

REQUEST FOR PROPOSAL

Accelerating Teacher Workforce Data Systems

Release Date: August 22, 2024

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1. Introduction

[Beyond100K](#), in partnership with the U.S. Department of Education, is exploring how states and other stakeholders collaborate to design tools and processes to better understand and predict teacher supply and demand and enable accurate projections and successful planning for the teacher workforce. Through this effort, Beyond100K is bringing to life a process called the “Solution Lab to Accelerate Teacher Workforce Data Systems,” where states and others will co-design and collectively fund the development of a series of solutions that will move the field forward toward comprehensive teacher workforce tracking and forecasting systems and tools across states. Proposals are sought that will contribute to the first phase of this transformative effort. Specifically, we are looking for proposals that enhance states’ capacity to disaggregate teacher supply, demand, and retention/mobility data by demographics, geography, grade level, certification area, and preparation pathway, as well as their capacity to act upon that data strategically in order to drive impactful decisions and policies that alleviate teacher shortages. The sections below articulate a multi-pronged approach to advancing the field, which involves: (1) a field scan to elevate bright spots and best practices, (2) a Community of Practice that supports collective learning and state-level application of effective practices, and (3) the provision of targeted expert support to build states’ capacity to execute and sustain this work. We welcome proposals that address one or more of the three solution components detailed in the sections below, at a range of budget levels from \$50,000 - 250,000.

2. Background

The problem

For decades, principals and school leaders across the nation have struggled to hire STEM teachers, especially those who are qualified, who hail from the communities where they teach, and who reflect the racial, cultural, and linguistic identities of their students. The severity of the problem has only been compounded since the pandemic and is currently a significant challenge to the teaching profession at large. Nationally, teacher turnover is up 66% from pre-pandemic levels, reaching 10% at the end of the 2021-22 school year (as compared to 3.4% on average in other industries). And, teacher shortages have a greater impact on students of color, in low-income communities, and in geographically-isolated regions.

The problem of teacher shortages is complex, influenced by many factors articulated in Beyond100K’s comprehensive [map](#); however, one pivotal keystone challenge with the potential to dramatically impact STEM teacher shortages and teacher shortages more broadly is the ability to comprehensively and precisely track teacher workforce data related to teacher supply, demand, and retention/mobility. Yet, states have vastly incomplete data on their teacher workforces. In particular, teacher workforce data related to teacher supply, demand, and

retention/mobility are rarely disaggregated by important factors such as demographics, geography, grade level, certification area, and preparation pathway. Without this visibility into the nuances of teacher supply, demand, and retention, school systems cannot accurately forecast and strategically fill classrooms with the well-prepared, racially, culturally, and linguistically diverse teachers our students need and deserve.

Ending teacher shortages relies on an accurate and complete understanding of teacher supply, demand, and mobility, disaggregated to reveal the specifics of different populations and geographies. Accessing this information in a clear, usable way would enable data-driven decision-making, including effective resource allocation to support strategic hiring and retention practices and strong and targeted policymaking. Over time, it would help transform the teaching profession, by avoiding further shortages via predicting and navigating teacher workforce needs, promoting best practices related to teacher hiring and retention, and supporting more positive dialogue about and surrounding teachers and schools.

The approach to finding solutions

Beyond100K is a leader in identifying big, shared challenges affecting the education sector and generating novel and effective solutions to them. Our model involves bringing together an eclectic mix of relevant experts to brainstorm on and workshop the issue at hand, followed by a process of aggregating demand and sourcing large-scale, shared solutions that multiple partners co-invest to bring to life. Called “Solution Labs,” these experiences are intended to move partners beyond deliberation and shared learning to collaborative action: co-funding the creation of a concrete product, strategy, approach, or intervention that’s beyond the capacity of any single partner to afford or design on their own. They are a method of responding to a big challenge with a big, coordinated response, rather than with the typical series of smaller, disparate reactions. (See Appendix B for more information about Beyond100K as well as the history of solution labs.)

Beyond100K, in partnership with the U.S. Department of Education, is currently leveraging this Solution Lab process to accelerate teacher workforce data systems. To begin this process, in the winter and spring of 2024, Beyond100K gathered data about the current state of the teacher shortage and teacher workforce data systems, as well as states’ interest and capacity to participate in a Solution Lab to advance these systems. The data collection process culminated with a workshop in April 2024, during which Beyond100K and the U.S. Department of Education convened 37 people from states, universities, and education organizations to kick off the co-design process and articulate their collective needs. The purpose of the workshop was to define specifications for a solution to the shared need for more comprehensive teacher workforce data systems and tools, in addition to building excitement and interest from stakeholders to continue forward in this effort. This [Executive Summary](#) includes key insights and recommendations for the components of a comprehensive teacher workforce data system; reference [this document](#) for more in-depth documentation of workshop outcomes and findings.

