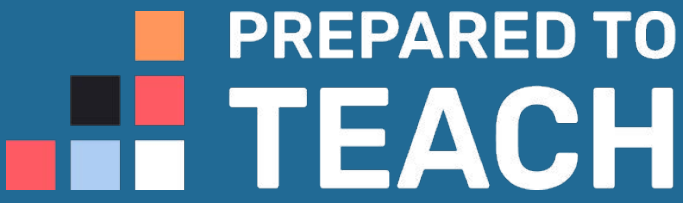
A Path to Equity:
Solving New York's Teacher Turnover & Quality Challenges



ABOUT *PREPARED TO TEACH* AND THIS WHITE PAPER

This white paper has been written to capture ideas that *Prepared To Teach* has been developing over the course of six years in collaboration with a range of stakeholders across the nation engaged in the field of teacher preparation, including institutions of higher education, districts, school leaders, collective bargaining leaders, state and federal policymakers, researchers, philanthropic organizations, non-profit preparation programs outside of higher education, and technical assistance providers.

We have created this document in response to specific New York State conversations, in particular discussions with the longstanding New York P-20 Collaborative, which meets monthly and includes roughly 100 members with representation from P-12, preparation programs in the SUNY, CUNY, and independent sectors, and collective bargaining groups in the State. The P-20 Collaborative was formed as a result of strong interest in the field from more than 40 organizations that collaborated on a federal grant submission to create sustainably funded residencies in New York. As part of the group's processes, members have reviewed residency policy developments from other locations, which informed this document's development.

The ideas, modeling, and research presented here are strictly the construction of *Prepared To Teach* and are intended to support discussions, not to advocate for any specific policy position. That said, research is increasingly clear that aspiring teachers on the whole cannot afford to work for free while in training. Since clinically rich pre-service preparation programs—which are the best pathway to ensure students have qualified teachers—generally require aspiring teachers to work for free, the system has an incentive problem. Individuals currently have the option to forego the clinically rich pre-service preparation they need, instead entering the profession through pathways that require as little as a week of work in a classroom. They are underprepared and unintentionally contribute to systemic inequities in many ways—but they have the incentive of being paid a salary with benefits through these pathways. Funding candidates to be in residency programs, where clinical practice occurs alongside an accomplished teacher, would help achieve state goals for equitable access to effective teachers. This document offers a roadmap to consider for achieving that goal.

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KEY TAKEAWAYS

This white paper frames both the case for and an approach to addressing persistent teacher quality, diversity, and turnover challenges in the State of New York. A growing set of research and promising practice informs the report, which is intended to offer a high-level understanding of the complexities around how the economics of teacher preparation both drives educational inequities and can be shifted to promote educational quality and equity by investing in funded teacher residencies.

Key takeaways for consideration include the following:

- A complete transformation of the teacher preparation system in the State could occur in 6 years for total investment $419 million dollars—just 1.4% of the state-supported education budget
    - That translates into a total investment of $161 dollars per student
- After an initial investment to establish a residency preparation system statewide, annual costs to continue the system would be $69 million—compared to $340 million that the system currently wastes in recurring annual early career turnover costs.
- That annual maintenance cost is less than 0.25% of the state's education budget, and an investment of only $27 per year per student
- Allowing retired teachers to come back to the classroom to serve as full-time mentors—without impacting their retirement—would address both the need for qualified mentors to scale this initiative and the current vacancy crisis districts face
    - Residents who graduate from such situations would be ready to step into those roles as fully certified teachers the following year
    - This configuration could be cost-neutral, also, since returning teachers would not need benefits, and those cost-savings could fund residents
- Teachers who are prepared through year-long co-teaching residencies improve student outcomes during their preparation year and as teachers of record compared to other novice teachers, and they stay in the profession
- Funding individuals to prepare through teacher residency pathways increases diversity in the profession and stabilizes the teaching workforce
- Shifting the teacher preparation ecosystem to residency-prepared teachers could decrease turnover by 2/3 over 6 years
    - Retention data from New York City show teachers from fast-track programs is 24% after 3 years, compared to up to 93% for residency programs
- The state can design and support systemic transformation that will enable every institution of higher education to retool its programs into residencies
- Residencies offer districts a strong, diverse pool of potential hires
- Schools benefit from serving as residency preparation sites both because students have better outcomes and because mentor teachers have genuine leadership roles that reinvigorate their engagement in the profession
- Hard-to-staff schools build a stable workforce, addressing the persistent inequities their students historically faced resulting from a revolving door of novice teachers

WHEN TEACHERS QUIT, EDUCATION FAILS.

