

Teacher Pipelines: Trends, Challenges, and Opportunities

Joe Hettler, TNTP

Thursday, June 16

Agenda

Overview of Tntp

Teacher Pipeline Trends and Challenges

Strategies and Solutions

TNTP was founded in 1997 by teachers who believed all students—particularly poor and minority students—deserved great teaching.

Research shows that students with even one top teacher...

are less likely to have children as teenagers...

are more likely to attend college...

earn a higher salary...

and save more for retirement.



Today, we work at every level of the U.S. public school system to help our partners end educational inequality and achieve their goals for students.

We focus on three areas to ensure teachers succeed and students thrive:



Rigorous Academics

Are students studying challenging, engaging and relevant content?



Talented People

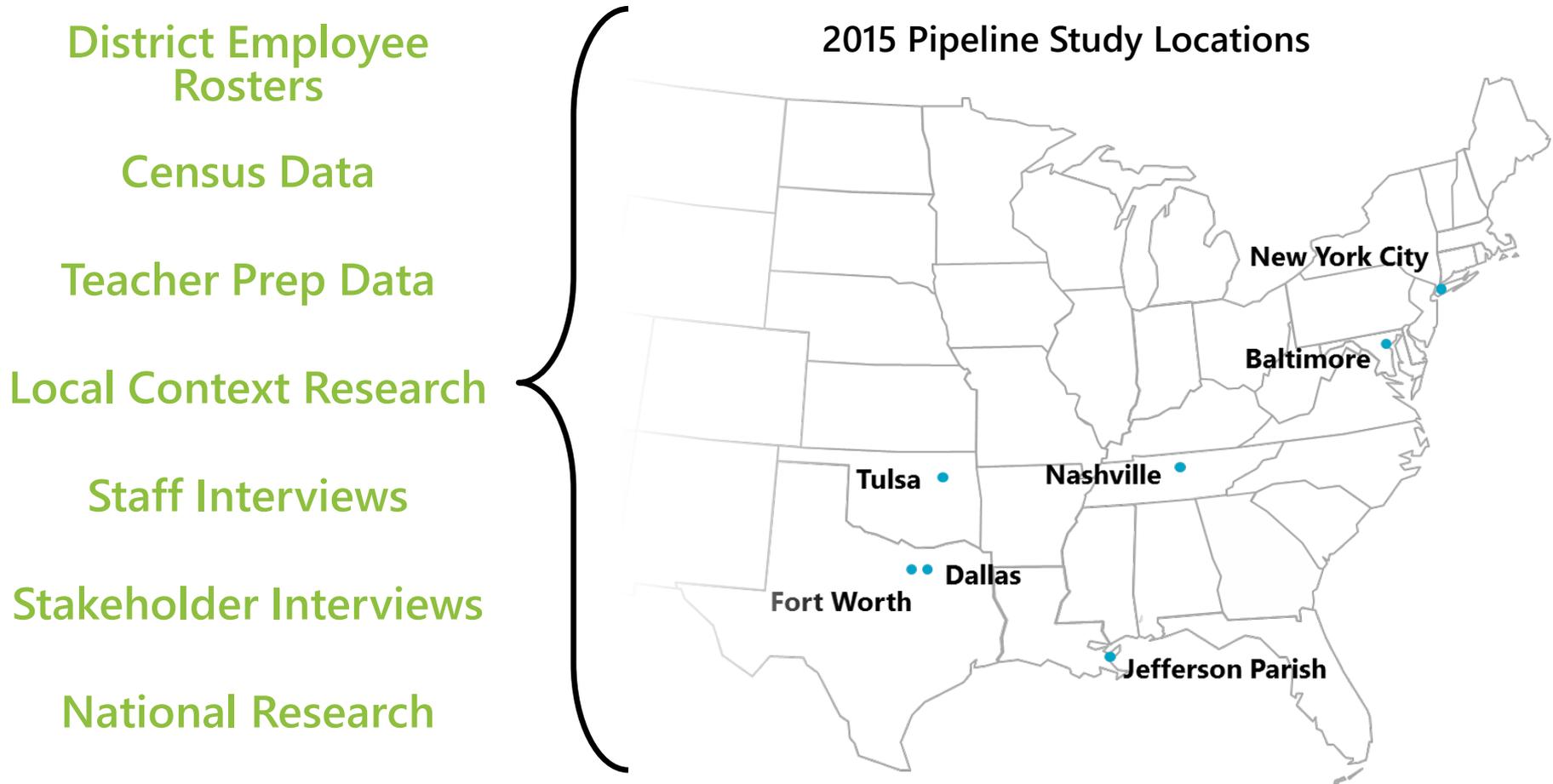
Are educators in the right roles with the right skills to help students thrive?



Supportive Environments

Are policies, systems and communities supporting great schools for all?

TNTP's Pipeline Studies dive deep into teacher supply and demand issues in each district, and into their current policies and practices.

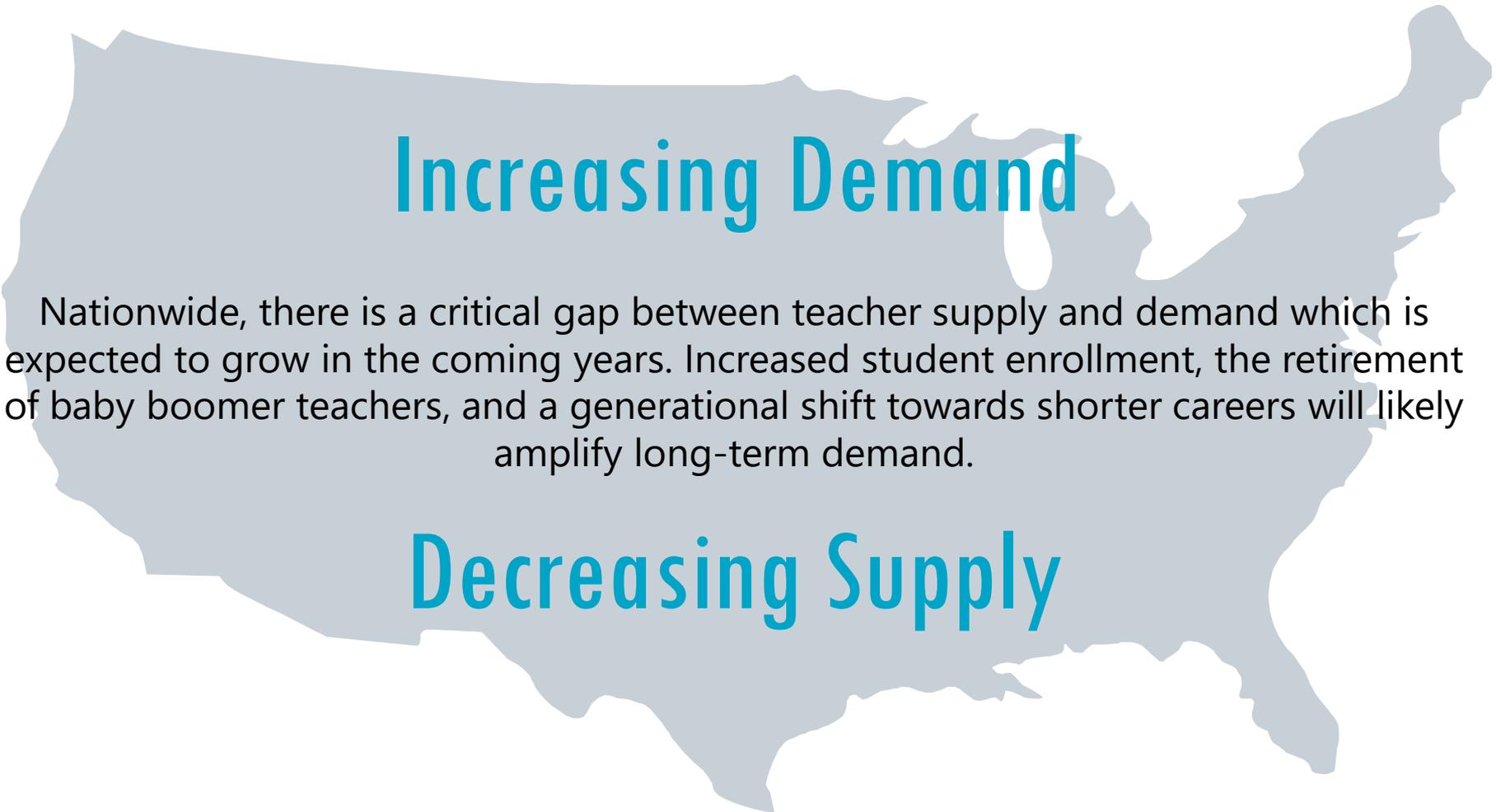


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Increasing Demand

Nationwide, there is a critical gap between teacher supply and demand which is expected to grow in the coming years. Increased student enrollment, the retirement of baby boomer teachers, and a generational shift towards shorter careers will likely amplify long-term demand.

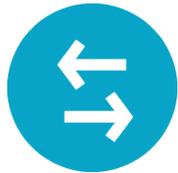
Decreasing Supply

The pipeline challenges in District A reflect challenges faced by many of the districts we studied.