One of the most important insights that came out of the workshop is the need to approach this effort in phases, given the complexity of the challenge. Thus, during May - July of 2024, Beyond100K solicited feedback from experts and stakeholders across states and organizations to consider the most effective place to begin this effort. The opportunity described below is a result of a synthesis of feedback and priorities expressed across the field.

3. Opportunity

Grounding in a shared challenge

This RFP seeks to enhance states' capacity to disaggregate teacher supply, demand, and retention/mobility data by demographics, geography, grade level, certification area, and preparation pathway, as well as their capacity to act upon that data strategically in order to drive impactful decisions and policies that alleviate teacher shortages.

Precisely disaggregating teacher workforce data by important factors such as demographics, geography, grade level, certification area, and preparation pathway is at the heart of addressing the inequitable distribution of prepared, diverse teachers across geographies, student populations, grade levels, and subject areas – a distribution which leaves students of color, in low-income communities, and in geographically-isolated regions most impacted by teacher shortages. In our interviews and surveys, states and stakeholders consistently highlighted the importance of having a more nuanced, disaggregated picture of the specific teacher shortages that exist and saw this as an important and commonly experienced challenge that has yet to be sufficiently advanced or solved. Currently, state teacher workforce data are rarely disaggregated by important factors such as demographics, geography, grade level, certification area, and preparation pathway. The inability to pinpoint and analyze specific gaps in these areas causes states, districts, educator preparation programs (EPPs), and others to rely on late-stage, broad-brush solutions that cannot manage let alone forecast and address the persistent inequitable shortage of well-prepared, diverse teachers across grades, subjects, geographic regions, and student populations.

Providing a path for states to collect, view, manage, and analyze their teacher workforce data in a disaggregated way would allow states, districts, EPPs, and others to precisely pinpoint specific needs in relation to teacher supply, demand, and retention, create targeted solutions tailored to those needs, and more strategically allocate resources to address the most pressing problems. It would help states to answer questions such as: Which subject areas/grade levels present the largest teaching vacancies? How do teacher shortages differ geographically? Which student populations have the least access to certified teachers? Are there differences in teacher attrition by teacher and/or student demographic characteristics? Why do each of these gaps occur, and how might we address them?

In the next section, we specify the components that a successful proposal will address.

Components of the requested solution

At present, the field of teacher workforce data systems is nuanced and complex. While there is widespread agreement and energy to enhance teacher workforce data systems, there has been a great deal of ongoing work and investment already focused on this issue, which over time has resulted in a myriad of existing tools, systems, and strategies, with differing strengths and gaps. We heard from many stakeholders that they were eager to more deeply understand how others have chipped away at this problem and consider how they might apply that work to their own settings. The multi-pronged approach we outline below therefore aims to:

1. scan the field in order to elevate existing bright spot models and best practices in relation to the collection, organization, and use of disaggregated data
2. harness the power of strategic collaboration and collective learning through a Community of Practice that shares knowledge and supports the state-level application and adaptation of effective practices, and
3. provide targeted expert support for states to develop and increase their capacity for this work in their specific contexts.

Specifically, we seek proposals for the three components detailed below. ***Respondents may target their proposals towards one or more of these components. We are also open to partnerships between respondents who can offer multiple components in collaboration. Preference will be given to proposals that either cover multiple components or already have established a partnership to do so. Applicants responding to one component do not need to have prior work experience in relation to the other components.***

Component 1: Field scan for bright spots and best practices

This component involves the creation of a report for the field that advances its ability to precisely disaggregate teacher supply, demand, and retention/mobility data by factors including demographics, geography, grade level, certification area, and preparation pathway, and to leverage that data to pinpoint gaps and strategically target solutions. We envision the report to include the following:

- *Analysis of the shared challenge of disaggregating data:* What are the specific reasons for this challenge and the key barriers states face in relation to it? What are the most pressing questions states cannot answer or critical problems they struggle to solve as a result of this challenge?
 - For this element, we expect a thorough analysis of the problem with a clear and organized distillation of the discrete barriers states face in relation to accurate and precise data disaggregation by multiple factors across teacher supply, demand, and retention/mobility.
- *Existing models to learn from:* What systems and practices already exist and are successfully addressing some part of the challenge of disaggregating data to pinpoint gaps and solutions? What are their features, what did it take to design them, how have they been implemented, and why do they work?