There's a solution for this problem: Quality preparation.

High turnover weakens schools, and weak schools can't serve students well. A root cause of high turnover is directly related to how well teachers are prepared before they are hired to teach.[1] Underprepared teachers are the least effective in the classroom and drive high turnover, leaving the profession at up to four times the rate of well-prepared, local teachers from strong state education programs.[2] A revolving door of novice, underprepared teachers robs students of the opportunity to learn from well-prepared, experienced professionals.[3]

Teacher retention—and teacher quality—start with preparation.

Without directly addressing the state's need for a strong teaching force through dramatic shifts in preparation options, ensuring equitable access to effective educators will be impossible. New models of sustainable, affordable teacher residencies can provide New York the teaching workforce its students need.

The Case: Preparation Matters

The science is clear: Teaching requires complex skills that need study and practice.[5] Other nations know this. Formerly poor-performing countries whose outcomes now exceed the United States' have embraced systems of high-quality preparation.[6] Decades of research show that fully certified teachers make a positive difference for student outcomes. In fact, the qualifications a teacher has on entering the classroom have been identified as the single most important predictor of achievement within a school's control.[7]

District-Aligned Residency Benefits

- Improved outcomes & fewer disciplinary referrals in the residency year
- Stronger novice teachers
- Reduced turnover to stabilize schools
- Cost savings from reduced turnover
- A more experienced workforce with stronger outcomes for students

3-Year Retention Rates from Research in New York City Schools[4]

- External fast-track teacher-of-record program.....24%
- Local fast-track teacher-of-record program..... 41%
- University-based student teaching program.....60%
- District-aligned, co-designed residency.....80-93%

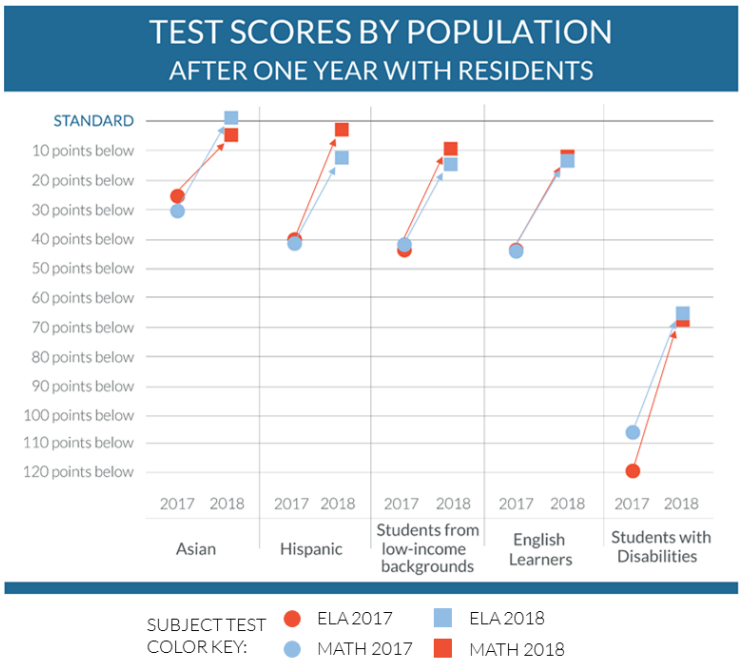
Preparation matters because teaching is complex. It takes time to learn how to teach.[8] The science of learning and development indicates teachers must support learning across unique social, biological, and experiential profiles for every individual child. They must understand how social, emotional, and academic brain functions work in concert in order to create responsive, nurturing environments that facilitate the neural experiences that help students construct knowledge.[9] When aspiring teachers do not have the opportunity to learn and apply what we know about

