



RUTGERS
NEW BRUNSWICK

ACADEMIC MASTER PLAN

Discovery Advantage



PRELIMINARY REPORT

September
2023



SCHOLARLY
LEADERSHIP



INNOVATIVE
RESEARCH



STUDENT
SUCCESS



COMMUNITY
ENGAGEMENT

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To Our Campus Community

“Not everything that is faced can be changed, but nothing can be changed until it is faced.”

James Baldwin

Rutgers–New Brunswick, a Top 15 public university and a nexus of world-class research, rightly prides itself on providing students with an excellent education that prepares them to make a difference in society. To deliver on our commitment to academic excellence, we developed the Academic Master Plan (AMP), a roadmap charting the future of our academic enterprise. After launching the AMP in April 2022, our community came together for a clear-eyed look at systems and practices in need of transformation.

The AMP identifies Four Pillars of Excellence: Scholarly Leadership, Innovative Research, Student Success, and Community Engagement. During the summer of 2022, the leadership teams of the university president and the Rutgers–New Brunswick chancellor collaborated to identify six areas of exploration for Discovery Advantage, a key initiative of the Student Success pillar. Those areas—curriculum, advising and academic support, living and learning communities, enrollment and marketing, administrative and financial structure, and data core—are the framework within which Discovery Advantage holistically reimagine the undergraduate student experience.

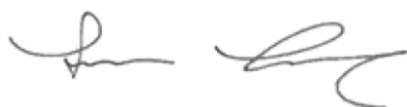
Kathleen Scott, Professor of Cell Biology and Neuroscience at the School of Arts and Science, began leading the Discovery Advantage initiative in the fall of 2022 with a steering committee of faculty, staff, and students. They have worked tirelessly over the past year, and I am deeply grateful for their monumental effort.

I am proud now to share the Discovery Advantage preliminary report, which articulates the committee’s initial findings and recommendations about learning goals, recruitment and enrollment, high-impact learning practices, financial aid policies and procedures, advising and academic support, and our use of data to better understand and serve our students.

We will soon invite you—the members of our campus community—to participate in focus groups, town hall meetings, and other forums, and to provide feedback on these recommendations. The committee will submit its final recommendations in spring of 2024, and we plan to begin implementation immediately thereafter.

It is my hope, and the aspiration of the AMP Steering Committee, that we will together realize the goals and objectives of the Student Success pillar: To transform our student experience; create a welcoming, equitable, and supportive learning environment; prioritize on-time graduation with minimal debt; and expand high-impact learning opportunities to help prepare students for success. We aspire to become an institution in which students are engaged with a robust network of professional and peer educators who support them through various high-touch experiences along their entire academic journey.

Please join us, and become actively involved as we continue redefining what excellence means in higher education to benefit our students, communities, nation, and world.



Francine Conway, Ph.D.
Chancellor and Distinguished Professor
Rutgers University–New Brunswick

Executive Summary

1 | Overview: What is Discovery Advantage?

Student Success is one of the four Pillars of Excellence identified by the Rutgers University–New Brunswick [Academic Master Plan \(AMP\)](#), and it is at the heart of Discovery Advantage. Discovery Advantage is a broad initiative to reexamine the undergraduate experience at our institution through the lens of student discovery and success and to develop a blueprint for implementing the main priorities of the Student Success Pillar:

- Create a welcoming, equitable, and supportive learning environment for all students.
- Prioritize on-time graduation with minimal debt for all students.
- Expand high-impact learning opportunities, such as internships, research, and more, to best prepare students for future success.

Six Discovery Advantage workstreams, whose members include faculty, staff, and students, examined the student experience at Rutgers–New Brunswick. Their work was united by the three priorities of the Student Success Pillar. The workstreams also focused on the enormous variety of choices students face when navigating our institution: How to choose schools as they enroll; how to seek the experiences that will help them discover new interests and skills; how to find advising and financial information; and how to decide on courses. This vast array of experiences and resources defines Rutgers–New Brunswick and creates great value recognized by our students and their parents, but it can create challenges as students navigate their academic journey.

This report presents our preliminary findings and recommendations, with the goal of generating broader discussion within the campus community. We will be convening town halls and focus groups throughout the Fall 2023 semester to gather feedback from faculty, staff, and students. This should be viewed as a working document that will be revised and amended based on the input we receive from the community.

Ensuring that students make the most of their experience must begin with defining the academic goals of a Rutgers–New Brunswick education (the subject of Chapter 2 of this report), continue with recruitment and marketing to ensure we enroll a diverse group of students who understand what New Brunswick has to offer (Chapter 3), and continue with opportunities and interventions that create a welcoming environment in which students can thrive and complete their education in a timely manner, with limited debt (Chapters 4 and 5). But—because our wealth of opportunities, majors, and extracurricular activities can become challenging for students—there is a need for improved advising and academic support to help students complete their education in a timely manner and prepared for their chosen career (Chapter 6). These recommendations were informed by currently available data on retention and graduation rates, but deeper analysis of student successes and challenges is limited by our current data systems and processes, which will need to be evaluated and updated (Chapter 7). Finally, the Discovery Advantage Steering Committee members recognize that the Rutgers–New Brunswick student experience exists within a larger institutional context, both physical and procedural, and that the student experience is affected by universitywide issues and processes not entirely within the purview of this initiative (Chapter 8).

2 | Defining the Student Experience: What is a Rutgers–New Brunswick Education?

To enhance student success and help students navigate the university, we must first identify the goals Rutgers–New Brunswick intends for its students to accomplish through their academic and co-curricular experiences. This chapter proposes a set of shared learning goals to inspire and guide student learning at Rutgers–New Brunswick. The proposed framework builds upon Rutgers University’s learning goals, which identify values our schools hold in common, as well as some skills that are currently not as developed across the schools. Our students will achieve these learning goals through a variety of campus experiences, including general education or core requirements, high-impact practices, and extracurricular activities, in ways that align with the expectation that all students feel supported, have access to the many opportunities with clear pathways that will help them navigate the university and graduate on time, and see connections to career and advanced degree opportunities. Given the range of schools—professional, liberal arts, fine arts—and accreditation concerns in some disciplines, the next step is to work with schools to articulate how learning goals are achieved.

Key Recommendation

- **Recommendation 2.1.** With these guiding principles in mind, this workstream proposes the following learning goals for Rutgers–New Brunswick. As noted above, the workstream members believe a broad, engaged, and consensus-oriented process should be conducted prior to the adoption of revised goals.

3 | Beginning the Rutgers–New Brunswick Experience: Recruiting and Enrolling Our Students

The process of helping our students navigate Rutgers–New Brunswick begins with recruitment and admission. Our marketing and recruitment materials can help prospective and new students understand the opportunities available at Rutgers–New Brunswick and its various schools, while helping our institution attract a diverse and highly qualified student body.

Key Recommendations

- **Recommendation 3.1.** We recommend increased marketing and recruitment efforts in key out-of-state and international markets.
- **Recommendation 3.4.** We recommend that Rutgers–New Brunswick remain test optional going forward. Enrollment Management, in consultation with academic leadership, will continue to review its admissions policies and procedures on a yearly basis and can recommend further changes as necessary.

4 | Enhancing the Student Experience: Improving Belonging and Retention Through High-Impact Practices

Many factors contribute to student retention and a sense of belonging on campus. These include a number of curricular and co-curricular experiences such as first-year seminars, transfer seminars, undergraduate research experiences, and learning communities; these and similar experiences are

considered High Impact Practices (HIPs). Rutgers–New Brunswick already offers several such programs—but there is little coordination among them, and students often do not recognize the importance of these opportunities as enhancements to their academic path and ways to prepare for post-graduation success.

Key Recommendations

- **Recommendation 4.1.** In light of the well documented benefits of High-Impact Practices (HIPs) and High-Impact Experiential Learning (HIEL) opportunities], we recommend that all Rutgers–New Brunswick students should participate in one HIP during their first year (transfer students during their first semester) and at least two others before graduation.

HIPs should be available across class years and include HIELs. Particular attention should be given to developing HIPs suitable for second-year students in that our first-year retention rates are relatively strong, but the second year presents a retention cliff. Methods of incentivizing participation, such as credentialing, should be explored.

- **Recommendation 4.9.** We recommend that Rutgers–New Brunswick establish Discovery First-Year Neighborhoods on the College Avenue, Busch, Livingston, Douglass, and Cook campuses, to include residential students and affiliated commuter students.

5 | Enhancing Student Retention: Financial Policies and Procedures

Although retention is often associated only with academic success and a sense of belonging on campus, financial considerations also affect retention, and many students who withdraw from the university cite financial issues as a factor. Thus, this chapter considers modifications to financial aid policies and procedures that will enhance student retention and ensure timely graduation with minimal debt.

Key Recommendations

- **Recommendation 5.1.** We recommend continued focus on Oracle Student Financial Planning (OSFP) challenges and that steps be taken to avoid similar issues moving forward.
- **Recommendation 5.2.** We recommend Rutgers–New Brunswick begin proactive preparation for the FAFSA Simplification Act implementation.

6 | Navigating the Rutgers–New Brunswick Academic Experience

The size of Rutgers–New Brunswick and its sheer number of courses, majors, programs, and co-curricular experiences are among its greatest strengths and most significant challenges. Students and parents cite this wealth of opportunities as among Rutgers–New Brunswick’s most attractive features. At the same time, however, the presence of so many options and opportunities—which may be poorly advertised and/or scattered among departments and programs—can be difficult to navigate. This chapter presents proposals in two targeted areas with the intent of significantly improving students’ ability to navigate the university: Curriculum mapping and advising (or, more broadly, academic support). Enabling students to better navigate the university will help improve retention and timely graduation.

Key Recommendations

- **Recommendation 6.1.** We recommend that Rutgers–New Brunswick adopt curriculum mapping, following the proposed template and modified for each major, to help students better navigate the many curricular and co-curricular options available.
- **Recommendation 6.7.** We recommend that Rutgers–New Brunswick ensure student-to-adviser ratios (for both academic advising and career preparation) are sufficiently low to allow for timely individualized support.

For academic advising, we recommend adopting the guidance of the Boyer 2030 report and having a ratio of matriculants to school-level professional, full-time advisors of no more than 250 to one, and matriculant to faculty advisor ratio of no more than 25 to one when faculty are providing general advising support. For career preparation, the ratio of students to career advisers in the Career Exploration and Success (CES) office should be no higher than 2,778:1 (midpoint of AAU institutions surveyed in 2019).

- **Recommendation 6.18.** We recommend that the Office of Undergraduate Education (OUE) within the Rutgers–New Brunswick chancellor’s office be rescoped to encompass academic advising, career preparation, and academic support, as well as address academic issues that cut across schools.

This rescoping should focus on specific campuswide resource gaps in professional development, technology management, policy coordination, assessment support, communication, and other essential areas, and should be supported by staff lines and infrastructure, using the 2019 Student Success Information Working Group Report (see Appendix C for the Technological Solutions for Student Success Working Group Report) as an initial guiding reference. The resulting structure should allow for centralized coordination and resourcing for the implementation of the recommendations described above, while respecting the differences in missions, cultures, and practices across schools.

7 | Understanding the Student Experience and Assessing Interventions: Data

Rutgers–New Brunswick, like our peers, collects ever-increasing volumes of data, particularly regarding our students. Pre-enrollment data, the comprehensive records of enrolled students, and post-graduation and alumni data all contribute to a detailed record of future, current, and past students. Our abiding challenge, however, is to overcome barriers to Rutgers’ ability to effectively use these vast stores of data to better understand our students and improve their educational experience.

Key Recommendations

- **Recommendation 7.1.** We recommend that core institutional data be centrally managed and organized to ensure individual business area data is both clearly delineated and readily shareable where appropriate.
- **Recommendation 7.3.** We recommend that Rutgers–New Brunswick clearly delineate the meaning and purpose of external and internal institutional reporting, and prioritize efforts to

build an easily accessible, robust, flexible internal reporting library to inform strategic planning, institutional initiatives, program development, and institutional self-assessment at the central, chancellor-led, school, and department and unit levels.

- **Recommendation 7.11.** We strongly recommend that Rutgers commit the time and resources to carefully design and implement a well-defined, multi-layered, interconnected data governance model that includes both structure and process, outlining clearly defined roles and responsibilities for both the individuals (positions, not individual people) and groups included in the overall data ecosystem, from the chief executive who is responsible for the strategic direction of the university and the senior administrators who oversee each of the business areas, to the functional leads who manage the day-to-day of these business areas, down through the chancellor-led, school, and departmental users who are largely responsible for inputting institutional data and best placed to ensure both its accuracy and its application.

8 | University Context

The Rutgers–New Brunswick student experience exists within and is influenced by the larger institutional context of business and administrative services (referred to in this chapter as “Central Services”) and living, learning, and supportive spaces (the “Physical Environment”). Though these factors do not lie entirely within the purview of Discovery Advantage, several workstreams analyzed some of the ways these procedural and physical infrastructures affect our students, identified several areas of concern, and made the recommendations provided herein.

Key Recommendations

- **Recommendation 8.1.** Rutgers must ensure that all stages of the planning process for new software or business processes, including the choice of an appropriate software package or business program, should include many stakeholders, including faculty and staff content experts, end users, and the IT groups that will support them. (Adopted from the Technological Solutions for Student Success Report, 2023; see Appendix C for the Technological Solutions for Student Success: Working Group Report)
- **Recommendation 8.3.** New system integrations must include a transition period during which the new system runs “in parallel” with the existing system and processes for at least one business cycle prior to full use of the new system. End-users and IT support must be consulted during this transition. Systems must not be fully implemented until they are operating efficiently, and users are fully trained.
- **Recommendation 8.6.** We recommend that Rutgers–New Brunswick invest in facilities and infrastructure enhancements to support the Discovery Advantage goals and recommendations and to advance campus life for all our student populations, including the creation of neighborhoods and support for learning communities.

Chapter 1 | Overview: What is Discovery Advantage?

Student Success is one of the four Pillars of Excellence identified by the Academic Master Plan (AMP), and it is at the heart of Discovery Advantage (see Appendix C and Appendix D for the Academic Master Plan). Discovery Advantage is a broad initiative to reexamine the undergraduate experience at Rutgers University–New Brunswick through the lens of student discovery and success and to develop a blueprint for implementing the three priorities of the Student Success Pillar:

- Create a welcoming, equitable, and supportive learning environment for all students.
- Prioritize on-time graduation with minimal debt for all students.
- Expand high-impact learning opportunities such as internships, research, and more, to best prepare students for future success.

We—the members of the Discovery Advantage Steering Committee—believe this reexamination of undergraduate education is timely. The last holistic examination of the undergraduate experience across our institution took place in 2005, when the Transforming Undergraduate Education Task Force (TUE) recommended sweeping changes in the undergraduate experience, including the merger of the former liberal arts colleges and the Faculty of Arts and Sciences to form the School of Arts and Sciences (see Appendix C for the TUE Report). Additional recommendations included curricular changes and improvements in the student experience, such as the development of learning communities. Although the TUE represented an extensive reexamination of our priorities and values in undergraduate education, much has changed since 2005 within Rutgers and in the world. It is time again to reevaluate undergraduate education across Rutgers–New Brunswick with the AMP as our guide. While several task force reports on various aspects of undergraduate education have been produced since the TUE report, only a few of their many excellent recommendations have been implemented. These have served as invaluable resources for the Discovery Advantage workstreams and have effectively broadened the number of participants in this effort.

Six Discovery Advantage workstreams, whose members include faculty, staff, and students, examined the student experience at Rutgers–New Brunswick. They focused on (a) Advising and Academic Support, (b) Curriculum, (c) Enrollment and Marketing, (d) Living-Learning Communities, (e) Data Core, and (f) Administrative and Financial Structure. The workstream members spoke with students, faculty, staff, and parents from across the Rutgers–New Brunswick community. These conversations, together with discussions among our workstream members and the deliberations of other current and former task forces, helped the workstreams identify Rutgers–New Brunswick’s strengths and challenges.

This report presents our preliminary findings and recommendations, with the goal of generating broader discussion within the campus community. We will be convening town halls and focus groups throughout the Fall 2023 semester to gather feedback from faculty, staff, and students. This should be viewed as a working document that will be revised and amended based on the input we receive from the community.

The workstream members examined the tremendous variety of choices students face when navigating our institution: how to choose schools as they enroll; how to seek out the experiences that will help them discover new interests and develop new skills; how to find advising and financial information; and how to decide on courses. This tremendous variety of possible courses, experiences, extracurricular activities, and resources defines Rutgers–New Brunswick and creates great value recognized by our

students and their parents. But it can also create challenges for students as they seek the information that will help them find community, graduate on time, and prepare for life after graduation.

Discovery Advantage looks at cross-cutting issues across all of Rutgers–New Brunswick. Although the charges were broad and the six workstreams examined a number of issues, we are aware there are other areas that impact the undergraduate experience. Some of these areas are being explored through AMP initiatives such as *ScarletWell*, a public health and prevention-focused approach to mental health and wellness for students, faculty, and staff (see Appendix D for more information on *ScarletWell*). We also recognize that the undergraduate experience depends heavily on the academic experience provided by our many excellent undergraduate programs, departments, and faculty. This first examination does not look at those specifically; we are not making recommendations concerning individual schools or departments.

Rather, these Discovery Advantage recommendations provide a first opportunity to impact the **totality** of the undergraduate experience and the priorities that should unite **all** Rutgers–New Brunswick departments and programs. Thus, this report examines learning goals that define the education that a Rutgers–New Brunswick student should have, but not the specifics of achieving those goals in the training of an engineer or an English major. Many of these Discovery Advantage recommendations are aspirational; they define what the student experience should be, with an understanding of the university’s limited resources particularly as it recovers from the pandemic. Though ambitious, several recommendations can be implemented with little cost to immediately improve the student experience while the others continue to be developed.

Ensuring that our students get the most out of their experience starts with defining the academic goals of a Rutgers–New Brunswick education (the subject of Chapter 2 of this report), continues with recruitment and marketing to ensure we enroll a diverse group of students who understand what Rutgers–New Brunswick has to offer and come here ready to start on their path to discovery (Chapter 3), and continues with experiences and opportunities that create a welcoming environment in which students can progress academically (Chapter 4 and Chapter 5). But—because our wealth of opportunities, majors, and extracurricular activities can become challenging for students—there is a need for improved advising and academic support to help students complete their education in a timely manner, with limited debt, and prepared for their chosen career (Chapter 6). These recommendations were informed by currently available data on retention and graduation rates, but deeper analyses of student successes and challenges is limited by our current data systems and processes, which will need to be evaluated and updated (Chapter 7). Finally, we recognize that the Rutgers–New Brunswick student experience exists within a larger institutional context, both physical and procedural, and the student experience is affected by universitywide issues and processes not entirely within the purview of this initiative (Chapter 8). Nevertheless, we believe it is important to understand how these issues affect Rutgers–New Brunswick undergraduates and to identify areas of concern.

The preliminary findings and recommendations presented here are only the first step in reimagining the Rutgers–New Brunswick student experience. During the coming months, Discovery Advantage working groups will engage the campus community in broad discussions through town halls and focus groups that may inspire the modification of some recommendations and/or the addition of others. And even after the final Discovery Advantage report and recommendations are prepared, this initiative will represent just the beginning of our communitywide efforts to improve the undergraduate experience.

Chapter 2 | Defining the Student Experience: What is a Rutgers–New Brunswick Education?

Enhancing student success and helping students navigate the university must begin by defining what Rutgers–New Brunswick intends for its students to achieve through their academic and co-curricular experiences.

I. Charges and Expected Outcomes

Charges

Curriculum Workstream: Learning Goals Subcommittee

- Increase clarity and consistency in the undergraduate curriculum by proposing learning goals to be achieved by all Rutgers–New Brunswick students.
- Review and reframe general education requirements of Rutgers–New Brunswick schools and programs to align with proposed campus-wide learning goals.

Expected Outcomes

- Rutgers–New Brunswick learning goals that reflect the values and mission of the university.
- Recommendations for a common curriculum across Rutgers–New Brunswick that aligns with its mission and ensures that students meet its learning goals.

II. Introduction and Context

Learning goals articulate an institution’s educational priorities to all internal and external stakeholders (see Glossary in Appendix B for “learning goals”). Goals must be specific enough to be meaningful while broad and flexible enough to serve as realistic aspirations for students completing our diverse degree programs. Learning goals express the institution’s aspirations and expectations. They often inform more specific learning outcomes or objectives that articulate specific, demonstrable expectations in general education, major, or co-curricular contexts (see Glossary in Appendix B for “learning objectives/outcomes”).

Rutgers University’s current learning goals, developed in 1992, serve all chancellor-led units. The universitywide goals were intended to establish collective standards that would allow campuses, colleges, and schools within the university to identify their commonalities as members of the university community while at the same time supporting the uniqueness of each unit. The goals were developed through a broad, inclusive process that included wide distribution of *The Rutgers Dialogues: A Curriculum for Critical Awareness*, which incorporated feedback from programs, schools and colleges, student and faculty governance bodies, and multiple public forums. The report is described in the 1998 Middle States self-study in the section on Undergraduate Education. A committee comprising representatives from each college and school reviewed the output of this process and developed a set of universitywide learning goals which were then approved by all decanal units (see Appendix C for *The Rutgers Dialogues: A Curriculum for Critical Awareness* and the 1998 Middle-States Self-Study).

The current [Rutgers University Learning Goals](#) state, “Rutgers graduates should possess the skills and knowledge to be responsible citizens and productive contributors to society in their workplaces and their intellectual, cultural, and social endeavors.” Three foundational areas are outlined with associated goals:

1. Intellectual and communication skills
2. Understanding human behavior, society, and natural environment
3. Responsibility of the individual in society

In the 31 years since these goals were adopted, there have been many changes at Rutgers–New Brunswick, in higher education, and across society. The Learning Goals Subcommittee of the Curriculum Workstream concludes that, while the universitywide goals should be reviewed and updated to reflect our current context, they provide a valuable foundation and starting point for defining new Rutgers–New Brunswick learning goals for the contemporary world. The recommendations presented herein should not, however, preclude a broad, engaged, and consensus-oriented process prior to the adoption of new or revised universitywide goals.

The Academic Master Plan (AMP), in its outline of the Student Success Pillar, describes today’s student as “action-oriented, socially conscious, technology-driven, entrepreneurial, and financially focused” (see Appendix C and Appendix D for more information on the Academic Master Plan). This reality aligns with Rutgers’ current universitywide learning goals while illuminating possible new approaches that must be engaged, pragmatic, and career focused.

Once new, overarching Rutgers–New Brunswick learning goals are established, they will provide the aspirational framework to guide student learning across all programs and schools. Currently, students may have different learning outcomes that are met through varied general education and/or major requirements, depending on program and school (as noted below in “Benchmarking”). Each school, in turn, has developed a system to approve courses, advise students, and measure student outcomes. Internally, these systems work for students who remain in one school; however, this arrangement may create confusion for entering students and for students who seek to transfer across schools. As stated in the Academic Master Plan, it is imperative that the Rutgers–New Brunswick learning goals and outcomes align with the expectation that all students feel supported, have access to the many opportunities with clear pathways that help students navigate the university and graduate on time, and see connections to career and advanced degree opportunities.

III. Benchmarking

Big Ten Peer Institutions

Rutgers–New Brunswick’s Big Ten Academic Alliance peer institutions offer a variety of approaches to establishing learning goals and outcomes and general education requirements (see Appendix F). Some schools (e.g., [Michigan State University](#), [University of Maryland](#), [University of Minnesota](#)) have broad institution-wide student learning goals (e.g., analytical thinking, cultural understanding, effective communication, problem solving, etc.), while others (e.g., [Indiana University Bloomington](#), [The Ohio State University](#)) focus on learning goals as realized in their general education requirements (for example, by including specific domains such as English, mathematics, arts/humanities, social/historical studies, world language, science, etc., as specific learning goals). Rutgers’ universitywide learning goals

fall on the broader side of the spectrum, but also include a level of specificity not found in all other peer institutions. The workstream came to appreciate the balance found in Rutgers' goals.

Rutgers University

Based on this thorough scan of outside schools, the workstream reexamined the Rutgers universitywide learning goals and came to several conclusions:

1. The existing goals balance both the need to articulate higher-order educational goals (e.g., “What does it mean to be an educated person?” “What are our goals for every Rutgers–New Brunswick graduate?”) with the goal of encouraging students to “get out of their comfort zone” and engage with a broad range of ideas, disciplines, and ways of thinking that may not naturally occur within a single school or program. Thus, we recommend expanding, modifying, and updating our existing goals rather than creating something brand new.
2. Areas in which Rutgers–New Brunswick could seek to expand and improve on the existing universitywide learning goals include:
 - The language surrounding **Technology and Information Literacy** in the current universitywide goals is archaic and needs to be updated. While not every peer school directly addresses technology in its learning goals, we view this area as a critical facet of forward-looking goals and increasingly fundamental to a thorough education.
 - The [University of Maryland](#) offers the most in-depth goals on this topic among our peer schools and has identified technological/information literacy as a goal distinct from technological fluency. On the other end of the spectrum, [Pennsylvania State University](#) (Penn State) folds information/technology into a long list of “key literacies,” and the [University of Wisconsin](#) does not mention technological literacy.
 - The concept of **Communication** is addressed in a very broad way in one of the Rutgers learning goals. Considering the diverse forms of communication with which a 21st century graduate will need to engage and the many disparate forms that communication takes across disciplines, this area needs sustained cross-campus discussion.
 - [Penn State](#) has broad language: “The ability to exchange information and ideas in oral, written, and visual form in ways that allow for informed and persuasive discourse that builds trust and respect among those engaged in that exchange, and helps create environments where creative ideas and problem-solving flourish.”
 - The [University of Maryland's](#) language seems grounded in more traditional communication formats: “Goal: Using standard English, University of Maryland undergraduates will communicate clearly and effectively in writing and orally for different audiences and purposes. Objectives - University of Maryland undergraduates should have the ability to:
 - Incorporate critical inquiry in their written and oral communication.
 - Demonstrate written and oral communication as processes involving invention, organization, drafting, revision, editing, and presentation.

- Demonstrate proficiency in conventions of genre, format, documentation, grammar, spelling, syntax, and punctuation to produce a stylistically appropriate text for written and oral communication.
 - Demonstrate awareness of the audience, circumstance, and purpose.”
- **Civic/Citizen Engagement** needs to be addressed. Nearly every peer school had this as an element.
 - The Rutgers goals do include “citizenship education,” but this goal narrowly focuses on the political and policy-making processes of the United States, neglecting both community engagement and the global context.
 - [Michigan State University \(MSU\)](#) has language that was particularly noteworthy, addressing the local, national, and global levels (edited for flow): “The MSU graduate:
 - Participates as a member of local, national, and global communities and has the capacity to lead in an increasingly interdependent world,
 - Understands the structures of local, national, and global governance systems and acts effectively within those structures in both individual and collaborative ways,
 - Applies knowledge and abilities to solve societal problems in ethical ways.”
- **Diversity** must be addressed directly. The Rutgers “multicultural and international understanding” goal focuses narrowly on student understanding of multicultural and international dimensions of the societies and the world in which we live. In today’s world, however, we regard it as essential that Rutgers students understand diversity in the context of power dynamics, unequal social structures, and historical perspectives.
 - [The Ohio State University](#) has the most precise language on these themes: “Race, Ethnicity, and Gender Diversity—Successful students will engage in a systematic assessment of how historically and socially constructed categories of race, ethnicity, and gender, and possibly others, shape perceptions, individual outcomes, and broader societal, political, economic, and cultural systems. Successful students will recognize and compare a range of lived experiences of race, gender, and ethnicity.”
- **Creative and Empathetic Thinking** currently is not included in the Rutgers learning goals and was discussed in the subcommittee.
 - [Penn State](#) offers this language: “The capacity to synthesize existing ideas, images, or expertise in original ways and the experience of performing, making, thinking, or acting in an imaginative way that may be characterized by innovation, divergent thinking, and intellectual risk taking.”
 - Empathetic thinking was not found in any of the peer-school learning goals but could potentially be a point of distinction for Rutgers.

Learning Goals and General Education Requirements at Rutgers–New Brunswick Schools

[School of Arts and Sciences \(SAS\) Core Curriculum](#): The Core Curriculum is structured as a set of core liberal arts and sciences learning outcomes. Courses are approved to satisfy learning outcomes, and

departments report assessment results for Core-certified courses on a three-year cycle. Each SAS major and minor program also has its own specific program-level learning outcomes. The Core is required for students matriculated in SAS, including those SAS students with majors in the Edward J. Bloustein School of Planning and Public Policy (EJB), the School of Communication and Information (SC&I), the School of Management and Labor Relations (SMLR), and the School of Social Work (SSW), and students pursuing the Mason Gross School of the Arts (MGSA) B.A. degree (not B.F.A degrees).