- For this element, we expect at least 5 individual case studies and a rubric to help states review them, including, categorization by different factors for instance, cost, complexity/time to implement, and aspect of the problem they solve (e.g. data visualization, data analysis, strategic action to impact practice and policy, etc.).
- *Distillation of best practices, resources, and recommendations:* What crosscutting insights, practices, and concrete resources can others learn from and apply directly to advance their work?
 - For this element, we expect a clear set of practices and recommendations that can be applied practically across state contexts, as well as any relevant resources/tools that others can use, such as protocols, processes, self-assessment tools, technical frameworks, strategic planning tools, etc.

For examples of the sample types of deliverables for this component, see Appendix C.

Component 2: Community of Practice

This component involves the design and facilitation of a Community of Practice that convenes states to collaboratively apply the findings from the Field Scan generated through Component 1, grounded in the shared challenge of effectively disaggregating data to pinpoint gaps and target solutions. Beyond100K would catalyze this community by bringing states together, drawing upon Solution Lab participants. We anticipate the Community to include approximately 10-15 states and to convene for 6-12 months. We seek proposals that articulate a vision for shaping the community’s launch, structure, and key activities. Some potential examples of strategies for collaboration might include:

- Strategic matchmaking to allow state pairs to learn from one another.
- Virtual “[Steal This](#)” sessions or other [collaborative tools](#) to bring to life best practices happening in other contexts.
- Structured workshops during which states and other stakeholders apply the Field Scan findings to their contexts, supported by experts in different spaces.

We welcome creative thinking around additional opportunities for strategic collaboration and collective learning.

Component 3: Tailored expert support to build capacity

This component involves the provision of direct technical assistance services to states to build and sustain their capacity to implement the practices and recommendations aligned to Components 1 and 2. That is, we recognize that in order to implement and sustain best practices and concretely take action to improve their systems, states may need more targeted support, tailored directly to their specific contexts. Customized technical assistance might fall into one or more of the following areas:

- *Data tools, visualizations, and dashboards*: Diagnosing and optimizing technical systems to better disaggregate data in line with recommendations from the field, and/or establishing common data standards that allow for the integration of data across different sources.
- *Data analysis*: Optimizing and deepening analysis protocols and practices, to make meaning from disaggregated data.
- *Shaping practice and policy*: Unpacking root causes of gaps unearthed through data analyses and taking strategic action towards reducing teacher shortages.
- *Capacity building and sustainability*: Establishing systems and structures to maintain and sustain data initiatives over time, and to mitigate against the challenges of staff turnover.

The above areas are based upon what we have heard thus far from states as areas of need. We welcome proposals for additional types of technical assistance aligned to the shared challenge.

We envision Component 3 to be based upon state need and interest – that is, states will have the option to invest in these services as they align with their needs in terms of both content and scope of support. Therefore, as part of the proposal and budget overview (further detail in requirements below), we ask respondents to define a beneficial rate for services that states may take advantage of as they see fit, as well as a set of intensity levels at different costs, with a cost benefit for purchasing a longer-term service. For instance, a respondent might propose an hourly rate of X dollars/hr for a short-term, consultative, or catalytic engagement of a small number of hours, and a lower rate of Y dollars/hr for a longer-term engagement over a longer period of time, in order to either optimize technical systems or build capacity and sustainability. Our hope is that this arrangement benefits both states receiving a beneficial rate for needed supports, as well as vendors who will be given access to a large potential client pool.

Note about Co-Design and Co-Investment

This project will be co-commissioned and co-funded by representatives from State Education Agencies (SEAs) who have been a part of the Solution Lab process (described above) alongside Beyond100K. A subset of these state-level stakeholders will contribute to the RFP selection process and help steer the project once it begins, as clients. The selected RFP partner(s) will therefore be expected to collaborate with key representatives from SEAs on the design and content of the solution components outlined in the prior section.

Proposal Requirements

Proposals should be **4-8 pages in length**, depending upon the number of components addressed (not including work samples and bios).