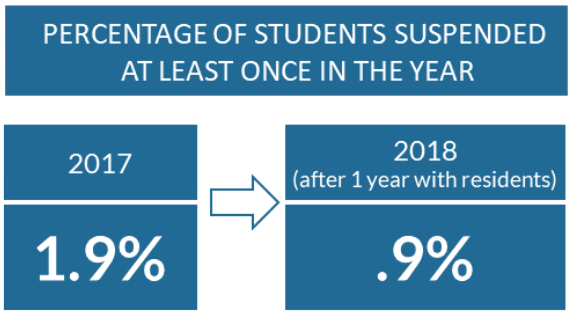
teaching and learning, their students pay the price of policies that allowed underprepared teachers to lead a classroom.[10]

Teacher residencies, where aspiring teachers work for a year teaching within a mentor's classroom, provide the opportunities necessary to become a highly qualified teacher. Residencies benefit educational systems in several ways. First, they improve instruction in placement classrooms where co-teaching models inform the residency design.[11] Graduates of residencies are also better prepared to teach.[12] With residencies, teacher retention improves, lessening the toll of teacher churn on schools and saving millions in state dollars.[13] Retention has its own benefits, too: an increasingly experienced teacher workforce, which positively impacts achievement, attendance, behavior, and motivation.[14] What's more, mentor teachers have meaningful professional opportunities to support their continued growth and development.[15]

When schools and preparation programs partner to design integrated co-teaching models for their residencies, everyone wins. Residents delve deeply into the work of supporting student learning. Mentor teachers have qualified, committed supports for instruction so they can reach more students. And students, across demographic subgroups, greatly improve their learning and experience fewer disciplinary referrals.

This graphic shows progress at Wishon Elementary School in California, where the program worked with the principal to bring a resident to every classroom. In the first year, achievement across every subgroup improved [either footnote or parenthetical here], and disciplinary referrals decreased.





Note: Wishon's student population only includes the subgroups reported here, but other schools with populations including African Americans and Indigenous Peoples have experienced similar transformations.

THE CHALLENGE: SUSTAINABLE FUNDING FOR AFFORDABLE RESIDENCIES

Money Matters for Aspiring Teachers

Why hasn't the nation embraced teacher residencies as the norm, given their profound positive instructional and long-term fiscal benefits? The answer is simple: Economics. Program-level residency costs have seemed insurmountable. Early residency models, designed as grant-funded stand-alone programs with their own administrative and instructional cost centers, had price tags of $50,000 to $60,000 per candidate. Though less than the total public funding investment of $100,000 per candidate that Teach For America has enjoyed,[16] scaling such models was seen as infeasible. We now know that, by working within systems instead of building separate programs, those costs can be dramatically reduced.[17]

More challenging are opportunity costs for an unfunded residency, which are insurmountable for all but the few who are privileged enough to be able to afford to work for a year for free. Aspiring teachers accrue as much debt as other college graduates, but their incomes and ability to pay off loans compromise their economic stability.[18] Extending unpaid student teaching to a full year for most aspiring teachers means either more debt, more wage-earning work on top of full-time teaching and coursework, or inability to complete their programs.

Barriers posed by unfunded clinical practice are even higher for aspiring teachers of color, whose family incomes are less than half that of white families.[19] And supporting teachers of color into the profession matters. For example, having teachers who share the race of their students reduces disciplinary referrals,[20] and having a single Black teacher in elementary school predicts that a Black student is 13% more likely to enroll in college.[21]

Awareness of the importance of the diversity of the teacher workforce has been an argument for proliferating fast-track teacher-of-record programs. Unfortunately, teachers of color leave the profession from these programs *even more quickly* than their white counterparts—draining the system of a promising pool of candidates of color.[22] Fast-track training also draws candidates away from university programs; quick, cheap pathways in the for-profit sector now enroll 68% of those pursuing teacher-of-record certification.[23] The perverse economic incentives of our policy system that allow individuals who are not fully certified to teach is the root cause of the deterioration of the teacher preparation system. New York has the power—and the responsibility—to change that reality.