Rutgers Business School (RBS): RBS students also complete the Core Curriculum, in addition to a series of requirements designed to meet the schoolwide learning outcomes for each program that are aligned with the RBS mission and vision.

School of Environmental and Biological Sciences (SEBS): SEBS uses the Core Curriculum with modifications. The number of requirements is reduced to enable students to complete course-intensive science majors, and science requirements are reduced since this is fundamental to all majors. In addition to the modified Core, SEBS students are required to complete at least three credits of experiential learning.

Mason Gross School of the Arts (MGSA): MGSA learning outcomes and general education requirements vary by major. Bachelor of music students and bachelor of fine arts students have learning outcomes associated with acquisition of professional skills—as well as theoretical, historical, and cultural understanding—associated with their field. They are also required to complete liberal arts courses in areas across the disciplines (see Appendix G).

School of Engineering (SoE): SoE learning outcomes are associated with accreditation standards for the field. In addition, students take a series of general education courses that include writing, math, natural science, humanities, and social sciences.

Edward J. Bloustein School of Planning and Public Policy (EJB) and School of Management and Labor Relations (SMLR), B.S. in Labor and Employment Relations: These schools offer degree completion programs designed to provide flexibility for adult learners with some previous college credits. The general education requirements for these programs align with those of the [New Jersey community colleges](#).

Students with A.A. or A.S. degrees that are compliant with the requirements of the New Jersey State-wide Transfer Agreement will have their general education requirements waived if the degree is transferable to their school of attendance.

Currently, school learning outcomes have developed independently, leading to different ways of describing what may be very similar objectives. Another difference is the depth of requirements for each learning outcome. While some schools may require multiple classes to meet a group of related learning outcomes, others may only require one. Framing the existing range of school learning outcomes and general education requirements onto the university learning goals reveals common purposes upon which Rutgers–New Brunswick can build (see Appendix G).

Accreditation and professional learning outcomes may have aspects of the Rutgers learning goals but with a focus on specifics to that field. For instance, communication for a dancer may relate to performance and for an engineer to communicating to multidisciplinary or technical teams.

There are a number of important commonalities across Rutgers–New Brunswick schools in their general education requirements and learning outcomes and how these map onto to the university’s learning goals. All Rutgers–New Brunswick schools, for example, require students to take a first-year writing course. All schools also have course requirements to meet the university learning goal for students to “understand the biological and physical world,” and all schools require some number of social science and/or humanities courses, although the specific requirements vary.

IV. Current Challenges

The question of learning goals and general education needs to be recognized as involving a key set of values: what is undergraduate education, what is it for, and what is the relationship between practical training and college education? It will be difficult for any overarching entity to resolve these questions satisfactorily, given all the stakeholders involved in instruction at Rutgers–New Brunswick. Nevertheless, there are a number of commonalities across schools upon which to build consensus and coordinate efforts.

1. *Coordination Across Schools and Disciplines*

It is vital to recognize within any discussion of Rutgers–New Brunswick learning goals that schools and disciplines have different curricular strategies and structures in place for achieving these learning outcomes. Future discussions about differences in approaches and potential opportunities for coordination across schools in achieving learning outcomes through general education requirements and/or other mechanisms would benefit from the involvement of a central facilitator. These discussions should also include advisors, as there will be many advising considerations to be addressed.

In terms of the levels of governance involved in recommending and adopting any policy changes, the Rutgers–New Brunswick Faculty Council is the body in charge of reviewing and recommending policies across Rutgers–New Brunswick. Revisions to the learning outcomes and general education requirements of each school would need to be discussed, developed, and approved by the faculty of each school.

2. *School-to-School Transfers*

The workstream members heard anecdotal evidence that transferring between schools is a challenge and that the different general education requirements have led to longer time to graduation. This needs to be studied in greater detail. Data from SAS covering 2017-2022 indicate that approximately 1,200 students per year transferred into or out of SAS from another Rutgers–New Brunswick school. Discussions of Rutgers–New Brunswick learning goals and general education requirements should consider student movement and pathways across schools, particularly as they relate to time-to-degree and financial implications for students. Curricular structures in each school should be reviewed to ensure they do not create unnecessary obstacles to the success of transfer students.

Given the complex issues and stakeholders involved, timely advising will be crucial as a cost-effective and equitable solution to some of the challenges presented by different learning outcomes and/or structures for achieving learning outcomes across schools. In some situations,

advising considerations may be more important to the question of transfers than curricular ones. That is, prior to transferring, students should be advised of courses they will be required to take should they transfer to another school so they can make a realistic assessment of their plans. It would likely be helpful to identify an office within each school responsible for tracking students who transfer from one school to another that would help them lay out their intended course of study, plan for on-time graduation, and perhaps even provide some financial support, if needed.

3. **Assessment**

We realize that assessment is a critical component to validating achievement of learning outcomes. Future work will need to be done to develop equitable, effective, and minimally time-consuming processes to assess learning outcomes at the school, program, and/or course levels.

V. Guiding Principles

In developing Rutgers–New Brunswick learning goals, we recognized the following guiding principles:

1. **Achieving learning goals will require coordination and synergies across general education, major curriculum, and co-curricular activities.**

Students engage the learning goals throughout their college experience. General education course requirements offer an important pathway to support learning goals across a range of disciplines. Within major curriculum, learning outcomes can be framed in professional and disciplinary modes. Co-curricular opportunities can be another means to achieve learning goals and engage with efforts within Student Affairs, Career Exploration and Success, Study Abroad, and other units at Rutgers–New Brunswick.

2. **Rutgers–New Brunswick learning goals should build upon Rutgers’ universitywide learning goals.**

We propose using Rutgers’ universitywide learning goals as the starting point for Rutgers–New Brunswick learning goals. The universitywide goals provide a structure that should be regularly reviewed and revised to reflect changing perspectives in higher education. We have included recommendations to deepen the learning goals for critical thinking, communication, information and computer literacy, and social and ethical awareness. We have also recommended three key areas of opportunity for Rutgers–New Brunswick-specific learning goals in the areas of creative and empathetic inquiry, community engagement, and social and ethical awareness (see Appendix H).

3. **The learning goals provide a shared language and terminology that is the basis for navigation across schools and units.**

The Rutgers–New Brunswick learning goals should provide a common language that enables schools to develop reciprocity and address potential challenges for students who move from one school to another.

VI. Initial Recommendations

Recommendation 2.1. With these guiding principles in mind, we recommend the following learning goals for Rutgers–New Brunswick. As noted above, the workstream members believe a broad, engaged, and consensus-oriented process should be conducted prior to the adoption of revised goals.

1. *Intellectual and Communication Skills*

- **Existing University Goal: Critical Thinking (revised language):** Recommendation for Rutgers–New Brunswick: Students will develop their ability to engage in logical thinking and complex critical analysis and to conduct interdisciplinary inquiry.
- **Existing University Goal: Communication:** Students will develop their skills in expressing complex ideas through written and oral communication.
- **Existing University Goal: Mathematical Reasoning and Analysis:** Students will develop their skills in analyzing and interpreting numerical data and in reasoning and problem-solving through mathematical processes.
- **Existing University Goal: Scientific Inquiry:** Students will develop their understanding of scientific methods of inquiry, including the use of observation and experimentation to answer questions and generate new knowledge.
- **Existing University Goal: Information and Computer Literacy (revised language):** Students will develop competency in navigating, gathering, analyzing, and interpreting information effectively, responsibly, and ethically in an increasingly data-driven environment.
- **Creative and Empathetic Inquiry (proposed new learning goal):** Students will understand and engage in creative practices as a means of self-expression and relating to others.

2. *Understanding Human Behavior, Society, and the Natural Environment*

- **Existing University Goal: Historical Understanding:** Students will develop their understanding of the historical bases of the societies and world in which we live.
- **Global and Diverse Understanding (replaces/updates Multicultural and International Understanding):** Students will understand how individual and group identities, histories, perspectives, and experiences both shape and are shaped by broader societal, political, and economic systems and power differentials. This should include developing an awareness of other cultures and societies.
- **Existing University Goal: Understanding of Literary and Artistic Expression:** Students will develop their understanding of and appreciation of the various creative literary and artistic endeavors.
- **Existing University Goal: Understanding the Bases of Individual and Social Behavior:** Students will develop their understanding of the nature of human behavior.
- **Existing University Goal: Understanding the Physical and Biological World:** Students will develop their understanding of the natural environment in which we live and the forces that have shaped it.

3. *Responsibilities of the Individual in Society*

- **Community and Civic Engagement (replaces Citizenship Education/revised language):** Students will become informed and active members of their communities who understand local, national, and global governance systems and contemporary challenges.
- **Existing University Goal: Social and Ethical Awareness (revised language):** Students will have the ability to recognize and address ethical questions, to make reasoned judgments

about alternative solutions, and to adhere to ethical standards in their academic, personal, and professional pursuits.

Recommendation 2.2. We recommend that the learning goals be reviewed regularly, and a process for assessing learning outcomes to achieve goals be developed.

The Rutgers–New Brunswick learning goals provide the groundwork for developing methods and approaches to support student success in reaching the goals. Courses, programs, co-curricular activities, etc., should be aligned with learning goals and regularly assessed to gauge impact and outcomes. The cumulative student experience will need to be assessed as part of the student exit survey, with results helping inform improvements.

VII. Conclusions and Next Steps

Rutgers University’s universitywide learning goals, though they would benefit from updates, provide a solid foundation for developing a distinct set of learning goals for Rutgers–New Brunswick. There will be a number of challenges to overcome in developing such goals and discussing how they will be achieved, but the Rutgers–New Brunswick schools already have much in common in terms of learning outcomes and general education requirements that map onto the universitywide goals, and there is great potential to build upon these commonalities. Examples from some Big Ten peer institutions will likely be helpful in crafting these goals and outcomes (see Appendix F).

Chapter 3 | Beginning the Rutgers–New Brunswick Experience: Recruiting and Enrolling Our Students

The process of helping our students navigate Rutgers University–New Brunswick begins with recruiting and admitting students. Our marketing and recruitment materials can help prospective and new students understand the opportunities available at Rutgers–New Brunswick and its various schools, while helping our institution attract a diverse and highly qualified student body. Expanding our diversity aligns with the university’s commitment to this issue and contributes to one of the key factors that distinguishes Rutgers–New Brunswick and makes it attractive to students.

The Enrollment and Marketing Workstream explored various recruitment options including different models for the demographic mix of students and tools available to help cultivate prospects and ensure their matriculation. The workstream also focused on how to convey the value of Discovery Advantage to prospective students, parents, guidance counselors, and other audiences, and how to differentiate Rutgers–New Brunswick from its peer institutions while emphasizing the institution’s commitment to excellence and the importance of a Rutgers–New Brunswick degree for the individual within a national and global context. To achieve our goals, we recommend developing a multichannel enrollment marketing plan that focuses on the following recommendations and a structured enrollment growth plan.

I. Charges and Expected Outcomes

Charges

- Overarching charge: Develop enrollment management strategies to increase and diversify the applicant pool, increase the yield of accepted students, and support the goals of Discovery Advantage.
- Focus on enrollment forecasting, capacity, composition, and associated systems and applications.
- Focus on enrollment goals, outreach to prospective students, market segmentation, and utilization of systems and processes to increase yield.
- Enhance the perception of the value of higher education generally and Rutgers–New Brunswick specifically, including continued development of a unique brand proposition for Rutgers–New Brunswick. Develop a plan to ensure prospective students understand the opportunities available here (see Glossary in Appendix B for “brand proposition”).

Expected Outcomes

- A plan that supports the goals of Discovery Advantage by helping students choose the most appropriate school for their interests and career goals and emphasizes the value of a college education generally and a Rutgers–New Brunswick education specifically.
- A plan for more effective recruitment of first-year and transfer students in New Jersey, nationally, and internationally.
- A plan for financial models that enable students to successfully complete their undergraduate careers.
- A plan to develop retention and registration policies and practices that ensure student retention and success.

II. Introduction and Context

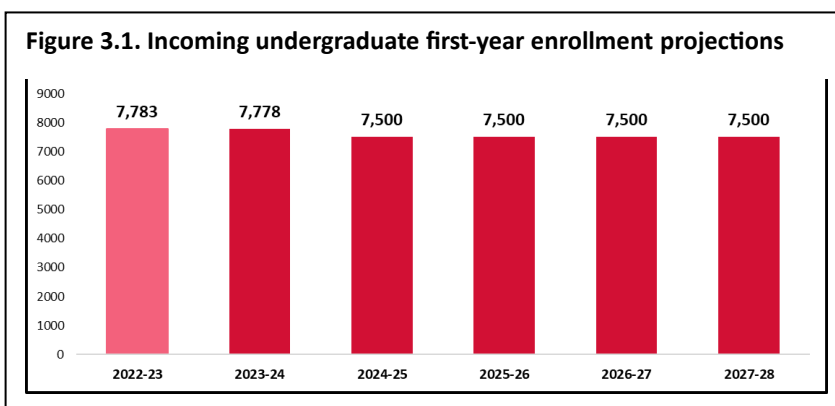
The Discovery Advantage Enrollment and Marketing Workstream is tasked with taking a critical and holistic view of the ways Rutgers–New Brunswick recruits, admits, enrolls, and retains new and transfer students to enhance student success before and after graduation.

At the first stage of student success is enrollment and marketing—the methods used to recruit and retain a diverse, inclusive student body. Innovative, data-driven, and effective recruitment, strategic financial aid support, and marketing are critical in providing a transformative student experience that encourages belonging and academic success both in and out of the classroom.

III. Benchmarking

Enrollment Modeling and Recruitment

The workstream’s Enrollment Modeling and Recruitment subcommittee compiled recommendations based on the Division of Enrollment Management’s five-year enrollment projections for 2023-2027 (see Figure 3.1), and considered those targets in light of the following benchmark data:



- The Fall 2022 class (see Appendix I)
- An overview of transfer enrollment over the last five years (see Appendix J)
- Big Ten comparative data for out-of-state (OOS), international (INTL), and Pell-eligible students (see Glossary in Appendix B for “Big Ten Academic Alliance.”)
- Rutgers–New Brunswick’s adoption of the Common Application for first-year applicants in Fall 2023 and the resulting expected increase in applications from New Jersey residents, OOS, and INTL students

Rutgers–New Brunswick enrolls a significantly lower proportion of out-of-state and international students than most other members of the Big Ten Academic Alliance or peer aspirants (see Figure 3.2 and 3.3) but enrolls a higher percentage of Pell-eligible students (see Figure 5.2).

Figure 3.2. Percent out-of-state students in comparable institutions (data from IPEDS)

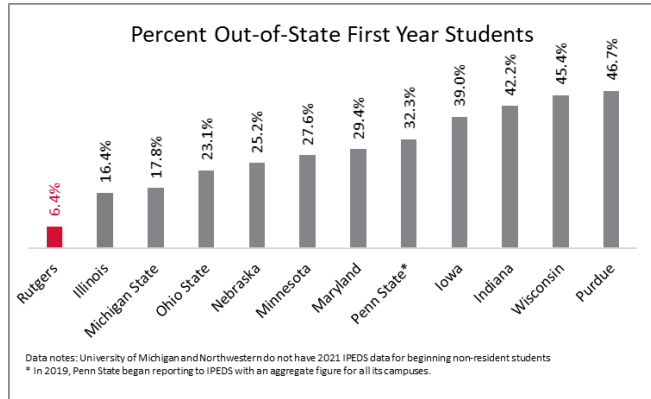
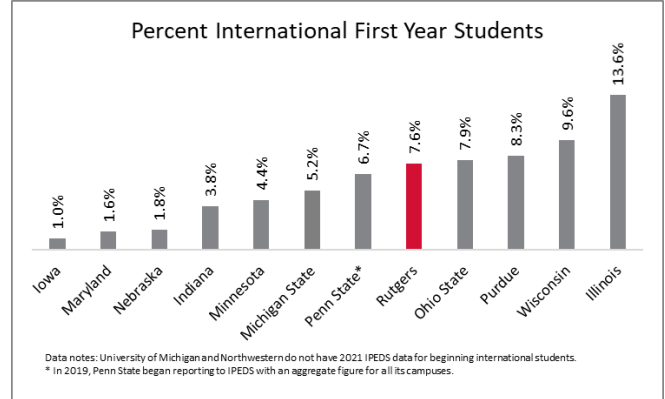
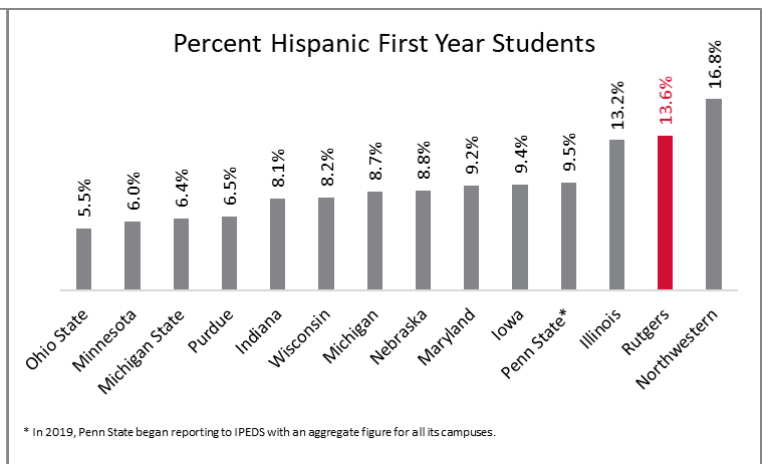
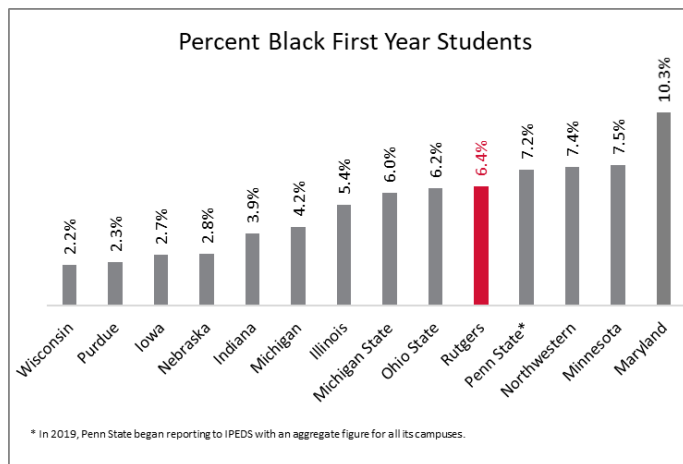


Figure 3.3. Percent international students in comparable institutions (data from IPEDS)

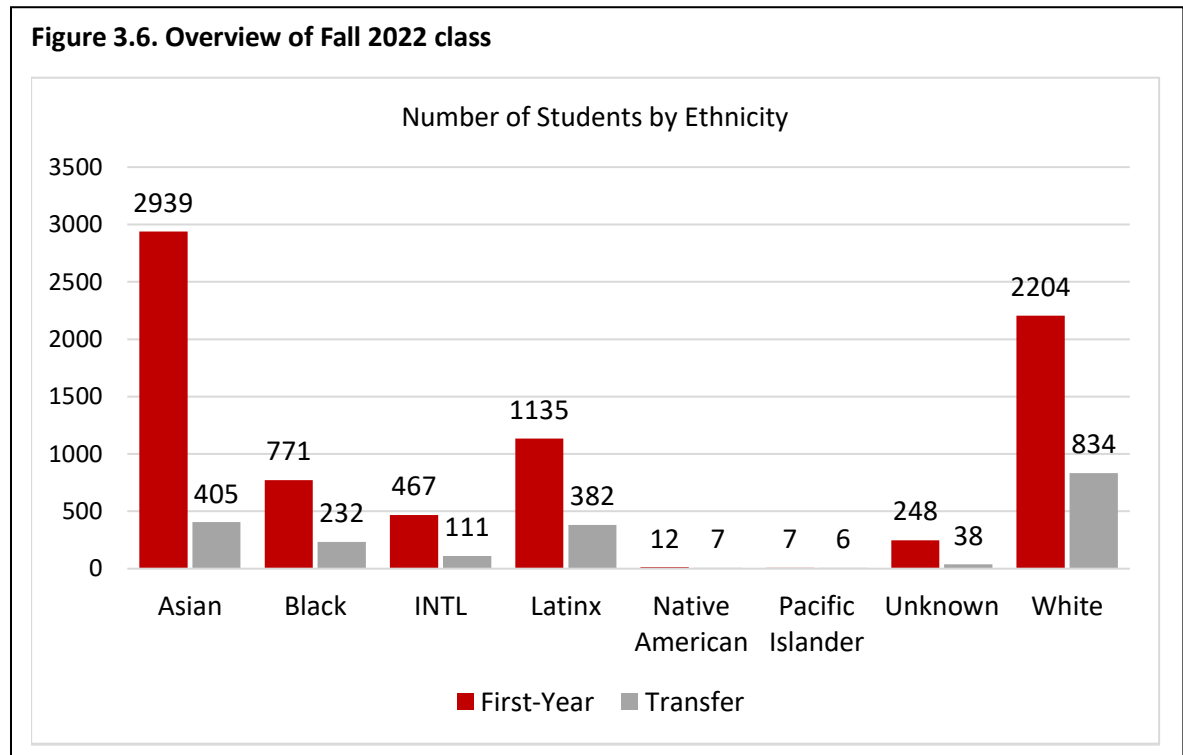
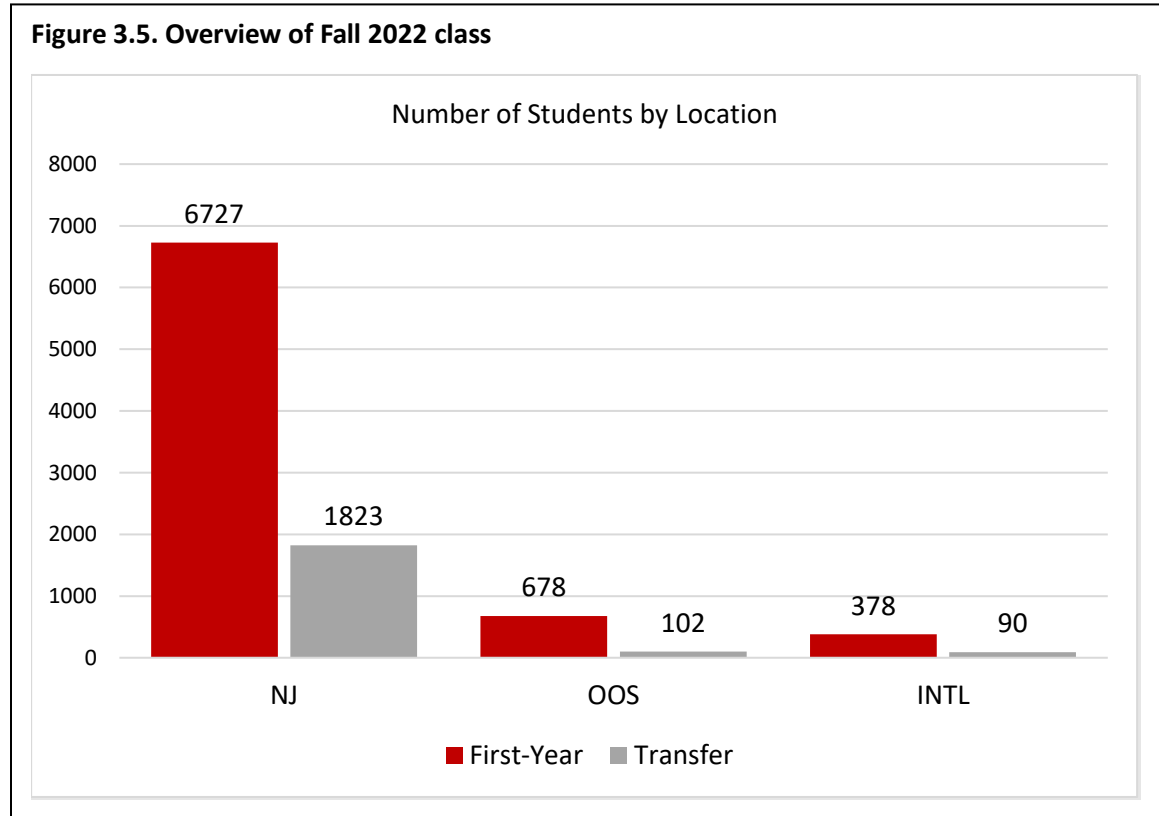


Rutgers–New Brunswick recruits a higher percentage of Black and Hispanic students than most comparable institutions, as shown in Figure 3.4 below.

Figure 3.4. Percentage of Black and Hispanic students in the entering first-year class in comparable institutions (data from IPEDS)



The composition of the first-year entering class of 2020 is shown below in Figures 3.5 and 3.6.



Recruitment and Enrollment: Parent Focus Group Feedback

Parent focus groups were conducted to solicit feedback regarding the recruitment and enrollment process for incoming students (see Appendix E). The Enrollment Pathway experience was mentioned as an opportunity for continued improvement. Comments that highlighted the issues with Enrollment Pathway include:

- “Many parents are doing this for their student, and if it is confusing for them, how much more so for the student.”
- “... First impressions are important, and after being accepted and having to navigate that portal in the beginning, and I know there was a lot of frustration for me and also some friends of mine who also had kids going to Rutgers.”
- “This is unnecessarily complicated, and I don’t think anyone actually knows what they are supposed to be doing, even though there is a section or a widget that says you know what you have to do, there’s all these other things that you can do.”
- “A lot of the links were broken or took you around in circles and didn’t take you where you needed to go.”
- “It’s a real missed opportunity for Rutgers to make a good first impression, and some of that stuff needed to be done as students were trying to graduate high school.”

Marketing

In January 2020, Rutgers–New Brunswick collaborated with higher education marketing firm Simpson Scarborough to conduct brand and marketing research. The goal was to gather data about brand awareness, performance, perceptions, motivations, and messaging to inform the development of a brand strategy and marketing messages. Data was gathered among prospective undergraduate students, graduate students, and the public; the sample included mainly East Coast and Rutgers feeder markets (NJ, NY, CT, DE, PA, MA, MD, VA, GA, FL, IL, TX, CA.). For prospective undergraduate students, the sampling frame included high school freshmen, sophomores, and juniors interested in attending a four-year college/university. A total of 595 respondents completed the online survey (see Table 3.1).

Table 3.1. Marketing sample of prospective Rutgers–New Brunswick undergraduates

Prospective Undergrads

Gender	Percent	Population	U.S. Resident	Percent	Population	High School GPA	Percent	Population
Female	60%	45%	Yes	97%	--	A+/95 or higher/3.75 or higher	59%	--
Male	37%	42%	No	3%	--	A/90-94/3.5 to 3.74	25%	--
Other	1%	--	State	Percent	Population	B+/85-89/3.25 to 3.49	10%	--
Prefer not to answer	3%	--	New Jersey	16%	12%	B/80-84/3.0 to 3.24	3%	--
Race/Ethnicity	Percent	Population	California	14%	20%	C or lower/79 or lower/2.99 or lower	2%	--
White	55%	--	Texas	12%	14%	Don't know	2%	--
Asian or Pacific Islander	19%	--	New York	8%	7%	Highest Level of Education Completed by Parent	Percent	Population
Hispanic or Latina or Latino	17%	--	Florida	7%	12%	Less than a high school diploma	10%	--
African-American or Black	13%	--	Pennsylvania	5%	5%	High school diploma/GED®	9%	--
American Indian or Alaskan Native	3%	--	Virginia	4%	5%	Certificate/technical degree	2%	--
Other	2%	--	Maryland	3%	4%	Associate degree/2-year degree	5%	--
Prefer not to answer	6%	--	Massachusetts	3%	4%	Bachelor's degree/4-year degree	27%	--
High School Class Year	Percent	Population	Connecticut	3%	3%	Master's degree	23%	--
Freshman	1%	--	Ohio	3%	<1%	Professional or doctoral degree	19%	--
Sophomore	14%	4%	Other (less than 3%)	22%	--	Other	2%	--
Junior	86%	96%	SAT Score	Median	Population	Don't know	3%	--
			Reading and Writing	670	--	Inquirers vs. Suspects	Percent	Population
			Mathematics	700	--	Inquirers	70%	25%
			ACT Score	Median	Population	Suspects	30%	75%
			Comprehensive ACT score	30	--			



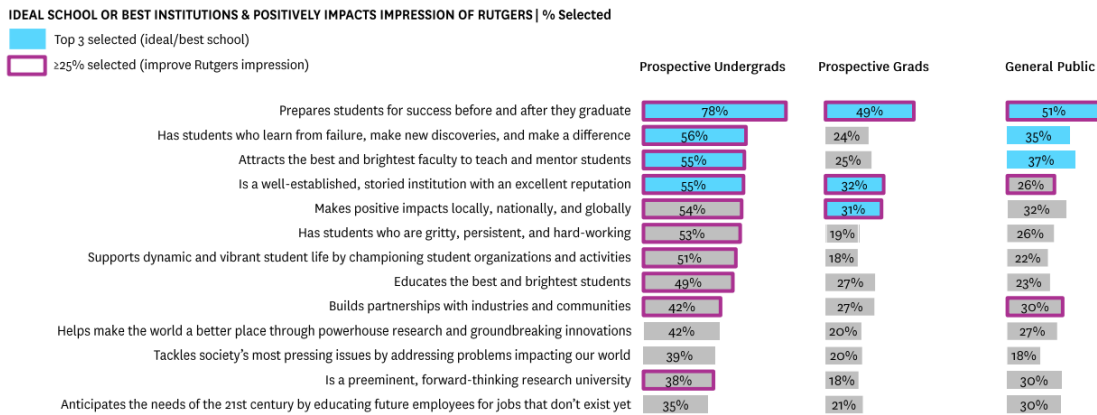
Percentages >100% are due to rounding.