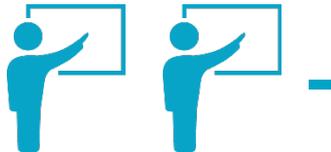
Increasing Enrollment

Student **enrollment has increased by about 20,000** over the last five years, and is expected to increase by about 17,000 more in five years from now. That will require about 400 additional teachers.



Shifting Demographics

By 2020-21 District A will have nearly 1,200 more students with special education needs and **15,000 students who don't speak fluent English**.



Teacher Attrition

District A **replaces an average 2,085 teachers every year because of attrition**—roughly 21 percent of its workforce. Teacher attrition is higher among key subject areas like special education, math, and science.

In addition to the growing demand for teachers, the supply of teachers is also steadily decreasing due to a number of factors.



Interest in a teaching career is decreasing.

- ACT-tested high school graduate interest in education majors/professions decreased by 16 percent from 2010 to 2014.

Teachers entering the profession are not teaching in high-need communities.

- There is uneven distribution of teachers in high needs communities and subject areas.

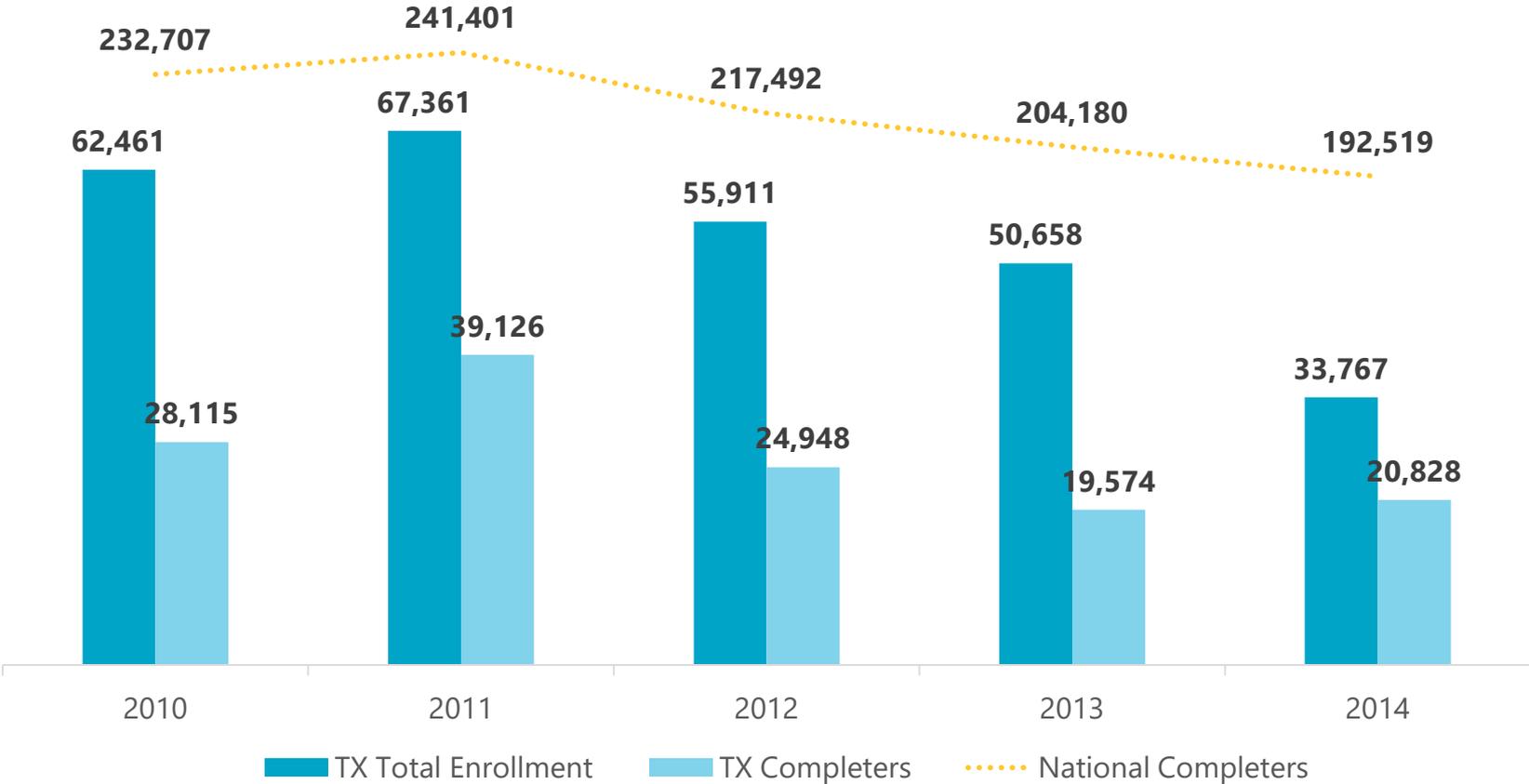


Enrollment in TX teacher prep programs is down overall (-11%) with critical drops in certain subject areas:

- ESL is up (+152%) but bilingual is down (-45%)
- Drop in Spanish (-57%)
- Slight increases in math (+3%)
- Drops across the board in science: chemistry (-21%), life science (-22%), science (-25%) and physics (-21%)

Nationwide, teacher prep program completion is down 20 percent, mirroring trends we've observed in most of the states we studied, including Texas.

Teacher Preparation Program Enrollment and Completion

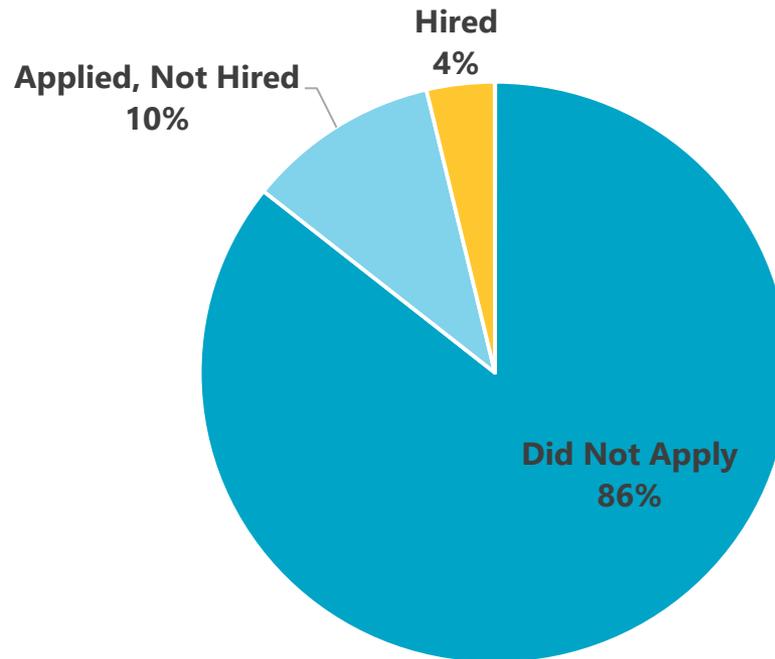


Some changes are driven by short-term economic swings, but national teacher supply has been decreasing for decades.

Source: U.S. Department of Education. Available <https://title2.ed.gov/Public/Home.aspx>

Few graduates are choosing to work in the urban and rural districts close to where they trained.

Graduating Class of Teachers from Local Universities by Application and Hire Status in District B (Estimate)



In 2015, only 14% of teachers who completed teacher preparation programs at local universities applied to District B. Only 4% were hired into the district.

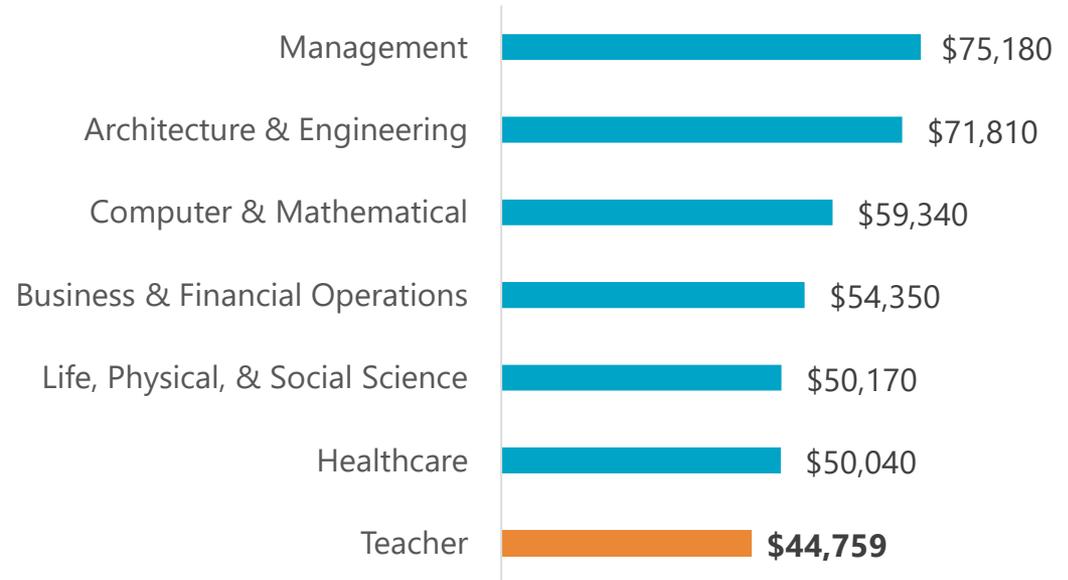
Low salaries often deter students from choosing teaching as a career.