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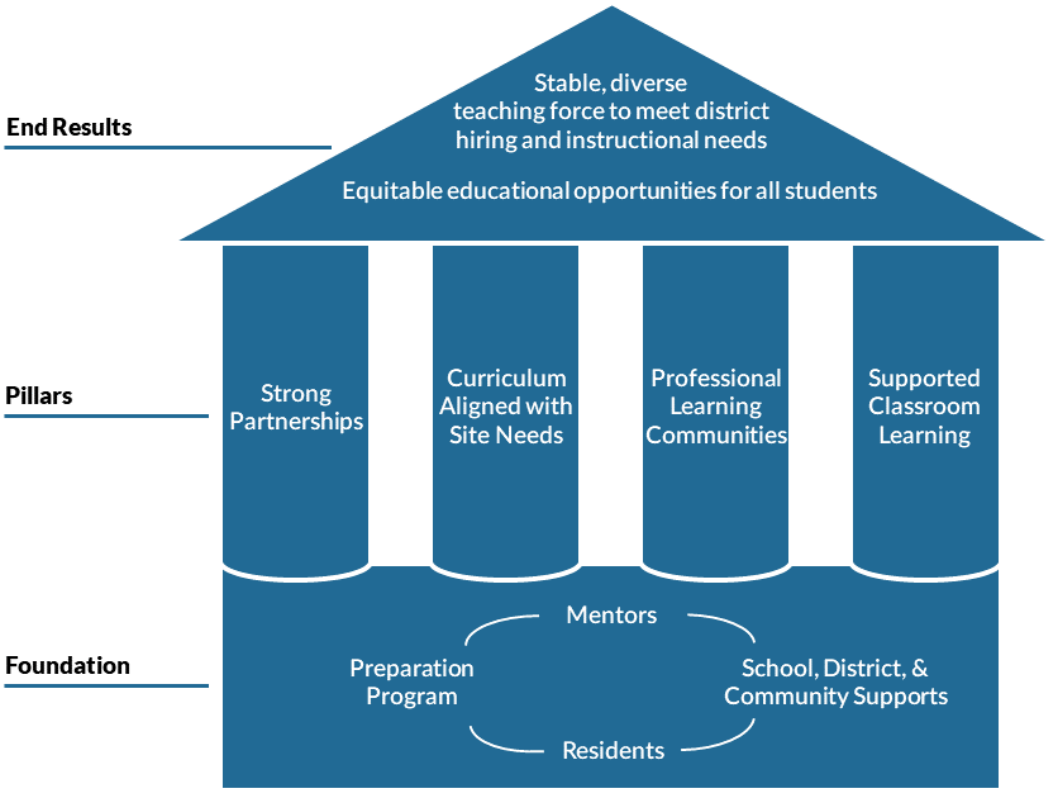
Funded teacher residencies ensure candidates from all backgrounds have equitable access to the kind of preparation that will set them up for success and help them stay in their chosen profession. Reducing financial pressures allows everyone, especially those historically challenged to enter the profession, to focus on the critically important work of learning how to teach. Spending a full year alongside an accomplished mentor teacher lets aspiring teachers experience and understand the arc of a school year, a complete curriculum, how a classroom

of students develops over nine months, and the full scope of the life of a teacher. In a word, it allows them to be prepared.

A Moment In Time Opportunity

The COVID-19 pandemic has both exacerbated and laid bare profound inequities in our educational system. Teacher residencies offer a proven path to positively change the system. The work needed to develop residencies immediately supports schools in ways that address lost learning opportunities students have faced, and results in instructional and cultural improvements that are long-lasting. Outcomes for students today improve when taught by residency-prepared teachers; tomorrow's students stand to thrive when residency-prepared teachers become the norm. And a stable teaching force that coheres and learns together drives continuous improvement in schools. Directing ESSER dollars to develop and support residencies is a smart investment.



SUSTAINABLY FUNDED RESIDENCIES ARE WITHIN REACH

Five Principles for System Redesign

Prepared To Teach has worked nationally for six years, including in New York, researching, innovating, and iterating on ways to design and scale affordable, sustainable teacher residencies. Five principles, embraced and pursued in tandem, help shift preparation ecosystems to high-quality pathways that ensure all students are taught by fully certified, well-prepared teachers.

Partnerships

Central to any transformation of teacher preparation is strong P-20 partnerships. Programs and districts need time and supports to co-design mutually beneficial, high-quality teacher preparation pathways that serve districts' instructional and hiring needs. Partnerships can braid resources between P-12 and higher education, aligning and streamlining work for cost-efficiency while simultaneously deepening the work of residents and teachers in the classroom to improve instruction.