Key research findings:

More than half of prospective undergraduates are familiar with Rutgers, less than Penn State University and higher than University of Michigan, University of North Carolina, University of Texas, Michigan State University, and University of Wisconsin–Madison. Sixty-five percent of the public is familiar with Rutgers, above all other peer and competitor institutions tested. The largest percentage of each audience has a positive opinion of Rutgers, but one-third of prospective undergraduates had no opinion (see Figure 3.7).

Figure 3.7. Attributes and messaging: Ideal school/best institutions and positive impact on impression

Student success is the top statement across all audiences. Overall, statements about the individual are preferred over statements about the institution.



(Prospective Undergrads, Prospective Grads) I want to go to a college/university that... (select all) Rutgers not identified as survey sponsor.
 (General Public) The best colleges/universities in the country... (select all) Rutgers not identified as survey sponsor.
 Which of the following statements MOST POSITIVELY IMPACT your impression of Rutgers-New Brunswick? (select all)

Key research findings:

- Outcomes and cost-related attributes (e.g., strong student outcomes, student support through internship opportunities, emphasis on career preparation, scholarship/financial aid opportunities, and cost of attendance) are important to prospective undergraduates in their college search (see Figure 3.7).
- “Bringing diverse people, ideas and disciplines together, leading to new discoveries and richer experiences” best describes how Rutgers betters the world in the general public’s perception, but nearly one in four prospective undergraduates did not know whether any of the tested statements describe how Rutgers betters the world (see Figure 3.7).
 - Opportunity to clarify and communicate how Rutgers “prepares talented students for lives and careers of meaning and consequence” and “provides its students with unparalleled educational excellence and opportunity.”

IV. Current Challenges

- The perception of the state of New Jersey within the national and global context.
- The perception of Rutgers–New Brunswick within the state of New Jersey.
 - Central communications and marketing, individual schools, institutes, and centers have different marketing methods leading to inconsistency of message, brand representation, recruitment marketing, and promotional success.
 - Communicating that Rutgers–New Brunswick is an institution of value without positioning Rutgers as cheap or discounted.
 - Communicating to constituencies that Rutgers–New Brunswick is an accessible and affordable option for in-state and out-of-state students.

- Communicating about financial aid, recruitment, and the application process clearly and consistently across all university websites. Schools within the Rutgers system feature this content, but language and information differ across websites.
- The current space and infrastructure considerations and limitations of Rutgers–New Brunswick (particularly as it relates to campus transportation, the current bus system, and associated capacity and traffic considerations) and those of Rutgers–Newark and Rutgers–Camden that impact enrollment.
- The inability to effectively capture student leads and conversions within current systems to measure multichannel marketing efforts that move beyond the traditional funnel (see Glossary in Appendix B for “brand conversion”).
- The current demographic cliff within the United States. Demographic changes (i.e., declining family size due to low birth rates, and migration from northeastern to southern states) are expected to reshape the market for higher education over the next 15 years.
- The [U.S. Supreme Court decision](#) for Students for Fair Admissions (SFFA) v. University of North Carolina and Students for Fair Admissions (SFFA) v. Harvard University. As the court majority ruled against affirmative action, colleges and universities will no longer be able to consider race in admission decisions.
 - Despite this challenge, Undergraduate Admissions currently utilizes holistic review methodology in its decision-making processes, and pre-college pathway programs, including Rutgers Future Scholars, provide opportunities for K-12 students to meaningfully engage with the university from a young age.

V. Goals

Strategic Objective 1: To achieve the overarching charge by focusing on enrollment forecasting, capacity, composition, and associated systems and applications.

Measurable Goals:

- Increase incoming non-resident first-year enrollment by 60 percent (from 15.5 percent of the incoming first-year class to 25 percent) over the next five years.
- Increase the diversity of the incoming class by five percent over the next five years, concentrating on contributing to the overall university objective to build and retain a university community that reflects the state of New Jersey while focusing on access and equity gaps in the success of underrepresented populations (see Glossary in Appendix B for “diversity”).
- Maintain incoming transfers at the current enrollment level over the next five years.

Strategic Objective 2: To achieve the overarching charge by enhancing the perception of the value of higher education generally and Rutgers–New Brunswick specifically, including continued development of a unique brand proposition for Rutgers–New Brunswick.

Measurable Goals:

- Increase non-resident (non-NJ) application conversion (from prospect to applicant) by 25 percent over the next five years.

Strategic Objective 3: To achieve the overarching charge by removing barriers to on-time graduation, thereby minimizing student cost.

Measurable Goals:

- Provide students with consistent deadlines and processes regardless of their school of enrollment via information shared at new student orientation annually. In collaboration with Rutgers–New Brunswick Academic Advising, ensure consistency in advising practices regarding enrollment and re-enrollment.

VI. Initial Recommendations

Recommendation 3.1. We recommend increased marketing and recruitment efforts in key out-of-state and international markets.

The Discovery Advantage steering committee has charged our workstream with increasing and diversifying the applicant pool. An increased marketing effort in key out-of-state and international markets will help attract non-New Jersey residents, increase geographic diversity, and increase out-of-state tuition revenue. To fulfill this recommendation, we will develop segmented marketing and outreach campaign(s) that target first-generation, transfer, out-of-state, and international students at the top of the funnel (awareness). In addition, retargeting methods will be built into the campaign(s) to move students through the funnel and increase applicants among this population of students. Finalized recommendation on the target population(s) of the campaign(s) will depend on various factors, including the allocated budget. (See Appendix P for estimates of the costs of these marketing strategies.)

Recommendation 3.2. We recommend that the Division of Enrollment Management, Rutgers Communications and Marketing, and the state of New Jersey Division of Travel and Tourism develop a strategic plan to effectively market New Jersey as a destination for students.

This collaborative work will help enhance New Jersey’s standing as a premier national and international destination, thereby increasing interest in Rutgers–New Brunswick across out-of-state and international markets.

Recommendation 3.3. We recommend that Rutgers–New Brunswick develop tuition discounting models for out-of-state and international students (see Glossary in Appendix B for “tuition discounting”).

Institutional grant aid for out-of-state and international students will provide more competitive financial aid packages for this population—helping to increase enrollment.

Recommendation 3.4. We recommend that Rutgers–New Brunswick remain test-optional going forward. Enrollment Management, in consultation with academic leadership, will continue to review its admissions policies and procedures on a yearly basis and can recommend further changes as necessary.

As the higher education and admissions landscape continues to evolve, standardized testing has become a barrier to accessibility. Over the last three years, with the establishment of the test-optional policy, first-year enrolled classes have become more diverse. In 2020, 18.4 percent of our incoming first-year students were underrepresented (URM) students. In 2022, that population has grown to 23.3 percent. Additionally, 70.5 percent of URM students have been test-optional compared to 56.6 percent of their

non-URM peers, and 65.4 percent of Pell recipients have been test-optional, compared to 43.3 percent of non-Pell recipients (two-year average of 2021 and 2022).

Recommendation 3.5. We recommend that Rutgers–New Brunswick implement new marketing attribution and personalization technology.

New technology will effectively track marketing leads and conversions, which is beyond the capabilities of our current resources. This will help improve out-of-state enrollment goals, establish marketing automation for Undergraduate Admissions, and increase engagement. In addition, this will help us move beyond the traditional name-buy practices and get ahead of privacy concerns and changes within the student search and name-buy landscape (see Glossary in Appendix B for “brand conversion,” “marketing automation,” and “name-buy”).

Recommendation 3.6. We recommend increased cross-functional enrollment work across admissions, central communications, and school communicators to push forward marketing and communications recruitment efforts under one brand while sharing resources.

Deep collaboration across New Brunswick schools will remove duplication of efforts and increase efficiencies in a decentralized structure.

Recommendation 3.7. We recommend increased Division of Enrollment Management staffing.

Increased staffing within the Division of Enrollment Management will help to support the 10,000 to 15,000 projected increase in first-year applications due to the move to the Common Application. Currently, the Undergraduate Admissions Application Evaluation Team consists of nine full-time permanent staff who review over 50,000 applications each year. The increase in the number of applications will require additional year-round support in both application review and student inquiry support with services including, but not limited to:

- Educational Opportunity Fund (EOF) application review (see Glossary in Appendix B for “Education Opportunity Fund”)
- Residency evaluation and determination
- Transcript audit support
- Document verification requests
- Financial aid appeals
- Professional judgment processing
- Student inquiry support across Case Management, phone calls, walk-ins, and emails

The associated workload resulting from increased applications is distributed throughout the year and not tied to a specific timeframe in the application and onboarding cycle, making increased full-time staffing a necessity.

Recommendation 3.8. We recommend that Rutgers–New Brunswick reinvests Common Application fee revenue into the Division of Enrollment Management.

With the move to the Common Application, Rutgers–New Brunswick anticipates an annual increase of 10,000 to 15,000 applications, yielding the university an additional \$650,000-\$975,000 in application fee

revenue per year (\$70 per application less a \$5 application fee to the Common Application, equaling \$65 net per additional applicant). Reinvestment of the Common Application fee revenue into the Division of Enrollment Management will help to support staffing, programming, and marketing initiatives to achieve Rutgers–New Brunswick enrollment goals and effective support of students from application to graduation.

Recommendation 3.9. We recommend that the Division of Enrollment Management improve the myRutgers student dashboard, including the following:

- Continued collaboration with campus partners to regularly audit content to ensure all changes in policies and procedures are captured, and all links on the dashboard are active and redirected appropriately at all dashboard go-live dates.
- Continued partnership with Health Services to refine the immunization process on the dashboard.
- Continued collaboration with university operations to ensure a more centralized CRM system, leading to effective automated updates to required and recommended widgets on the dashboard.

The Enrollment Pathway was merged into the myRutgers University Portal to improve the overall incoming student experience. The fully customizable student dashboard of the myRutgers portal provides the required and recommended items for students who accepted their admissions offer, including financial aid, billing, information for new student orientation (NSO), immunization records, application for housing, placement testing, academic advising, and course registration. To access the myRutgers dashboard, admit-coming students must first activate their NetID.

VII. Conclusions and Next Steps

The charges related to recruitment are central to the overall purpose of Discovery Advantage and of the Student Success Pillar of the Academic Master Plan. The Enrollment and Marketing Workstream undertook a comprehensive evaluation of Rutgers–New Brunswick’s current strategies and practices with regard to recruitment; a thorough analysis of various models, data, best practices, and experiences from other institutions; a review of the factors that led to our great success over the past half-decade in enrolling a student body that is both highly diverse and academically qualified; and a study of the many challenges affecting recruitment strategies across our institution.

The workstream determined that meeting our recruitment goals—and particularly attracting higher numbers of out-of-state and international students and onboarding them within the Rutgers–New Brunswick community—requires the use of state-of-the-art best practices in communicating and marketing to support “boots on the ground” recruitment efforts. This includes strategic efforts to promote an accurate understanding of the great value of a Rutgers–New Brunswick education as well as the distinguishing features that make our institution the right destination for students who seek to build lives and careers of meaning and consequence.

We are confident that the recommendations set forth in this report will help Rutgers–New Brunswick successfully expand its recruitment of those students across the United States and the globe who are best suited to achieve success at Rutgers. The workstream looks forward to working with the Discovery Advantage chair, the New Brunswick leadership, and our university community to bring these goals to fruition.

Chapter 4 | Enhancing the Student Experience: Improving Belonging and Retention Through High-Impact Practices

Many factors contribute to student retention and a sense of belonging on campus. These include curricular and co-curricular experiences such as first-year seminars, transfer seminars, undergraduate research experiences, and learning communities.

I. Charges and Expected Outcomes

Charges

Curriculum Workstream: High-Impact Practices Subcommittee

Our students thrive when they have opportunities for experiential learning or research involvement that leads to connecting with our faculty in meaningful ways. Furthermore, high-impact learning practices have been proven to increase student retention and transition to careers and graduate work. Given the university's commitment to community engagement, how might we:

- Create first- and second-year experiences that provide students with opportunities to be of service to the community, a hallmark of our public land grant mission?
- Provide opportunities for students to learn about resources for well-being, community building, self-assessment of study skills, and instruction in 21st century skills and career competencies?
- Promote academic exploration by expanding opportunities for interdisciplinary study and high-impact learning experiences—and can these experiences be incorporated into curricular requirements or co-curricular opportunities?

In other words, how do we realize the Academic Master Plan's focus on experiential learning and community engagement as a distinctive component of a Rutgers–New Brunswick education? (See Glossary in Appendix B for “experiential education.”)

Living-Learning Communities Workstream: Living-Learning Communities and Learning Communities Subcommittees

Examine the role that Learning Communities and Living-Learning Communities (LLC) might play in (1) helping first-year students make the transition into Rutgers and develop the skills they need to succeed academically, and (2) helping students at all stages of their academic career develop their interests and prepare to enter their chosen careers. Develop possible models for first-year communities that can be replicated on each campus and develop a pilot LLC. How will these communities support our goal of creating a welcoming, equitable, and supportive environment and help prepare our students for future success?

Expected Outcomes

- Recommendations for a cohesive set of first- and second-year experiences that create a sense of community and belonging and reflect the mission of Rutgers–New Brunswick.
- A plan for a wide variety of experiential learning activities that will be available to all students.

- A plan for a cohesive program of learning communities, living-learning communities, and special interest housing that help to create a sense of community and well-being and help students further their academic and career goals.

II. Introduction and Context

A number of curricular and co-curricular experiences have been shown to help students develop a sense of belonging and improve retention, especially among new students. Rutgers–New Brunswick offers a number of unique programs that serve this need. Currently there is little coordination or synergy among them. It is difficult for students to recognize the importance of these offerings as enhancements of their academic careers and their preparation for post-graduation success. Hence, our recommendations center on enhancing coordination, encouraging students to explore these options, and ensuring that the experiences truly fulfill their purposes. We also recommend using the residential landscape to increase the number of learning communities—one specialized type of high-impact practice—and to ensure proximity of students to the services that can help them succeed.

High-Impact Practices

The phrase “high-impact practices” (HIP) denotes a set of teaching and learning practices used in the classroom and in some co-curricular settings that have been shown to promote student success by yielding tangible benefits in terms of student retention, timely graduation, and skill development that promotes post-graduation success (see Glossary in Appendix B for “high-impact practices”). Among other benefits, such programs provide students with an increased sense of belonging; awareness of the spectrum of resources available to students at the university; connection with peers, professors, and mentors; and an expanded understanding of career readiness.

HIPs often include opportunities for experiential learning, but not all experiential learning opportunities meet the criteria of high-impact practices or yield positive outcomes in retention, timely graduation, and post-graduate success. We refer to those that do as “high-impact experiential learning” opportunities (HIELs). HIELs can be thought of as a subset of HIPs, but for clarity here we refer to HIPs/HIELs to emphasize the importance of high-quality experiential learning opportunities, which are particularly important in preparing for post-graduation success.

HIPs/HIELs at Rutgers–New Brunswick align with the Academic Master Plan’s Student Success Pillar by creating a welcoming, equitable, and supportive learning environment; prioritizing on-time graduation with minimal debt for all students; and expanding high-impact learning opportunities to best prepare students for future success. HIPs can help actualize our commitment to access, equity, and inclusion and ensure Rutgers–New Brunswick is responsive to the growing needs and challenges of our students, including in a culture affected by the pandemic.

The High-Impact Programs/Experiences subcommittee, representing faculty and staff across the schools, academic departments, and units in Student Affairs at Rutgers–New Brunswick, spent a substantial amount of time reviewing the well-developed scholarly literature to gain a shared understanding of HIPs, the various categories into which they are most often organized, and the characteristics or elements which help to achieve intended outcomes.

The subcommittee also reviewed reports from previous Rutgers committees and task forces whose work summarized substantial valuable literature, provided information about current practices and trends in Rutgers–New Brunswick and/or nationally, and provided well-thought-out recommendations.

Particularly helpful was the Rutgers–New Brunswick First-Year Experience Task Force Report (2016), which looked extensively at the role of high-impact practices and recommended:

“All students at Rutgers–New Brunswick should participate in one HIP during their first year and at least two others before graduation. Given the individual needs and interests of the diverse student body, multiple pathways should be identified for students so that they may pursue and achieve the benefits associated with participation in multiple high-impact practices. With Rutgers–New Brunswick’s deep commitment to improving the success of first-generation students and students from underrepresented backgrounds, it is important to stress again the positive effects that high-impact practices have demonstrated in support of these special populations” (see Appendix C for the First-Year Experience Task Force Report).

Additional work is needed to determine:

- A comprehensive list of current initiatives that may be defined as high-impact practices using the working definition; a partial list is included below.
- The current number of students participating in these activities.
- The students who are not participating in a high-impact practice and associated barriers to participation.
- Types of high-impact practices that can be expanded through the addition of courses, instructors, staff, and funding.
- The resources needed to facilitate the development and implementation of new, or expanded, high-impact practices.
- Scheduling systems that can facilitate the goal of increased student participation.
- Programs and initiatives that can be designed and reimaged to reflect and incorporate characteristics of high-impact practices (e.g., student employment).
- Obstacles to developing and offering more HIPs/HIELs.

This committee also referred to the Rutgers–New Brunswick Task Force to Enhance Experiential Education Report (2017) (see Appendix C for the Task Force to Enhance Experiential Education Report). This report provided a good starting point for us, but we noted that they are primarily focused on for-credit internships, and we also want to include a broad range of experiential learning opportunities that contribute to students’ preparation for graduate study or community service. The report recommended that all high-quality experiential education programs meet the following standards:

- The experience should be aligned with the student’s academic and career interests.
- It must include formal learning objectives and evaluation of student performance, which may be demonstrated through writings, presentations, or portfolios.
- Academic assignments should be designed to help students reflect on the experience and successfully articulate what they have learned to a future employer or graduate school.
- Academic credit should be granted upon successful completion of the experience at a level commensurate with the students’ time and completion of academic requirements.

- The student should be supervised by a Rutgers faculty member or qualified professional staff member.
- The student must be supervised by an experienced professional at the worksite to ensure proper mentoring and learning of professional skills.
- In most circumstances, students should receive compensation from their employer, at not less than the state minimum hourly wage, for work performed under the direction of the employer. It is a misconception that an internship that earns academic credit cannot be paid. While an internship at a non-profit organization can be unpaid regardless of credit status, the U.S. Department of Labor has developed explicit criteria for determining whether an internship at a for-profit organization can be unpaid according to the Fair Labor Standards Act.

We also welcomed input from the focus groups held for Discovery Advantage (see Appendix E) and the Rutgers–New Brunswick Academic Master Plan Survey Responses (2021) (see Appendix C for the Academic Master Plan Survey Responses), and many of our members brought considerable expertise and experience of their own.

Learning and Living-Learning Communities

Living-learning communities (LLCs) are residential programs that combine a student’s academic and social experiences (Wood, 2022; Schritter, n.d.) and are widely regarded as a HIP, as noted above. They provide a living environment tailored to students’ interests, ambitions, and goals. These communities are designed to foster a sense of community and enhance students’ learning and development by integrating academic and co-curricular experiences. LLCs can be based on specific themes such as academic majors, identities, interests, or shared experiences. For example, universities may have LLC programs for students in science and engineering, global citizenship, sustainability, entrepreneurship, or leadership. Students who participate in these programs live together in the same residence halls or apartments, take classes together, attend co-curricular events and activities, and have access to resources such as mentorship, academic support, and leadership development. The goal of LLCs is to provide students with a shared space in which they can learn, experiment, grow, and cultivate long-lasting relationships with their peers, faculty, and staff.

Studies have shown that students in LLCs are more likely to exhibit critical thinking skills and engage in campus life (Choset, 2016). Findings include LLCs positively impacting students’ academic and personal development, including higher grades and greater involvement on campus and having a more positive college experience overall (Pike, 1999). Additionally, living and learning communities have been determined to promote student engagement and retention leading to higher levels of engagement in academic and extracurricular activities, with participants being more likely to form supportive relationships with peers and faculty and more likely to persist to graduation (Zhao & Kuh, 2004). Additional studies have highlighted the need for intentional curriculum development, faculty and staff involvement, and ongoing assessment and evaluation of living and learning programs (Haynes & Janosik, 2012).

This subcommittee identified residential learning communities as a model for helping first-year students transition successfully to Rutgers–New Brunswick and throughout the first-year experience, resulting in a higher persistence rate to the second year of college. With no current housing requirement, slightly more than 80 percent of incoming first-year students choose to reside on campus (close to 6,000 students out of an incoming first-year class of about 7,000+). Increasing the number of first-year students residing on campus would impact housing availability for upper-class students, with more

having to live off campus or commute. As a result, non-residential learning communities would need to be established to ensure their benefits for all students including commuter students. Varying types of smaller living-learning communities, but Discovery Advantage calls for something that can accommodate a greater number of students. The Honors Residential College (HRC) and Douglass Residential College (DRC) currently have elements of what we envision providing in other residential learning communities. HRC and DRC can each house approximately 500 first-year students. The quality and functionality of first-year housing vary widely across Rutgers–New Brunswick, with all first-year housing being different. A commitment to establishing residential learning communities requires a campus revitalization plan to ensure that the amenities needed to support living-learning/learning communities, campus life, and teaching are available on each of our campuses.

III. Benchmarking

High-Impact Practices

As the scholarly literature reveals, and any quick Google search will confirm, HIPs have become ubiquitous across higher education since George D. Kuh (2008) coined the term in his work for the American Association of Colleges and Universities' Liberal Education and America's Promise (LEAP) Initiative.

They typically include academic and co-curricular programs:

- First-year or transfer first-semester seminars
- Learning communities
- Writing intensive courses
- Collaborative projects
- Research and scholarly collaboration with faculty
- Diversity and global learning
- Service learning and community engagement
- Internships, field experiences, and some student employment
- Capstone courses and projects

Rutgers–New Brunswick currently offers a broad range of curricular-based for-credit initiatives that fit these categories, along with initiatives that may or may not qualify as high-impact practices. A non-exhaustive sample includes:

- [Academic support seminars](#)
- [Aresty Research Center opportunities](#)
- [Business Forum](#)
- [Byrne Seminars](#)
- Capstone courses, theses, and projects, major specific
- Career Explorations courses
- Community engagement courses
- [DRC Knowledge and Power Course](#)
- [Eagleton Undergraduate Associates Program](#)
- [EOF Summer Institute](#) and [SEBS EOF Summer START UP](#) - bridge programs
- Field work, major specific

- [First-year Interest Group Seminars \(FIGS\)](#) within Career Exploration and Success
- [Honors Colloquium](#) – SAS Honors Program
- [Honors College Forum](#)
- Honors Intro to Engineering
- [Honors Engineering Design & Development](#), 14:440:294
- [Innovation, Design, and Entrepreneurship Academy \(IDEA\)](#)
- Internships (major specific and the [Rutgers Internship & Co-op Course](#))
- [Interdisciplinary Research Teams](#)
- [Introduction to Engineering](#), first year seminar
- Learning communities
- [Louis Stokes Alliance for Minority Participation \(LSAMP\) Program](#)
- Research with faculty and senior theses, major specific
- Reserve Officer Training Corps (ROTC)
- [RU-First Seminar \(RU1st\)](#)
- [Rutgers First-Year International Student Transition Course \(RU-Fit\)](#)
- Rutgers Internship & Co-op Course
- [Rutgers Scarlet Service Internship Program](#)
- [SEBS Experiential Learning](#)
- Service learning
- SoE First-Year Seminars
- [Students in Transition](#) course (STS) for transfer students
- [Study Abroad](#)

(See Glossary in Appendix B for “capstone projects,” “Career Explorations courses,” “community engagement opportunities,” “field work,” “internships,” “learning communities,” “research with faculty,” “Reserve Officer Training Corps,” and “service learning.”)

In addition, many other initiatives, particularly co-curricular experiences, have the potential to fit the criteria for HIPs and may promote retention, timely degree progress, and post-graduate success. Some examples include:

- Community engagement programs
- [Helyar House](#) cooperative living
- [Learning communities](#)
- [Louis Stokes Alliance for Minority Participation \(LSAMP\) Program](#)
- NJ Agricultural Experiment Station (NJAES) Cooperative Extension Program
- On- or off-campus work accompanied by a career development course/program
- Supervised and directly advised co-curricular activities such as [athletics](#); [Marching, Pep, and other bands](#); and leadership in the [Rutgers University Programming Association](#) (RUPA), [Rutgers University Student Assembly](#) (RUSA), [Rutgers Dance Marathon](#), student organization leadership, etc.
- Working as a [Scarlet Ambassador](#), a school ambassador, or department ambassador accompanied by meta-cognition activities
- Working as a [Resident Assistant](#) (RA) accompanied by meta-cognition activities
- Working for the [Learning Centers](#), or elsewhere, as a tutor, learning assistant, or peer mentor
- Various mentorship/leadership development programs

Learning and Living-Learning Communities

Many universities offer living and learning communities, including:

- University of Michigan: The [Michigan Community Scholars Program](#) focuses on civic engagement, leadership, and social justice. Other examples include the [Residential College](#) which offers an interdisciplinary curriculum that emphasizes writing, critical thinking, and community building.
- Stanford University: Stanford offers a range of living and learning communities including [ITALIC](#), which combines literature and arts studies with interdisciplinary courses, and the [Sophomore College](#) which allows students to live together while engaging in intensive, small-group seminars.
- University of California, Los Angeles (UCLA): The [Public Service and Civic Engagement Living-Learning Community](#) offers students the opportunity to engage in community service and address social justice issues. The [Global Health Living-Learning Community](#) focuses on careers in the health sciences.
- Vanderbilt University: The [Ingram Scholarship Program](#) provides students with funding for community service and research projects. The program emphasizes interdisciplinary learning and collaboration.
- University of North Carolina at Chapel Hill (UNC): The [College of Arts and Sciences Honors Program](#) focuses on intellectual curiosity and academic excellence and affords its first-year students the opportunity to live together. The [Chancellor's Science Scholars Program](#) provides a supportive [living community](#) for underrepresented students in science and technology fields.

Rutgers–New Brunswick offers similar programs, but they are typically geared toward small segments of the student body and are not required for an entire incoming class. Current Rutgers–New Brunswick LLC offerings include Health and Medicine, Business and Economics Discovery House, Entrepreneurship and Innovation, Law and Political Science Discovery House, and Psychology Discovery House. Thematic communities include Mason Gross School of the Arts Housing, Rainbow Perspectives, Weather Watchers, and Seeing Eye Puppy Raisers. (See <http://ruoncampus.rutgers.edu/rulc/> for a complete listing.) These communities currently enroll about 2,500 students.

Other institutions have residential colleges where first-year students live together with faculty or deploy a neighborhood model in which essential supports are co-located with easy access for students. Several also offer a required seminar course that focuses on student success-related topics or offer a required traditional academic course that informs students of the factors needed for academic success. Examples include:

- Residential College Model: Students live in a residential community led by a faculty member and supported by the housing program model. Students develop strong bonds with fellow first-year students from diverse backgrounds, academic programs, and co-curricular interests. (e.g., [Residential College model at University of Virginia](#).)
- Residential Neighborhood Model: These are residential communities with intentional adjacencies to co-located resources; embedded resources may include academic advising, mental health supports, and/or a central place for neighborhood members to dine and engage. (e.g., [Neighborhood model at Michigan State University](#).)

IV. Current Challenges

High-Impact Practices

Rutgers–New Brunswick’s retention metrics, graduation rates, and post-graduation success are strong nationally and compared to our New Jersey peers but could improve in comparison with our Association of American Universities and Big Ten Academic Alliance peers. Progress in these three areas could result in reduced student debt and increased social mobility which are central to Rutgers–New Brunswick’s mission.

