

Good morning and thank you for having me. I'm Desiree Carver-Thomas, Senior Researcher and Policy Analyst at Learning Policy Institute, where my work focuses on issues of educator quality, including teacher shortages, both nationally and here in California. At LPI, we've been tracking teacher shortages in California over the last decade, and in our most recent report, [Tackling Teacher Shortages](#), we examine the latest data on shortages in the state and also take-up of the state's major investments in strengthening the educator workforce, including the Teacher Residency Grant Program, the Golden State Teacher Grant Program, and the National Board Incentive Program.¹

Chairs Alvarez and Muratsuchi, thank you both for your remarks at our recent briefing of this report. You're familiar with the findings, so I will be brief. First, I'd like to set the stage by saying that the research is clear that teacher preparation, certification, experience, and stability matter for student achievement. We see this borne out in large scale state studies, including studies in [California](#).² In addition, teacher preparation also matters for retaining teachers. Teachers who enter the profession with little to no preparation are two to three times as likely to leave their positions as those who enter fully prepared.³ Finally, teacher shortages are a serious equity issue, as we know students of color and students from low-income families are disproportionately taught by underprepared and inexperienced teachers.⁴

Looking at the most recent state data, we see that shortages continue to be a serious problem. One of the clearest indicators of shortages is the number of substandard credentials issued each year, as these are only supposed to be issued when a fully prepared teacher is not available. In 2022-23, the Commission on Teacher Credentialing issued more than 14,000 substandard credentials and permits. That's triple the number of substandard credentials and permits issued in 2013. Even more concerning, this increase is being driven by a massive increase in emergency-style permits and waivers, which are issued to individuals who may not be enrolled in a teacher preparation program, and may not have demonstrated subject matter competency. These have increased 8-fold since 2013. In other words, the least prepared teachers are growing at the fastest rates. The state's investments since 2019 have begun to make a dent in this problem, which I'll discuss shortly. Finally, our analysis shows that underprepared teachers were not equally distributed across the state in 2023. Our schools with the highest concentrations of unduplicated count students were nearly 3 times as likely to fill teaching positions with interns and teachers on emergency-style permits or waivers compared to the lowest-need schools with the lowest unduplicated pupil counts.

Fortunately, the state has invested in a set of programs designed to strengthen the educator workforce and address teacher shortages, particularly in the schools and subjects where teachers are most needed. Data from these early investments show that these programs are beginning to make a positive difference. However, the impact of these investments will be fully realized and understood in the coming years as these funded programs continue to be implemented. Still, data

available now provide insight into the progress made to date and the potential benefits of these kinds of programs in the future.

Our analysis shows that the Teacher Residency Grant Program, which supports planning, implementation, and expansion of residency programs, has supported a large number of residents and that districts are increasingly demanding residencies. [Residencies](#) are partnerships between teacher preparation programs and local education agencies designed to recruit diverse candidates for specific district hiring needs. Residents typically work with an accomplished mentor teacher for a full school year while completing tightly integrated coursework at the partnering preparation program and earning a stipend of at least \$20,000 (starting in 2023–24) in exchange for a commitment to teach in the district for 4 years after their residency year.⁵

The CTC has awarded nearly 300 residency grants, with most of those being awarded since 2021. About 5,000 residents graduated between 2021 and 2024 with many of those supported by TRGP. Most residents were people of color and pursued credentials in high need subject areas, including special education, STEM, and bilingual authorizations. An [analysis](#) of residency completers showed that these teachers rated their preparation as more effective and felt better prepared than those from any other pathway, passed the teacher performance assessment at higher rates, and were viewed by employers as highly effective.⁶ Another evaluation found that these teachers also had very high retention rates in teaching.⁷

With TRGP funding, Sonoma State University grew from 1 residency in 2019–20 to 8 programs this year spanning 7 districts and 4 counties in the North Bay, including rural communities in the region. These residencies are filling crucial district needs for STEM, bilingual, special education, early childhood, and multiple subject teachers. The program director there noted:

We have more residents than traditional student teachers or interns across all of our programs. There are a lot more BIPOC teachers in our residency program than there are in the student teaching or intern pathway. We used to have a really hard time recruiting residents for special education because many were going into the internship pathway. Now that we have a larger stipend and some scholarships, we have more residents in our special ed program than we've ever had.

-Rhianna Casesa, Sonoma State University

When it comes to the Golden State Teacher Grant program, those service scholarships of \$10,000 (this year) and \$20,000 (in previous years), which underwrite preparation costs in exchange for teaching for 2-4 years in priority schools, have shown several early benefits. You might wonder if these grants are simply subsidizing the cost of preparation for individuals who would have pursued teaching anyway. Our analysis indicates otherwise. First, we found the grants attracted candidates to the teaching profession, including individuals who may not have pursued teaching.

One GSTG recipient noted:

Loans were not an option for me. Knowing that my tuition was going to be paid made my decision to become a teacher a lot easier. I am coming from a role where I had a large pay cut and now I am in my purpose. This is to the end. This is not a 4- to 5-year commitment. This is for my lifetime.