School-based Instructional Redesign

In residency preparation sites with high concentrations of residents and strong program/school partnerships, instruction improves. These residency sites can reduce adult-to-student ratios and use creative staffing approaches—such as allowing a resident to teach in the classroom alone while the mentor teacher substitutes one day a week, or by integrating tutoring and other academic supports into residents' roles. Districts can then support residents' financial needs by offering pay or stipends for this work.

Affordability

Promoting financial literacy for aspiring teachers around financial aid and maximizing access to existing financial aid, work study, and workforce development dollars can help reduce loans and out-of-pocket costs. Focusing on efficient co-design of programs can reduce duplication of course content through meaningful linkages to residency experiences.

Competitive Salaries with Fast-track Programs

Ensuring residency programs are attractive requires equalizing financial incentives with fast-track teacher-of-record programs.

Learning Networks

Residency partnerships are new; diffusing innovations will speed adoption and transformation. Partnerships should be supported to learn meaningfully with each other.

MAKING THE POSSIBLE REAL

Designing residencies using investments from across the system offers a pathway to sustainability. The remaining analyses in this report offer policy considerations and cost estimates for scaling residencies in New York, based on specific values for key variables that influence the cost of developing a sustainable system of residencies. A dramatic transformation that would stem the unacceptably high turnover rate of 21% to 22% among novice teachers can be achieved in four years. Normalizing turnover and establishing a fully funded residency system in the state could be achieved in six years.

Variables to model a funded residency system: Core assumptions

Resident Pay or Stipend Levels

Resident stipends will have to remove the current perverse policy incentive of offering salary and benefits to those who are not fully credentialed. Cost modeling in this report uses a stipend level of $30,000, which, though not completely competitive with teacher-of-record models in many districts, will help disincentivize those pathways.

Fringe is not calculated in the following model, but assuming full fringe at 35% would add an additional $10,500 per resident; providing just medical, assuming a 12% rate, would add an additional $3,600 per resident.

Numbers of Residents & Speed of Scale

The second major cost driver is the number of residents the system needs and how quickly the state chooses to pursue a transformation. New York is estimated to need to hire roughly 17,000 newly certified teachers each year.[24] Universal residencies would ultimately reduce that number by 2/3, given retention rates for residency-prepared graduates, though scaling such a transformation will require time.

The state should begin its transformation efforts with the most urgent needs—turnover among inexperienced teachers. Estimates of teachers who leave the profession in their first four years indicate the state has 6,800 open positions each year previously held by a novice teacher.[25] These positions will frequently be re-staffed by another novice teacher—often from fast-track programs. It should be a priority to fill these positions with residency-prepared teachers, since revolving doors of underprepared and novice teachers deprive students of their opportunity to learn. The 6,800 number is the basis for the calculations that follow, with a summary calculation that carries forward the same scale for two additional years, resulting in a full system transformation to funded residencies. Modeling includes an immediate Winter 2021-22 planning year - Year 0 - so that residents begin in Fall of 2022, or Year 1 in the models.

Modeling the Intersection Between Scale and Costs

Because residency-prepared teachers remain in the profession, costs for residencies reduce and stabilize over time since the system achieves a healthier staff attrition pattern, saving billions of dollars. Conservative estimates predict a reduction of 2/3 in vacancies if residencies replaced other preparation pathways.

Table 1 models costs for 1600 residents in the first year, growing to and stabilizing at 4600 residents a year.[i] Because of reduced attrition, by Year 4 the residency-prepared teachers would begin to address other teacher hiring needs in the state because the residencies would have dramatically reduced vacancies across the 6,800 original positions. Within two more years, this same rate of residency preparation—4,600 a year—would stabilize the entire teaching force with residency-prepared teachers.

Table 1: Size, Scale, and Stipend Needs for the Residency Initiative

Project Year	School Year	Current Year Novice Teacher Turnover	Residents Prepared	Stipend Funds Needed ($30k/resident)	Completers Being Hired[i]
1	2022-23	6,800	1,600	$48,000,000	n/a
2	2023-24	6,800	3,200	$96,000,000	1,440
3	2024-25	5,360	4,600	$138,000,000	2,880
4	2025-26	2,480	4,600	$138,000,000	4,140

[i] Well-designed programs might anticipate a 90% completion and hiring rate of their candidates into local schools. Models in this document take the 10% attrition rate into account.