At Rutgers–New Brunswick, where students are often challenged by the size and complexity of the university, greater cross-unit collaboration would allow students to benefit from the coordination and integration of curriculum and practice. High-impact practices can encompass collaboration between curricular and co-curricular units at the university. A HIP/HIEL can take place fully within a classroom environment, community engagement experience, non-academic campus unit such as advising or student affairs, in a supervised internship, or overseas as part of an international program. HIPs offered throughout all class years can expand students’ learning skill development and opportunities for post-graduate success.

While Rutgers–New Brunswick should seek to support experiential learning in many venues, special emphasis should be placed on those opportunities that qualify as HIELs, since those have been shown to lead to positive outcomes in retention, timely graduation, and post-graduation success, and to provide multiple avenues for community engagement.

Currently, there is a rich collection of Rutgers–New Brunswick programs that have the potential to be effective HIPs. However, there is no mechanism for determining which of these programs meet the criteria for and deliver on the promise of HIPs/HIELs.

Further, the value and availability of HIPs/HIELs at Rutgers–New Brunswick are not well articulated for students, advisors, faculty, and staff. Existing programs are scattered and often difficult for students to find. Even those programs that involve for-credit courses are difficult to identify since there is no consistent coding of such courses. Students have no way of searching the Schedule of Classes for for-credit HIPs, and likewise, administrators have no easy way of tracking participation in for-credit HIPs. Co-curricular experiences that do not involve for-credit courses present even more significant challenges for tracking participation.

In addition, many students face barriers to participating in HIPs/HIELs. For some students, the challenge is juggling these experiences with a credit-intensive academic program. More commonly, though, the constraint is financial. Students with full- or part-time jobs may not be able to participate in programs that would limit their available work hours. Additional costs of some programs, such as tuition and fees required for for-credit summer session programs (for which many students do not have remaining financial aid to cover), exacerbate the inequality of access.

The [On-campus Work Experience Network \(OWN\)](#), coordinated by Career Exploration and Success and Enrollment Management, provides a model for addressing such financial constraints by making on-campus employment a HIEL. Currently, however, this program has limited reach and consideration could be given to expanding this program.

Learning and Living-Learning Communities

- Rutgers–New Brunswick has various residential areas that require significant capital investments to provide a baseline level of guarantees related to supporting the first-year student experience (e.g., quality first-year housing and gathering spaces for commuter students/non-residential LCs; accessible academic/career/engagement advising; embedded counseling; other types of baseline amenities). There are also significant differences in the types of amenities and quality of facilities spaces available between the Rutgers–New Brunswick campuses that might make it difficult to scale programs up for 7,000 first-year students and the rest of student body.
- Several programs target first-year students (e.g., Career Exploration and Success’ FIGS seminars; Byrne Seminars; some current LLC offerings; and other transition programs offered through schools and administrative divisions). Where can we leverage existing program offerings to support the LLC model?
- Rutgers–New Brunswick’s geographical spread across multiple campuses creates additional travel and logistical challenges for students; for example, students living on Cook/Douglass typically take classes on other campuses and vice versa.

V. Goals

Our overriding goal is to promote student success—to increase retention, promote timely graduation, and ensure Rutgers–New Brunswick students are well-equipped for post-graduation success.

High-Impact Practices

The HIP/HIEL subcommittee’s specific goals are:

- To ensure that Rutgers–New Brunswick promotes and supports HIPs/HIELs by identifying courses and initiatives that meet the criteria established by the literature and that have demonstrated positive outcomes.
- To increase participation by ensuring that students, parents, advisors, and other stakeholders are aware of the benefits of HIPs/HIELs; by providing students with well-curated access to the breadth of HIPs and HIELs open to them; and possibly by offering credentialing.
- To increase access to HIPs/HIELs by working with faculty to integrate these experiences into the curriculum and by addressing financial barriers to participation.

Learning and Living-Learning Communities

The Learning Communities Workstream’s specific goals are:

- Develop a viable model for leveraging the student residential environment to support the student success goals of the Academic Master Plan and Discovery Advantage.
- Develop a general framework for thinking about campus revitalization. Program planning drives design, so while there are some obvious infrastructure needs, it is vital to allow the final Discovery Advantage recommendations to emerge to see how design can accommodate the program goals.

VI. Initial Recommendations

High-Impact Practices

Recommendation 4.1. In light of the well-documented benefits of HIPs/HIELs, we recommend that all Rutgers–New Brunswick students should participate in one HIP during their first year (transfer students during their first semester) and at least two others before graduation.

HIPs should be available across class years and include HIELs. Particular attention should be given to developing HIPs suitable for second-year students in that our first-year retention rates are relatively strong, but the second year presents a retention cliff. Methods of incentivizing participation, such as credentialing or badging, should be explored. Given the intensive degree requirements for certain schools and majors, HIPs/HIELs should not add to students' credit loads but should be folded into existing curricula. For example, many internships and work in faculty research labs carry credit toward the major, as do capstone projects.

In Chapter 6, recommendation 6.9 calls on each of the Rutgers–New Brunswick schools to establish a requirement that every new student successfully complete one course from an approved menu of transition-focused courses approved as HIPs. We recommend that more data be collected on current participation in HIPs targeted at first-year and first semester transfer students to determine our current capacity to meet the demand such a requirement would generate. In addition, we recommend that data on who currently takes a first-year HIP and their subsequent success be assembled. In addition, the variety of current offerings should be reviewed to determine if they meet, or can be modified to meet, the learning outcomes for a transition course. We are mindful of the differential impact this requirement may have on our diverse student body, including part-time and non-traditional students.

The 2016 survey of Big Ten peers in the Rutgers–New Brunswick First-Year Experience Task Force Report indicated that only one of the 11 responding universities had a mandatory first-year seminar. Penn State attempted to institute a mandatory seminar but reported logistical issues, and instead a broad range of opportunities across schools were cobbled together. The others, not including Purdue, offer a variety of optional first-year seminars (First-Year Experience Task Force Report, 2016, p.35). (See Appendix C for the First-Year Experience Task Force Report.)

A more recent sampling of the schools that we compete with for first-year students reveals that [University of Maryland, College Park](#) has a first-year book program; [New York University](#) has a first-year seminar program for students in the College of Arts and Sciences which it describes as the “centerpiece of students' first-year academic experience” while noting that “enrollment is limited;” [University of Delaware](#) offers a range of first-year seminars and a common read, though it is unclear whether they are required; [Penn State](#) now requires a 1-credit first-year seminar; [Purdue University](#) offers, but does not require, a first-year undergraduate research program, and some departments may offer first-year seminars; [University of Wisconsin](#) provides a FIGS option that combines a small seminar with two linked classes; [University of Michigan College of Literature, Science, and the Arts](#) offers a range of first-year seminars that do not seem to be required.

Recommendation 4.2. To ensure that the courses, programs, and practices labeled as HIPs/HIELs at Rutgers–New Brunswick deliver on their promise to increase retention, promote timely graduation, and ensure our students are well equipped for post-graduation success, we recommend that a Central HIP

Committee of faculty, student affairs professionals, advisors, etc., be created to vet and curate HIPs/HIELs offered to Rutgers–New Brunswick students.

Currently, Rutgers–New Brunswick offers a diverse set of opportunities that are not well-coordinated, vetted, or uniformly promoted, nor is there a mechanism for identifying gaps in offerings. Responsibility for administrative support for the Central HIP Committee at Rutgers–New Brunswick would need to be assigned to a particular office or unit; suggestions include the new Institute for Teaching, Learning, and Inclusive Pedagogy or the Office of the Vice Provost for Undergraduate Education. This Central HIP Committee should also develop and oversee an assessment plan.

Recommendation 4.3. Drawing from the scholarly literature, the subcommittee recommends that the Central HIP Committee employ a rubric to vet existing programs, to guide any recommendations for modification to fit HIP/HIEL criteria, and to support the development of new HIPs and HIELs. Criteria should include:

- Articulated and assessable learning goals
- Sustained structured interactions with a faculty member, advisor, supervisor, or peer mentors
- Critical reflection and/or integrated learning and frequent feedback
- Incorporation and affirmation of diverse perspectives
- Real-world application and/or alignment with career goals

See Appendix K for “Suggested Template for Review of High-Impact Practices and High-Impact Experiential Learning Opportunities.”

Recommendation 4.4. To ensure that our students benefit from HIPs/HIELs, we recommend that materials (a website, digital assets, print material) should be developed to help students, parents, faculty, advisors, and staff understand the benefits of HIPs, the full range of available HIPs/HIELs, and information on how students can access them at Rutgers–New Brunswick. HIPs/HIELs should also be incorporated into Curriculum Maps.

Currently, the various first-year and transfer seminars are not coherently marketed as such. Students often learn too late about missed opportunities. Information is scattered across multiple web pages with no central directory. Rather than just a static list, an interactive page that allows students to filter by interests may be preferable. In addition, appropriate HIPs/HIELs should be included in the Curriculum Maps recommended in Chapter 6.

Recommendation 4.5. To ensure that the courses, programs, and practices labeled as HIPs/HIELs at Rutgers–New Brunswick deliver on their promise, we recommend the development of a system for assessment and outcome reporting.

Each HIP/HIEL should conduct its own program-level assessment under the broad oversight of the Central HIP Committee. The Central HIP Committee should also use data from Institutional Research to assess correlations between participation and retention, timely graduation, and post-graduate success; these results should be used to identify which HIPs/HIELs merit the investment of faculty, staff, and student time and fiscal resources in a time of budgetary austerity.

Recommendation 4.6. We recommend that Rutgers–New Brunswick improve the structural support of experiential learning opportunities to enable units to categorize and monitor participation in HIPs /HIELs.

As a first step, the Office of Academic Scheduling and Instructional Space should be engaged to introduce additional course mode codes, such as the existing internship course mode, to enable academic units to categorize and monitor participation in credit-bearing high-impact academic-based experiential education activities (e.g., research, service-learning, and fieldwork). Furthermore, Rutgers–New Brunswick should adopt a provost office code, similar to that used by Rutgers–Newark, for experiential learning-related courses not affiliated with a specific school. These courses should undergo evaluation and approval by the Central HIP Committee recommended above (Recommendation 4.2) This change will facilitate the integration of co-curricular experiences offered by central units into coursework for no credit or elective credit.

Recommendation 4.7. We recommend that Rutgers–New Brunswick take appropriate steps to promote equitable access to career preparation and experiential education resources for all students.

Crucial steps would include:

- Collaborating with relevant governing bodies to replace the current summer tuition credit model with an administrative fee which would cover operating costs for summer internship courses and other for-credit experiential learning; and
- Working with faculty members from each school to integrate career preparation and experiential learning options into their current curriculum without increasing the number of credits required for graduation to minimize disparities between students who receive this through established curricula and those who must seek it independently.

Recommendation 4.8. We recommend that Rutgers–New Brunswick provide opportunities for students to access meaningful on-campus employment opportunities as a means for students to earn a wage while accessing professional development resources.

This can be facilitated by expanding the existing [On-campus Work Experience Network \(OWN\)](#), coordinated by Career Exploration and Success and Enrollment Management, to all Federal Work Study (FWS) students. This would include:

- Requiring all on-campus departments accepting FWS funds to have their FWS student employees participate in at least one OWN-sponsored professional development workshop per year from a menu of options using allocated FWS hours;
- Requiring new FWS supervisors to complete the OWN-sponsored supervisor training; and
- Incorporating career readiness competencies into a prescribed performance review and development meetings between supervisors and FWS student employees.

Additionally, to provide more opportunities for FWS students, the connection between FWS students and employment opportunities should shift from a matching process managed universitywide to an application and interview process facilitated by Rutgers–New Brunswick's Handshake Platform, allowing FWS students to engage in coordinated research with faculty and off-campus non-profit employers within federal regulations. To support this initiative, Career Exploration and Success should form a

committee of representatives from different employment units, including at least one direct supervisor of students conducting undergraduate research, and FWS students¹.

Learning and Living-Learning Communities

Recommendation 4.9. We recommend that Rutgers–New Brunswick establish Discovery First-Year Neighborhoods on College Avenue, Busch, Livingston, Douglass, and Cook campuses, to include residential students and affiliated commuter students.

Discovery First-Year Neighborhoods may exist as a single residence hall or a cluster dedicated to the first-year experience and student success. They would help students establish themselves within a cohort community and the broader campus community. (See Appendix L for possible locations of the neighborhoods.)

To minimize the gap in experience between residential and commuter students and to foster shared experiences and community, commuting first-year students would be assigned to a Discovery First-Year Neighborhood and offered additional, commuter-specific programming and outreach. This practice would also connect commuter students to a community on campus and help them achieve a greater sense of belonging. Outreach would include commuter student parking, community building, communications, and academic/resource events. Including commuter students in the Discovery First-Year Neighborhoods will also allow the leveraging of existing supports for commuter students provided by the very active [Rutgers Commuter Student Association](#).

Recommendation 4.10. We recommend that each neighborhood have a “Faculty Lead” who will provide collaborative leadership for and oversight for the functioning of their Discovery First-Year Neighborhood, and that each neighborhood include live-in faculty.

Faculty Leads would convene the principals from their neighborhood; work with Residence Life to develop living and learning programs within their community; establish collaborations with academic schools on their campus (e.g., SoE on Busch campus); and oversee student success programming for their residential and commuter students.

Live-in faculty will serve under the Faculty Lead, reside in the Discovery First-Year Neighborhoods, contribute to the life of each community, and assist in achieving the overarching goals of Discovery Advantage. Research has shown that in studies of engagement, learning, and retention, faculty involvement positively affects residence hall students’ academic engagement, sense of belonging, perception of the institution’s climate, and overall satisfaction (Frazier & Eighmy, 2012). Thus, faculty involvement in residence halls can be a catalyst for student success and retention (Engberg & Mayhew, 2007).

¹ This would take some time to implement correctly and will require the authority to run the Rutgers–New Brunswick FWS program differently. To make something like this happen, we need an enforcement mechanism and a way to track student participation in the program. The FWS program provides a remarkable enforcement mechanism in that we can control whether a department has access to the funding associated with each FWS student. We would need to change how organizations are approved to hire FWS students.

Recommendation 4.11. We recommend that each neighborhood have an on-site “Student Success Advisor(s)” who would serve as an immediate point of contact for students affiliated with a Neighborhood.

Success Advisors would be generalist advisors who would be trained in academic and career advising, student success strategies, and engagement opportunities. Student Success Advisors onsite would serve not only as an immediate point of contact for students affiliated with a Neighborhood, but also as a gateway to campus resources so as not to be duplicative. Many universities have adopted localized advising models because of the convenience they provide to students (e.g., academic advising in residence halls). One research study highlighted that advising offered in LLCs significantly impacted students participating in educational programs (Arms et al., 2008).

Recommendation 4.12. We recommend that each Discovery First-Year Neighborhood have a *ScarletWell* Counselor who will serve as an embedded counselor and collaborative coordinator of wellness activities (see Appendix D for more information on *ScarletWell*).

ScarletWell in Residence will include embedded mental health counseling, health education programming inclusive of relationship violence awareness, mindfulness practices, and recreation opportunities. Given the significant focus on college student mental health over the past 10 years, Discovery First-Year Neighborhoods present a tremendous opportunity to connect first-year students to the extensive support resources available in New Brunswick. *ScarletWell* in Residence would apply a holistic framework to student outreach, support, and engagement to help students develop general awareness about health-related issues, develop help-seeking and bystander intervention behaviors, and be inspired to participate proactively in mental and physical health activities, many of which are already provided through CAPS and Recreation. *ScarletWell* in Residence will build upon and implement New Student Orientation messaging that uses a wellness framework to assist students with their transition to Rutgers–New Brunswick. Each Discovery First-Year Neighborhood would have a *ScarletWell* counselor who will serve as an embedded counselor and collaborative coordinator of wellness activities.

Recommendation 4.13. We recommend that each Discovery First-Year Neighborhood include a series of LLCs and thematic communities that will create smaller cohort experiences for students.

Each proposed neighborhood will host between 650 to 1,400 students, and it will be necessary to make the communities feel smaller and welcoming. LLCs will provide students with an excellent opportunity to self-select into smaller communities of academic, career, and personal interests. These communities will provide diverse ways to develop new learning opportunities for students in partnership with the schools, provide community-specific supports (e.g., Posse Scholars living together), and, more importantly, allow choice for incoming students—a hallmark of the Rutgers–New Brunswick community. As noted above, studies have shown that LLCs can help advance the learning and student success outcomes that Discovery Advantage seeks to achieve for first-year students, including engagement with faculty and peers and a sense of belonging.

Recommendation 4.14. We recommend that each Discovery First-Year Neighborhood develop a residential programming model grounded in the concept of civic engagement.

The programming models will focus on the following subthemes: Common Good, Beloved Community, “Where We Live, Learn, and Play” (New Brunswick/Piscataway), and Campus Citizenship. This focus will

serve as a foundation for helping students understand Rutgers–New Brunswick’s institutional values and those of its host communities and inspire students to make a difference on campus and beyond. The programming model will be targeted at both residential and commuter students through the First-Year Discovery Neighborhoods but also through other campus programming efforts (e.g., commuter student programming through the Student Involvement and Leadership Office, Student Volunteering Programs, etc.).

Recommendation 4.15. We recommend that each Discovery First-Year Neighborhood develop a peer mentor program, whose mentors will assist with advising, mentoring and success coaching, community development, and programming and outreach.

When faced with challenges, many students are more likely to confide in their fellow students than in faculty or staff. Rutgers–New Brunswick’s peer-based programs can be leveraged in proposed neighborhoods to assist with advising, mentoring and success coaching, community development, and programming and outreach. These peer opportunities can be developed to be high-impact learning experiences. Ideally, rising sophomores will want to serve in these peer leadership roles to help their neighborhood and emulate the peer advisors who helped them. While the research on the efficacy of peer mentoring is mixed, studies suggest it can contribute to student retention and satisfaction (Lane, 2020).

Recommendation 4.16. We recommend that each Discovery First-Year Neighborhood have dedicated spaces for studying, activities, and wellness.

Benefits include more engagement in collaborative learning and enriching student-student and student-faculty interactions. This would require new capital projects and upgrades to existing residential facilities.

Recommendation 4.17. We recommend that each Discovery First-Year Neighborhood have an Engagement Center, a designated location for students seeking help with questions, concerns, advising, and connecting with in-residence faculty.

Currently, Residence Life Coordinators do not have offices in the residence halls they oversee but function from a central location on each campus. This arrangement has been a true impediment in our community development efforts, so having a physical presence within each Neighborhood will be key to the model’s success. The following roles would be in the Neighborhood Engagement Centers: Faculty Lead, Faculty In-Residence, Residence Life Coordinator/Hall Director, Success Advisor(s), Wellbeing Counselor/Coordinator, Learning Coach(es), and select Peer Mentors. The Faculty Lead would provide coordinating leadership for the collaborative Neighborhood success team. These sites could be created by, for example, repurposing a first-floor residential wing in a particular residence hall or as part of a new residential capital project. The recommendation outlines examples of resources that could be reflected in the Neighborhood Engagement Centers, but the services actually located there will be based on needs assessments, planning between administrative areas (e.g., Undergraduate Education and Student Affairs), and other considerations (e.g., budgetary implications, viability of redeployment of existing services, duplication, etc.).

VII. Conclusions and Next Steps

High-Impact Practices

HIPs/HIELs that meet the criteria outlined above have been shown to increase student success by increasing retention, promoting timely graduation, and preparing students for post-graduation success. Many of the next steps outlined below should be taken on by the new Central HIP Committee and the administrative staff supporting it.

- Incorporate additional information from focus groups and determine what questions have yet to be asked.
- Conduct further research on models at other institutions to understand how HIPs are organized, administered, and evaluated.
- Request data regarding first-year students with GPAs below 2.0 and identify involvement in initiatives that support academic success and retention, including participation in a first-year seminar and a second semester academic success seminar.
- Update the list of possible HIPs targeted at first-year and first semester transfer students:
 - Create a first year/semester assessment rubric that adds the recommended learning outcomes for a new student transition course to the HIP/HIEL rubric; and
 - Assess these courses using the rubric to determine whether each meets the criteria and learning outcomes.
- Work with Institutional Research to collect data on
 - Current participation in possible HIPs targeted at first-year and first semester transfer students to determine our current capacity to meet the demand a requirement would generate;
 - Who currently takes a first-year HIP, and who does not, and whether levels of participation in HIPs are lower among any specific population (e.g., students from underrepresented minority groups or first-generation students); and
 - Correlations between successful participation and the goals of retention, academic success, and timely graduation; determine if they meet, or can be modified to meet, the learning outcomes for a transition course.
- Conduct a similar study to assess existing HIPs/HIELs that target second-year and transfer students.
- Conduct a similar study on existing HIELs.
- Develop consistent language to be used about HIPs/HIELs: why they matter, what they are, and how students can learn about them and fulfill the recommendations for participation. It will be important to have standard language about whether this is a “recommendation” vs. a “requirement.”
- Assess the full landscape of HIPs/HIELs at Rutgers–New Brunswick. Questions to address include:
 - How/where is language regarding “high-impact practices” used?
 - What is the current understanding of HIPs/HIELs and the research that supports them, and where are opportunities to broaden understanding?
 - What courses/programs exist that may be preliminarily identified as HIPs or HIELs based on the criteria outlined in the rubric?
 - Develop a preliminary list of curricular and co-curricular initiatives that fit the criteria and map them across class years and target populations. Identify gaps where new HIPs/HIELs may be needed to accommodate the numbers of students who want to be

involved, the subject matter that HIPs/HIELs cover, the types of experiences involved, etc.

- Determine opportunities for sharing and promoting information consistently to students, parents, faculty, and staff.
- Integrate questions into the post-graduation survey conducted by Career Exploration and Success to capture the impact of HIPs/HIELs.

Learning and Living-Learning Communities

In the coming months, the Living Learning Communities workstream will conduct physical and virtual site visits with peer and aspirant institutions. On a parallel track, the workstream will begin to evaluate areas on the Rutgers–New Brunswick campuses that might serve as effective sites for new residential communities. This will include ranking locations for suitability based on existing amenities and outstanding needs and identifying which residence halls might be best suited for a possible pilot program. What ultimately emerges will be unique to Rutgers–New Brunswick, given our historic and geographical landscape.

Specific next steps include:

- Further evaluate each of the identified locations for Discovery First-Year Neighborhood suitability.
- Continue to discuss and shape the emerging model(s).
- Advance the discussion and modeling for non-residential first-year communities.
- Discuss how the Honors Residential College and Douglass Residential College will align with the emerging Neighborhood model. What will be some baseline offerings or commitments that would cut across all three? Discuss also whether any other first-year honors communities will continue and how (e.g., SAS).
- Further develop plans for the location of LLCs in each neighborhood.
- Develop plans for residential experiences for upper-class students, in particular second- and third-year students. What will be the offerings after the first-year experience? How about transfer students? Explore the suitability and adaptability of the Neighborhood model for upper-class students.

Chapter 5 | Enhancing Student Retention: Financial Aid Policies and Procedures

Many factors contribute to student retention and a sense of belonging on campus. Although retention is often associated with academic success, financial considerations also affect retention, and many students who withdraw from the university cite financial issues as a factor. Thus, this chapter considers modifications to financial aid policies and procedures that will enhance student retention.

I. Charges and Expected Outcomes

Charges

- Leverage existing financial resources and explore new models, including associated policies and practices impacting registration and retention to help students graduate on time and with minimal debt.

Expected Outcomes

- A plan for financial models that enable students to successfully complete their undergraduate careers.
- A plan to develop retention and registration policies and practices that ensure student retention and success.

II. Introduction and Context

Financial aid plays an integral role in Rutgers–New Brunswick’s mission to keep quality education within reach of academically qualified students. Access and affordability are paramount in the pursuit of higher education as the cost of a degree outpaces the availability of aid resources. It is vital to ensure students and families have the tools and resources necessary to make informed financial decisions throughout their time at Rutgers.

Approximately 70 percent of Rutgers–New Brunswick students receive some form of financial aid. In the 2021-2022 academic year, the Office of Financial Aid at Rutgers–New Brunswick disbursed more than \$568 million in aid. The office awarded more than \$417 million to undergraduate students, with an average award of \$16,456 (greater than the cost of current in-state tuition). Approximately 15 percent of first-year students were offered merit-based scholarships. Graduate students were awarded more than \$150 million in aid with an average award of \$18,438.

As an investment in the university’s in-state talent, two new “last dollar” financial aid programs were introduced and implemented at Rutgers–New Brunswick. The state of New Jersey introduced the [Garden State Guarantee](#) (GSG) program, which covers the tuition and fee costs for qualified New Jersey undergraduate students in their third and fourth year of study, after all other aid is applied. Rutgers–New Brunswick expanded the GSG by implementing a comparable gap program for students in their first and second years—the [Scarlet Guarantee](#) (see Appendix D for more information on the Scarlet Guarantee). Both programs are transformational in that a Rutgers–New Brunswick degree will be more accessible to low- and middle-income families.

To further support students and families, phase one of a new financial literacy program, ScarletSense, was launched in spring 2022. This resource instructs and empowers students to make sound financial decisions early in life and helps them prepare to be financially capable, savvy consumers in the future. These combined financial assistance resources collectively reduce reliance on student loans to cover unmet costs and allow students to primarily focus on their academics instead of educational financing. However, “financial reasons” remain a top reason for withdrawal from the university, impacting retention and necessitating continued improvement in this area.

III. Benchmarking

Rutgers University’s average graduation rates are mid-range among the Big Ten Academic Alliance schools, but lag those of our peer aspirants (see Figure 5.1; see also Appendix M; see also Glossary in Appendix B for “Big Ten Academic Alliance” and “peer aspirants”). For example, for the entering cohort of 2014, the four-, five-, and six-year graduation rates were 66.9 percent, 81.4 percent, and 84.4 percent, respectively, compared to 76.1 percent, 87.8 percent, and 89.5 percent for peer aspirants (data retrieved from the Integrated Postsecondary Education Data System [IPEDS]).

However, Rutgers–New Brunswick has the greatest enrollment of Pell recipients among its Big Ten counterparts (see Table 5.2). Pell grants are federal need-based grants provided to low-income students and provide a measure of the overall financial need of our student population (see Glossary in Appendix B for “Pell grants”).

Figure 5.1. Big Ten school graduation rates

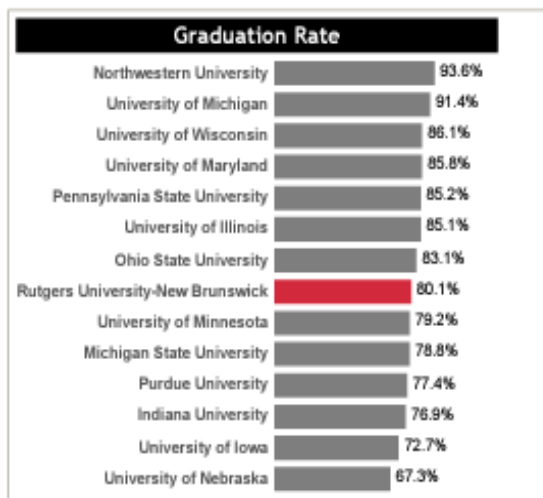
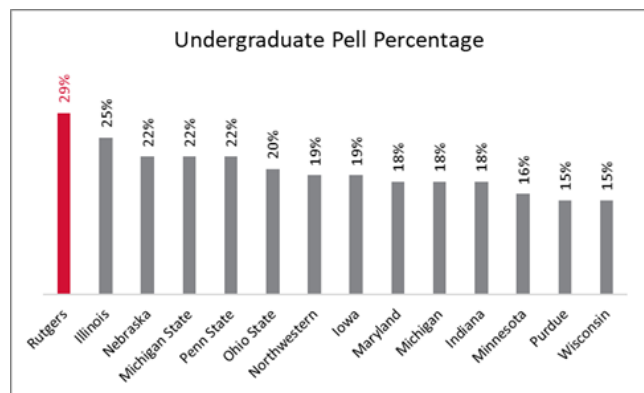


Figure 5.2. Big Ten Pell enrollment percentages, 2021



Although Rutgers–New Brunswick retains and graduates all students at rates in the mid-range compared to other Big Ten institutions (see Figure 5.3), disparities in outcomes exist between Pell recipients and non-Pell recipients (see Table 5.1), as well as between students by race/ethnicity (see Table 5.2). It is important to note that the gaps by Pell grant eligibility and race are larger for four-year graduation rates than six-year graduation rates. This has important implications for equity gaps in the costs of completing a degree. Appendix N shows that average debt is much higher for students who take longer to complete their degree.

