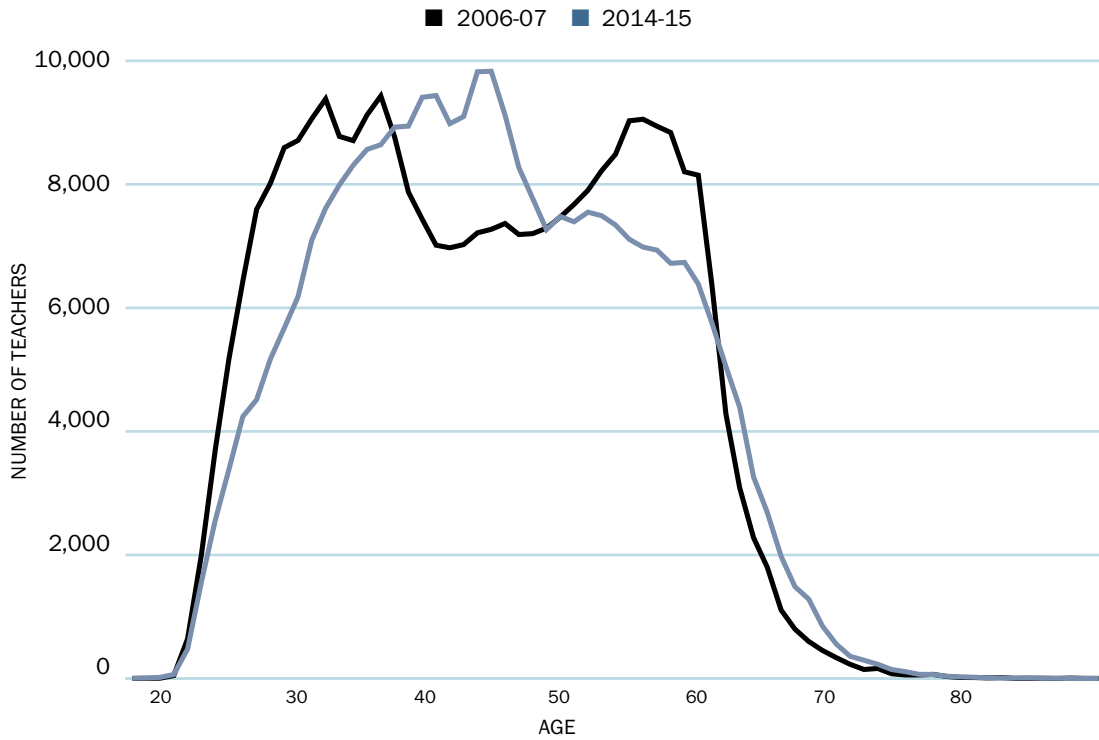


Credentials and permits issued, 2011-12 to 2013-14

Source: California Commission on Teacher Credentialing.

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California Nears the End of Retirement Surge