Using the current salary scale in District C...

It would take a teacher with a Bachelor's degree more than **27 years** to earn the median household income of **\$49,992**.

It would take **17 years** to reach MIT's Living Wage Calculation threshold of **\$42,970**.

Examples of Typical Annual Salaries in District C (Reported in 2014 Dollars)²



Staff and stakeholders at all levels—school principals, teachers, central office staff, and university partners—said low salaries contribute to the talent drain.

Agenda

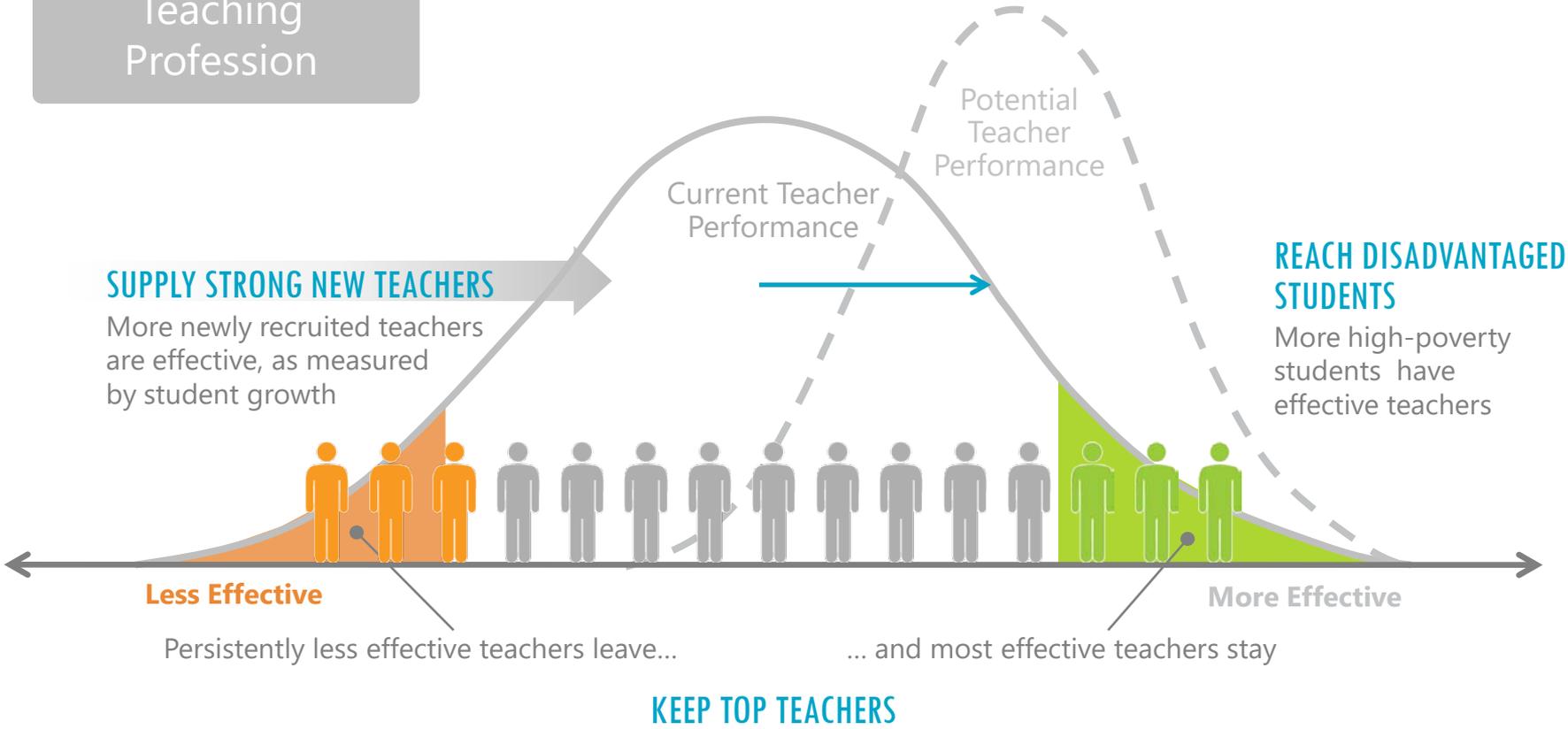
Overview of TNTP

Teacher Pipeline Trends and Challenges

Strategies and Solutions

Creating a long-term, sustainable pipeline of effective teachers is one of the highest-impact ways to raise student performance and outcomes.

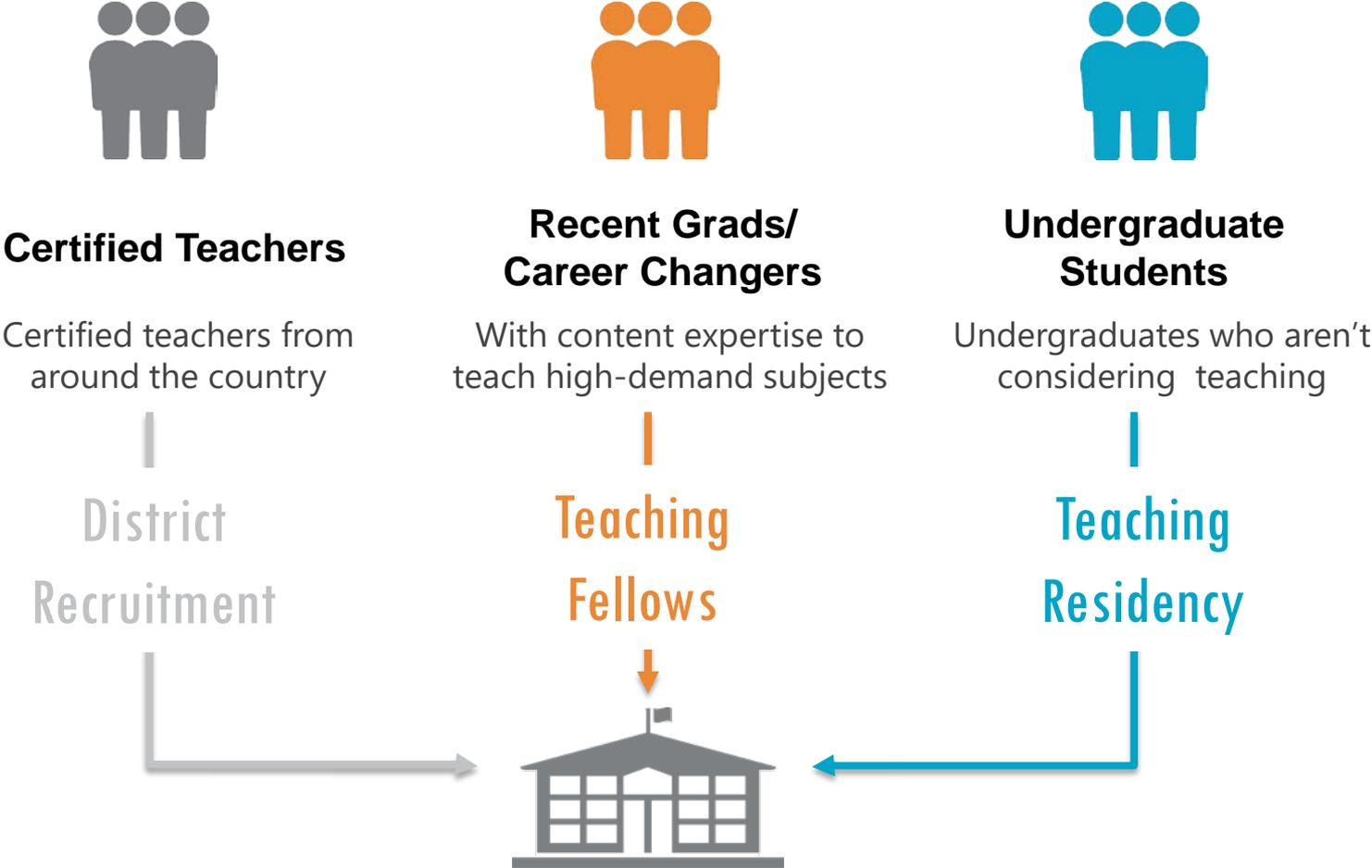
Priorities for the Teaching Profession



TNTP has focused on three ways to help districts overcome these supply and demand challenges.

- 1 Improve recruitment and identify more pipelines
- 2 Identify vacancies and hire earlier
- 3 Retain the highest performers

Districts can strengthen the quantity and quality of incoming teachers by improving local recruitment strategies and identifying additional pipelines.