Figure 5.3. Big Ten six-year graduation rates by Pell status, 2021

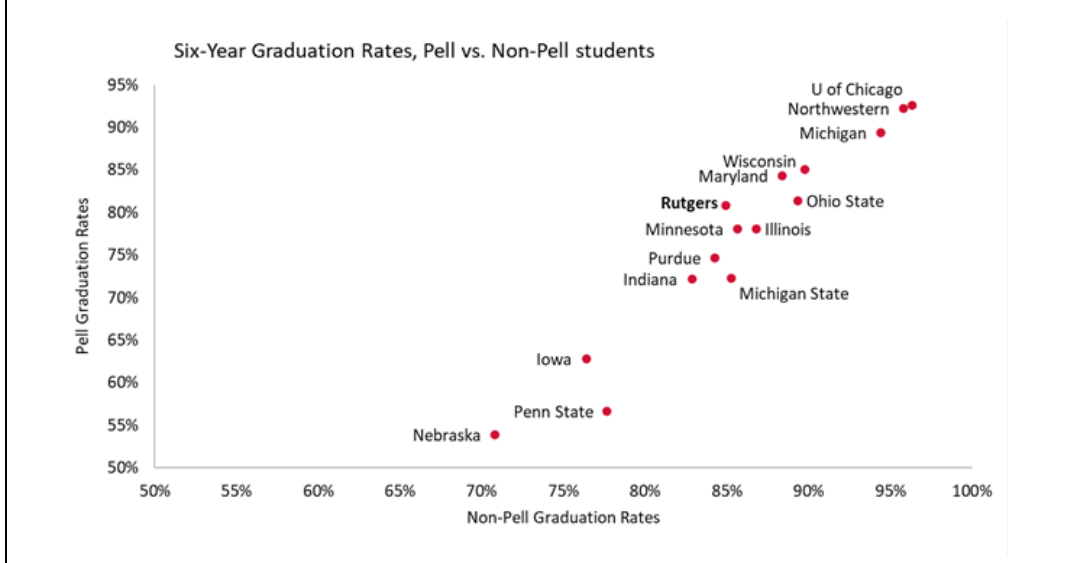


Table 5.1. Rutgers–New Brunswick Incoming Students by Pell Status, Fall 2018-Fall 2022

Rutgers–New Brunswick Incoming Students by Pell Status, Fall 2018-Fall 2022:

	2018	2019	2020	2021	2022
First-year	27.2%	24.4%	26.2%	27.4%	24.8%
Transfer	37.2%	36.6%	36.4%	34.4%	33.0%

Rutgers–New Brunswick First-Year Retention Rates by Pell Status, Fall 2016-Fall 2020 Cohorts

	2016	2017	2018	2019	2020
Pell Recipient	92.8%	92.3%	91.2%	93.6%	91.8%
Non-Pell Recipient	93.8%	93.4%	93.4%	93.0%	94.3%

Rutgers–New Brunswick Four-Year Graduation Rates by Pell Status, Fall 2011-Fall 2015 Cohorts

	2011	2012	2013	2014	2015
Pell Recipient	52.6%	54.5%	54.7%	59.1%	59.3%
Non-Pell Recipient	63.3%	64.2%	68.9%	70.2%	70.9%

Rutgers–New Brunswick Six-Year Graduation Rates by Pell Status, Fall 2011-Fall 2015 Cohorts

	2011	2012	2013	2014	2015
Pell Recipient	77.0%	78.2%	79.8%	82.8%	80.8%
Non-Pell Recipient	81.6%	81.3%	85.3%	85.1%	84.9%

Table 5.2. Rutgers–New Brunswick Retention and Graduation Rates by Race/Ethnicity

Rutgers–New Brunswick First-Year Retention Rates by Race/Ethnicity, Fall 2016-Fall 2020 Cohorts

	2016	2017	2018	2019	2020
Asian	95.7%	95.4%	95.0%	95.6%	96.4%
African American	92.9%	91.7%	92.1%	94.6%	93.9%
Latinx	90.7%	91.3%	88.8%	92.0%	89.6%
White	92.9%	91.8%	92.0%	91.6%	92.6%

Rutgers–New Brunswick Four-Year Graduation Rates by Race/Ethnicity, Fall 2011-Fall 2015 Cohorts

	2011	2012	2013	2014	2015
Asian	64.7%	66.8%	69.4%	71.2%	73.1%
African American	50.5%	49.3%	54.7%	56.6%	58.9%
Latinx	45.0%	46.1%	53.2%	50.5%	53.8%
White	63.8%	66.1%	67.7%	71.7%	71.0%

Rutgers–New Brunswick Six-Year Graduation Rates by Race/Ethnicity, Fall 2011-Fall 2015 Cohorts

	2011	2012	2013	2014	2015
Asian	85.4%	86.0%	88.0%	89.5%	88.9%
African American	73.6%	72.7%	79.8%	77.2%	75.8%
Latinx	72.8%	73.5%	78.7%	76.0%	75.7%
White	80.4%	81.5%	83.5%	85.0%	84.6%

Student Withdrawal Data

More than 1,000 students withdraw from Rutgers–New Brunswick each term. Withdrawal data is collected, and students can submit a reason for their withdrawal (see Tables 5.3 and 5.4). However, withdrawal processes are not consistent across schools. Targeted outreach and intervention can be embedded into the withdrawal process to aid and potentially retain students.

Table 5.3. Total Withdrawals Spring 2022-Spring 2023

	Student Count
Spring 2022	1151
Fall 2022	1256
Spring 2023	1050

Table 5.4. Top Reasons for Withdrawal Spring 2022-Spring 2023

	Other - Personal	Health – Mental (valid 2/22)	Transfer	Financial - Family
Spring 2022	515	118	61	134
Fall 2022	291	274	228	91
Spring 2023*	219	267	132	78

**In Spring 2023, “anticipation of poor academic performance” was also cited by 87 students.*

Oracle Student Financial Planning (OSFP) System

Rutgers University has recently transitioned to the Oracle Student Financial Planning (OSFP) system for financial aid (see Glossary in Appendix B for “Oracle Student Financial Planning”). There have been many

challenges throughout the implementation of this system. The Division of Enrollment Management for the New Brunswick campus, which has been on the frontlines of dealing with these challenges, conducted informational interviews with peer institutions that also work with the system to understand barriers and to brainstorm potential solutions. Additional information can be found in Appendix O of this report.

Staff Focus Group Feedback

The Strategic Retention and Financial Aid subcommittee convened in-depth focus groups of support staff in the offices of the Dean of Students, Financial Aid, and One Stop Student Services Center (One Stop). These focus groups helped the subcommittee to better understand the ways students experience and perceive Rutgers–New Brunswick’s policies and practices that impact registration, retention, and graduation, particularly concerning enrollment and financial aid (see Appendix E).

Key findings:

- Many of today’s students face personal and financial challenges that are greater than those faced by prior students (such as family responsibilities/serving as full-time caregivers, health challenges, balancing school and work, challenges unique to first-generation students, etc.).
 - These issues impact incoming student yield, continuing student retention, student mental health, graduation rates, and institutional reputation.
- Challenges surrounding the implementation of the Oracle Student Financial Planning (OSFP) system have created difficulties for students (such as incorrect refunds, untimely or incorrect aid disbursement, and in some cases no resolution on packaging/disbursement after students spent months requesting support from University Enrollment Services and the Office of Information Technology). Specific challenges outlined by staff include:
 - The One Stop and Financial Aid teams expressed concerns regarding low office morale, overworked staff, safety issues from escalated student/family interactions, and skewed student perceptions of their department.
 - Staff reported feeling unappreciated, robotic, and frustrated.
 - Staff reported increased job difficulty, limited ability to resolve student issues, and increased frustration among staff, students, and families.
 - Staff reported they perceive University Enrollment Services (UES) as lacking interest in collaborative planning.
 - Staff cited difficulty voicing concerns, lack of inclusion in decision making, long service ticket delays and poor resolution, limited system access and feelings of obsolescence, lack of control, diminished morale and patience, and lack of support and accountability.
- Staff within One Stop and the Office of Financial Aid identified the following areas for improvement:
 - Provide appropriate system access to Enrollment Management staff.
 - Streamline information and maintain consistency.
 - Communicate system issues with clarity as they arise.
 - Consider adopting a better, integrated ticketing system (e.g., Salesforce).

Additional information can be found in Appendix E of this report.

IV. Current Challenges

- The Oracle Student Financial Planning (OSFP) System: The implementation of this system during 2022-23 has caused system challenges that have greatly affected the student experience, particularly with the disbursement of financial aid and refunds (see Glossary in Appendix B for “Oracle Student Financial Planning”). It has also created unprecedented challenges for University Enrollment Services, the Office of Financial Aid, the One Stop Student Services Center, and Student Accounting. As of March 2023, the system has created:
 - Negative impact on receivables (e.g., ability to collect tuition).
 - Outstanding balances for Rutgers–New Brunswick alone are \$11.6 million (+254 percent) more for Fall 2022 vs. Fall 2021 and \$13.2 million (+137 percent) more for Spring 2023 vs. Spring 2022.
 - An increase of 8,804 (+7 percent) in the number of student inquiries handled between August 1, 2022, and April 30, 2023 (nine months) compared to the same period a year earlier.
 - An increase of 10 percent in inquiries and escalations from One Stop to Financial Aid.
 - Generation of more than 5,500 service request tickets that were unresolvable at the campus level between July 1, 2022 and March 7, 2023.
 - As of March 7, 2023, the average resolution time for these tickets was 34 days.
 - As of March 7, 2023, the average age of an unresolved ticket was 65 days.
 - Negative impact on student satisfaction.
 - Down as much as 15 percent in overall satisfaction levels of their One Stop experience since OSFP implementation.
 - Negative impact on staff satisfaction and morale.
 - Turnover of 12 (of 33) fully trained, front-line, full-time staff members for the One Stop and Financial Aid Office (New Brunswick) since OSFP was implemented.
 - Negative impact on student and staff mental health.
 - Negative impact on student experience; disbursement challenges resulting in student food and housing insecurity.
 - Negative impact on institutional reputation, undermining the tremendous effort and great strides the university has taken to improve the student experience.
 - Negative impact on alumni relations and potential future giving.
- Financial Hardship Submissions:
 - The Office of Financial Aid has experienced a 48 percent increase in Change in Family Circumstance (CIFC) submissions and a 56 percent increase in appeals for additional financial support between the 2019-20 and 2020-21 academic years.
 - These increases are expected to be further exacerbated when Rutgers–New Brunswick joins the Common Application for admission, and with the projected growth of the Garden State Guarantee (GSG) and Scarlet Guarantee financial aid programs.
 - With current staffing levels, the financial aid application review process can take between four to six weeks. Families see this as an unreasonable amount of time to await an outcome, but it is expected to continue increasing given the concerns outlined above.

- [FAFSA Simplification Act Implementation](#): The FAFSA Simplification Act represents a significant overhaul of the processes and systems used to award federal student aid starting with the 2024-25 award year. The act will affect the Free Application for Federal Student Aid (FAFSA) form, needs analyses, and policies and procedures within every state that uses FAFSA data to award state grant aid and every institution—including Rutgers–New Brunswick—that participates in federal student aid programs (see Glossary in Appendix B for “Free Application for Federal Student Aid”). Major changes required by the new law include:
 - Replacing the Expected Family Contribution (EFC) with the Student Aid Index (SAI): Students and families will see a different measure of their ability to pay for college and experience a change in the methodology used to determine aid. The new formula removes the number of family members in college from the calculation, allows a minimum SAI of -1500, and implements separate eligibility criteria for Federal Pell Grants. (See Glossary in Appendix B for “expected family contribution” and “student aid index.”)
 - Modifications to Family Definitions in FAFSA Formulas: A student’s family size will align more with what was reported on the student’s/parent’s tax return.
 - Expanded Access to Federal Pell Grants: The act will expand the Federal Pell Grant to more students and link eligibility to family size and the federal poverty level. Incarcerated students will regain the ability to receive a Federal Pell Grant, and lifetime eligibility will be restored to students whose school closed while they were enrolled or if the school is found to have misled the student.
 - Streamlining the FAFSA form: The form will include a significantly reduced number of questions, use a data exchange with the IRS to calculate SAI and Federal Pell Grant eligibility (thus eliminating the need for families to provide tax information), remove questions about Selective Service registration and drug convictions, and add questions about applicants’ sex, race, and ethnicity.
 - Ultimately, the FAFSA Simplification Act is intended to increase transparency and streamline processes for students, families, and institutions. However, its initial implementation is expected to cause challenges as institutions lack awareness of timeline updates and other important, nuanced details.

- Satisfactory Academic Progress (SAP) Annual Evaluation: We have identified significant concerns regarding Satisfactory Academic Progress (SAP) requirements and probationary periods and have found that students and staff alike do not fully understand them (see Glossary in Appendix B for “satisfactory academic progress”).
 - The plans are not very clear; additionally, students are not issued warnings and thus do not understand the severity and implications of their status.
 - Unsatisfactory evaluations can result in a student’s complete loss of financial aid support, requiring many students to pay out of pocket or utilize private loans, thereby increasing student debt.
 - Additionally, students who choose to transfer or withdraw must enter federal loan repayment.
 - At the end of the 2020-2021 academic year, 465 financial aid recipients were identified as not meeting the SAP standards to continue to receive funding. Students who do not meet SAP requirements must appeal to have their financial aid reinstated, and an academic plan is required, which must be completed in consultation with a school-based academic advisor.

- In addition to the 465 students flagged as not maintaining SAP standards for the first time, 442 continuing students were on an active academic plan at the beginning of the 2020-2021 academic year but failed the requirements of their plan.
- At the beginning of the 2021-2022 academic year, 778 aid recipients were on an approved academic plan and, therefore, eligible to continue receiving financial aid.
- **Withdrawals or Lack of Pre-Registration:**
 - A total of 1,151 students withdrew from the university in Spring 2022; 1,256 students withdrew in Fall 2022; 1,050 students withdrew in Spring 2023.
 - Students cite mental and/or physical health, family and/or financial responsibilities, transfer, anticipation of poor academic performance, and other/personal issues as the top five reasons for withdrawal; however, there is little coordinated communication across the university with these students to seek ways to potentially re-engage or prevent withdrawals with targeted intervention.
- **Student Experience Challenges Expected to Increase with Class Size:**
 - Despite the considerable progress we have made in recent years, persistent factors continue to negatively impact the student experience. The university greeted its largest incoming class in history in Fall 2022 and expects a similar class size in 2023. We must protect our ability to ensure quality support for such large numbers of students across all areas of enrollment management.

V. Goals

Strategic Objective: To achieve the overarching charge by removing barriers to on-time graduation, thereby minimizing student cost. This objective can be met by the following measurable goals:

- Provide students with consistent deadlines and processes regardless of their school of matriculation via information shared at New Student Orientation annually. In collaboration with Advising, ensure consistency in advising practices regarding enrollment and re-enrollment.
- Increase understanding among faculty, staff, and students of the Satisfactory Academic Progress (SAP) requirements and encourage students' adherence to SAP which will help prevent financial aid loss via the One Stop Certification Initiative (outlined in the "Recommendations" section).

VI. Initial Recommendations

Recommendation 5.1. We recommend continued focus on Oracle Student Financial Planning (OSFP) challenges, and that steps be taken to avoid similar issues moving forward (see Glossary in Appendix B for "Oracle Student Financial Planning").

These challenges represent issues so detrimental to our students that we believe this should be our highest priority. In addition, Rutgers–New Brunswick needs to ensure that, moving forward, the institution embraces collaboration, transparency, and feedback when selecting software vendors. The process should include input from staff and faculty with content-level expertise. It should also include transition periods when migrating to new systems, to ensure staff can appropriately address and resolve student inquiries, and should integrate project management support from the university Project

Management Office (PMO) to assist with organizing, tracking, and communicating system challenges and enhancement requests.

Recommendation 5.2. We recommend that Rutgers–New Brunswick begin proactive preparation for the FAFSA Simplification Act implementation.

Utilizing the [National Association of Student Financial Aid Administrators](#) (NASFAA) resources, convene a FAFSA Simplification Taskforce with representatives from across the university to prepare for the major overhaul of financial aid methodology and the downstream impacts on current and future students, including necessary system changes. Estimate the institutional budget impact of Pell Grant and Student Aid index changes; this will help ensure the fiscal strength of the university. Work with the Office of Information Technology (OIT) and University Enrollment Services (UES) to ensure OSFP supports all system changes necessitated by the FAFSA Simplification Act. Update university policies and procedures, communications and outreach, and staff training.

Recommendation 5.3. We recommend that Rutgers–New Brunswick implement improvements to the Satisfactory Academic Progress (SAP) Annual Evaluation process.

Establish further integration of financial aid and advising efforts at the university to allow for more holistic student support. Empower the Rutgers–New Brunswick Division of Enrollment Management, in collaboration with Rutgers–New Brunswick schools and the Advising and Academic Support Workstream, to notify students midyear if they are at risk of failing to meet SAP requirements and work with students to identify a path toward resolution via connections with academic, financial, and personal resources at the university. Continue to effectively promote and leverage existing financial literacy resources (ScarletSense) to educate students about various facets of financial responsibilities and strategies. Review and update the content on the current [Student Success website](#), specifically regarding financial assistance and aid, to further assist students with access to current and digestible information.

Recommendation 5.4. We recommend that Rutgers–New Brunswick implement proactive intervention to positively impact student retention.

Provide early, targeted engagement with students during the registration process; this will allow better understanding of the impediments students face, help resolve resource-related or personal issues, and prevent or reduce late registration. Publish myRutgers dashboard reminders about preregistration. Encourage school leadership to reach out to students who are not registered (a process that must begin with the regular creation of lists of such students). Embed financial aid outreach into the withdrawal process for students who indicate financial challenges. Review the widgets on the student-facing myRutgers Dashboard to ensure relevant resources are easily accessible. With the Advising and Academic Support Workstream, identify opportunities to create consistent enrollment deadlines and processes, as well as a universal undergraduate academic calendar.

Recommendation 5.5. We recommend that Rutgers–New Brunswick implement a One Stop Certification initiative to empower university partners and streamline the student experience.

The One Stop Student Services Center is implementing a One Stop Certification initiative to improve staff and faculty awareness of basic but critical registrar, financial aid, and student accounting functions and processes. The initiative will leverage gamified training sessions and badging to empower university

partners to resolve basic student issues. Currently, the promotion and deployment of these resources has been delayed due to pervasive OSFP system issues.

Recommendation 5.6. We recommend that Rutgers–New Brunswick implement a rebranding strategy to streamline web communication related to student services.

Rebrand scarlethub.rutgers.edu as onestop.rutgers.edu to align the web presence with the university’s branding and to create a unified platform for student services. Migrate student-facing student accounting information from finance.rutgers.edu/student-abc to onestop.rutgers.edu, to centralize resources and reduce student confusion. Students will experience a more user-friendly interface that aligns information with support and enhanced communication efforts.

VII. Conclusions and Next Steps

The Enrollment and Marketing Workstream charge to examine ways to improve retention is central to the overall purpose of Discovery Advantage and of the Student Success Pillar of the Academic Master Plan. Our focus on retention included an unflinching look at factors that may negatively impact the student experience, particularly those that impede students’ ability to readily and transparently access needed financial and academic support. We identified specific and detailed recommendations that will help us address these current and emerging challenges—and help Rutgers–New Brunswick establish a culture in which all students can feel confident that our institution cares about every individual’s success and is ready to focus on each student’s unique needs.

We are confident that the recommendations set forth in this report will help Rutgers–New Brunswick successfully increase retention by helping every student achieve their academic and personal goals, graduate on time with minimal cost, and join the ranks of accomplished Rutgers–New Brunswick alumni. The committee looks forward to working with the Discovery Advantage chair, the Rutgers–New Brunswick leadership, and our university community to bring these goals to fruition.

Chapter 6 | Navigating the Rutgers–New Brunswick Academic Experience

The size of Rutgers–New Brunswick and the sheer number of courses, majors, programs, and co-curricular experiences it offers are among both its greatest strengths and biggest challenges. Students and parents cite the many opportunities at Rutgers–New Brunswick as one of the factors that make it attractive, and a number of students include it as one of the factors they most like about the university. At the same time, the number of options and opportunities, which may be poorly advertised or scattered among many departments and programs, makes it difficult for students to navigate and choose among them. Compounding these issues are challenges with advising; many students (and their parents) noted that they were dissatisfied with advising. Students also noted they often did not know whom to contact about a particular question and had difficulty scheduling appointments with advisors. Unfortunately, this means many students rely on advice from other students, parents, or Reddit. Discovery Advantage workstreams have developed proposals in two targeted areas which we believe will significantly improve students’ ability to navigate the university: curriculum mapping and advising, or more broadly, academic support. Ultimately, enabling students to better navigate the university will also help improve retention and timely graduation.

I. Charges and Expected Outcomes

Charges

Curriculum Workstream: Curriculum Mapping Subcommittee

- Overview: The chancellor has charged the deans to develop “major maps” that clearly identify how our curricula lead to career pathways and graduate education and create clearly defined and transparent pathways to success to help students easily navigate the university.
- Charge: Identify areas and information that should be included in all curricular maps. Develop a plan to ensure students are introduced to these maps and able to effectively use them throughout their Rutgers–New Brunswick journey to support learning and career objectives, enrich their experience, facilitate on-time graduation, and prepare for their future beyond Rutgers.

Advising and Academic Support Workstream

- Overall Charge: Create an advising model that is inclusive of our students’ voices and adopts successful elements of existing student support services to produce scalable advising and support services for all students. Make recommendations regarding organizational structure, policies and evidence-based practices, and technological solutions to support this model.
- Organizational Structure: Establish an organizational structure that supports the goals of holistic advising and student self-discovery. This structure must ensure high quality and consistent support for all undergraduate students; facilitate the coordination of academic advising, career advising, and student support services; promote student use of major maps and other tools designed to illuminate pathways to academic and career goals; and enable students to complete their degree in a timely manner with minimal debt.
- Policies and Evidence-Based Practices: Develop coordinated academic policies and practices across schools and consistent job descriptions, training, and professional development opportunities for faculty and staff engaged in academic advising and support.

- Technological Solutions: Investigate, choose, and develop plans to implement the technological tools needed to support the holistic and coordinated care of students and to facilitate student exploration and engagement.
- Academic Support: Develop plans to implement evidence-based practices to (a) help students succeed in their courses, including proven strategies such as early alerts and notifications regarding academic progress, and (b) help instructors develop inclusive teaching skills, including supporting students who need to overcome limiting academic backgrounds.

Expected Outcomes

- A plan for curricular maps that would present all populations of students with a clear pathway to academic success.
- An advising model that permits the holistic support of all Rutgers–New Brunswick students and ensures coordination among the programs that offer academic and career advising.
- Recommendations for technological tools that will facilitate the sharing of information and the holistic advising and support of students.
- Recommendations for consistent, evidence-based practices and policies across schools that will facilitate school-to-school transfer and enable students to pursue academic goals.
- An academic orientation plan that will ensure students use curricular maps and academic support at matriculation.
- A plan for coordinated and comprehensive learning assistance that improves student academic performance, increases retention, promotes timely graduation, and reduces student debt.

II. Introduction and Context

Curriculum Mapping

A curriculum map is a powerful tool that provides students with a visual representation or a structured outline to navigate the complex landscape of an academic institution. The map can help students navigate the multifaceted opportunities and challenges within the university setting. More specifically, students can use the map to effectively guide their college experience, including academic (major/minor/study abroad); advising (general/major/minor/career); academic support; and extra-curricular, including on-campus activities as well as service and outreach activities, networking, and career development opportunities. It is expected that the map will also encourage students to seek advising, help frame advising sessions, and facilitate on-time graduation.

In Fall 2022, the Undergraduate Education Council (UEC) began discussing ways to help students navigate the curricular and co-curricular aspects of programs at Rutgers–New Brunswick. Guided by the goal of creating clearly defined and transparent pathways to success so students can easily navigate the university, this group conducted several in-person brainstorming sessions with UEC members to develop a draft curriculum map template. Additional work on the template (see Appendix Q) was conducted asynchronously via a shared document.

Carolyn Moehling, vice provost for undergraduate education, presented the UEC Curriculum Mapping template to school deans in December 2022, and it was positively received.

The plan at that time was to identify a small number of majors to pilot the map (see Appendix R).

Starting in Spring 2023, the Discovery Advantage Curriculum Mapping subcommittee has been charged to continue and build on the work started by the UEC. Part of this work involved the review of curriculum maps developed by other programs, schools, and institutions (see Appendix S).

Advising and Academic Support

“Academic support” refers broadly to the wide variety of methods, services, and resources intended to support students in pursuing their academic goals (see Glossary in Appendix B for “academic support”). Academic and career advising, learning assistance, and other support resources such as disability accommodations, are distinct but overlapping spheres within academic support (see Glossary in Appendix B for “advising” and “career advising”). The charge for this workstream focused particular attention on academic advising, learning assistance, and career preparation, but also specified an examination of the organizational infrastructure, policies, and technological tools necessary to coordinate and integrate these services and other academic supports to better serve Rutgers–New Brunswick students.

Academic Advising

Academic advising is integral to the educational mission of institutions of higher education and plays an increasingly critical role in enhancing students’ academic performance, commitment, and persistence (Habley, 1981; Tinto, 1987; White, 2015). The academic advisor is important to guiding students in decision-making and academic planning. In a recent review of the academic advising profession, Troxel et al. (2021) defined the importance of the advising role for student success:

“Academic advising is uniquely placed within the academy as a bridge between the curriculum and the co-curriculum and draws from multiple theories and disciplines to ground scholarship and practice in the field to support student success. While balancing the curricula and the goals of individual students, advisors connect students to opportunities both in and outside the classroom to help them grow and develop. An academic advisor can ensure students are apprised of meaningful opportunities related to their goals and can help them identify barriers and ways to overcome them. Quite simply, an academic advisor can be the first individual on campus who knows the unique strengths and goals of each student and can help them navigate their educational experience toward positive outcomes by identifying resources, experiences, and a broader network of advisors.”

Once organized as faculty guidance of students in the prescriptive task of class selection, academic advising emerged from the early work of Crookston (1994), who introduced developmental advising theories that conceptualized advising as a form of teaching. The new focus gave rise to professionalization and the emergence of academic advising as a field of research inquiry and practitioner development (Gordon et al., 1988). The profession of academic advising is guided by four pillars of academic advising that guide professional development and program assessment: a concept of academic advising, core values, core competencies, and the Council for the Advancement of Standards in Higher Education (CAS) principles, developed and organized primarily by NACADA: The Global Community for Academic Advising (NACADA, n.d.).

Recent research has demonstrated the positive impact of advising on the persistence of multiple student populations, including first-generation students (Swecker et al., 2013), students who are academically disadvantaged or low-income, or have disabilities and learning disabilities (Heissrer & Parette, 2006;

Ryser & Alden, 2005; Soria & Bultmann, 2014), student athletes (Brecht & Burnett, 2019), and students who are Black, Indigenous, and People of Color (BIPOC) (Museus and Ravello, 2010; Roscoe, 2015; Suárez & Beatty, 2022).

Learning Assistance

The field of learning assistance is vast and varied, but the shared goal of learning assistance programs (LAP) is, broadly speaking, to “facilitate student learning, development, and academic success...by assisting students in developing appropriate strategies and behaviors to increase learning efficiency” (Council for the Advancement of Academic Standards in Higher Education, 2017, p. 3). These programs and services can improve student retention and academic engagement as well as create supportive communities of learners on campus. For the intentions of this report and developing a shared campuswide vocabulary around the various elements of academic support, learning assistance is defined here as:

“Supportive activities beyond the regular curriculum, that promote the understanding, learning, and application of knowledge; remediation for prescribed entry and exit levels of academic proficiency; and the development of new academic and learning skills.” (Arendale, 2020)

These activities typically include services such as study skills instruction, tutoring, embedded course support, academic coaching, study groups, workshops, and self-paced instruction. They may be provided by professionals, paraprofessionals, peers, or near-peers. These services should ideally be available to all students, as all college students are on a continuum between novice and master learners, and they may be situated on different points on that continuum for different courses, skill areas, or contexts (Arendale, 2010).

It is important to note that variety is an important factor in offering quality learning assistance to all students because needs vary not only across students but also across courses. Rutgers–New Brunswick provides a wide variety of services for students, and this is a promising foundation for widespread success. Currently, however, those services are siloed and often limited to a relatively small population due to either program constraints or a lack of visibility of, and student familiarity with, the programs. More intrusive, visible, and easily accessible options need to be made available to the full Rutgers–New Brunswick student population.

The Council for the Advancement of Standards in Higher Education (2017) asserts that:

“High-quality LAP are characterized by a focus on processes and strategies of learning, intellectual development, and effective assessment of academic performance. These programs respect students’ cultures while acquainting them with the conventions, discourses, and expectations of higher education. LAP also engage faculty, staff, students, and administrators in broader conversations about academic success.” (p. 4)

Services should be designed to foster a growth mindset in students, in which they “believe that their most basic abilities can be developed through dedication and hard work” (Council for the Advancement of Standards in Higher Education, 2017). Services should also be differentiated, flexible, and assessed regularly to ensure they align with the diverse academic needs of students and keep pace with known best practices, as learning assistance is a constantly evolving field.