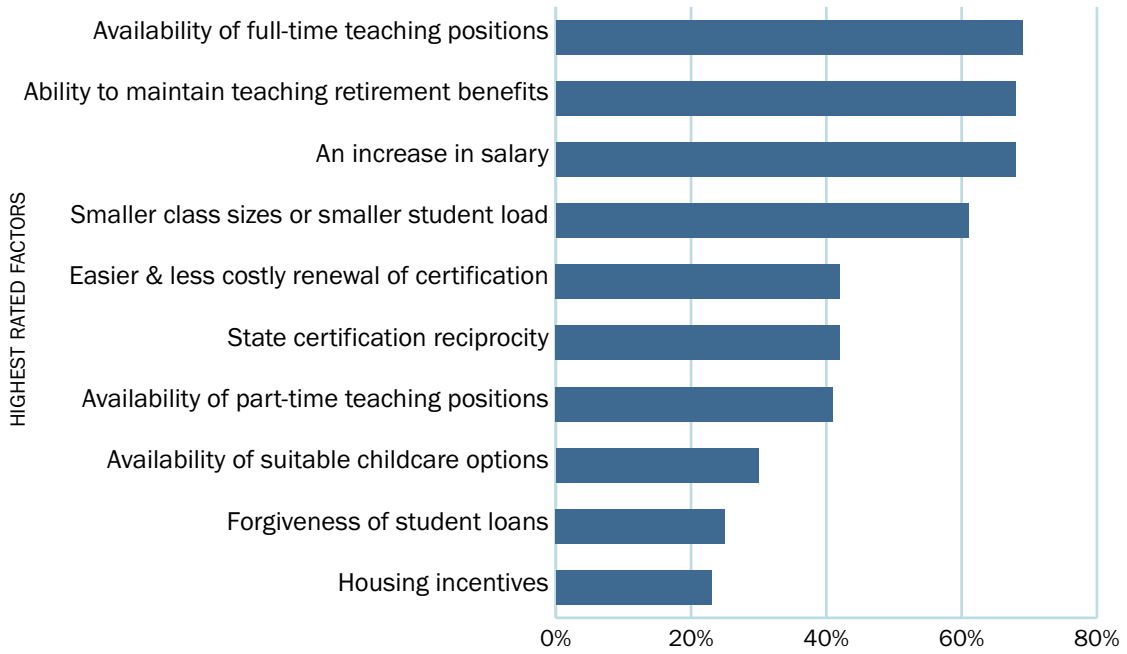


California public school teacher age distribution, 2006-07 and 2014-15

Source: California Department of Education data, provided in response to a special request.

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What Would Bring Leavers Back?

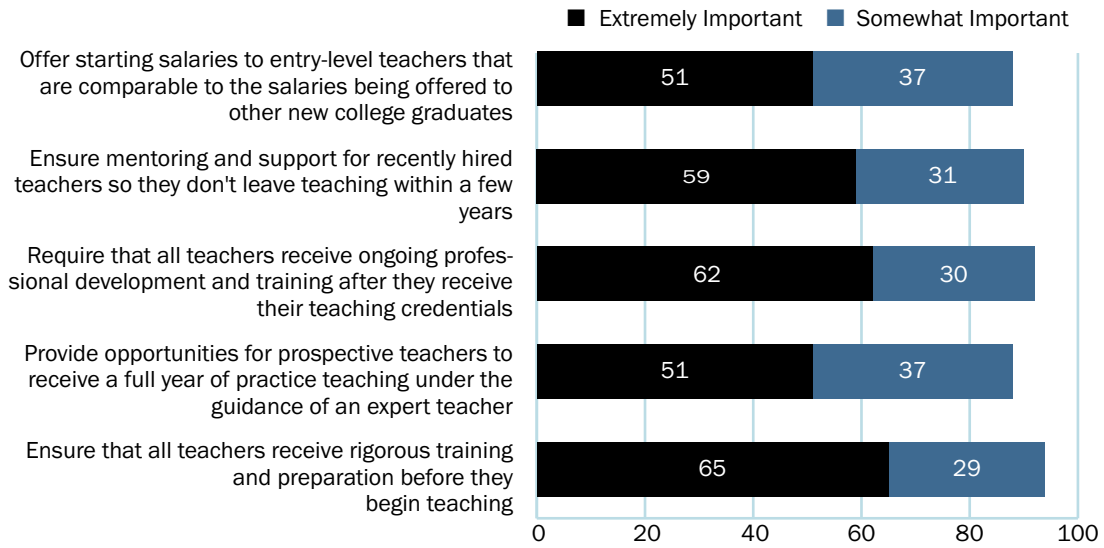


Factors rated by former teachers as important in a decision to return

Source: U.S. Department of Education, National Center for Education Statistics, 2012-13 Teacher Follow-up Survey.

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California Voters Appear Ready to Invest in Teaching



Percent of registered voters who feel that specific policies to address the teacher shortage are important

Source: Learning Policy Institute, developed from Field Poll survey data.

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Teacher Preparation Enrollments in the State University System

Institution Type	2011-12	2012-13	2013-14	2014-15
University of California	1,055	788	726	883
California State University	9,496	8,052	8,642	8,837
Total	10,551	9,840	9,368	9,720

Source: Data from the CSU Office of the Chancellor and the UC Office of the President.
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Top Hiring Areas, 2013-14 School Year

Subject Area	Number of Full-Time Equivalent (FTE) Teachers	Percent of FTE Teachers in the Field
Special Education, including State Special Schools	4,540.3	26.9%
Mathematics/Computer Education	2,214.6	10.4%
Science	2,016.9	12.7%
English/Drama/Humanities	2,024.2	8.5%
PE/Health/Dance	903.2	7.4%
History/Social Science	1,184.9	7.1%
Other Specializations	967.9	6.8%
Totals	13,858.3	5.34%

Source: California Department of Education, district hiring estimates data.

Age Distribution of the California Teacher Workforce

Age	2006-07	2008-09	2010-11	2012-13	2014-15
Under 30	42,214	40,823	28,082	24,372	27,679
	13.7%	13.3%	9.8%	8.5%	9.4%
30 to 39	87,269	89,535	84,605	82,071	81,679
	28.3%	29.2%	29.5%	28.8%	27.6%
40 to 49	72,018	73,020	76,185	80,790	87,082
	23.3%	23.8%	26.5%	28.3%	29.4%
50 to 59	84,501	78,368	73,205	70,778	70,652
	27.4%	25.5%	25.5%	24.8%	23.9%
60 and older	22,009	24,357	24,854	27,294	28,706
	7.1%	7.9%	8.7%	9.6%	9.7%
Total	308,790	306,887	286,969	285,308	295,800

Number and percentage of teachers by age groupings, 2006-2007 to 2014-2015

Source: California Department of Education data, provided in response to a special request.