Even if candidates had already chosen teaching, they may not have decided to teach in a priority school, or may not have planned to stay there for as long. For example, candidates noted that they put off plans to move counties or schools in order to meet their service requirement.

Second, it covered tuition and other expenses, reducing stress as candidates completed rigorous and demanding preparation programs. This means candidates were able to complete their programs. Even among those who might have considered teaching anyway, they may not have been able to complete their programs and begin their teaching careers without this support. Another GSTG recipient explained that in the first few months of his teacher preparation program, money was tight:

I was thinking, "I only have 5 dollars in my bank account and I need a job. Do I continue this program?" I would not have continued my teaching career whatsoever without the Golden State Grant.

It will be some time before the most recent grant recipients complete their programs, enter the workforce, and complete their service requirements. Data on how candidates move through each of those stages will be critical to more deeply understand the effectiveness of the Golden State Teacher Grant Program. However, in the meantime, it's important to maintain the consistency of this funding. Grant recipients noted that there was uncertainty about whether the grant program would continue to be available which made them less certain about their ability to complete teacher preparation. If the state wants the program to successfully recruit more teachers for high need positions, this grant program needs to be a well-known, reliable source of funding.

Finally, the National Board Incentive Program has successfully encouraged more teachers to pursue board certification, with the \$2,500 subsidy to cover the cost of certification, and the promise of \$5,000 per year for up to 5 years teaching in a priority school. National Board Certified Teachers (NBCTs) support greater student achievement both for their own students and for the students of the beginning teachers they mentor.⁸ The number of candidates pursuing certification tripled when the program went into effect in 2022. Priority schools also saw a jump in National Board candidates, and the number of teachers of color pursuing Board certification increased fivefold.

The National Board Incentive is a valuable piece of a comprehensive teacher workforce strategy. While the Teacher Residency Grant Program and Golden State Teacher Grant Program are designed to recruit new, fully prepared teachers into high need positions, it's also important that

our students in priority schools have access to highly accomplished, experienced teachers. This incentive program encourages these expert teachers to teach where they're most needed.

The teacher shortage problem in California continues to be at the heart of our state's ability to provide a world-class education to each and every child in this state. We have begun to make the investments that are needed to strengthen our teacher workforce, but these early successes could quickly diminish if we let these programs fall by the wayside as one-time funds run out. If the state of California wants sustainable improvements to the teacher workforce, we need reliable, ongoing investments to recruiting and retaining well prepared and diverse teachers. This is all the more critical as federal teacher workforce funding is put in jeopardy. Further, if these programs build seamlessly upon one another, we may be able to compound their impact.

Imagine, for example, that a candidate applies for the Golden State Teacher Grant or a teacher residency program. They are able to complete their preparation and begin their service commitment with little to no graduate student debt. Then, in their first years of teaching, they are able to receive loan repayment funds to pay down their undergraduate debt. Once they've met that service requirement, they sign up for the National Board subsidy to become certified in one to three years, followed by five years of teaching as a Board certified teacher in a priority school, where they contribute as an expert teacher as well as a mentor to novice teachers. In that time, they would have put in at least 10 years in a high need school, at which point they are more likely to continue to stay in their position. California can support this kind of high quality pathway into and through teaching in our highest need schools.

¹ Carver-Thomas, D., Leung-Gagné, M., & Jeannite, D. (2024). *Tackling teacher shortages: What we know about California's teacher workforce investments*. Learning Policy Institute. <https://doi.org/10.54300/137.196>

² Podolsky, A., Darling-Hammond, L., Doss, C., & Reardon, S. (2019). *California's positive outliers: Districts beating the odds*. Palo Alto, CA: Learning Policy Institute.

³ Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? Research Report (#RR-82). Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.

⁴ Carver-Thomas, D., Kini, T., & Burns, D. (2020). *Sharpening the divide: How California's teacher shortages expand inequality*. Learning Policy Institute; Carver-Thomas, D. & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Learning Policy Institute. <https://doi.org/10.54300/454.278>.

⁵ Fitz, J., & Yun, C. (2024) *Successful teacher residencies: What matters and what works* [Brief]. Learning Policy Institute. <https://learningpolicyinstitute.org/product/successful-teacher-residencies-brief>

⁶ Patrick, S. K., Darling-Hammond, L., & Kini, T. (2023). *Educating teachers in California: What matters for teacher preparedness?* Learning Policy Institute. <https://doi.org/10.54300/956.678>

⁷ Hirschboeck, K., Hannan, M., Brannegan, A., & Eiler White, M. (2023). Barriers to the scalability and sustainability of the Teacher Residency Grant Program. WestEd

⁸ Cantrell, S., Fullerton, J., Kane, T. J., & Staiger, D. O. (2008). National Board Certification and teacher effectiveness: Evidence from a random assignment experiment [No. w14608]. National Bureau of Economic Research; Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26, 673–682; Goldhaber, D., & Anthony, E. (2007). Can teacher quality be effectively assessed? National Board Certification as a signal of effective teaching. *The Review of Economics and Statistics*, 89, 134–150; Harris, D. N., & Sass, T. R. (2009). The effects of NBPTS-certified teachers on student achievement. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, 28(1), 55–80.