Level of District Investment

Unique to the *Prepared To Teach* approach for developing strong residencies, and built into our cost modeling, is the commitment to braid resources from across every part of the system to create affordable, sustainable pathways that meet state and district needs for a strong, diverse, high-quality educator workforce. In such programs, residents meet meaningful instructional needs, providing important supports that strengthen student learning and outcomes.

Designing roles and compensating residents for meaningful instructional supports in schools can offer cost-neutral and/or strategically aligned ways to pay candidates. For example, residents can offer tutoring, instructional remediation, or enrichment; substitute one day a week; or serve as part-time paraprofessionals.

Braiding resources from schools and districts offers partnerships more ways to offset residents' costs while they pursue full-time clinical practice. Federal Title I, Title II, and IDEA dollars, along with general operating funds, can provide stipends for residents' instructional supports. In most places, 30%-40% of a stipend can be funded through existing instructional expenditures over time.

Over time, districts can also reinvest cost savings into the residency. Teacher turnover has significant costs, estimated to be anywhere from $9,000 per teacher in rural districts to $20,000 in urban districts.[26] Additional savings, not yet quantified through research, would accrue from reductions in remediation needs. When students are taught by residents co-teaching in their rooms, and when they have strong first-year teachers, their outcomes improve.[27] They receive the targeted, timely instructional supports they need and don't fall behind. Similarly, inappropriate special education referrals and grade retention—both costly and preventable—are reduced when teachers are fully prepared before taking over a classroom.

Models here begin with a conservative estimate of 10% of the $30,000 stipend coming from reallocation, with those dollars growing by 10% a year for two years. In addition, by Year 4, an additional 10% a year can be funded through cost savings from turnover, for a total of 50% of stipends being paid through local funding (Table 2).

Table 2 : District Contributions to Resident Stipends

		Percent of Stipends Covered Locally		
Project Year	School Year	From Reallocation	From Savings	Total
1	2022-23	10%	0%	10%
2	2023-24	20%	0%	20%
3	2024-25	30%	10%	40%
4	2025-26	30%	20%	50%

Costing Out the District and State Investments in Stipends

Over the course of four years, as the proportion of the local investment grows, state-level investments per person drop dramatically. Initial state costs are modeled here at $27,000 per resident, with an average of $20,000 per resident over the first four years and an ultimate cost of $15,000 per resident when the system is scaled and stabilized.

For an investment of $271,800,000 over four years, the State can address the current high turnover rates among novices and create a sustainably fundable stipend system. In addition to addressing the dire need to stem the tide of turnover among the state's novice teachers, which currently is a powerful driver of inequitable educational opportunity, the system, once established, will prepare new residency graduates who can address other hiring needs across the state in just two more years, with recurring investments of $69,000,000 in the system.

In addition, investment in residencies will reduce turnover costs across the board, ***saving an estimated $340,000,000 a year*** in dollars lost to attrition of early career leavers from the profession. It's a cost-efficient investment that also promotes excellence, as it will ensure every student has a qualified teacher in the classroom (Table 3).

Table 3: Total Costs for Supporting Candidates, Including Six-Year Full Scale Calculations

Project Year	School Year	Residents Prepared	Annual Stipend Need ($30k/resident)	Total Covered Locally	State Gap Funding Needed
1	2022-23	1,600	$48,000,000	$4,800,000	$43,200,000
2	2023-24	3,200	$96,000,000	$19,200,000	$76,800,000
3	2024-25	4,600	$138,000,000	$55,200,000	$82,800,000
4	2025-26	4,600	$138,000,000	$69,000,000	$69,000,000
Sub totals years 1-4		14,000		$148,200,000	$271,800,000
5	2026-27	4,600	$138,000,000	$69,000,000	$69,000,000
6	2027-28	4,600	$138,000,000	$69,000,000	$69,000,000
Totals		23,200		$286,200,000	$409,800,000
Annual recurring		4,600		$69,000,000	$69,000,000

Investing in the Transformation Effort

Transforming current programs into high-quality residencies will require investments in the change process itself. Building high-quality, district-aligned residencies takes time and effort.

The kind of resource braiding that will allow a system to become cost-efficient and sustainable needs deep partnerships between districts and preparation programs. Leaders from both sectors will need to dedicate time to learn about possible models, align curriculum, plan for recruitment, address affordability barriers, and prepare schools and mentors for their important roles in residents' learning. Each program licensure area and school or set of schools will need support to engage this work.