Supports for Recruiting and Retaining Teachers Have Dwindled

Discontinued and inactive California teacher development and support programs

Program	Description	When Instituted	Current Status
Teacher Recruitment Incentive Program (TRIP)	Established six regional teacher recruitment centers to address the teacher shortage. Centers assisted school districts in recruiting qualified teachers to low-performing and hard-to-staff schools. \$9.4 million allocated annually.	Funded beginning in 2000-01	Suspended 2003-04
California Center for Teaching Careers (CalTeach)	Created to serve as a one-stop information, recruitment, and referral service for prospective teachers. Funding peaked at \$11 million in 2000-01 and 2001-02.	Funded beginning in 1997	Suspended in 2003-04
Governor's Teaching Fellowship	Created to attract and retain qualified individuals in the teaching profession. Provided \$20,000 for tuition and living costs in exchange for a four-year teaching commitment in a low-performing school. \$21.1 million allocated in 2001-02.	Funded beginning in 2000-01	Suspended 2002-03
Cal Grant T	Provided tuition and fee assistance to students in teacher preparation programs in exchange for teaching in a low-performing school for at least one year. \$10 million allocated annually, from 1998-99 through 2001-02.	Funded beginning in 1998-99	Discontinued 2003-04
Teacher Retention Tax Credit	Allowed teachers to claim a state income tax credit of up to \$1,500, depending on years of service.	Funded beginning in 2000	Suspended in 2004
Mathematics Initiative for Teaching	Created to address shortage of credentialed math teachers. Provided funds for tuition and related expenses. Recipients agreed to teach one year of math for every \$2,500 received.	Funded beginning in 1998	Eliminated in 2003-04
Teaching as a Priority (TAP) Block Grant	Provided competitive block grants to districts to create incentives to recruit and retain credentialed teachers for low-performing schools. Incentives included signing bonuses, improved working conditions, teacher compensation, and housing subsidies.	Funding beginning in 2000-01	Funding suspended in 2003-04; incorporated into the Professional Development Block Grant in 2005-06
Assumption Program of Loans for Education (APLE)	Long-standing loan forgiveness program designed to encourage outstanding students to work in teacher shortage areas. Teachers received a total of up to \$19,000 in outstanding loan forgiveness.	Established in 1983	New warrants suspended in 2012-13 (active recipients still received remaining funds)

Source: *Teaching and California's Future: California's Teaching Force 2006: Key Issues and Trends*; and California Student Aid Commission data available at <http://www.csac.ca.gov/doc.asp?id=111>.

Teacher Preparation and Credentialing: Understanding the Terms

Term	Credential Types	Definition
Fully Prepared Teachers	Preliminary Credential	Awarded to individuals who have successfully completed a teacher preparation program and the state assessments required for a license; preliminary credentials are valid for five years.
	Clear Credential	Awarded to preliminary credential holders once they have successfully completed an induction program; clear credentials are renewable every five years.
Underprepared Teachers	Provisional Intern Permits, Short Term Staff Permits and Waivers	Used to fill “immediate and acute” staffing needs, these one-year permits allow individuals who lack the appropriate training or subject-matter competency to teach a particular grade or course for a maximum of one year.
	Limited Assignment Teaching Permits	These authorizations allow credentialed teachers to teach outside of their subject area, to fill a “staffing vacancy or need.”
	Intern Credentials	Awarded to teachers-in-training who have an undergraduate degree and subject-matter competency but have not completed preparation or met the performance assessments for a license. Interns take courses and receive mentoring while teaching.

Source: California Commission on Teacher Credentialing, CTC Glossary: http://cig.ctc.ca.gov/cig/CIG_glossary/all.php. See also <http://www.ctc.ca.gov/credentials/leaflets/cl858.pdf>; <http://www.ctc.ca.gov/credentials/leaflets/cl856.pdf>; <http://www.ctc.ca.gov/credentials/leaflets/cl402a.pdf>.
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Number of Vacancies Listed in EdJoin by County