By focusing on these three groups, districts can bring hundreds of diverse and talented teachers to students who need them most.

A variety of strategies will strengthen basic district recruitment strategy.



Online Postings	Social Media	Referral Campaign	Candidate Cultivation	Data Tracking
Posted jobs on 140 University Career and Employment websites	Coordinated a series of Twitter feeds and LinkedIn postings	144 responses to May referral request sent out to current teachers from CEO	Coordinated cultivation phone calls with candidates in high-need subjects	Used weekly data reports to track and adjust recruitment strategies
Used application deadlines and subject-specific postings to drive applications	Integrated, diversity recruitment messaging into social media postings	A similar referral process was also implemented for principals	Conducted calls to over 80 SPED, Bilingual, Math and Science candidates	Data informed recruitment strategies for diversity and high-need subjects

Fellowships attract teaching candidates without an education background and offer a condensed, high-quality training and coaching.



TEACHING FELLOWSHIP

(recent grads/career changers)

- ✓ Tailored towards career changers or those without an education background
- ✓ Summer training, screen that predicts 1st year success
- ✓ Intensive coaching and training during 1st year of teaching
- ✓ High bar for teaching certification
- ✓ Provide the district with a meaningful number of teachers in hardest to staff subjects

Residency programs attract undergraduate students, providing a rigorous combination of programming and coursework, while also maintaining a high bar for certification.

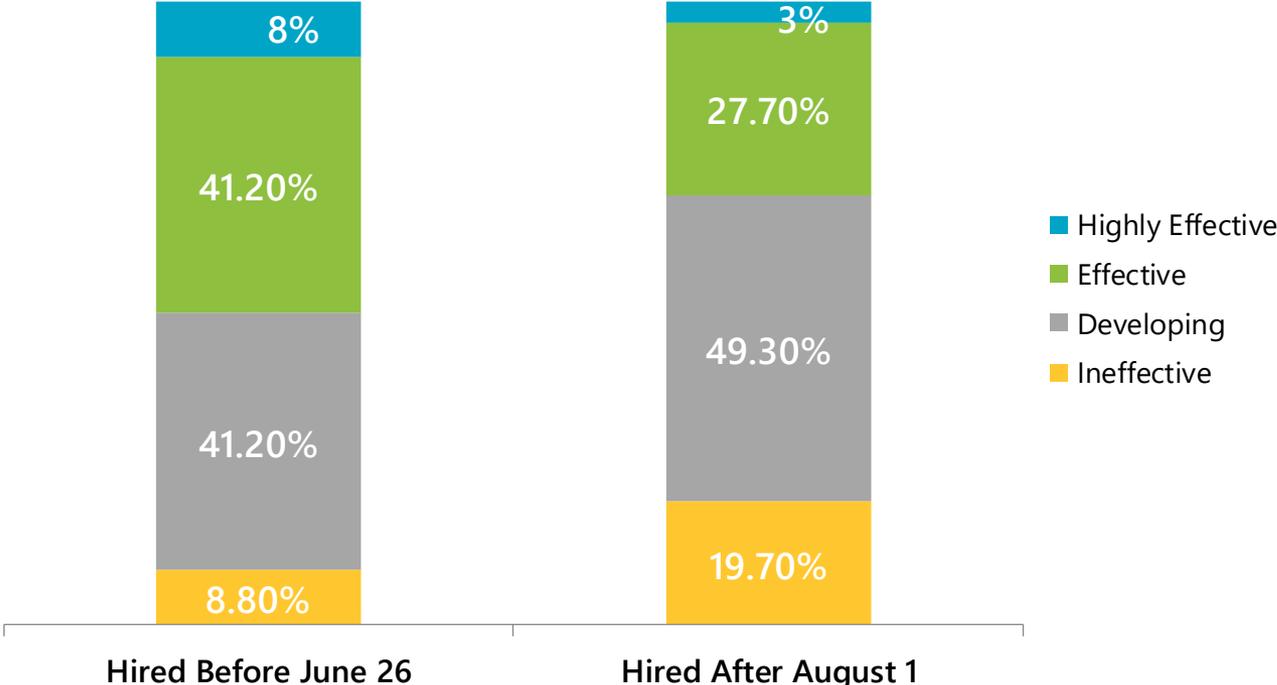


RESIDENCY PROGRAM (undergrads)

- ✓ Tailored towards undergraduates not pursuing an education degree
- ✓ Chance to “try-out” teaching before joining program
- ✓ Intensive coaching and training during junior year
- ✓ High bar for teaching certification, and content degree
- ✓ Provide the district with a meaningful number of teachers

Research shows teachers hired early perform better than teachers hired late. Our interviews with principals support that research.

Principal Perceptions of Teacher Effectiveness, by Hire Date



Source: TNP surveys of principal perceptions of 400 teachers in a subset of low-performing schools in a large urban district, 2009-10.

TNTP recommends a number of strategies to address late hiring timelines common in many districts.



Offer early contracts in high-need subject areas



Begin the budgeting process sooner



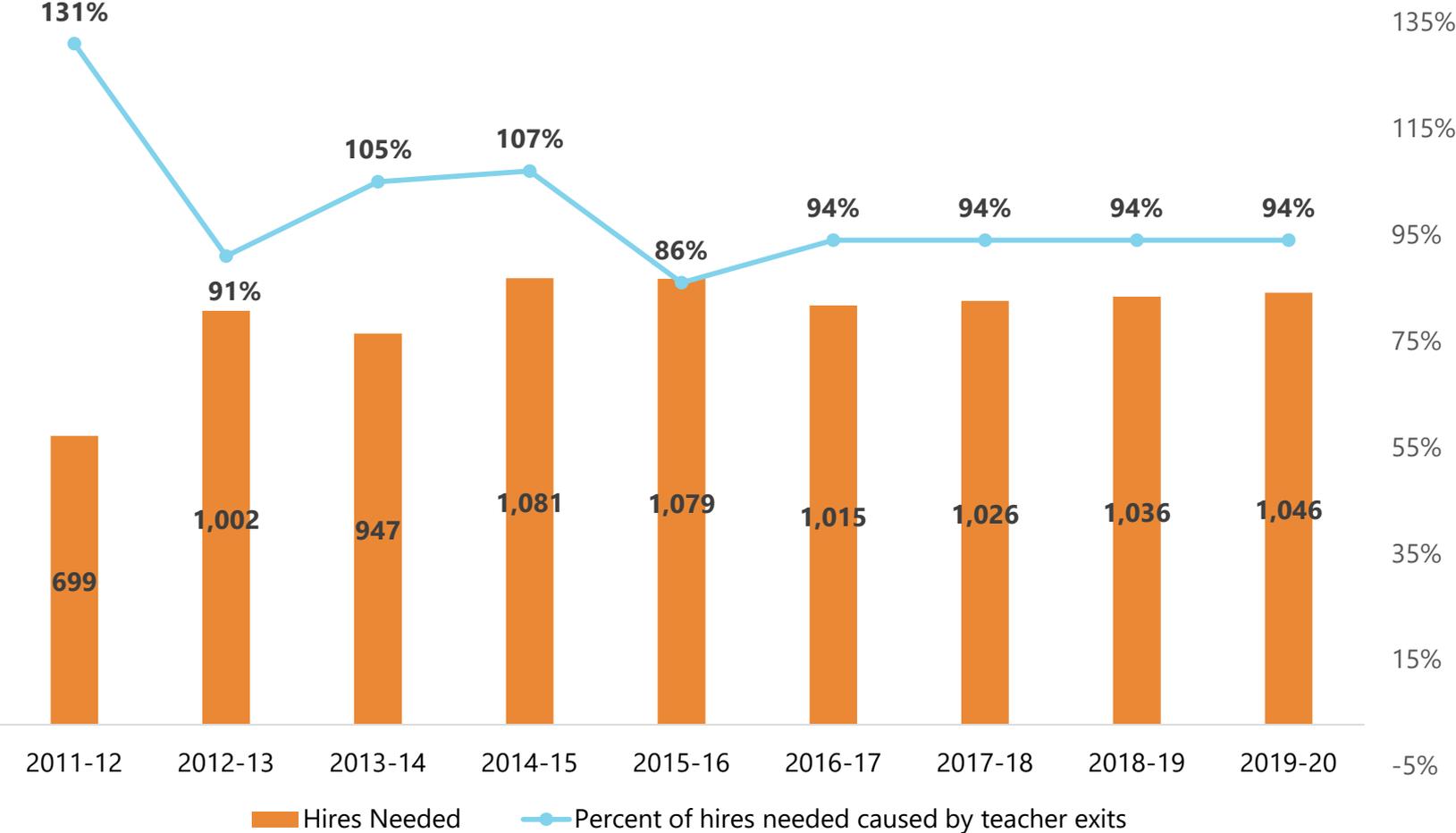
Allow schools to staff to the state minimum for student-to-teacher ratio



Coach principals with skills to forecast/predict their hiring needs and act on hiring earlier.

Teacher attrition is responsible for many of the demand-side challenges.