Several prior reports were consulted in gathering information about advising and academic support on campus (see Appendix C). In addition, the Council for the Advancement of Standards in Higher Education guidelines for learning assistance programs, the Learning Centers of Excellence standards from the National College Learning Center Association, focus groups (e.g., student, staff, and faculty), and previously collected student survey data were consulted to develop the recommendations shared within this report.

Career Preparation

The emphasis on students finding jobs after graduating from colleges and universities, as well as having developed the necessary skill sets needed for a particular career, is becoming a primary return-on-investment question for government officials, faculty members, parents, employers, and students (Lindholm et al., 2005; Pryor et al., 2012; Stolzenberg et al., 2019; Busteed, 2020; Fischer, 2022). The importance of career preparation, which includes career advising and experiential education, is underscored by a study conducted by the Higher Education Research Institute at the University of California, Los Angeles. The study revealed the primary reason students choose to pursue a college education is to secure better job prospects, with 98.4 percent of respondents considering this reason important (Stolzenberg et al., 2019). This highlights the significant role career outcomes play in students' decision-making process, emphasizing the need for universities to prioritize career preparation initiatives.

According to the Council for the Advancement of Standards in Higher Education (CAS), a high-quality career services program should provide comprehensive career development resources, offer individualized career advising and counseling, facilitate access to experiential learning opportunities, foster employer partnerships, and assess the outcomes and impact of career services (Council for the Advancement of Standards in Higher Education, 2017). These elements ensure students receive the necessary support and opportunities to explore their career interests, gain relevant experience, and develop the skills and competencies required for successful transitions into the workforce.

III. Benchmarking

Curriculum Mapping

We recognize the importance of benchmarking activities to enhance our programs and improve the educational experience for our students. To achieve this, we have conducted a thorough review of various sources to gain insights and best practices related to student journey mapping.

Our review encompassed a diverse range of sources both within Rutgers–New Brunswick as well as among our peer institutions. For example, we reviewed the Edward J. Bloustein School of Planning and Public Policy Undergraduate Roadmaps, which provide comprehensive guidance for majors such as [Health Administration](#), [Public Health](#), [Public Policy](#), [Planning and Public Policy](#), and [Urban Planning and Design](#). These roadmaps offer valuable insights into the structure and progression of academic programs.

Furthermore, we examined the curriculum maps constructed and employed by [Fisk University](#), [Queens University](#), [North Dakota State University](#), [University of California, Berkeley](#), [University of Texas, El Paso](#), [University of Utah](#), and [Virginia Commonwealth University](#). These resources serve as comprehensive guides, offering students a clear path to navigate their academic journey by outlining recommended

courses, internships, and co-curricular opportunities. By analyzing these maps, we gained valuable knowledge that informed our approach to ensuring students are equipped with the necessary skills and knowledge for their chosen fields.

Additionally, we studied the Advising Success Network's "[Student Journey Map](#)," which provides a visual representation of a student's progression through their academic program. This map enables us to better understand the student experience from admission to graduation, identifying potential pain points and opportunities for improvement.

Common elements emerged from our review of these sources. Examples of information in curriculum maps include:

- Academics:
 - Core Courses: A list of essential courses that provide foundational knowledge and skills within the academic program.
 - Major-Specific Courses: Courses that delve deeper into the specific subject matter and build expertise in the chosen major or field of study.
 - Elective Options: A range of elective courses that allow students to explore their interests, specialize within their major, or broaden their knowledge across disciplines.
 - Course Sequencing/Building Competencies: A recommended order or sequence of courses that ensures a logical progression of learning and prerequisites.
 - Credit Requirements: The total number of credits required to complete the program, including specific credit distributions across different course categories.
 - High-Impact Practices/High-Impact Experiential Learning: Includes the entire range of HIPs/HIELs discussed in Chapter 2 including Study Abroad and capstone projects, theses, or experiential learning opportunities that synthesize the knowledge and skills acquired throughout the program.
- On-Campus Involvement and Engagement:
 - Engagement with the Learning Centers and other student support resources.
 - Clubs and Organizations: Information on student clubs, organizations, and extracurricular activities relevant to the academic program.
 - Research Opportunities: Guidance on engaging in undergraduate research projects or assisting faculty members in their research.
 - Internships and Co-Op Programs: Information on internships, cooperative education programs, and experiential learning opportunities that provide real-world experience in the field.
 - Service-Learning: Opportunities for community engagement and service-learning projects that integrate academic learning with practical experiences.
- Preparation for Post-Graduation Success:
 - Internships and Co-Op Programs: Information on internships, cooperative education programs, and experiential learning opportunities that provide real-world experience in the field.
 - Career Development Resources: Access to career counseling, resume-building workshops, interview preparation, and job search strategies.
 - Alumni Network: Information on connecting with alumni who have graduated from the program and accessing their professional networks.

- Graduate School Preparation: Guidance on pursuing advanced degrees, including information on standardized tests, application processes, and relevant resources.
- Professional Skills Development: Opportunities to enhance essential skills such as communication, critical thinking, problem-solving, leadership, and teamwork.
- Networking Events: Information about networking events, industry panels, and career fairs specific to the academic program.
- Professional Associations and Conferences: Recommendations for joining relevant professional associations and attending conferences to network with professionals in the field.

Based on our research and discussions, we arrived at the following guidelines for map content and guiding principles.

Information Included in the Map

- Academics (Get the Courses You Need): Degree requirements, course offerings, specialized tracks or electives, core courses, and HIPs and HIELs.
- Engagement and involvement on campus (Get Involved and Discover Your Interests): Engagement with the Learning Centers and other student support resources; relevant clubs, organizations, and leadership opportunities; Aresty and research with faculty; experiential learning through HIELs.
- Community beyond Rutgers–New Brunswick (Connect with Community and Engage with the World): Community-based campus events, e.g. Rutgers Day, speaker series, on campus conferences; local, national, and global connections that our institution has established or could establish in the future: volunteering and community service initiatives, and other ways in which students can get involved in their local community; Study Abroad
- Looking ahead (Prepare for Life Beyond the Banks): Resources supporting post-baccalaureate and career plans, internships, Career Exploration and Success programing; networking events.
- The total student (Wellness): ScarletWell initiatives.

Guiding Principles of the Map

- **Inclusive headers** that do not presuppose “year” in school or number of years/semesters at Rutgers–New Brunswick to prioritize inclusivity of all student experiences and accessibility for all students, to foster a sense of community among students, regardless of their entry point to Rutgers–New Brunswick.
- **General version that can be further customized and tailored** to specific majors to help orient students and demystify aspects of the college journey.
- **Emphasis on a holistic experience** and progress on a journey, with a balance of opportunities and experiences, recognizing that each student’s path through college is unique.

Advising and Academic Support

Currently, the provision of advising and academic support at Rutgers–New Brunswick is highly decentralized, with only limited coordination and consultation across units.

Academic Advising

Rutgers–New Brunswick units utilize a variety of advising models and structures across schools, with most school advising offices employing a split or dual model of advising (Habley, 1997). All New Brunswick students have access to professional advisors in their schools of matriculation in addition to faculty and professional advisors in their prospective or declared major/minor departments; additionally, other offices/programs have professional advisors who serve as resources for specific areas of academic planning (i.e., health professions careers, pre-law advising) and for specific student populations (i.e., Academic Support Services for Student Athletes, Educational Opportunity Fund advisors, etc.). Appendix S provides information on the staffing, organizational structures, and practices of the professional academic advising offices in New Brunswick.

Although advisors from different units frequently work together to serve the needs of particular students or populations of students, there is no formal structure for coordination. Currently, there is no campuswide system used to record advising notes, and advising units use a variety of different platforms that do not share information. Academic policies and procedures also vary greatly across schools.

In some units, staffing levels are low given the population of students served, leading to high caseloads for professional advisors. The current caseload is 714 students per full-time professional advisor in the School of Arts and Sciences, 625:1 in the Rutgers Business School–Newark and New Brunswick (RBS), and 615:1 in the School of Engineering. The standard recommendations for advising caseloads are 300:1 for full-time, professional advisors and 30:1 for faculty advisors. However, the Boyer 2030 Commission report that was released in Fall 2022 recommends that “large, complex, academically demanding research universities” should strive for maximum ratios of 250:1 for professional advisors and 25:1 for faculty advisors (p. 33).

In addition to high student-to-advisor ratios, at Rutgers–New Brunswick the school-level advising offices also perform many administrative tasks, like transcript review and transfer credit evaluation, that are typically handled by the offices of the registrar at other universities.

In reviewing peer institutions, the Advising and Academic Support Workstream learned that most universities of our scale have decentralized academic advising, with advising units embedded in different schools/colleges and academic departments. However, many of our peer institutions have established more formal structures for coordinating academic advising for their students.

Nearly every institution we reviewed requires all advising and student support units to use the same advising platform, thus facilitating the sharing of information and the coordination of support for students. One challenge to implementing this at Rutgers—New Brunswick is concern about the ability to migrate existing records to a new system. Many institutions have created centralized websites on advising that provide general resources and links to school and program-level advising units across campus. See, for example, [The Ohio State University](#), [University of Wisconsin](#), and [University of Minnesota](#). Some of our peer institutions have a centralized administrative position in the provost’s office responsible for coordinating academic advising and supporting central advising resources, such as technological tools, websites, etc. For instance, [Purdue University](#) has an executive director of advising who reports to the vice provost for undergraduate education and to whom all school-level advising directors have a dotted reporting line. The [University of Wisconsin](#) has an associate vice provost for advising and career services who reports to the vice provost for teaching and learning; this individual is responsible for providing leadership and coordination to the campus’s undergraduate advising system

and career services system and oversees the central office of undergraduate advising's five direct service units. A few schools have central advising offices that serve specific populations of students. The University of Nebraska has the [Explore Center](#) that serves incoming students who are undeclared or planning to pursue pre-professional academic tracks such as pre-med or pre-law. The University of Minnesota has the [Center for Academic Planning and Exploration \(CAPE\)](#) that assists students exploring majors across schools. [The University of Maryland Office of Undergraduate Studies](#) oversees the advising of students still deciding on majors and has a Pre-Transfer Advising program with dedicated advisors serving prospective transfer students, especially those from Maryland community colleges.

Although many of our peer public research universities also have high student to advisor caseloads, some are working toward the ratios recommended by the Boyer 2030 Commission report. The administration at Purdue University has set a target of 225:1, supported by an annual review of advisor assignments and additional duties and central funding for advisors embedded in the schools to allow for staffing adjustments with shifts in enrollment.

Learning Assistance

Rutgers–New Brunswick provides a wide range and significant number of learning assistance services to students, most of which are free to them and many of which are available to the entire Rutgers–New Brunswick student population. A list of existing services can be found in Appendix T, although it should be noted that a comprehensive list does not exist in any central location and there is no consistent communication channel for learning assistance programs, so it can be assumed that some services may be missing from this list.

Benchmarking learning assistance programs across comparable and aspirational institutions can be challenging, as most schools the size and structure of Rutgers–New Brunswick have vastly different support structures, and their learning assistance programs, like ours, are spread across units and difficult to access through any centralized source. As an alternative, several national and international organizations provide standards of excellence that can be used for benchmarking the quality of learning assistance programs. The most regularly implemented of these are the College Reading and Learning Association's (CRLA) International Tutor Training Program Certification (ITTPC), the National College Learning Center Association's (NCLCA) Learning Centers of Excellence (LCE) designation, and the Council for the Advancement of Standards in Higher Education's (CSA) Standards for Learning Assistance Programs. The Learning Centers at Rutgers–New Brunswick are CRLA ITTPC certified and won the Frank L. Christ Outstanding Learning Center Award from the NCLCA in 2018. The CSA self-assessment guide is used on a five-year cycle for program evaluation of the learning centers as well.

Most schools of this size and structure offer tutoring either through a drop-in or one-to-one appointment model, although the scope of those programs and the populations they serve vary greatly. We would propose that Rutgers–New Brunswick is set up to be a leader nationally in the ways in which this institution makes tutoring available without additional charge to all students and that capitalizing on this opportunity through strategic growth would further advance our efforts toward equitable and accessible high-quality education for all students.

In addition to tutoring programs, most schools offer either supplemental instruction (SI) or learning assistance programs for large-enrollment, first-year courses. Again, these programs vary in scope and population served, but they have become a consistent element of learning assistance efforts across large schools and particularly within STEM disciplines. The International Center for Supplemental Instruction is

run out of the University of Missouri–Kansas City and sets the standard for SI programs across the country, listing [accredited institutions](#) on its website. In addition, [Texas State University](#) is recognized for its “Exemplary SI Program.” Rutgers–New Brunswick is not SI-accredited, but that is primarily because most of the centralized resources shifted away from SI and toward the Learning Assistance (LA) Program beginning in 2011. The LA Program has the advantage of serving students in class during instruction, which removes some of the inequities inherent in the SI model, which relies on voluntary participation.

Rutgers–New Brunswick has one of the largest learning assistance programs in the country and one of the only programs that is housed centrally and, therefore, reduces the cost of the program overall and enhances the coordination across schools and departments. The program model was founded at [University of Colorado–Boulder](#), which remains an exemplary program. [Florida International University \(FIU\)](#) and [Oregon State University](#) also have strong programs that offer some elements for consideration at Rutgers–New Brunswick. FIU has an internship model for advanced LAs to expand their professional competencies through leadership positions within the program, and Oregon State University incorporates faculty professional development into their program as well.

Many schools offer a first-year seminar or similar course that is designed in collaboration with learning assistance programs (see Appendix U). The programs may design and coordinate the course, provide content for it, or consult on the curriculum development. Rutgers–New Brunswick offers a variety of first-year options, but they are not currently coordinated across units and do not collaborate extensively with learning assistance programs to incorporate learning strategies and academic support materials.

Academic coaching programs are known across learning assistance networks as a high-impact practice for supporting retention and student success. Rutgers–New Brunswick has a well-established Academic Coaching Program within the Learning Centers, THRIVE Student Support Services, the Honors College, Athletics Academic Support, and others. A few programs, including the [University of Kentucky](#), stand out for their commitment to coach certification. They have [International Coaching Federation](#) training and accreditation built into their programs so that coaches can pursue these certifications with resources from the institution. The Rutgers Learning Centers currently provide resources for certification through the Association for the Coaching and Tutoring Profession, which is specific to academic coaching, but there is no process for coaches to gain ICF certification through employment in Rutgers–New Brunswick programs. In addition, some schools, such as the [University of North Carolina](#), have coaches with specializations in particular areas like STEM, the arts, ADHD support, and others. Rutgers–New Brunswick does not currently have a coaching team large enough for this type of specialization, though it may be a future direction given more resources.

One area in which Rutgers–New Brunswick is in need of improvement across the board is in assessment of learning gains and outcomes. Student data, support for data analysis, and student success metrics need to be more accessible to learning assistance programs to keep up with best practices in the field and to remain competitive with comparable institutions.

Another common practice of learning assistance programs is the incorporation of graduate interns or graduate assistants into their regular staffing. These graduate students are typically pursuing degrees in disciplines such as education or psychology and contribute significantly to the programs by offering direct services including tutoring or academic coaching, supporting assessment projects, or mentoring undergraduates. Rutgers–New Brunswick learning assistance programs do not currently have widespread or consistent connections to the Graduate School of Education (GSE) or other graduate

programs that could support both the professional development of graduate students and the learning and development of undergraduate students through such partnerships.

Career Preparation

The current career services model at Rutgers–New Brunswick employs a hybrid structure consisting of a strong central office, comprehensive offices in two schools (RBS and the School of Management and Labor Relations [SMLR]), and personnel dispersed across the campus. There are pockets of excellence within the career services ecosystem, but campus complexity can sometimes lead to confusion, conflicting priorities, and an uneven distribution of resources for connecting students and employment. Among our peer institutions, there is a mix of hybrid organizational structures in their career services departments. An AAU and Big Ten benchmark survey conducted by CES in 2019 included responses from 36 (50 percent) universities, with 29 (47 percent) being AAU institutions and 11 (79 percent) being Big Ten Academic Alliance institutions (see Appendix C for the Career Services Benchmarking Survey). To promote better coordination, 10.34 percent of respondents reported that school-based offices have a supervisory reporting relationship with the Chief Career Services Officer (CCSO). Some universities, such as [Johns Hopkins University](#) and the [University of North Carolina–Chapel Hill](#), have now adopted similar models by establishing supervisory reporting relationships between the CCSO and career professionals in school-based offices and other career-focused partners, including some forms of experiential education, across the institution. Additionally, an audit of AAU universities revealed that 32 percent of CCSOs hold elevated titles such as assistant vice provost- (AVP), vice provost- (VP), or dean-related titles, indicating recognition of the importance of career preparation across the campus.

As New Jersey’s land grant university, Rutgers–New Brunswick has a responsibility to ensure a well-prepared workforce to support the state’s economic growth, increase the socioeconomic mobility of its population, develop their civil engagement skills, and enhance their ability to lead purposeful and fulfilling lives that address the challenges of our rapidly changing world. This aligns with Governor Phil Murphy’s vision to invest in people and create a stronger and fairer economy in New Jersey. While the university already offers experiential education programs, there is a need to enrich and expand these opportunities to make them more impactful. To address this, a Task Force on Experiential Education was established in 2016, followed by a committee as part of the Fall 2021/Spring 2022 Academic Master Plan process, to collect data for the development and expansion of experiential education at Rutgers–New Brunswick (see Appendix C for the 2016 and 2022 reports of the Task Force to Enhance Experiential Education for Undergraduate Students at Rutgers–New Brunswick). The call in Chapter 4 to increase HIEs echoes this.

In terms of experiential education integration, based on information collected through a previous committee, various universities have celebrated their efforts to integrate programs into the academic experience to enhance students’ learning beyond the classroom. For example, [Florida State University](#), with over 32,000 undergraduates, has introduced a requirement that will make it the largest and most diverse university in the country to have such a mandate. Similarly, the [University of Georgia](#) (27,000+ undergraduates), the [University of North Carolina–Chapel Hill](#) (19,000+ undergraduates), [Miami University](#) (16,000+ undergraduates), and [Kent State University](#) (23,000+ undergraduates) have all integrated experiential learning into their core educational experience. It is important to note that the Rutgers–New Brunswick Post-Graduation Survey data for classes graduating between 2018 and 2020 showed that 87 percent of undergraduate students reported participating in one of the listed experiential learning opportunities (see Appendix C for the Rutgers–New Brunswick Post-Graduation Survey). Furthermore, between 54 percent and 63 percent of students with internship experiences

stated that their internship converted into a full-time job offer post-graduation. However, the survey results did not provide specific information about the high-impact nature of these experiential learning opportunities.

Regarding the Federal Work Study (FWS) program, the 2019 Rutgers–New Brunswick Career Services benchmark survey indicated that 91.89 percent of respondents employed a “posting and interview” process, allowing FWS students to apply for positions and interview with departments (see Appendix C for the Career Services Benchmarking Survey Results). Only 8.11 percent of respondents utilized a “staff placement” approach, where students are assigned to eligible departments. Notably, around 30 percent of institutions had already initiated formal efforts to transform FWS on-campus jobs into high-impact internships.

When it comes to mentoring, approximately 54.84 percent of respondents, including Rutgers, utilize electronic mentoring platforms to facilitate student and alumni mentoring. Moreover, 48.39 percent of the institutions surveyed have established high-impact mentoring programs through their central career offices.

Pertaining to student-to-advisor ratios within career services, the National Association of Colleges and Employers (NACE) currently lacks a recommended ideal ratio, although there is a growing call to do so among members, similar to NACADA. However, the 2019 Rutgers–New Brunswick Career Services benchmark survey of main career offices at peer institutions found the median caseload to be one advisor per 2,778 students (see Appendix C for the Career Services Benchmarking Survey Results). At that time, Rutgers–New Brunswick had a ratio of one advisor per 4,314 students.

Organizational Structure for Undergraduate Education

As noted throughout the discussion above, the organization of undergraduate education in Rutgers–New Brunswick is highly decentralized. The vice provost for undergraduate education oversees the [campuswide academic support programs and services](#), including the Rutgers Learning Centers, Career Exploration and Success, the Office of Disability Services, the Office of Distinguished Fellowships, the Office of Transfer and Nontraditional Students, the ROTC units, the Aresty Center for Undergraduate Research, the Byrne First-Year Seminars, Academic Support for Student Athletes, Pre-law Advising, and the Innovation, Design, and Entrepreneurship Academy (IDEA). The only campuswide/non-school-based advising services are those for student-athletes and for students interested in law school. There is no central unit that provides general advising or supports the coordination of advising practices and policies across schools. Due to this lack of central advising infrastructure, the only advising tool used campuswide, Degree Navigator (a degree audit tool), is maintained by the Office of Advising and Academic Services (OAAS) in the School of Arts and Sciences (SAS).

The senior vice provost and vice chancellor for undergraduate education is responsible for convening the Undergraduate Education Council (UEC), which includes representatives from the deans’ offices of all Rutgers–New Brunswick undergraduate-serving schools and the directors of some central undergraduate education offices. The UEC meets monthly during the academic year to share information and discuss issues that cut across Rutgers–New Brunswick schools. The UEC is very collaborative and played an essential role in supporting the shift to remote instruction necessitated by the pandemic. However, the UEC has no formal authority or dedicated resources and can only effect change through consensus-building.

Many of our peer institutions in the Big Ten Academic Alliance have more extensive central infrastructures supporting undergraduate education. In addition to the central advising support described above, many undergraduate education offices include units administering or coordinating transition programs, experiential education, living-learning communities, and other curricular and co-curricular opportunities. For example, the [Office of Undergraduate Education at Michigan State University \(MSU\)](#) includes units supporting first-year experiences; global learning, community engagement; living-learning communities, including the MSU Neighborhood Student Success Collaborative; transition programs; new student orientation; and the MSU testing center. The [Office of Undergraduate Studies at the University of Maryland](#) is responsible for the administration of the general education program for all undergraduates, coordinates a First-Year Book Program, and includes a Student Success unit, which provides leadership, data, and direct student services related to student retention.

At some institutions, the expanded scope of responsibilities of the provost-level undergraduate office has led to a rebranding of that office to better communicate its mission. At both the [University of Wisconsin](#) and [Purdue University](#), the central undergraduate education units are titled Teaching and Learning and are overseen by vice provosts of teaching and learning. Reflective of the titles, these units also include programs supporting teaching. At The Ohio State University, undergraduate student academic support is part of the [Office for Student Academic Excellence \(SAE\)](#), which also includes units supporting graduate education, enrollment management, and academic program development. SAE also includes a Student Success Research Lab charged with identifying barriers to academic success and developing strategies to address them.

IV. Current Challenges

Curriculum Mapping

The name “curriculum map” may not fully capture the spirit of this guide and may serve as a barrier to adoption by students and other stakeholders. We considered alternative names, such as “Rutgers Pathways to Success” or “Your Guide to a Successful Rutgers Experience,” both of which highlight the key role of the document in guiding students through their time at Rutgers–New Brunswick and emphasizes its potential to support student success in a holistic sense.

A document of this scope and complexity may be overwhelming to some users. We are actively working to develop training and support resources to help facilitate its adoption and use.

Overlap among the various workstreams and their subcommittees may lead to inefficiencies and redundancies in our efforts. We are actively working to streamline our processes and communications to ensure that each subcommittee’s efforts are complementary rather than duplicative. By fostering greater collaboration and communication across the various workstreams, we can maximize the impact of our curriculum mapping efforts and better serve the needs of our students and faculty.

Advising and Academic Support

To understand the challenges and barriers students face in accessing academic and career support at Rutgers–New Brunswick, we conducted extensive focus groups with academic advisors, career and experiential education professionals, and frontline staff from learning assistance and other support services. Incorporating the recommendations and insights shared by these frontline members of the

community was crucial to our work. Additionally, we conducted a thorough review of previous reports. Through these efforts, we identified several barriers that hinder students' access to the necessary support they require. These challenges primarily fell into the following categories: students encountering barriers in navigation and challenges in using resources; unclear or insufficient communication across schools, departments, and offices; policies that create impediments to students' strategic decision-making, timely graduation, and successful post-graduate outcomes; inadequate resources and systems; and a lack of assessment and evaluation to inform practices.

Students often lack awareness and knowledge about available resources and support services for academic and career matters. They may not know where to go for different types of support and guidance, and there is a need for better training to recognize mental health issues and direct students to appropriate resources. Limited information sharing and coordination between departments, schools, and offices further complicates matters. Collaboration and information sharing are lacking, resulting in missed opportunities for students to access strategies for success in specific majors and careers. Transfer students face additional difficulties in understanding evaluation of transfer credits, graduation timelines, and departmental processes.

Policy-related challenges and inconsistencies pose additional hurdles. Delayed departmental engagement and inconsistent declaration processes can lead to advising challenges. Inequities in access to career advising resources based on students' school or program affiliation create disparities in support availability. Limited funding opportunities for unpaid internships and the high costs of summer course credit to engage in credit-based experiential education also are barriers.

Resource limitations and systemic issues present significant challenges. Insufficient numbers of advisors lead to an inadequate student-to-advisor ratio, limited availability of individual support appointments, and a lack of centralized systems causing information gaps. Difficulties in securing appointments and accessing immediate in-person support exacerbate the situation. There is an absence of a comprehensive course or program addressing student challenges.

To address these barriers, we propose targeted strategies. Improving awareness, knowledge, and communication about available resources and support services is crucial. Revising policies and systems for consistency and addressing inconsistencies is necessary. It is vital to allocate sufficient resources, including an adequate number of various types of advisors. Enhancing collaboration and information sharing between units and departments is essential. Improving the accessibility and availability of support services, such as centralizing information systems and streamlining appointment processes, is important. Providing financial support and opportunities, promoting mental health support, and fostering inclusivity and equity are critical steps in supporting students' academic and career success. Challenges specific to each area based on a review of previous reports and focus groups are as follows:

Advising

- Students consistently value the advising that they receive and recognize their advisors as playing a critical role in their planning and growth once they invest in attending advising meetings and connecting with their advisors. However, too many students either do not recognize the value of advising or do not know how to access advising.
- Students often find it difficult to find and access resources and academic advice. They do not understand the structure of the university and are unsure to whom to turn for guidance. Many university websites are difficult to navigate and are not kept updated.

- Embedded, community-based advising partnerships have been best practice exemplars embraced by our students but are not scalable with the current advising ratios and are reliant on individuals reaching beyond their university divisions rather than supported or encouraged by university structure.
- Students do not understand how advising works or how advising conversations contribute to their own growth and development and, ultimately, their successful college experience. They do not recognize that different advisors specialize in knowledge about different aspects of Rutgers–New Brunswick and that students need to consult multiple advisors to obtain the tools and information to effectively manage their decision making and academic planning at an institution with the wide offerings and complexity of Rutgers–New Brunswick.
- Offices working with students do not consistently share information about students, and school-based advising offices use different note-sharing platforms. While many advising offices work closely with their school-based departments, gaps exist that complicate advisors’ ability to effectively refer students to departments and programs within and across schools. The Registrar’s Warning reports process is under-utilized and provides little information in a timely manner to facilitate interventions. Similarly, no consistent process or procedure exists for faculty to report concerns about students’ academic performance. Academic policies are inconsistent across schools, leading to confusion when students share information with peers. Some policies, like major declaration requirements, are constructed to serve the needs of different student populations, but more transparent communication about these requirements and their purposes would better serve students’ understanding. Policies governing degree progress—including course withdrawal and repeating—are not consonant with our focus on decreasing time and cost to degree. Inconsistencies challenge sound advising and student clarity. Whenever possible, academic policy should be aligned across the Rutgers–New Brunswick schools. Due to staffing levels in many advising offices, students can experience long waits for appointments. Many advisors find that appointments are spent providing tutorials in using university systems (like WebReg and Degree Navigator) rather than providing academic guidance.
- Advising offices with student-facing web presence (Live Chat) find that students utilize these tools as a live Google or RUInfo and don’t understand which conversations are appropriate for which advising spaces (i.e., chat vs. email vs. appointment).
- Advisors’ time is typically split between advising and administrative tasks (i.e., transcript review, transfer credit evaluation, graduation certification, etc.) that are necessary academic services but that further complicate advisor availability in many offices.
- Assessment of advising typically happens sporadically and within narrow contexts. Many advising offices do not have the time or staffing to provide consistent review of the quality of advising and advising structures nor is there a central means to engage in broad assessment to evaluate and inform advising practices and acknowledge areas of excellence.
- The broad range of professional and faculty advisors across Rutgers–New Brunswick represent a wealth of experience and knowledge. However, opportunities for collaboration and sharing knowledge are rare and largely contingent on offices’ resources and commitment to seeking professional development opportunities.

Learning Assistance

- There are many “pockets of excellence,” but collaboration and consistency are limited.
- Students have substantially different access to support services, as access often depends upon program affiliation and poorly structured communication channels.