Prepared To Teach has estimated transformation costs at $50,000 per residency partnership, assuming each residency partnership serves a cohort of 15-20 residents. For 500 residents a year, the state would need 30 residency partnerships, each consisting of a program and 1-4 local schools working together to develop that program's residents. For this model, in Year 0, 20 partnerships would need to be developed for the first 300 residents in Year 1; an additional 10 would need to be ready for Year 2 (Table 4). Residency partnership sites ideally would be geographically distributed so that all higher education preparation programs are able to engage in focused residency work, ensure Indigenous Nations and Pueblos have access to residency preparation schools and be located in areas with anticipated future enrollments to sustain the residency work. In addition, attention to how residency programs ensure graduates equitably address hiring needs across the state--for example, with contracts requiring service in certain locations-- will be an important part of the system's design.

Table 4: Residency Partnership Development Supports

Project Year	School Year	# of IHE Program Partnerships Developed	Average # of Residents Per Partnership	Total Annual # of Residents	Residency Development Support Funds Needed
0	2021-22	40	40	1,600	$2,000,000
1	2022-23	40	40	3,200	$2,000,000
2		35	40	4,600	$1,750,000
TOTALS		115			$5,750,000

Prepared To Teach also argues that states can best meet their responsibilities for ensuring students have equitable access to effective educators not simply by funding strong preparation models, but by actively supporting their systemic development through networked learning communities and targeted local strategic supports.[28] Transforming existing systems into residencies is nuanced and complicated work, and partnerships will best be able to navigate their change processes if they are able to learn with and from others who have engaged in residency transformation. Accordingly, supporting a state-level community of practice should be part of the plan. The State would also want to engage in a learning agenda, gathering baseline and ongoing data on designs, impacts, and costs. An investment of $1,000,000 for each of three years starting in Year 0 would support the structures, convenings, and technical assistance needed to ensure the investment results in sustainable change in the sector (Table 5).

Table 5: Learning Network and Research Investments

Project Year	School Year	Community of Practice Supports
0	2021-22	$1,000,000
1	2022-23	$1,000,000
2	2023-24	$1,000,000
TOTALS		$3,000,000

AN INVESTMENT THAT PAYS OFF

The modeling used in this white paper can be adjusted in many ways—lower or higher stipends, larger or smaller scale targets, faster or slower scale assumptions. Any way it's modeled, though, the investment in a systematic, state-wide residency preparation system is worth it. Importantly, residency prepared teachers are not simply addressing hiring shortages; they serve as a systemic solution for the State's continued educational inequities. Residency-prepared graduates ensure P-12 students have a teacher who is not learning on the job at their educational expense. Residents' documented strong retention rates ensure that investments in professional development are able to achieve their goal of building a strong teaching force. Retention also stabilizes schools and communities, conferring additional benefits beyond improved classroom instruction.

Cost to transform 17,000 vacancies to permanent residencies over 6 years

Cost per year once scaled—**0.24%** of the annual state-funded school aid budget

Annual cost per student, or **$161** per student for the full 6-year transformation

WHAT TO DO ABOUT TODAY'S VACANCIES?

Admittedly, envisioning a push towards a system that embraces residencies during the crisis-level vacancies that districts face today is daunting. There is, though, a remedy for that challenge. States can create short-term incentives for retired teachers to return to the classroom full-time ***as mentor teachers who work alongside a resident***. Residents of course would be well-positioned to be hired for their mentor's position once they graduate. This arrangement addresses two needs—finding qualified mentor teachers as the residency system scales, and filling current classroom vacancies. By removing disincentives that negatively impact retirement pay, many vacancies could be filled. And because retirees have health insurance, those expenses could be removed from districts' costs—and could fund part of residents' stipends.

A teacher's certification status is the single most important indicator of quality a school has control over, and students from low-income backgrounds, from communities of color, and with special educational needs are the ones in our educational system who disproportionately lack access to fully certified teachers.[29] Residencies would pave the way to address generations of systemically inequitable access to a quality education. The recurring annual cost of for this investment once scaled would be less than a quarter of one percent of the annual state-funded school aid budget—$27 per student. The children of New York deserve this investment.

ENDNOTES

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