Teacher Hires and Percent Caused by Attrition



Simple, low-cost steps can help principals retain their best teachers.

- 1 Provide teachers with regular, positive feedback
- 2 Help them identify areas of development
- 3 Give teachers critical feedback about their performance informally
- 4 Recognize their accomplishments publicly
- 5 Inform them that they're high-performing
- 6 Identify opportunities or paths for teacher leader roles
- 7 Put them in charge of something important
- 8 Provide them with access to additional resources for their classroom

Top teachers who experience two or more of these retention strategies plan to keep teaching at their schools for *nearly twice as long* (2-6 more years).

By understanding what's behind teacher pipeline challenges, districts and states can decide which strategies will be most effective to overcome them.

CHALLENGES

As student enrollment grows and shifts, the **demand for high-quality teachers increases**, particularly in high-need schools and subjects.

High attrition rates put a huge strain on hiring needs.

Decreasing enrollment in teacher prep programs and a general decreasing interest in the teaching profession are reducing the **supply** of new teachers.

SOLUTIONS

Attract more high-quality candidates by improving **recruitment strategies**, and creating **additional pipelines** that match the needs of specific districts

Improve policies and practices so districts can **identify vacancies** and **hire earlier**.

Retain the highest-performing teachers with concrete strategies that make them feel valued, and give them opportunities to grow professionally.

Questions?

Connect with us.



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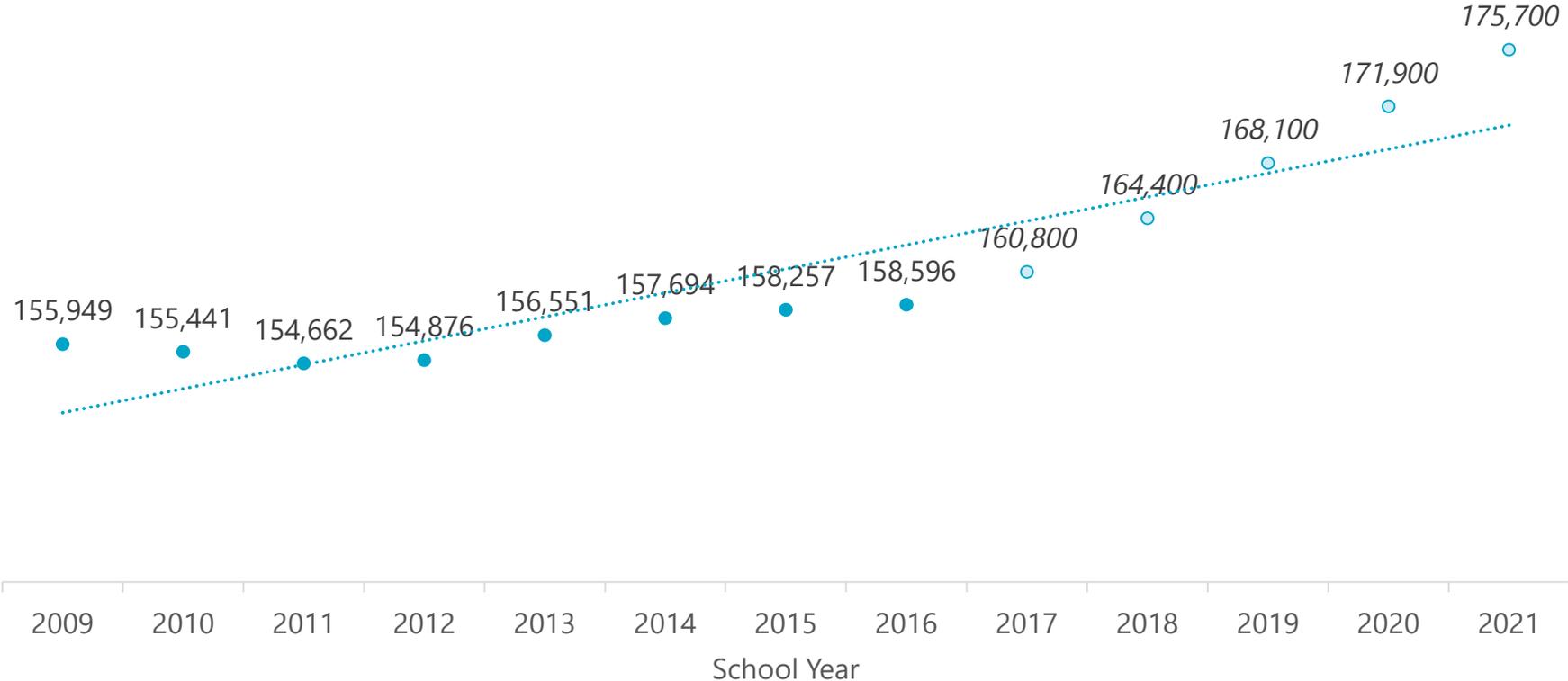


linkedin.com/company/tntp

Appendix

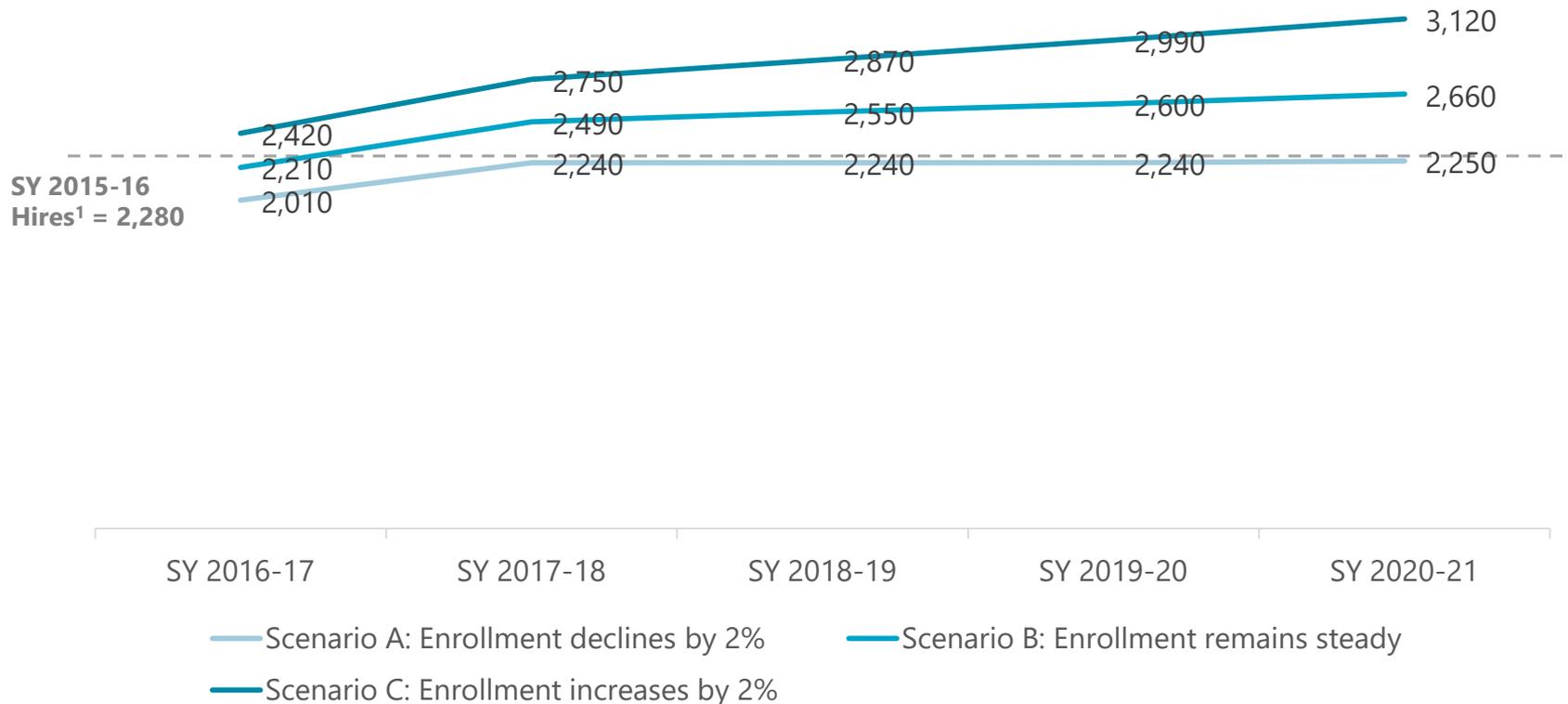
The pipeline challenges in district A reflect challenges faced by many of the districts we studied.

Total Number of Students Enrolled in District A by School Year¹



This growing student population means that District A's hiring needs likely will continue to increase in the coming years.

