Increasing college completion is a top priority for higher education institutions, systems, and states across the country. Despite headlines that question the value of a degree, evidence shows that a degree yields benefits across the board. These include healthier, wealthier, more socially mobile students; reduced costs to institutions; and economic benefits to states. For example, over their lifetimes bachelor’s degree holders earn up to $1M more than those with a high school diploma.¹

Despite being a priority, U.S. graduation rates have stagnated. As of 2012, only 42% of young adults in the US had a college degree. This places the United States 14th in the world in college attainment, versus 1st in 1990.² Completion rates at public 2-yr institutions have fallen by 0.8% over the past five years, and public 4-yr institutions have only done slightly better with a 2.7% increase.³

It is clear that pockets of success exist on campuses across the country. However, these victories have not materially impacted national completion rates. Learnings and best practices have, for the most part, remained with individual institutions, with limited codification of cost and impact data and sharing of key successes.

It is time to take these pockets of successes and learnings to the next level – it is time to accelerate and amplify the interventions that work. This memo discusses NASH’s strategy to take three proven interventions to scale across NASH systems. The memo will cover the following topics:

I. The case for collective impact through NASH

II. Your perspective on completion

III. Our collective path forward

¹ Julian, Tiffany. "Work-Life Earnings by Field of Degree and Occupation for People with a Bachelor's Degree: 2011."
³ IPEDS; While we all know there are issues in how completion is captured, the limited trajectory is a concern
I. THE CASE FOR COLLECTIVE IMPACT THROUGH NASH

There have been many examples of step-change gains toward solving a social problem when organizations come together, in fields ranging from public health to the environment to education. By using common definitions of success, sharing learnings, and building a common infrastructure, collective impact can be an incredibly powerful tool to drive large-scale change.

Why NASH?

While there have been some collective efforts to increase completion rates across systems, nothing has been attempted at the scale that NASH could achieve. NASH, which encompasses over 75% of the US undergraduate student body in four year institutions, has the scale and influence for unprecedented impact on college completion.

A firm commitment to identifying and implementing successful completion initiatives across NASH systems could affect 4.5 million students across 44 systems in 35 states. If completion rates increased by only 5% across NASH systems, 50,000 more students would attain degrees each year, leading to over $50B in additional income from just one cohort of students over the course of their lifetimes. (See exhibit 1)

EXHIBIT 1

While other organizations are making headway on completion, NASH has the scale for unprecedented impact

4.5 million NASH undergraduates comprise over 75% of the US undergraduate population attending 4 year institutions …

… across 44 systems

… in 35 states

If we could improve completion rates by just 5% across NASH systems:
- Over 50,000 more students would graduate per year
- Up to $50B more income would be earned by one year of additional graduates over the course of their lifetimes
- Up to $10B of additional federal tax revenue would be generated by one year of additional graduates

NASH is uniquely positioned as a forum for information-sharing and collective problem solving, and can be the vehicle by which we can all improve completion rates at an unprecedented scale

5 Assumes median time to degree of 52 months; assumes bachelor’s degree holders earn $1M more than high school graduates; See: Julian. "Work-Life Earnings," 2011.
II. YOUR PERSPECTIVES ON COMPLETION

Through conversations with systems heads and chief academic officers over the past 6-months, we have learned about the many exciting interventions and strategies underway at NASH systems. We also learned that to make a step-change gain in completion, we need to act as a collective - and we need to do so with a holistic and integrated strategy that includes the following:

a) Insight and data on what's working best for which students (and at what cost), which requires data infrastructure and analytical tools  
b) A 'playbook' of high-quality, proven interventions that can be mapped to specific student needs  
c) Institutional capabilities and implementation of best practices

We have identified three interventions that are each an ingredient to the above strategy. As an initial path forward, NASH has decided to take on all three interventions, as together they will form the components of the successful holistic approach described above. These interventions are:

1) **Guided Pathways using Predictive Analytics**, which includes using tools such as Degree Compass and EAB. This will be part of what we described as (a) above - the infrastructure to identify and track at-risk students - and will provide the ability to map interventions to specific student needs  
2) **Redesigning the Math Pathway**, including innovative approaches such as Mathways, Statway/Quantway. This will be a key element of (b) above, the ‘playbook’ of interventions  
3) **High Impact Practices for all Students**, which is built on defining standard definitions and quality criteria for interventions (e.g., learning communities, peer mentoring), building them into degree requirements, and then measuring and tracking impact across campuses. These will also be a key element of (b) the playbook.

The combination of all three interventions in the context of a collective effort across NASH will generate impact that is greater than the sum of the component parts.

To make this possible, a NASH collaboration will involve:

- Common definitions of success, built on existing metrics  
- Flexibility in implementation approaches, to accommodate the diversity of campuses and student populations among NASH system  
- Networked communities of both system and campus representatives  
- Discussions informed by data, which focus on sharing best practices and collectively identifying and overcoming barriers  
- Significant system leadership support  
- Strong interest from a substantive number of campuses in each system, accounting for variability in system size and institutional diversity
Finally, while we have heard a great deal of excitement about completion and the three proposed interventions, it is important to highlight our common challenges. These are areas NASH can help explicitly address and navigate through the collective assets and learnings of its systems:

- **Understanding the ROI of specific interventions.** Many NASH systems are starting to think about whether specific interventions are worth the investment. However, systems are struggling with the feasibility of isolating the impact of a specific intervention, particularly across multiple data systems at different campuses. Common metrics and definitions of success are needed, as well as a commitment across campuses to consistently measure cost and impact, in order to assess which interventions deliver the greatest gains relative to cost.