- The programs on campus (see Appendix T), while far-reaching, lack central coordination of standards and practices and do not share information in any systematic way. Silos and variations across programs often lead to confusion and create barriers to students accessing services. Differences in pay and training requirements for student workers also lead to internal competition in recruiting, which results in fewer services and hours being available through campuswide services when program-specific services can pay higher rates.
- The communication and understanding of resources regularly break down across all channels (i.e., faculty, staff, and student), leading to students under-utilizing the services available or paying for the same service elsewhere.
- Physical space, educational technologies, and communication systems vary across programs and campuses and are—when taken as a whole—insufficient for connecting students to services and sharing pertinent information with partnering offices.
- There is a widening variance in the level of preparation among incoming first-year students.
- The pandemic and remote education have impacted the ways in which students engage with course materials and education in general. New strategies and a deeper understanding of current students’ needs will be necessary to support them effectively.
- First-year students are introduced to a new volume, density, and level of student learning objectives. To address the challenges of cognitive load, students need developmental opportunities to reflect on their learning efficacy, practices of learning, development of new strategies, and regulation of their learning. This type of behavior change is difficult and requires time, scaffolding, development in disciplinary context and a community that embraces research-supported learning practices. This requires significant organizational design and planning.
- Skills support is most effective when embedded in content and aligned with course activities, but this level of coordination and resource allocation presents a challenge to widespread initiatives of this type.
- A universitywide culture of help-seeking and collaborative learning needs to be cultivated at all levels to combat common stigmas around receiving support.

Career Preparation

- There are inherent inequities when some academic programs integrate career preparation and field experiences in their courses and requirements while others do not. Some students, many of whom lack financial resources and strong networks, face difficult choices between prioritizing their future career preparation or meeting immediate needs such as graduating within four years (to limit debt) or finding employment to support themselves financially outside of school.
- Financial constraints and the need to work hinder students’ participation in high-impact internships and experiential learning due to limited funding options, limited job types for Federal Work Study (FWS) students, and high costs of summer credit hours and fees.
- Addressing the needs of marginalized and historically underserved populations require dedicated efforts to ensure equal access to career development resources.
- Supporting diverse student populations, including neurodiverse, international, and undocumented students, poses challenges in providing equitable access to career development opportunities.
- Inconsistencies in policies and support for credit-based internships and the need for effective curricular mapping create challenges in integrating career preparation into academic programs.

- Navigating the abundance of programs, internships, fellowships, and research opportunities without a centralized source of information leads to confusion and potential inequities. Streamlining access to employers through multiple points of contact remains challenging.
- Limited awareness and timing of engagement with Career Exploration and Success services result in missed opportunities for some students, while others have earlier integration into their curriculum.
- Facilitating effective communication and collaboration among academic advisors, career professionals, and employers remains a challenge to streamline access to information and opportunities. Collaboration between academic advisors and career professionals is crucial for comprehensive student support.
- Equipping students with necessary knowledge and skills for career exploration and preparation, including self-assessment and articulating career readiness, is an ongoing challenge.
- Students often overlook the career readiness competencies (i.e., career and self-development, communication, critical thinking, equity and inclusion, leadership, professionalism, teamwork, and technology) already being developed through their coursework. Some schools collaborate with faculty to identify and highlight these skills, but there is a need for greater emphasis on recognizing existing, often hidden, career readiness competencies in general education. This can help address public concerns about the value of higher education and ensure students understand the importance of what they are learning for their future pursuits.

V. Goals

Curriculum Mapping

Our curriculum map was developed with several high-level goals in mind, each of which is intended to support student success at Rutgers–New Brunswick.

One such goal is to facilitate on-time graduation by providing students with clear pathways to degree completion and preparation for post-graduate success. By mapping out the necessary degree requirements—supplemented with major specific information on courses, requirements, and milestones for each major—we can help students stay on track and complete their degree programs in a timely manner.

Another key goal of our curriculum map is to provide students with robust advisor support. This includes not only clear guidance on academic requirements but also support in navigating the co-curricular opportunities available at Rutgers–New Brunswick. By creating clear pathways to high-impact practices and co-curricular activities, we can help students make the most of their college experience and develop the skills and knowledge they need to succeed in their chosen careers.

Our curriculum map is also designed to remove obstacles for students as they navigate the many options available at Rutgers–New Brunswick. By providing clear guidance and resources, our intention is to help students make informed decisions about their academic and co-curricular experiences and minimize the stress and confusion that can come with navigating complex university systems.

Additionally, we want to encourage students to explore the career-readiness skills they need and to update their resumes, personal statements, and cover letters as they achieve these skills. By viewing and using the resources and experiences available at Rutgers–New Brunswick toward career preparation,

students can gain a competitive edge in the job market and graduate school and develop the skills they need to succeed post-graduation.

We also set out to construct a curricular map that makes connections between curricular and co-/extra-curricular experiences and opportunities. By helping students see the relationships between their academic coursework and their co-curricular activities, we can provide them with a more holistic and integrated understanding of their college experience.

Finally, helping students make connections between their academic experience and their ultimate career paths was another key factor. By developing knowledge, values, and skills that are transferable to the workplace, civic engagement, and personal lives, we can help students achieve their career and personal goals and contribute meaningfully to their chosen fields.

Furthermore, we aim to motivate students to not only cultivate career-readiness skills but also prepare for graduate study, urging them to continually refine their resumes, personal statements, and cover letters as they acquire these proficiencies. By harnessing the resources and opportunities offered at Rutgers–New Brunswick for both career readiness and graduate school preparation, students can enhance their competitiveness and cultivate the essential skills for success in their chosen careers and advanced academic pursuits.

Advising and Academic Support

The Advising and Academic Support Workstream has identified five overarching goals (i.e., design principles) for the future evolution of academic advising, career exploration, and academic support at Rutgers–New Brunswick:

- Goal A: All students must be able to find their way to the advising and academic support resources they need, no matter who or what their first point of contact is. Information for all advising and academic support programs, including best ways to contact each office/program, should be accurate and clearly visible on the Rutgers website.
- Goal B: All students must have equitable access to comprehensive and high-quality academic advising, career preparation, and learning assistance. Equity of access cannot rely on voluntary use of services. Inclusive and sometimes intrusive advising and academic support should be part of all students' experience during their first year at Rutgers–New Brunswick and continued at key milestones throughout their academic career.
- Goal C: Advisors, instructors, and other personnel and offices supporting students must share student data in a way that enables analysis of key indicators across schools and academic programs, including early alerts and shared advising notes.
- Goal D: Academic advising, career advising, and learning assistance are professions, foundationally grounded in research and educational opportunities, and entail ongoing professional development within Rutgers, the Big Ten Academic Alliance, and nationally. Effective advising and learning assistance require support for ongoing professional development.

- Goal E: Support for student success must be coordinated, data-driven, and sustainable, relying on a comprehensive and accurate picture of student engagement and outcomes and on structural support rather than solely on relationships.

VI. Initial Recommendations

Curriculum Mapping

Recommendation 6.1. We recommend that Rutgers–New Brunswick adopt curriculum mapping, following the proposed template and modified for each major, to help students better navigate the many curricular and co-curricular options available.

Based on our research and discussions, we arrived at the following guidelines for “Map Content and Guiding Principles.”

- Academics (Get the Courses You Need): Degree requirements, course offerings, specialized tracks or electives, core courses, and HIPs and HIELs.
- Engagement and involvement on campus (Get Involved and Discover Your Interests): Engagement with the Learning Centers and other student support resources; relevant clubs, organizations, and leadership opportunities; Aresty and research with faculty; experiential learning through HIELs.
- Community beyond Rutgers–New Brunswick (Connect with Community and Engage with the World): Community-based campus events, e.g. Rutgers Day, speaker series, on campus conferences; local, national, and global connections that our institution has established or could establish in the future: volunteering and community service initiatives, and other ways in which students can get involved in their local community; Study Abroad
- Looking ahead (Prepare for Life Beyond the Banks): Resources supporting post-baccalaureate and career plans, internships, Career Exploration and Success programing; networking events.
- The total student (Wellness): ScarletWell initiatives.
- Guiding Principles of the Map:
 - Inclusive headers that do not presuppose “year” in school or number of years/semesters at Rutgers to prioritize inclusivity of all student experiences and accessibility for all students, to foster a sense of community among students, regardless of their entry point to Rutgers.
 - General version that can be further customized and tailored to specific majors to help orient students and demystify aspects of the college journey.
 - Emphasis on a holistic experience and progress on a journey, with a balance of opportunities and experiences, recognizing that each student’s path through college is unique.

The subcommittee has created a template that can serve as a starting point for future versions of the curriculum map (see Appendix V). Feedback from the Discovery Advantage focus groups informed the items currently represented in the map (see Appendix E).

Everyone’s Rutgers–New Brunswick experience will be different, so each major is able to tailor the map. In addition, there can be a map to guide students who are still deciding on a major or on a career path.

We propose to refer to the map as the “Rutgers Pathways to Success” or “Your Guide to a Successful Rutgers Experience.”

We might consider gamifying the map (e.g., use Google Maps as a model or situate the map concepts within a resource such as [Gather.town](#)).

Recommendation 6.2. We further recommend that these curriculum maps be integrated into the student experience, through the following steps:

- Introduce the map during New Student Orientation.
- Incorporate the map into the peer advising programs on campus.
- Integrate the map into Canvas and/or Degree Navigator.
- Link the map to departmental websites from a central location.
- Establish coordinated and consistent communication.
 - Market the maps to students, parents, and other external stakeholders.
 - What do they need to know, when do they need to know it, and how do they need to hear it?
 - Build on “[Explore Our Programs](#)” page.
- Provide training to students, staff, professional and faculty advisors, peer mentors, and undergraduate program directors on how to effectively use the map. Include an openly accessible training video on the main Curriculum Map web page.

A curriculum map can serve as a valuable tool to help students navigate the various academic opportunities and challenges that they may encounter. While the maps are designed to assist students in planning their learning journeys, we recognize that their adoption may be a challenge. Therefore, it is important to thoughtfully integrate the maps into the student experience and actively promote their use to improve learning engagement, facilitate learning, and enhance the overall quality of education.

Recommendation 6.3. We recommend that these curricular maps undergo rigorous assessment to measure student, advisor, and faculty engagement with the map.

Simply creating a curriculum map is not enough to ensure its effectiveness in promoting student success. To make the map maximally effective, we require feedback from students, advisors, and faculty. To truly assess the impact of curriculum maps, we should establish a committee that provides oversight and regularly assesses and revisits the use and usefulness of the map, implementing a mechanism for regular review and updating by departments. This committee should measure student, advisor, and faculty engagement with the map, evaluating if and how the map is being used and whether it is making an impact on student success/time to degree/retention. Individual departments should also be invited to regularly assess and update their tailored version of the map.

Advising and Academic Support

The Advising and Academic Support Workstream’s five overarching goals (i.e., design principles) are restated by letter, with the associated recommendations following immediately below each one.

Goal A – Navigation of Resources

All students must be able to find their way to the advising and academic support resources they need, no matter who or what their first point of contact is. Information for all advising and academic support programs, including best ways to contact each office/program, should be accurate and clearly visible on the Rutgers website.

Recommendation 6.4. We recommend that Rutgers–New Brunswick establish a new campuswide advising website (e.g., with a URL such as <https://newbrunswick.rutgers.edu/advising/>) to serve the needs of new and continuing students, as well as the needs of staff and faculty serving in advising roles. As part of this effort, Rutgers–New Brunswick must develop interactive “advising maps” to complement the curriculum maps, laying out what types of advisors a given student should reach out to and at what junctures in their undergraduate career.

For students, this website should be aligned with the success.rutgers.edu website and introduce the general philosophy of advising (e.g., the idea that one can consult an advisor without having a specific question), definitions of advising and student/advisor responsibilities, the various types of advising available at Rutgers (e.g., academic vs. career, and department-based vs. school-based), and the pathways for contacting advisors of different types. The website should be equipped with an AI-generated chatbot for the first layer of referral needs, which can answer simple questions about available resources and direct students to appropriate advising and academic support offices (based on school of enrollment, intended major, and program affiliations) for more complex questions. In situations where students have assigned advisors, the website should provide specific information to identify the advisor(s) and their contact information. For advisors, this website should provide links to accurate information on academic requirements at the school and department levels as well as up-to-date contact information for making referrals. For both students and advisors, campuswide videos delivered through the website may be useful in introducing key support services.

The “advising maps” portion of this website would lay out what types of advisors a given student can reach out to and at what junctures in their undergraduate careers. These maps would be shared on the website and be interactive, so that students will be empowered to build an advising map based on their own desired pathways. This effort should be complemented by the development of skills maps determined by employer needs, critical career readiness skills, and national reports on career readiness. These coordinated maps can be connected to pathways at Rutgers–New Brunswick and used across advising units to ensure consistency in language and practice.

A similar and connected website for transfer students should be developed that displays information (including contact information) for all schools and programs. The website should include specific practices for students transferring to Rutgers from community colleges, other four-year institutions, non-traditional backgrounds, and the armed forces.

Recommendation 6.5. We recommend that Rutgers–New Brunswick develop a communications plan to share time-sensitive information and targeted resources to students across the academic year.

This plan must consider the formats and modes that will be most effective in reaching students as well as provide greater support to faculty in communicating with students about advising, learning assistance, and support services.

Recommendation 6.6. We recommend that Rutgers–New Brunswick provide greater support to faculty in communicating with students about advising, learning assistance, personal development, career preparation, and cultivating civic values and skills.

This objective can be achieved by (a) incorporating academic support and advising information into faculty onboarding; (b) maintaining a Canvas site for new faculty to help them learn to use the maps; (c) broadening communication channels so that faculty and support staff receive the same messaging when relevant; and (d) providing a standardized message about learning assistance services that can be included on each syllabus or Canvas course site.

Goal B – Equitable Access

All students must have equitable access to comprehensive and high-quality academic advising, career preparation, and learning assistance. Equity of access cannot rely on voluntary use of services. Inclusive and sometimes intrusive advising and academic support should be part of all students' experience during their first year at Rutgers and continued at key milestones throughout their academic career.

Recommendation 6.7. We recommend that Rutgers–New Brunswick ensure that student-to-advisor ratios (for both academic advising and career preparation) are sufficiently low to allow for timely individualized support.

To ensure that all students have access to comprehensive and high-quality advising, we recommend adopting the guidance of the Boyer 2030 report and having a ratio of matriculants to school-level professional, full-time advisors of no more than 250:1, and matriculant to faculty advisor ratio of no more than 25: 1 when faculty are providing general advising support. We note that the National Academic Advising Association (NACADA) stresses that the appropriate ratio is context specific. Depending on the population being served and the advising model adopted, these ratios may need to be much lower. For programs adopting a relational advising model in which a student is assigned an advisor to serve them throughout their undergraduate academic experience, the ratio may need to be as low as 170:1 for full-time, professional advisors. For career preparation, the ratio of students to career advisors in the Career Exploration and Success (CES) office should be no higher than 2,778:1 (midpoint of AAU institutions surveyed in the 2019 Rutgers–New Brunswick Career Services benchmark survey), to ensure manageable appointment wait times (currently as long as five weeks) during the academic year (see Appendix C for the Career Services Benchmarking Survey Results).

As we aim to increase the access of students to advisors, we must also ensure that advising offices have adequate administrative support. As noted above, currently, advisors are responsible for administrative tasks like transcript review and transfer credit evaluation that reduce the time they have to work directly with students.

Recommendation 6.8. We recommend that Rutgers–New Brunswick adopt a more consciously proactive approach to advising at all levels.

This approach should encompass (a) the early identification of new students' prospective majors and the sharing of this information with their prospective degree programs; (b) the early identification of students whose major plans are uncertain and who can best be initially matched with generalist advisors; (c) the provision of advising services for pre-transfer students (internal and external), to

alleviate challenges in application processes and evaluation of transfer credits; (d) the designation of mandatory advising checkpoints by individual schools, departments, or degree programs, tuned to the typical needs of their enrolled students; (e) the introduction of “push” video delivery to students through myRutgers and/or Canvas, with targeting based on completed credits, to ensure timely information is shared prior to decisions about courses for the coming semester; and (f) the integration of advising referrals in first-year courses and other known critical opportunity points.

Recommendation 6.9. We recommend that each of the Rutgers–New Brunswick schools require that every student successfully complete one course from an approved menu of transition-focused courses—building their sense of belonging, their knowledge of learning strategies, and their ability to navigate the campus and access its resources (e.g., advising and career exploration)—at some point in their first year of enrollment. These transition courses should be designed to meet the criteria of high-impact practices as defined in Chapter 4 and would therefore be the first-year high-impact course as described in recommendation 4.1.

It is important to note that many academic programs already have such requirements. For instance, the School of Engineering requires all first-year students to take the Introduction to Engineering course and the School of Arts and Sciences requires all incoming transfer students to take Students in Transition Seminars. The recommendation here is to encourage all academic programs to adopt such requirements.

Courses should have a unified set of competencies that underpin their curricula and be capped at 25 students per section to meet the high-impact expectations of the student experience. Students should be able to choose from a menu of courses that deliver these three core benefits, but which are otherwise tailored to meet a diverse set of needs. Courses on the menu should include both existing options (e.g., First-Year Interest Group Seminars (FIGS), First-Year International Student Transition (RU-FIT), Students in Transition seminars, Introduction to Engineering, and Honors Forum) and new options that are developed with active faculty involvement. Existing courses may require the infusion of new “transition-relevant” elements and other key components of high-impact practices as discussed in Chapter 4, presented in ways that connect to the main course material and synchronously or asynchronously according to instructor preference.

Among the wide variety of “new options” that can be envisioned, the Advising and Academic Support Workstream places a high priority on the development of additional 1-credit paired courses, which students take alongside key first-year courses (e.g., math, chemistry, sociology, etc.), and whose activities align with and support those of the primary courses. This format allows for the transmission of discipline-specific learning strategies and avoids stigmatizing any student. Although potentially able to reach larger numbers of students, standalone transition courses may be less effective (and motivating) in helping students internalize new learning strategies, and the deployment of “transition-related” elements divorced from any course will not by itself build students’ sense of belonging.

A Central High-Impact Practices Committee consisting of faculty and staff from across campuses, as discussed in Chapter 4, will be charged with the monitoring of these course offerings, both in quality and quantity, and the vetting of new proposals. The first task of this committee will be to develop a rubric that defines the unified set of competencies as learning outcomes that will be addressed in all of these courses. The administrative support for this committee will be provided by the rescoped Office of Undergraduate Education in the Office of the Provost; please refer to Recommendation 6.18.

Recommendation 6.10. We recommend that Rutgers–New Brunswick develop a more formal and reliable coordinated care network to respond to academic and personal risk indicators.

Additional student-facing staff and increased program publicity is needed to support students facing financial, legal, health, housing, personal, and other non-academic challenges that interfere with academic performance and persistence. The existing [“Do Something” process](#), coordinated by the Offices of the Dean of Students, responds to students at all levels of risk; fields referrals via “Do Something,” email, telephone or in-person contact; leads a standing assessment and response committee composed of staff from various university offices; coordinates a care-network of services for each student; and responds to inquiries from staff and faculty who wish to confirm that referred students are receiving assistance. The availability of these services to students below the highest level of immediate risk and crisis is under-publicized, yet the Offices of the Dean of Students are already short of student-facing staff to respond to existing needs.

The coordinated care network would build on the existing “Do Something” process but would involve more student support offices with the goal of providing more comprehensive coverage and care. The network would receive risk alerts, triage cases, assign students to a team of relevant support personnel, create an action plan, share notes, and ensure follow-up until the action plan goal is met. A key role in this network would be filled by an assigned “success navigator,” who stays with the student, rather than with an office, and who would help the student navigate college life in areas beyond the typical ambit of academic and career advisors (e.g., dealing with financial, legal, health, housing, and other non-academic challenges).

Recommendation 6.11. We recommend that Rutgers–New Brunswick support the growth of students’ mentoring networks from their first through their final years on campus.

The development of a requisite universitywide mentoring culture can be facilitated by (a) creating a first-year Peer Navigators program; (b) utilizing a mentor matching system such as PeopleGrove after the first year; and (c) expanding the existing Student-Alumni Career Connect Program (PeopleGrove platform) and Career Pathways Mentoring Program to enhance alumni-student mentoring resources and facilitate student exploration of career pathways.

Recommendation 6.12. We recommend that Rutgers–New Brunswick create a pre-semester online introduction to the institution that is asynchronous and focuses on college expectations, the Rutgers–New Brunswick experience, and navigating resources. This resource will be available to all students but may be especially valuable for those who are unable to attend New Student Orientation and begin to build a sense of belonging before they arrive on campus. Completion of this course can be incentivized in different ways, such as earning a digital credential or entry in a raffle for a new laptop or gift cards. In connection with these efforts, all students should be enrolled in a Canvas course with consistent messaging and resources that remain open and available throughout their time here.

Goal C – Information Sharing

Advisors, instructors, and other personnel and offices supporting students must share student data in a way that enables analysis of key indicators across campus, including early alerts and shared advising notes.

Recommendation 6.13. We recommend that Rutgers–New Brunswick evolve towards the use of a single campuswide platform for sharing notes and data across all advising, learning assistance, and support offices.

This system should also facilitate appointment scheduling and referrals to advising and academic support resources. Specific recommendations and a detailed implementation plan are included in the Rutgers–New Brunswick Technological Solutions for Student Success Working Group Report (see Appendix C for the Technological Solutions for Student Success Working Group Report). The essential capabilities of such a platform should include the following:

- Access by school, department, and program-specific (e.g., EOF, Academic Support for Student Athletes, Career Exploration and Success, etc.) advisors with appropriate controls to ensure privacy.
- Automatic/routine capture of online communications with individual students.
- Accurate tracking of students’ academic progress, advising team, participation in co-curricular activities, and contact information.
- Access to other relevant student data such as health or accessibility issues to provide a complete picture of the student’s specific circumstances.
- Ability to push out notifications to students via SMS messaging or app notifications or connect with a system, such as Suitable or Anthology, with this capability.

In selecting a platform, consideration should be given to the ability to import existing notes and the functionalities of systems currently in use. The functionality and performance of this platform should be assessed on an annual basis by a committee that includes a representative group of its end users. Support services requiring specialty platforms should prefer vendors who can share information automatically with the primary advising platform.

Recommendation 6.14. We recommend that Rutgers–New Brunswick develop a new early warning system that provides more timely and more robust notifications.

Warnings must be easily accessible to all necessary support personnel. This effort should encompass (a) improving campuswide education on the use of Canvas tools, including the consistent implementation of features and the value of Canvas Analytics for providing feedback and identifying early warning signs prior to exam grades; (b) developing a mechanism for advisors and academic support professionals to have earlier, more detailed information about student performance prior to warning grades being distributed, with access defined by cohort and clear policies on gatekeeping and the protection of private student records; (c) the inclusion of tools that connect with campus resources, such as the libraries tool and tutoring schedule tool through Penji, in the Canvas navigation pane for all courses; and (d) the inclusion (building on the 15+ to Finish communication campaign) of messaging as a notice on the Canvas dashboard.

Goal D – Ongoing Professional Development

Academic advising, career advising, and learning assistance are professions, foundationally grounded in research and educational opportunities, and entail ongoing professional development within Rutgers–New Brunswick, the Big Ten Academic Alliance, and nationally. Effective advising and learning assistance require support for ongoing professional development.

Recommendation 6.15. We recommend that Rutgers–New Brunswick ensure that staff and faculty serving in advising and academic support roles are given opportunities for continued professional development.

In keeping with our recognition of academic advising, career advising, and learning assistance as professions, these opportunities should include online interactions and in-person events crossing department and school boundaries to facilitate a vigorous exchange of ideas within Rutgers–New Brunswick. Professional advisors and academic support personnel also should be able to engage with colleagues at peer institutions (particularly within the Big Ten) and national organizations, thereby allowing the university to remain abreast of the latest scholarship and tools for effective advising. Both internal and external activities should focus on the imperative of meeting the needs of students whose academic and professional plans and personal identities are extremely diverse.

Recommendation 6.16. We recommend that Rutgers–New Brunswick create consistency in pay scales for academic support service providers.

Academic support roles should have clearly defined training requirements and pay scales that are consistent across departments to reduce the internal competition for talent and ensure a consistently high-quality experience for all students using services, regardless of the office providing the services. Wages must be equitable across full-time and part-time professional staff as well.

Recommendation 6.17. We recommend that Rutgers–New Brunswick establish an ongoing faculty and staff career engagement initiative.

This effort can be launched with an inaugural set of panels to offer up-to-date industry insights and should include an annual professional development conference where career advising and academic advising units can collaborate, exchange information, foster relationships, and deliver training. Creation of a central resource hub to support faculty in aligning course objectives with career readiness competencies will allow students to better comprehend the relevance of their education to in-demand skills sought by employers.

Goal E – Coordination and Sustainability

Support for student success must be coordinated, data-driven, and sustainable, relying on a comprehensive and accurate picture of student engagement and outcomes, and on structural support versus solely on relationships.

Recommendation 6.18. We recommend that the Office of Undergraduate Education (OUE) within the Rutgers–New Brunswick chancellor’s office be rescoped to encompass academic advising, career preparation, and academic support, as well as address academic issues that cut across schools.

This rescoping should focus on specific campuswide resource gaps in professional development, technology management, policy coordination, assessment support, communication, and other essential areas, and should be supported by staff lines and infrastructure, using the 2019 Rutgers–New Brunswick Student Success Information Working Group Report (see Appendix C for the Student Success Information Working Group Report) as an initial guiding reference. The resulting structure should allow for centralized coordination and resourcing for the implementation of all of the recommendations

described above, while respecting the differences in missions, cultures, student populations, and practices across schools. New dotted reporting lines should connect academic advising offices and career services offices at the school level with campuswide coordinators based in the OUE. For career services, campuswide coordination can naturally be lodged in the Office of Career Exploration and Success (CES). For academic advising, a new position (tentatively, an associate vice provost for advising or an executive director of student retention) would need to be filled. In addition, the office should coordinate councils for advising, learning assistance, and career preparation across schools, like CES's existing career ecosystem of boards, councils, and committees.

The rescoped OUE, including its new dotted-line coordinator positions, should be responsible for implementing the above recommendations and the following:

- Facilitating the development of consistent and coherent policies across the Rutgers–New Brunswick schools.
- Resolving chronic bottlenecks (e.g., assignment of special permission numbers and assessment of transfer credit) that impede academic and career advising and academic support.
- Promoting innovation and the adoption of evidence-based practices in the academic support of students.
- Monitoring enrollment, assessing curriculum, and staffing the Central High-Impact Practices Committee discussed in Chapter 4 in its vetting of proposals for high-impact courses to satisfy the proposed new student transition course requirement (Recommendation 6.9)
- Administering the Academic Integrity Policy for Rutgers–New Brunswick and providing programming for students and instructors on academic integrity.
- Providing resources for assessment, technology adoption and coordination, grant writing, instructional design, communications, and fundraising support.
- Convening student success professionals across the campus to promote ongoing collaboration, information sharing, and professional development.
- Coordinating the support for transfer students including managing pre-transfer advising, transfer credit evaluation, and transition support for transfer students. Promoting transfer student success and improving the overall readiness of students transferring to Rutgers–New Brunswick by spearheading collaboration among Academic Advising, school deans, Career Exploration and Success, Learning Centers, Registrar, Enrollment Management, and other key stakeholders.
- Coordinating the support for first-year students, including developing and maintaining the pre-semester online course and Canvas resource site (Recommendation 6.12) working with campus partners to coordinate first-year transition courses and programming, and collaborating with Student Affairs to run New Student Orientation.
- Implementing professional development opportunities as well as recognizing and rewarding excellence for staff and faculty in student support positions across New Brunswick.
- Adopting, managing, developing, and supporting campuswide educational technologies like CircleIn, Sutable, Degree Navigator, and Penji for student learning, engagement, and communications, as well as coordinating the use of the universitywide badging system for extracurricular and co-curricular activities focused on professional and academic skill development. Specific recommended technologies are included in the Rutgers–New Brunswick Technological Solutions for Student Success Working Group Report (see Appendix C for the Technological Solutions for Student Success Working Group Report).
- Collaborating with Institutional Planning and Operations to secure access to the institutional Salesforce System, enabling more efficient tracking of relationships with recruiters.

Furthermore, CES will facilitate two-way data sharing with career offices across multiple schools and the Rutgers University Foundation.

As the OUE's scope of responsibilities evolves—in particular, as it grows to include more services aimed at graduate as well as undergraduate students—consideration should be given to whether the name of the office should also change, perhaps along the lines of analogous offices at peer institutions, like “Student Academic Excellence” or “Teaching and Learning.”

Recommendation 6.19. We recommend that the Rutgers–New Brunswick OUE study the variables that impact student performance and broaden access to those interventions that are subsequently identified as successful.