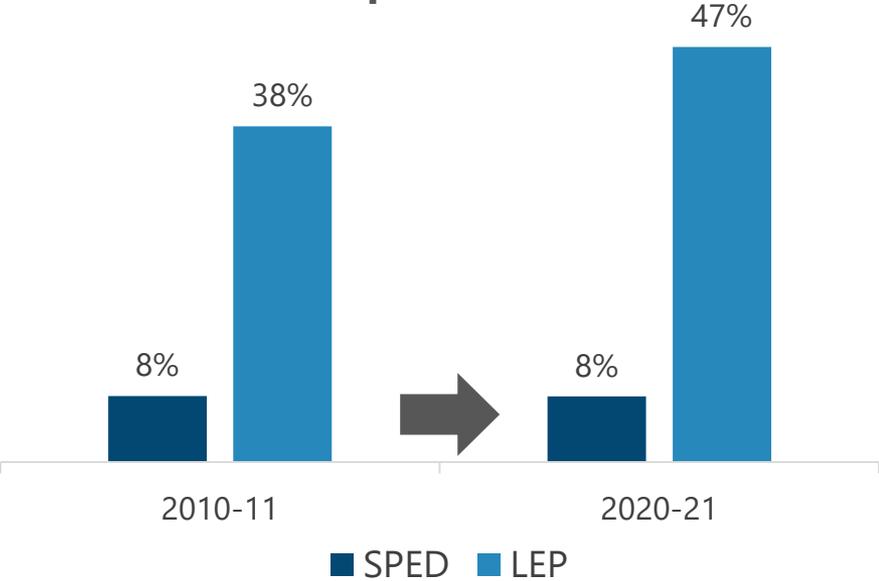
Projected Teacher Hiring Targets



If enrollment trends continue, District A may be serving 17,000 more students in five years than it does today.

Because of growing student enrollment and a shifting set of educational needs, the teacher workforce will need to adapt, particularly with regard to Limited English Proficient students.

Percent of Special Education and LEP Students as a Part of the Total District A Population Over Time



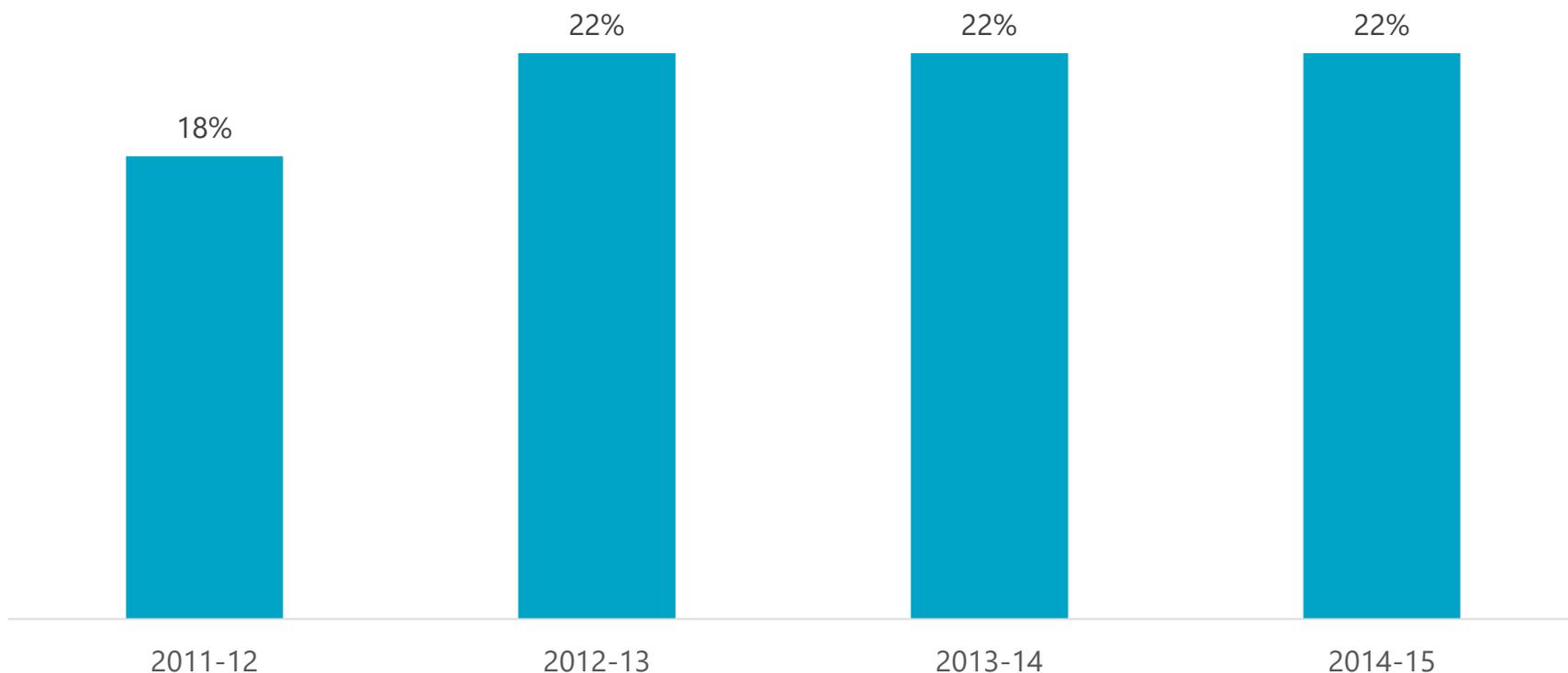
By 2020-21 District A will have nearly 1,200 more students receiving Special Education Services and 15,000 more Limited English Proficient students than the district is currently serving in the 2015-16 school year.

In five years, District A may need to employ as many as 750 ESL/ESOL and 2,600 bilingual teachers to support the growing LEP population.

Note: The percentage of LEP and special education students as a part of the total population is used over time to estimate future trends.

In addition to the growing student population, District A also needs to replace an average of 2,085 teachers (21% of their workforce), every year due to teacher attrition.

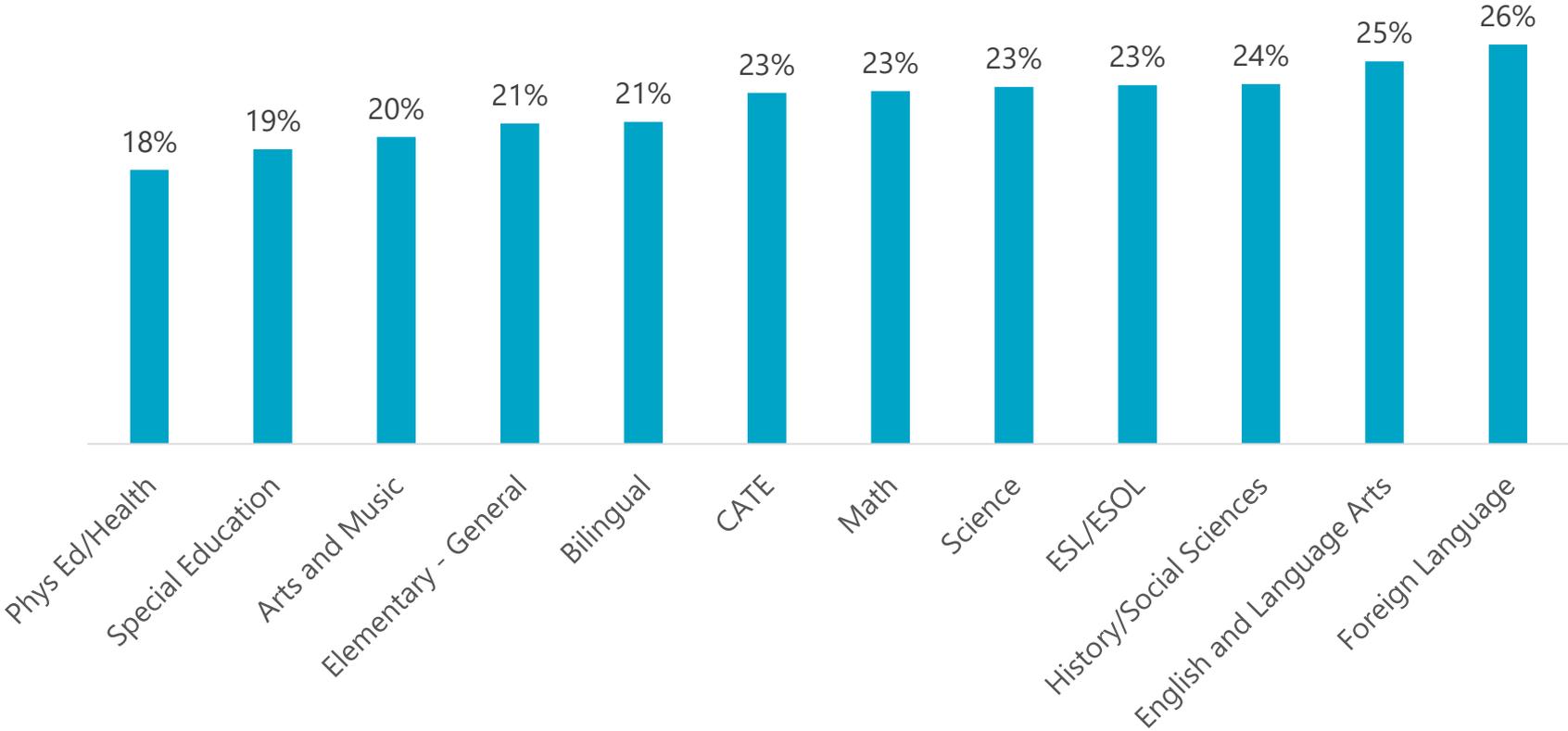
Attrition rates by year SY 2011-12 to SY 2014-15



75% of new hires in 2014-15 simply replaced positions vacated by teachers who left the district or transitioned to a non-teaching role.