- **Maximizing the impact of tools for predictive analytics.** While there is a lot of interest and excitement about predictive analytics across NASH institutions, there are several challenges that systems are still working out. These include selecting the right tools to serve the needs of each campus, integrating the different types of insights offered by different tools, and coordinating the use of analytics at the system level. Further, systems are still working to figure out how to translate insights from analytic tools into concrete actions that help students succeed. Navigating these issues will be critical for the systems that sign-up to move forward with predictive analytics.

- **Achieving buy-in and support across stakeholders.** Many systems emphasized the importance breaking down the silos between different groups on campuses (e.g., academic affairs, student life, faculty) and getting all stakeholders on the same page and working together. Particularly important will be bringing faculty on board around interventions that involve course design, such as new math pathways. As a collective we will problem solve strategies on how to achieve the maximum support and coordination across these groups.

### III. COLLECTIVE PATH FORWARD – DECISION POINT

While NASH is taking on all three interventions holistically, we ask each of you to be thoughtful and strategic about which interventions you would like to initially commit to scaling across your systems, while sharing learnings and problem solving with the collective. By signing up for one or two interventions, you will be able to focus on specific elements of the holistic strategy and then come back to the larger collective to share what you have learned.

Below is a view of what the commitment might look like from each system for each intervention, as well as the support that NASH could provide.
1. **Redesigning the Math Pathway**

*Description*

The need for developmental math education presents a major obstacle to completion for many incoming students at both the 2- and 4-year levels. Recently, innovative approaches to redesigning developmental and entry-level math courses have been developed, incorporating elements that include: disaggregated pathways with targeted curricula for specific audiences, co-remediation rather than pre-remediation, focus on problem-solving rather than skill building, and new teaching methodologies. Quantways/Statways (Carnegie Foundation) and New Mathways (Charles A. Dana Center/Texas) are among the options that could be implemented.

*System commitment*

Each system that signs up will commit to implementing innovative approaches to math remediation at several of their campuses.

Key decisions and design questions each system will need to address include:

- Which policies should be adopted at particular campuses (e.g., co-remediation, flipped classrooms)?
- Which approaches should be considered (e.g., Quantways / Statways, New Mathways, your own model)?
- How will new math pathways affect transfer policies within the system and to other systems?
- How will systems gather data and measure impact?

*NASH support*

NASH will provide resources, facilitate decision making on which solutions to implement, provide data management and analytic support to assist in measuring impact, and convene system and campus leaders to share best practices and discuss challenges.

2. **Guided Pathways Using Predictive Analytics**

*Description*

Predictive analytics and data-mining techniques have proven powerful in improving student success at the campus level. The focus of this initiative will be on implementing predictive analytics across multiple systems, strengthening the data infrastructure needed to leverage these tools, and implementing the policy, curricular advances, and academic support programs needed to enable the successful use of predictive analytics.

*System commitment*

Each system that signs up will commit to adopting and scaling predictive analytic tools at multiple campuses. Tools could range from those that flag students at risk of not completing to those that predict the likelihood of a student’s success in a particular course or major.
Key decisions and design questions each system will need to address:

- Which types of tools should be used at particular campuses (e.g., tools to predict risk level using administrative data, tools to flag issues using real-time data, tools to help students with course selection)?
- Which vendors should be considered (e.g., Civitas, Starfish, EAB, DegreeCompass, DegreeWorks, MAP-Works, eAdvisor, IPAS)?
- What role will the system play (e.g., acquiring a system-wide license? integration of multiple tools? Convening systems to share best practices?)
- How will predictive analytics be tied to interventions?
- How will systems collect and analyze data and measure impact?

NASH support

NASH will provide resources, facilitate decision-making about which tools are ‘best’ to use for what type of campus and objective, facilitate problem solving around system-level strategies, and help campus and system leaders work together to develop solutions that address the current gaps and problem areas, and convene system and campus leaders to share best practices and discuss challenges.

3. **High Impact Practices for All Students**

*Description*

Over the past decade higher education has embraced the use of high-impact educational practices like learning communities, service learning, undergraduate research, and peer mentoring for their significant contributions to learning as well as persistence. As states and state system consider the ways engaged learning can drive student success, we have the chance to develop a shared national understanding of particular high-impact practices, building them into both degree programs and the higher education infrastructure in ways that ensure consistency and quality.

*System Commitment*

Each system that signs up will commit to implementing a required set of high impact practices on their campuses, according to common definitions decided upon by their campuses. Systems will track the cost and impact of high impact practices using common metrics and methods.

Key decisions and design questions each system will need to address:

- Will interventions currently underway be adapted to meet common definitions?
- How will student participation in high impact practices be tracked (e.g., transcripts, attendance)?
- Will particular student segments be targeted for a given high impact practice?
- How will high impact practices be built into degree requirements?
- What data infrastructure is needed in order to collect participation data and analyze impact and cost effectiveness?
**NASH Support**

NASH will facilitate the selection and definition of high-impact practices and work with systems to define the metrics and methods to track them. NASH will provide resources as well as data support for analyzing impact and comparing results across systems. Further NASH will facilitate problem solving around key implementation challenges, such as getting faculty on board and developing the infrastructure needed for tracking. NASH will also convene system and campus leaders to share best practices and discuss challenges.

We ask that you email Rebecca Martin with the intervention(s) you are initially interested in pursuing by November 15th. In order to be included in the first round of discussions with potential funders, we will then need a formal commitment by December 15th, after you have consulted with your campuses.

We look forward to discussing this with you over the upcoming weeks and getting your thoughts and commitment to a collective action on completion that has the potential to transform the field.