County	2013	2014	2015	% Change from 2013 to 2015
Alameda	1,632	2,393	2,539	55.6
Alpine	0	4	1	NA
Amador	55	54	92	67.3
Butte	231	316	374	61.9
Calaveras	36	61	70	94.4
Colusa	60	81	66	10.0
Contra Costa	1,631	1,978	2,236	37.1
Del Norte	5	19	77	1440.0
El Dorado	196	199	219	11.7
Fresno	1,233	1,230	1,227	-0.5
Glenn	47	55	74	57.4
Humboldt	58	115	141	143.1
Imperial	194	548	618	218.6
Inyo	52	54	52	0.0
Kern	300	438	733	144.3
Kings	124	184	262	111.3
Lake	104	161	544	423.1
Lassen	31	64	85	174.2
Los Angeles	2,146	3,378	4,071	89.7
Madera	180	334	259	43.9
Marin	324	339	426	31.5
Mariposa	7	30	27	285.7
Mendocino	185	248	230	24.3
Merced	354	576	629	77.7
Modoc	13	26	15	15.4
Mono	16	33	32	100.0
Monterey	868	1,428	1,676	93.1
Napa	92	205	218	137.0
Nevada	96	129	105	9.4
Orange	1,661	2,627	2,450	47.5
Placer	492	521	550	11.8
Plumas	34	35	46	35.3
Riverside	1,547	2,041	2,262	46.2
Sacramento	898	1,365	1,905	112.1
San Benito	104	186	250	140.4
San Bernardino	1,096	2,234	2,573	134.8
San Diego	1,151	1,824	2,117	83.9
San Francisco	135	503	190	40.7
San Joaquin	616	858	987	60.2
San Luis Obispo	303	305	301	-0.7
San Mateo	953	1,269	1,599	67.8
Santa Barbara	313	383	489	56.2
Santa Clara	1,944	2,578	3,041	56.4
Santa Cruz	468	534	619	32.3
Shasta	158	233	253	60.1
Sierra	1	2	3	200.0
Siskiyou	38	52	81	113.2
Solano	582	818	937	61.0
Sonoma	689	930	990	43.7
Stanislaus	900	1,006	1,217	35.2
Sutter	210	226	203	-3.3
Tehama	86	98	72	-16.3
Trinity	23	11	19	-17.4
Tulare	718	1,043	1,223	70.3
Tuolumne	44	53	51	15.9
Ventura	248	398	501	102.0
Yolo	439	622	577	31.4
Yuba	56	90	160	185.7
Total	26,177	37,525	42,764	

Note: Numbers reflect open teaching positions advertised on EdJoin over 12-month period, beginning October 16 and ending October 15.

Source: EdJoin data on postings for 12-month period provided to LPI by request.

Teaching Permits, Waivers, and Credentials Issued by Year, 2012-2015

Type of Credential	2012-2013	2013-2014	2014-2015	1-year change 2013-14 to 2014-15
University Interns				
Education Specialist Instruction Credential	1,318	1,395	1,359	-2.6%
Multiple Subject Teaching Credential	253	342	554	62.0%
Single Subject Teaching Credential	570	704	828	17.6%
Total University Interns	2,141	2,441	2,741	12.3%
District Interns	461	522	674	29.1%
Total Intern Credentials	2,602	2,963	3,415	15.3%
Provisional Internship Permit				
Provisional Internship Permit	186	267	525	96.6%
Short-Term Staff Permit	665	914	1,884	106.1%
Total Short-Term and Provisional Permits	851	1,181	2,409	104.0%
General Education Limited Assignment Multiple Subject Teaching Permit				
General Education Limited Assignment Multiple Subject Teaching Permit	42	68	76	11.8%
General Education Limited Assignment Single Subject Teaching Permit				
General Education Limited Assignment Single Subject Teaching Permit	792	897	1,170	30.4%
Special Education Limited Assignment Teaching Permit				
Special Education Limited Assignment Teaching Permit	308	767	485	-36.8%
Total Limited Assignment Teaching Permits	1,142	1,732	1,731	0.0%
Teaching Waivers	129	201	126	-37.3%
New Preliminary Teaching Credentials recommended by IHEs, excluding interns (first time credentials and new types of credentials added to an existing credential)				
California State University	6,004	5,552	5,499	-1.0%
Private and Independent Colleges and Universities	5,231	4,747	4,842	2.0%
University of California	861	843	883	4.7%
Total IHE Preliminary Credentials	12,096	11,142	11,224	0.7%
IHE: New Credentials by Type				
Education Specialist Instruction Credential	2,807	2,276	2,195	-3.6%
Multiple Subject Teaching Credential	4,574	4,444	4,709	6.0%
Single Subject Teaching Credential	4,715	4,422	4,320	-2.3%
Total IHE New Credentials	12,096	11,142	11,224	0.7%

These data are drawn from the Commission on Teacher Credentialing database to represent the number of credentials issued between July 1 of each year and June 30 of the following year. Due to processing time, there are credentials counted in this data run from applicants who completed preparation in the prior year; therefore they differ from data in the annual teacher supply report, which reflects only those applicants who completed preparation in that academic (July-June) year.



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