Teacher attrition in District A is happening at even larger percentages across key subject areas.

3-Year Average Attrition Rates by Subject SY 12-13 to SY 14-15



We launched the Teach Cleveland website to provide a teacher- focused recruitment portal, marketing CMSD as an attractive place to teach.

TEACH Cleveland

APPLY NOW

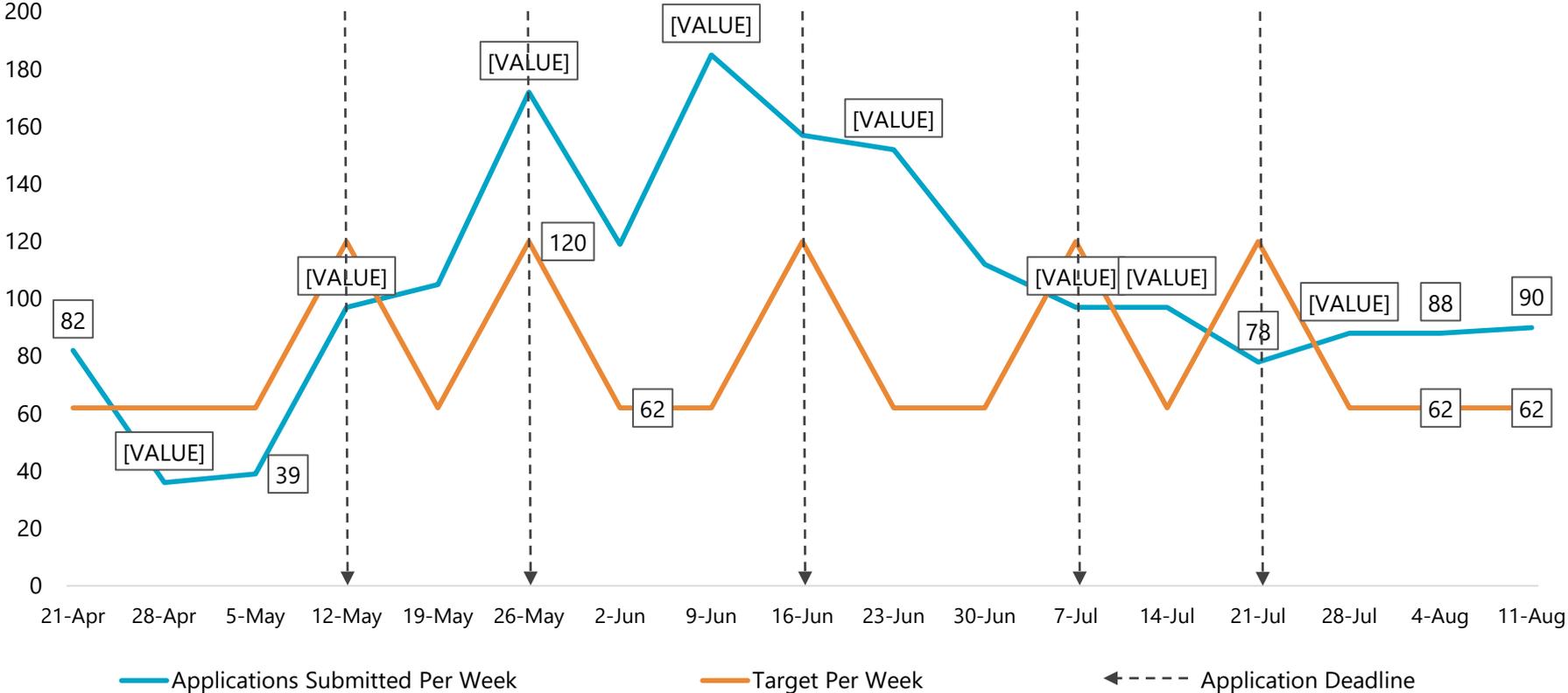
Teachers • Principals • Schools • Investment Schools • Our City • Our District • FAQs



16% of applicants and 12% of hires identified this website as their primary recruitment source. By mid-September, Teach Cleveland had received 8,428 unique visits and 16,442 Page Views.

As a result of these recruitment efforts, application volume exceeded projected targets for most of the season.

Actual v. Targeted Applications Submitted Per Week



Approximately 1,500 cumulative applications had been submitted by the first day of school for 255 vacancies for external hire.

These recruitment efforts resulted in our ability to meet our pool-to-vacancy ratio goal for high-need subjects.

Subject Areas	Cumulative Pool	Cumulative Vacancies	Pool-to-Vacancy Ratio
<i>Critical Shortage (Goal 2:1)</i>			
Bilingual	30	12	3 : 1
Foreign	26	11	2 : 1
Math	67	29	2 : 1
Science	82	28	3 : 1
SPED	246	119	2 : 1
<i>Non-Critical Shortage (Goal 4:1)</i>			
Art	30	9	3 : 1
English	99	32	3 : 1
Foreign	26	11	2 : 1
Librarian	20	7	3 : 1
Music	54	7	8 : 1
Physical Education	14	14	1 : 1
Pre K-8	409	143	3 : 1
Social Studies	97	21	5 : 1

We're one of the country's most experienced teacher preparation programs. For 15 years, we've trained diverse teachers for high-need subjects—at scale.

Our programs are:

1. Diverse

Roughly half of our Teaching Fellows identify as people of color, compared to 18 percent of teachers nationwide.

2. Scalable

We trained one-fifth of Math, Science, and Special Education teachers in NYC and a quarter of new City Schools' teachers in Baltimore.

3. Flexible

In cities like Boston, Dallas, and San Francisco we're enhancing our core training to reflect district priorities and the region's talent pool.

Since 2000, we've recruited and trained more than 34,000 teachers for high-need schools and subjects.

Where we have value-added data—the most robust measure of direct impact on student learning—there are promising signs that our teachers are raising student achievement.



1st Year Fellow



Avg. teacher at any exp. level

In Tennessee in SY 2014-15, first-year Fellows in Nashville, on average, **performed at about the same level as the average teacher in the state**, regardless of experience level.



2nd Year Fellow



6 in 10 LA teachers

In Louisiana in SY 2013-14 (our most recent data), second-year teachers with value-added scores **outperformed more than 60% of all teachers statewide, regardless of experience level.**



1st-3rd Year Fellows

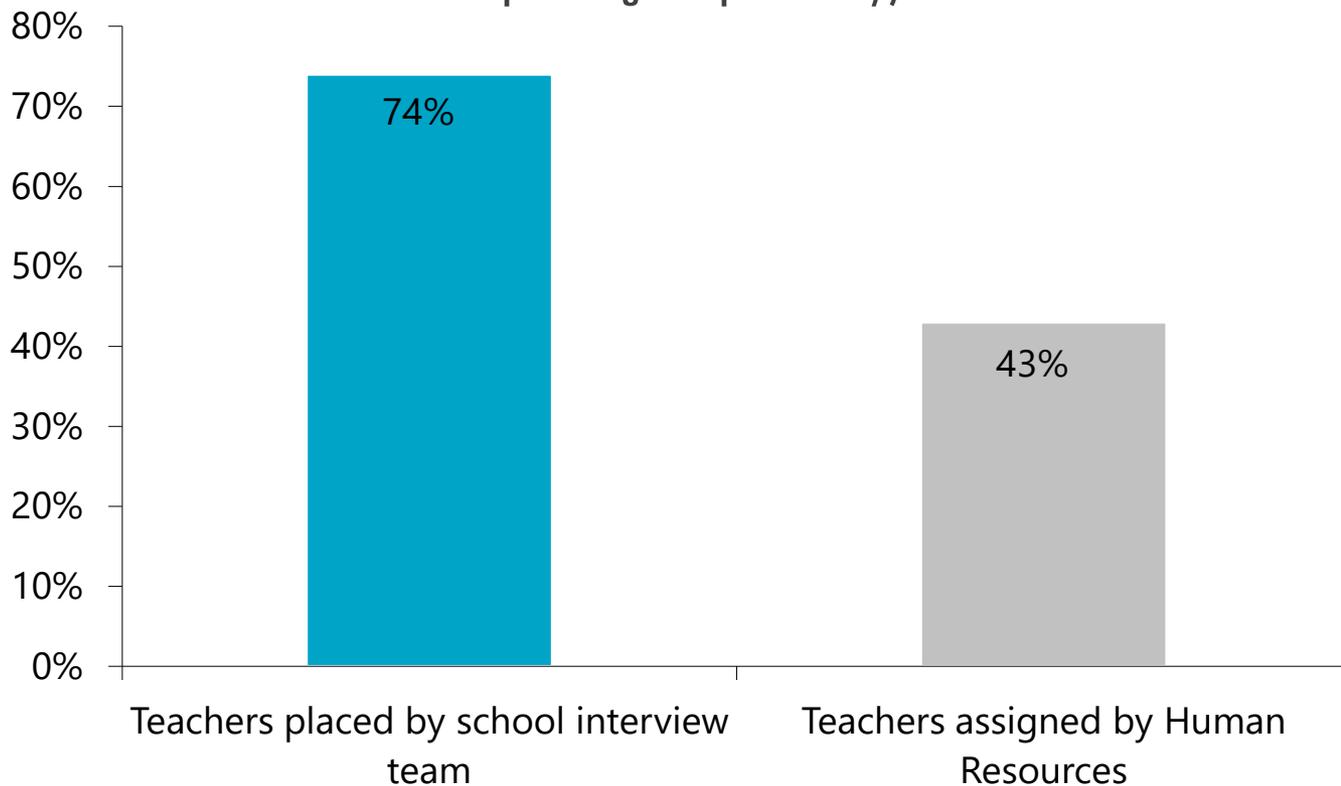
= 4.5

more months of learning

In 2013, Mathematica found that TNTP-trained secondary math teachers with less than three years experience were significantly more effective than other novice teachers—**generating roughly 4.5 months more learning for students.**

Mutual consent contributes to retention, effectiveness and teacher satisfaction.