Clearly identify which component(s) you are applying for:

- Your proposal may address one, two, or three of the components described above:
 - Component 1: Field scan for bright spots and best practices
 - Component 2: Community of Practice
 - Component 3: Tailored expert support to build capacity

For each component that you are applying for, please paint a more detailed picture of how you would approach that component by answering the following questions:

- *Component 1*
 - What methods will you use to unearth bright spots and best practices worth spreading?
 - How will you ensure that what is produced is relevant and useful to a wide audience of states at different stages in relation to their data work?
 - What qualities/characteristics will your field scan need to have in order to be successfully utilized by states?
 - What challenges/barriers do you anticipate, and how will you address them?
- *Component 2*
 - What guiding principles/values will undergird the work of your Community of Practice?
 - How will the principles of Diversity, Equity, Inclusion, and Belonging (DEIB) be integrated into your Community of Practice?
 - What do you see as the anticipated outcome(s) of the Community of Practice, and how will you know if you've achieved it?
 - What specific strategies for collaboration will you use to achieve your goals and why? How will you structure these over time?
 - How do you envision leveraging the Field Scan produced through Component 1 to drive/support the work of the Community of Practice?
 - What challenges/barriers do you anticipate, and how will you address them?
- *Component 3*
 - In what specific area(s) would you provide technical assistance to states? Why do you see this as a critical area of need?
 - What do you see as the anticipated outcome(s) of your support, and how will you know if you've achieved it?
 - Explain the specifics of your support model in terms of content and approach.

- If any technology tools or applications would be needed as part of the work, please describe. Also, describe any technical considerations that would be important in working across states with different existing state data systems (e.g. considerations regarding a data standard to support interoperability).
- How would you ensure states would have the capacity to sustain the work you do when your engagement ends?
- What challenges/barriers do you anticipate, and how will you address them?

*Explain why you are ideally suited to take on the work aligned to **each component** you are applying for, as well as what partners you might need to bring this work to life:*

- What is your specific expertise aligned to:
 - your selected component(s)?
 - the field of teacher workforce data systems and/or other projects involving government data systems?
 - the shared challenge of disaggregating data to pinpoint gaps and target solutions?
 - technical considerations regarding data system work (e.g. unified data standards, collaborative data sharing and agreements, etc.).
- What are examples of relevant past work? Please include 1-2 work samples of previous relevant projects that would help us understand your work and approach aligned to your selected component(s).
- Who will serve on the project team? (Please include bios of key team members who will be working on this effort.)
- What partners might you need to bring on to support this work and for what purpose(s)?

Provide an overall project timeline with key milestones and deliverables

- What is the anticipated timeline of the project?
- What are the key activities and milestones?
- What key deliverables will be produced?

Provide a budget overview

- What is the overall cost of the proposed solution?
- For each component you apply for, please provide a budget overview outlining the specific costs for each phase of work. Given the nature of the co-funding process, we are open to proposals that provide options for what you might offer at different costs (for example you might provide a 50K or 100K version and a 150K or 250K version, or a range of what could be provided at different costs).
- For Component 3, as described in the prior section, please detail a beneficial rate you can offer for services as well as how that rate varies as the time and intensity of the engagement increases (e.g. X dollars/hr for 5 hours of consultative support, Y dollars/hr for 15 hours of technical support, and Z dollars/hr for 40 hours of capacity-building support, etc.). Note: this example is not to suggest a prescribed timeframe, just to illustrate the concept of a variable rate.

Key Dates

Phase	Date (s)	Notes
RFP Release Date	08.22.24	
Office Hours	08.22.24 – 09.06.24	Contact Meghan Grady Serrano at meghan@beyond100k.org to schedule a time.
Notification of Intent to Respond	09.06.24	Email Meghan Grady Serrano at meghan@beyond100k.org to notify.
Responses Due	09.13.24	Submit all responses to Meghan Grady Serrano at meghan@beyond100k.org . Please email Meghan if this due date presents any challenges for you.
Finalist Notification	Week of 09.30.24	
Finalist Presentation and Selection	Between 10.15.24 – 10.24.24	Zoom link, details, and specific timing will be shared in finalist notification.
Selection of Final award recipient	Week of 10.28.24	

4. References and Appendices

References

- [NCTQ 2021](#)
- [NCTQ 2022](#)
- [NCTQ 2022](#)
- [Learning Policy Institute 2023](#)

Appendices

- Appendix A: [Executive Summary](#) of April 29th Solution Lab Workshop
- Appendix B: [Background on Beyond100K and Solution Labs History](#)
- Appendix C: [Sample Types of Deliverables for Component 1](#)

Appendix B: Background about Beyond100K and Solution Labs History

About Beyond100K

In 2011, Beyond100K, launched in response to President Obama's call to solve our country's most pressing challenges – giving kids a great STEM education by preparing 100,000 excellent STEM teachers in ten years. What started with 28 organizations grew to a coalition of over 300, including thousands of brilliant thinkers and leaders. Together, we exceeded our 100K teacher goal and helped to prepare 108,000 STEM teachers for America's classrooms by 2021, achieving something no one thought was possible.

To reach our goal of preparing 100,000 STEM teachers in a decade, we built three interconnected strategies:

- A **network**: 300+ diverse organizations and leaders contributed to the goal
- A **map**: identified the causes of the STEM teacher shortage, woven through with bright spots and research
- **Tools**: built for making progress, building trust, accelerating learning, and enabling shared problem-solving

These three interconnected strategies led to:

- **108,656** STEM teachers trained; 2.5M teachers reached
- **345** organizations made 567 commitments
- **100%** of partner organizations engaged in the network
- **106** Innovation Teams came up with solutions to longstanding challenges
- **2,700** people participated in the network

While we surpassed our original goal, the work is far from complete. To identify our goal for the next ten years, we launched the [unCommission](#), a diverse participatory process which focused on listening to the stories of young people about their experience in PK-12 STEM education. Guided by what they shared, we set a bigger, bolder vision for impact on STEM learning and education.

Our Moonshot Goal

By 2032, we will prepare and retain 150,000 STEM teachers, especially for schools serving majority Black, Latinx, and Native American students. We'll support our network to prepare teachers who reflect and represent their students and to cultivate workplaces and classrooms of belonging, creating the conditions for all students to thrive in STEM learning.

Together we will create the conditions so that STEM learning environments are places where students and teachers feel they belong and can succeed in their classrooms, the field, and the workforce. The vision of equitable, high-quality STEM education for all students will remain at the center of the work of Beyond100K, and our next moonshot goal will bring us closer to making this vision a reality.

History of Beyond100K's Solution Labs

During its first decade of work, Beyond100K facilitated three solution labs, which together catalyzed \$1M+ in investments in shared solutions to tackle the identified problems.

In our inaugural Lab, partners and top-notch media firms framed an actionable challenge: develop communications messages that will draw STEM undergraduates and recent graduates to STEM teaching. The resulting "[Blow Minds, Teach STEM](#)" campaign launched in September 2014, featuring an animated music video and an interactive website connecting site visitors with co-funding partners. The campaign was featured on platforms such as Upworthy, TED, and YouTube Nation, and it was tweeted by influencers including John Legend, The White House, and Secretary Arne Duncan, generating a reach of 13 million via social media and sourcing hundreds of interested candidates to partners.

Our second Solution Lab in March 2014 zeroed in on the need for change-management strategies to help organizations address the transition to the new standards. In one of the projects that emerged, Dr. Drew Westen, a neuroscientist at Emory University, incorporated landscape analysis, qualitative research, quantitative data, and ongoing input from co-investing partners to develop messages to guide principals, teachers, parents, and sector leaders in talking about the new standards. The work culminated in "[Plagiarize This](#)," an aesthetically pleasing toolkit that made it easy for partners and others to integrate the messages into their existing communications.

In the third Solution Lab partners came together to grapple with how to respond to the passage of the Every Student Succeeds Act. Partners came together not to study the legislation, but to think more critically about the role they need to play within their communities to keep STEM and teachers a top priority as states and districts develop plans under ESSA. Together, they developed a digital resource [hub](#), "Every Student Succeeds with STEM," which partners used to advocate for STEM in the places where they work.

Appendix C: Sample Types of Deliverables for Component 1

For examples of the potential types of products for this component, see the following:

- "[Plagiarize This](#)," and "[Every Student Succeeds with STEM](#)" hub, two prior Solution Lab products described further in Appendix B.
- [Strategic School Staffing Landscape Scan](#), Education First.
- [State Reporting of Teaching Supply and Demand](#), NCTQ.
- [Beyond the Schoolhouse: Bright Spots](#), UCLA Center for the Transformation of Schools (see report download).

These examples are not meant to prescribe a specific format, structure, or set of content, but to provide a concrete sense of the possible type of artifact we envision for this component.