Teacher satisfaction with current school placement in District D (percent responding net positively)



52%

of teachers assigned by HR say that they may change placements again this year.

Compared to:

22%

of teachers who interviewed for their placements.

Through our work with districts across the country, we have identified critical policies and practices to improve teacher recruitment and staffing.

BEST PRACTICES

Build a large pool. Our recruitment sites work with regional teacher preparation programs, launch nationwide online recruitment campaigns, and engage with local organizations to attract thousands of applicants.

Early Hiring. We consistently find that teachers hired early outperform those hired later in the summer. We work with districts to help drive up hiring timelines to secure top talent early.

Mutual Consent Hiring. Mutual consent hiring is a critical practice for districts wishing to strengthen their hiring practices. In Memphis, teachers hired through mutual consent consistently perform better than those who are forced placed.

OUTCOMES

1,998

Teachers recruited in Tulsa in 2015. In 2013, prior to TNTP's engagement in Tulsa, approximately 419 teachers were recruited.

55-60%

Of all vacancies identified early each year in Memphis since 2012. This is a result of a sustained focus on early vacancy identification.

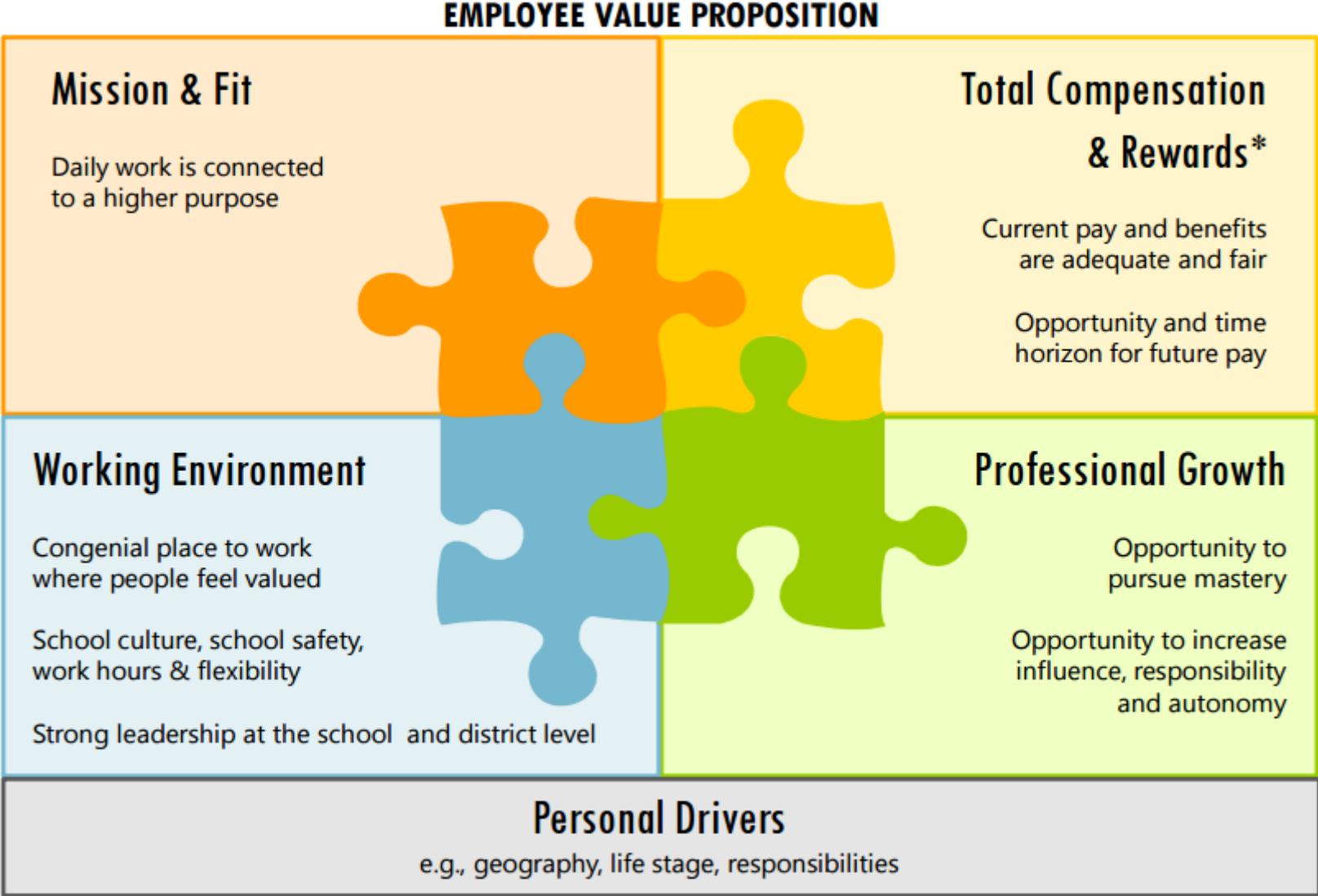
100%

Of teachers hired through mutual consent in Memphis in 2013-2015. Prior to TNTP's engagement with Memphis, many teachers were force placed each year.

By improving recruiting and hiring processes and prioritizing teacher quality, we've been able to help Memphis build a more talented teacher workforce.

	MEMPHIS THEN	MEMPHIS NOW (2014)
RECRUITMENT	1,500 applications received in 2004	8,800 applications received
EARLY HIRING	July Month first hires were made in 2010	January Month first hires were made
EFFICIENT HIRING	Months to fill the average vacancy pre-TNTP	10 days average # of days to fill a vacancy
MUTUAL CONSENT	Inconsistent Much new teacher hiring was mutual consent in 2004, but surplus teachers were limited choice or direct placed	100% mutual consent hiring of 1,685 teachers by start of school

While retention is affected by a number of factors, districts should proactively address areas in their control.



* Financial incentives should not be seen as the “silver bullet” that will automatically increase teacher retention. According to TNTP research in Washington, D.C.’s charter schools, no reasonable amount of money can overcome a weak school culture (*Irreplaceables*, 2012).

***The Irreplaceables* explores retention through the experience of the nation's best teachers, who urban schools desperately need to keep.**

Who Are the Irreplaceables?

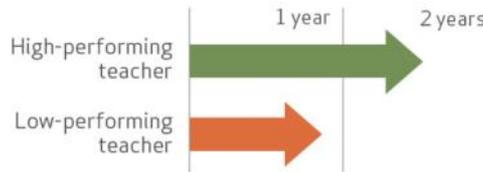
OUTSTANDING TEACHERS



IRREPLACEABLES

Top 20% of teachers in studied districts, as gauged by district data

GETTING GREAT RESULTS



STUDENT IMPACT

Generate 5 to 6 more months of student learning each year than a poor performer

IN SCHOOLS NATIONWIDE



SCOPE

4 urban districts, with 2,100 schools, 90,000 teachers, 1.4 million students

The “Irreplaceables” are teachers so successful that they are nearly impossible to replace.

TNTP helps school leaders make the retention of their high-performing teachers a top priority.

Retain Irreplaceables



Set clear, public retention targets for Irreplaceables



Overhaul principal hiring support and evaluation to focus on instructional leadership.



Monitor school working conditions and address concerns that drive away Irreplaceables



Pay Irreplaceables what they're worth, and create career pathways that extend their reach



Protect Irreplaceables during layoffs

A combination of focused strategies, focused leadership, and focused policies will help keep the best teachers in the classroom longer.

There are also longer term solutions to help retain teachers – access to career opportunities and compensation.

High-Performing Teacher Responses

Most high-performing teachers say availability of career pathway opportunities impacts their decision to remain in the classroom.

Specifically:

50-80%

would stay longer due to expanded career opportunities that allowed them to stay in the classroom, as compared to:

25-50%

who would stay longer if offered a higher salary due to their high performance in the classroom.