Specific focus areas should include why students leave the university without graduating, what factors lead to delayed graduation, which efforts decrease DFW rates, and which interventions support retention, persistence, and success.

Recommendation 6.20. We recommend that the Rutgers–New Brunswick Office of Undergraduate Education implement a learning strategies assessment as part of placement testing.

This assessment can be couched as “the first step towards your success,” connected to the curricula of the 1- and 2-credit courses recommended above and used to reinforce messaging about Rutgers–New Brunswick as a supportive environment.

Recommendation 6.21. We recommend that Rutgers–New Brunswick create an assessment/testing center to facilitate a variety of types of testing, including:

- Accommodations for students with disabilities
- Proctored exams for online courses
- Placement testing
- Exam scheduling for large courses (to reduce the number of common hour exams that are scheduled very late, on Sundays, or at times that are otherwise difficult for many commuting and non-traditional students)
- Research assessments

The center would be a physical space (or spaces) staffed with part-time proctors and assessment specialists. The center would also require IT personnel to support the technological tools used in testing.

Critical capabilities include:

- A robust scheduling system.
- Communication capabilities to allow students to communicate with off-site instructors.
- Workspaces for instructors so they can be available to test takers while having a place to work.
- Testing software to vary exams enough that large class exams don't have to be conducted concurrently.
- Security measures to ensure appropriate screening of those entering the facility.
- Lockers where students' valuables can be stored while they take an exam.

When not being used for testing, the space can be used for other purposes such as new student orientation, group advising, staff training, and the like. The center could also be made available for rental by outside groups to generate revenue and offset costs.

Recommendation 6.22. To ensure the long-term sustainability of the changes being recommended here, we recommend that the OUE arrange for the external review of Rutgers–New Brunswick's performance in these areas (from top to bottom and including the OUE's own role and effectiveness).

The first such review should take place two to three years after the approval and full funding of the final Discovery Advantage recommendations, with a steady-state cadence of five years thereafter. External reviewers should be selected on the basis of their specific expertise in the areas of academic advising, career preparation, and academic support and their familiarity with the challenges that can arise in these areas for a large public university.

VII. Conclusions and Next Steps

Curriculum Mapping

The next steps for the Curriculum Mapping subcommittee are to

- Polish our map prototype.
- Gather feedback from students, advisors, and other community members.
- Conduct user testing.
- Develop a process for reviewing and updating the maps on a regular basis.
- Create an assessment program for the curricular maps to measure impact.

Advising and Academic Support

The Advising and Academic Support Workstream has identified many areas of strength in the current advising and academic support infrastructure at Rutgers–New Brunswick. However, the workstream also found that many students are not accessing the resources they need to thrive. This shortfall has multiple causes, including inadequate staffing and resources for student support offices, lack of awareness on the part of students as to where to find the services available to them, inconsistencies in policies and processes across schools and programs, and limited coordination of academic support at the campus level.

The recommendations put forward in this report are intended to address these shortcomings. Many of these recommendations will require increased funding. Fundamental for many of the proposals is the increased staffing of academic and career advising offices. Without reducing advisor caseloads, the proactive, holistic support envisioned by the Advising and Academic Support Workstream will not be possible.

Some of the recommendations put forward in this report will not require substantial increases in resources, and these should be acted on as soon as possible. These include recommendations under Goals A, C, and D aimed at helping students navigate existing resources, facilitating more coordination and information sharing across academic support offices, and providing professional development opportunities to faculty and staff in advising and academic support roles. Some elements of the recommendations under Goal E can also be acted upon in the short term, such as developing

coordinating councils for academic advising and learning assistance and regularly convening student success professionals from across campuses to promote ongoing collaboration, information sharing, and professional development. Accelerated implementation of these recommendations (even if others can only be realized on longer timescales) will represent an important down payment on supporting the success of all our current and future students.

Chapter 7 | Understanding the Student Experience and Assessing Interventions: Data

Rutgers–New Brunswick, like our peers, collects ever-increasing volumes of data, particularly regarding our students. Pre-enrollment data, the comprehensive records of enrolled students, and post-graduation and alumni data all contribute to a detailed record of future, current, and past students. Our abiding challenge, however, is to overcome barriers to Rutgers’ ability to effectively use these vast stores of data to better understand our students and improve their educational experience.

I. Charges and Expected Outcomes

Charges

Data Core Workstream

- Overall: The Data Core Workstream should work closely with the Curriculum, Advising and Academic Support, Living-Learning Communities, Administrative and Financial Structure, and Enrollment and Marketing workstreams to identify present and future needs for data that help address their charges.
 - Audit: Conduct a thorough audit of our systems of record and primary data sources, including identifying any gaps in those systems and data repositories that are inhibiting robust data collection, data sharing, and data analysis.
 - Data Governance: Outline a detailed data governance model that will include both the individual roles for key positions at all levels and the standing committees that will ensure that our data efforts remain relevant and up to date.
 - Data Quality: Provide specific recommendations to improve data quality, including how institutional data is collected, secured, shared, and used for reporting and analysis.

Expected Outcomes

- An enterprise-wide framework that develops, supports, and promotes processes, practices, and data governance structures to transform both external institutional reporting and internal data-informed decision-making efforts designed to advance our institutional mission and our students’ success.

II. Introduction and Context

The Data Core Workstream was given a two-part charge, one immediate and tactical, one long-term and strategic: to field and fill individual data requests from the respective workstreams to inform their efforts and recommendations; and to evaluate our current data environment and recommend considerations to improve data capture, reporting, and analytics, particularly as they relate to student data and student success.

Though the workstream includes members with extensive student data experience and expertise, those members do not possess the necessary access to fill the individual workstream requests. Rather, the workstream worked with relevant university partners and offices to organize, distill, and prioritize

individual data requests, and to provide the necessary reports and analysis. The workstream determined early in its efforts that it would use part one of its charge to address part two, the expected outcomes. That is, it used the process of filling individual requests to identify gaps and challenges within our current data environment.

At its core, the Discovery Advantage initiative is intended to provide a holistic review of the undergraduate educational experience at Rutgers–New Brunswick and to identify areas where strategic improvement can provide the broadest benefit for our students. At their best, such undertakings are not designed to be critical of individual areas and units or the diligent staff and faculty who work within them. Rather, they provide opportunities for periodic institutional self-assessment. The central questions that animate the overall initiative are those that healthy institutions should address regularly: Where are the institutional barriers impacting admissions, persistence, and completion, and how can we systematically improve educational experiences, learning outcomes, and overall student success?

The initial workstream data requests intended to help address these questions might be considered basic: retention and graduation rates—across Rutgers–New Brunswick, by school, and by department—broken down by first-year start vs. transfer; non-traditional, first generation, out of state, international, military-affiliated; race and gender; and Pell eligibility. Additional requests regarding time-to-degree issues—such as the average number of credits at graduation; breakdowns on school-to-school transfers; excess remedial credits; number of AP credits—might be considered more detailed, but the Discovery Advantage steering committee members can be excused for assuming that this level of basic reporting either already exists or can be made readily available. Appendix Y lists the data requests made by other Discovery Advantage workstreams.

In attempting to fill these initial requests, however, the Data Core Workstream confirmed the past experiences of many of its individual members, namely that—despite our current external reporting capabilities, which are ably managed by the Office of Institutional Research and Academic Planning (OIRAP)—Rutgers–New Brunswick lacks well-coordinated, reliable internal data reporting and analytics capabilities to measure and track both these basic institutional metrics and the more detailed analysis necessary for data-informed decision-making. As a result, the workstream turned its attention to making long-term recommendations for a library of robust internal institutional dashboards sophisticated enough to allow detailed filtering and sorting; and investments in analytics capabilities that enable ad-hoc analysis of student information to support targeted intervention initiatives. Critically, the workstream strongly advocates for the central role of functional leads and senior administrators in our long-term data planning initiatives, especially those at the chancellor-led, school, and department level who are well-positioned to help articulate the strategic questions necessary to direct data reporting and analytics efforts.

III. Benchmarking

Analytics in Higher Education: Benefits, Barriers, Progress, and Recommendations (Bichsel, 2012)

- Focuses on the largely underdeveloped nature of analytics efforts in higher education, highlighting:
 - The potential for both resource recovery and targeted educational interventions using data-informed decision-making;
 - The importance of beginning educational analytics efforts by defining strategic institutional questions and using those questions to identify the appropriate stakeholders and data sources necessary to address them; and

- The necessity of both partnerships—including institutional research (OIRAP), information technology (OIT), and, critically, functional leaders and senior administrators—and planned iteration in analytics efforts (Bichsel, 2012).

The Equity-Excellence Imperative: A 2030 Blueprint for Undergraduate Education at U.S. Research Universities (The Boyer 2030 Commission, & the Association for Undergraduate Education at Research Universities, 2022).

- Provides suggestions on how to assess excellence in undergraduate education and hold institutions accountable:
 - Include all students (i.e., students who transferred in and those who transferred out), entering in any term in the assessment of pathways and success. Track student success demographically including status such as first-generation, low-income, as well as grouping based on full-/part-time, traditional/non-traditional, etc. Institutions should have agreed-upon definitions of all the terms. Consider including data indicating participation in high-impact practices (HIPs) and other indicators of goals for education beyond completion rates. Create an institutional dashboard to track progress over time.
 - Connect data sources that are hosted across the institution to support holistic assessment and transparency in process and progress.
 - Consider tools, such as [Curricular Analytics](#), that may be useful for a wide range of stakeholders. For instance, disaggregated student pathway data by degree program may help faculty and department leadership to analyze and make changes for equity and success.
 - Consider professional development opportunities for advisors and/or other professionals who may need to use the data but may lack extensive experience in data analysis (The Boyer 2030 Commission, & the Association for Undergraduate Education at Research Universities, 2022).

Student Data in the Digital Era: An Overview of Current Practices (Alamuddin et al., 2016)

- Foregrounds the importance of data efforts to directly improve students' educational experiences, learning outcomes, and overall success, highlighting the potential for data initiatives to better understand student learning and student behaviors; identify institutional barriers to persistence and completion; and provide advisors and instructors the ability to proactively reach out to struggling students.
- Identifies many of the challenges to large-scale data efforts, including difficulty with data integration across multiple platforms and the risks associated with underdeveloped data ownership and data governance practices.
- Highlights a common tendency to avoid overreaching through data initiatives, which often leads to “underreaching,” creating inaction in areas where institutions have the potential to help students and enhance student success (Alamuddin et al., 2016).

Traveling Through Time: The Forum Guide to Longitudinal Data Systems (National Forum on Educational Statistics, 2010)

- Provides a detailed outline for educational institutions to consider when developing enterprise-wide “longitudinal data systems” (LDSs), including:
 - The importance of robust, multilevel data governance structures.
 - The roles and responsibilities of the different data governance levels.
 - The basic steps to set up data governance models.

- Highlights the importance of building a strong foundation to develop a data-informed institutional culture: greater organizational coordination and collaboration creates higher quality data, which increases data use to improve the educational enterprise.
- Outlines data security and privacy issues, providing recommendations to ensure responsible use of student records (National Forum on Education Statistics, 2010).

IV. Current Challenges

Noting that Rutgers–New Brunswick is sprawling and complex is not a criticism; it is a statement of fact. Though we celebrate our Colonial college roots, what we recognize as our modern university came together over the past roughly 100 years through different periods of dynamic growth and expansion as we transitioned from a private to a public institution and absorbed and re-absorbed formerly independent institutions along the way, creating today’s massive, diverse, sprawling Rutgers University, with a footprint in every corner of the state emanating from its hub in New Brunswick.

Yet, institutions of higher education, which are designed around stability, often struggle to adjust to convulsive change, and perhaps nowhere are these effects felt more acutely than in the areas of data and information technology. For example, the recent integration of the former University of Medicine and Dentistry of New Jersey with Rutgers essentially doubled our current operation and brought with it new processes and practices, and, of course, new information systems, to which the university has had to adapt and adjust. As we take stock of our current data environment, it is important to acknowledge the university’s ongoing challenges in keeping pace with near-constant change, while managing to maintain consistency and continuity.

Generic discussions about data, particularly among nonexperts, often conflate the different aspects of the larger data ecosystem, which risks obscuring the underlying challenges inherent in the related, yet separate, areas of data core, data reporting, and data analytics that, in a mature data environment, should be tied together by well-defined data governance. To gain a better understanding of the scale and scope of the challenges facing Rutgers–New Brunswick, particularly with regard to student data, it is important to look at each of these areas separately for a better understanding of the whole.

Data Core

What we might consider our data core is an ever-expanding web of databases, homegrown and third-party vendor software platforms that interface with those databases, and on-premises and cloud-based servers that host both. When we talk about accessing “our” institutional data, we are generally referring to different databases, often managed and overseen by different functional areas, the “custodians” or stewards of that data. Indeed, institutional data is generally most useful when it crosses functional areas—and is drawn from separate databases. For example, basic reporting on who is teaching what to whom requires human resources, course, and student data, all of which reside in different locations and must be tied together by the appropriate “keys.”

Because of the age of the institution—and our need to maintain continuity—much student information is still housed on a now antiquated mainframe system, which was state-of-the-art during the middle of the previous century. To ensure interoperability with many of the contemporary systems also deployed across the university, much of this data is also mirrored in more modern databases. Moreover, in addition to accessing core student data to operate, many third-party software systems utilized by the

universities maintain databases of their own, which contain information that is captured within—and is specific to—those respective platforms, and that data is often either opaque or inaccessible for our institutional reporting and analytics efforts.

The software platforms that interface with our databases are also a combination of mainframe, “homegrown,” and third-party vendor software systems: it is the software that actually makes the data usable. Though the term homegrown is often used pejoratively, many of the systems that have been developed by Rutgers programmers are highly sophisticated, and they allow for a level of customization that reflects our local needs. Critics of homegrown systems, on the other hand, point to that customization unfavorably, noting that it can lead to overcomplication that inhibits normalization, which is critical for reporting purposes. These homegrown systems can also be challenging to maintain and upgrade because software, by its nature, requires constant attention. Yet, so-called “vanilla” third-party platforms, which can rely on greater resources and programming support, often lack the ability for even basic customization, which is, likewise, important for many reporting and analytics purposes.

Often because access to enterprise-level student information is perceived as either limited or inflexible by academic units or departments, many areas have responded over the years by investing in their own information systems and technology solutions. Purchasing data information systems to meet the individual needs of departments and academic units is costly, however, and there are numerous examples in which multiple academic units have entered into individual contracts with the same vendor for the same data solutions or services, resulting in lost cost-savings and/or cost-sharing opportunities for the university. Moreover, though many units feel compelled to invest in these platforms to solve their own local challenges, this redundancy moves potentially critical information further from the institutional core, inhibiting or preventing enterprise-wide reporting and analytics efforts.

Along with local third-party information systems, many units have created their own homegrown solutions to address individual needs, creating an array of so-called “shadow” systems that often rely on some form of data “scraping,” where core data is generally pulled from a website or web application and stored either in separate, local databases or in static files. Naturally, this type of practice leads to widespread data inconsistency, which is a common challenge across the university, creating a broader lack of confidence in knowing which data is actually “correct”—yours, mine, or theirs. The impulse to create these systems and practices is generally well-meaning: units are responding to perceived gaps, errors, or limitations with enterprise-level data and systems to improve their operations and better serve their students. But the corrosive effects of data inconsistency and non-standard practices risk undermining institution-wide reporting and analytics efforts, particularly those related to student success.

Data Reporting

Like all universities that receive state and federal funding, Rutgers–New Brunswick is responsible for providing extensive yearly reports—which are drawn from our enterprise-level databases and systems—to state and federal agencies. Among other duties, the Office of Institutional Research and Academic Planning (OIRAP) manages this critical function for the university, ensuring that these reports are accurate and up to date, and, importantly, consistent from year to year. To guarantee the necessary levels of compliance, OIRAP follows strict processes and protocols to maintain this consistency.

In addition to its compliance function, this detailed external reporting has tremendous widespread applicability. As anyone who has spent time utilizing the powerful Integrated Postsecondary Education

Data System (IPEDS) database will attest, having the ability to compare Rutgers–New Brunswick to peer universities across the country is tremendously valuable. The key metrics that help us answer the question of how we are doing—e.g., admissions, retention, graduation, and enrollment rates—are equally important to our peers, and tracking these metrics over time vis-à-vis our peers provides broader perspective in answering those fundamental questions.

Inherent in this type of external reporting—which can be used for large-scale, longitudinal study—is the concept of “data norming.” Essentially, every college and university in the country is organized somewhat differently, and they all offer different sets of majors—often using different names—through different schools and units. Therefore, to make apples-to-apples comparisons, one must first take the many varieties and put them in the same basket. For example, for external reporting, OIRAP creates a “crosswalk” in which Rutgers–New Brunswick majors are mapped onto normed options, and these normed values are used to make broader comparisons.

The issue with this type of example, however, is that, although the data is “correct,” it does not match what internal constituents expect, which points to a broader institutional data reporting challenge: external and internal reporting are often either mistaken for one another or, more problematic still, conflated and treated as if they are the same. Moreover, by their nature, external reports reflect only basic institutional data in aggregate. Internal reports, on the other hand, require extensive data in greater detail, and data that can be easily manipulated through sophisticated sorting and filtering in order to be useful for internal planning at various levels of the institution.

OIRAP oversees a longstanding, critical institutional function: managing our external reporting responsibilities to state and federal partners. To create an institution-wide culture of data-informed decision-making, however, Rutgers–New Brunswick must clearly differentiate its external and internal data reporting and build robust internal reporting capabilities that can reflect our unique organizational structure—and, most importantly, our specific internal goals and needs—and help answer fundamental questions at the central, chancellor-led, school, department, and unit levels.

To build effective internal reporting takes sustained commitment and direct coordination between the critical stakeholders: senior administrators who provide strategic direction; the so-called “business process owners,” i.e., the functional leads who best understand what the data elements mean; the school and department heads, who can articulate the local needs and nuances; faculty and staff on the ground, who actually input the data and can ensure its accuracy; and the IT professionals, who maintain the databases and data systems, and who build the requested reports. And it takes continual iteration to ensure the reports are accurate and up to date by regularly verifying the accuracy of the data entry, the complex data “joins” and calculations, and the underlying assumptions that are used to build the reports.

It is important to stress that our lack of robust, accessible, and reliable internal reporting is not an abstract barrier; it directly impacts operations at every level of the institution. That is, chancellor-led divisions regularly request information and reports from the schools and units, which, in turn, request information and reports from departments. Yet, each level generally lacks the ability to reliably provide the requested information, so they are often forced to share data that can be either partial or incorrect, which affects both regular operations and strategic planning efforts.

Data Analytics

Seemingly sterile discussions about data are generally off-putting to many people who are dedicated to higher education, but the concept of data analytics can be truly objectionable: how can the distinctly personal, idiosyncratic, intellectual relationships and interchanges between faculty and students during their academic careers be captured in charts and graphs? At an institution as large as Rutgers–New Brunswick, however, it is simply not possible to responsibly guide the progress of 50,000 students across 14 schools and 120 departments without aggregating key information to provide actionable insights. The challenge for the institution is to acknowledge and support the unique paths of 50,000 individuals while using the increasingly sophisticated information we have about those students to provide individualized interventions at strategic points during their educational journeys such as advisors alerting students during the preregistration period that they are missing key degree requirements or academic coaches reaching out to students who are performing poorly in multiple courses early in a semester. Finding those meaningful “nudge” opportunities starts with those same dedicated people asking strategic questions, such as: Does student engagement with Learning Management System (LMS) course material predict success? Can specific strategic interventions in so-called high “DFW” courses improve student success and time-to-degree?

Once animating questions are identified, successful data analytics efforts roughly follow these iterative steps:

- Locate the relevant data,
- Glean insight with analytics tools,
- Identify opportunities to “nudge” behavior,
- Track the results to gauge impact, and
- Use the outcomes to modify the animating question or ask new ones.

If we think about data reporting as largely retrospective and reactive, data analytics can be considered predictive and proactive, answering such questions as: What are the true roadblocks to student success and, relatedly, how can we do better? Or, more accurately with respect to areas of student success: How can we help our students excel?

So-called Business Intelligence (BI) and data analytics solutions are relatively new in higher education, but they are rapidly gaining traction across the university. Their adoption with student success efforts, however, has been notably slow and halting. Of course, data analytics rely on the larger data core and data reporting, so the challenges outlined above directly impact more widescale use. Nonetheless, because of their tremendous potential, the workstream strongly recommends that the university fully commit to responsible data analytics efforts where they are currently glaringly absent. Again, it is critical that faculty, faculty administrators, and functional leads contribute to formulating the animating questions and informing the resulting “nudge” opportunities. But a university as vast and complicated as Rutgers–New Brunswick must avail itself of all available tools to ensure a broader, sustained impact on our students’ educational experiences.

Data Governance

It is difficult to find a simple, universal definition of “data governance.” For some, data governance concerns the important matters of privacy, confidentiality, and legal compliance. For others, it refers to

security, permissions, and access. For others still, it applies to different data stakeholders' ability to coordinate institutional reporting and analytics efforts. The topic's apparent ambiguity often makes engagement with data governance a challenge.

Robust, well-articulated data governance is interconnected and multilayered, and includes all the above concerns. Well-defined data governance is the foundation upon which all successful data ecosystems are built; its absence will impede even the best-intentioned data initiatives. Data governance is both structure and process, outlining clearly defined roles and responsibilities for everyone included in the overall ecosystem, from the chief executive responsible for the university's strategic direction and the senior administrators who oversee business areas, to the functional leads who manage day-to-day tasks of these business areas, down through the chancellor-led, school, and departmental users who are largely responsible for inputting institutional data and best placed to ensure its accuracy and application. And, of course, this governance structure is supported through representation from the Office of General Counsel (OGC), the Office of Information Technology (OIT), and OIRAP.

Likely due to the seemingly constant changes in our overall university structure—particularly over the past 25 years—Rutgers–New Brunswick has struggled to create and sustain the kind of well-defined data governance necessary to support a large, complicated, and ever-changing institution. It is telling that the most common data challenge is also the most basic: whom to ask for what kind of data. There is a widespread lack of clarity as to who—or, more specifically, which functional area—is responsible for which sets of data and, perhaps more importantly, how to request or access that data in a way that is appropriate, manageable, timely, and effective. Even for those functional areas with a clearer handle on their own data, the lack of well-defined data governance makes data-sharing across functional areas difficult.

It is this difficulty in coordinating data efforts across functional areas that is most challenging to large-scale data reporting and analytics efforts. Indeed, the most valuable institutional data initiatives must work across functional areas—combining, for example, student, course, human resources, and financial data. Most importantly, area experts must coordinate these efforts because the individual data fields in each area can be opaque to those outside of those functional areas—including to staff members in IT and OIRAP—and if underlying assumptions are not confirmed and verified by those area experts, the resulting reports and analysis will include fatal flaws. In addition to providing clearly defined roles and responsibilities for all relevant stakeholders and the mechanisms for the necessary cross-area coordination—including processes that support iteration and regular review and verification—effective data governance establishes a culture of accountability, collaboration, data-based decision making, and standardization.

V. Goals

The overarching goal is to create, support, and sustain an institution-wide culture of data-informed decision-making, particularly for student support and student success. To support this goal, this workstream encourages the university to direct the necessary resources and institutional will to develop the required structures, processes, and practices. Specifically, Rutgers–New Brunswick should consider it a critical institutional imperative to develop:

- Data systems that are flexible and facile, and that facilitate complex sorting, filtering, and ad-hoc report building.

- Internal reporting and analytics capabilities with standard metrics and dashboards that are broadly accessible and that enable users to reliably gain data-driven insights across functional business areas.
- Data governance that encourages and enables cross-unit collaboration.

VI. Initial Recommendations

The recommendations below are based on the following core principles:

- Institutional data is a foundational resource that directly supports the university’s threefold mission of teaching, research, and service, underpinning both regular operations and strategic planning, institutional initiatives, program development, and institutional self-assessment.
- Rutgers University, led by the university president, is the sole “owner” of institutional data. The senior administrators overseeing respective university business areas, and the functional leads managing their day-to-day operations, are the “trustees” and “stewards” of that data, responsible for ensuring it is accurate, up to date, and appropriately shared across business areas, supported by OIT.
- While accounting for the business, legal, and ethical compliance necessary to guarantee data security and confidentiality, every effort should be made to ensure that institutional data is appropriately accessible, flexible, and useful to university stakeholders at every level. This will maximize the value, benefit, and utility of this foundational resource.

The core principles above are intended to apply to all institutional data efforts at Rutgers–New Brunswick. In addition, the Data Core workstream recommends that Rutgers–New Brunswick place a particular focus on student data initiatives, which include how data is properly gathered and secured and how it is used for internal reporting, and analytics efforts designed to improve undergraduate student success and the overall undergraduate experience. The workstream notes, too, that gaps and limitations in data systems and processes not directly connected to student success initiatives can significantly impact the undergraduate experience.²

The recommendations are divided into general recommendations—outlined below and organized to mirror the structure of the Current Challenges section—and specific recommendations, included in Appendix W. The Data Core workstream understands and appreciates that some of these items are either planned or in progress but included them to underscore their importance and centrality to workstream discussions. Every effort should be made to ensure that the various groups working to improve our overall data ecosystem coordinate their efforts on this critical institutional need.

² For example, the current challenges with the Oracle Student Financial Planning (OSFP) project is having a substantial and widespread negative effect on the overall student experience.

Data Core

Recommendation 7.1. We recommend that core institutional data be centrally managed and organized to ensure individual business area data is both clearly delineated and readily shareable where appropriate.³

Recommendation 7.2. We recommend that all institutional data fields be reflected in a robust, easily navigable, institution-wide data dictionary, including both detailed definitions and uses and the names of the business area (trustees and stewards) for each set of fields. The business areas are responsible for the integrity of their data fields and for their regular maintenance.

Data Reporting

Recommendation 7.3. We recommend that Rutgers–New Brunswick clearly delineate the meaning and purpose of external and internal institutional reporting, and prioritize efforts to build an easily accessible, robust, flexible internal reporting library to inform strategic planning, institutional initiatives, program development, and institutional self-assessment at the central, chancellor-led, school, and department and unit levels.

Recommendation 7.4. We recommend that business area leads direct internal reporting efforts to ensure that proper data fields are included and that the appropriate assumptions are guiding the use of the data from their business area. These efforts should include representation and plans to gather input and feedback from all levels that will make use of the reporting to ensure that it reflects the respective needs.

Recommendation 7.5. We recommend that regular training for users be provided at each level to make sure they understand what the reports do—and do not—represent and what they can and cannot be used for.

Recommendation 7.6. We recommend that a clear process be provided for central, chancellor-led, school, and department and units users to request new data reports. The process for new report creation should be overseen by a Data Council (see below under “Data Governance”).

Data Analytics

Recommendation 7.7. To augment data reporting, we recommend that robust data analytics efforts be developed to help answer strategic questions at the central, chancellor-led, school, and department and unit levels using institutional data.

Recommendation 7.8. As with data reporting efforts, we recommend that business area leads direct data analytics efforts to ensure that proper data fields are included and that the appropriate

³ The workstream understands and appreciates that there will always be a need for certain data to be collected and used at the “local” level. Nonetheless, core institutional data must be managed centrally to ensure all units are relying on the same source data.

assumptions guide the use of the data from their business area. These efforts should include representation and plans to gather input and feedback from all levels that will use these analyses.

Recommendation 7.9. We recommend that analytics teams that include representatives of the New Brunswick schools be given the ability to work with business area leads to request the data needed to assist with emerging analytics efforts.

Recommendation 7.10. Given the widespread use of Tableau, the enterprise-wide reporting and analytics tool, we recommend that the university provide regular training opportunities for staff at every level, including those required to access the increasing number of Tableau reports and those who create the reports. The workstream strongly advocates support for an active local Tableau User Group, in which experiences and best practices could be regularly exchanged.⁴

Data Governance

Recommendation 7.11. We strongly recommend that Rutgers commit the time and resources to carefully design and implement a well-defined, multi-layered, interconnected data governance model that includes both structure and process, outlining clearly defined roles and responsibilities for both the individuals (positions, not individual people) and groups included in the overall data ecosystem, from the chief executive who is responsible for the strategic direction of the university and the senior administrators who oversee each of the business areas, to the functional leads who manage the day-to-day of these business areas, down through the chancellor-led, school, and departmental users who are largely responsible for inputting institutional data and best placed to ensure both its accuracy and its application.

Well-defined data governance is both structure and process, outlining clearly defined roles and responsibilities for both the positions and groups included across the overall ecosystem.⁵ Though the final form might include some variation, the workstream proposes the following roles:

- *Data Owner:* The president of Rutgers, who is ultimately responsible for all institutional data, is the data owner. The data owner identifies and appoints the data trustees, who are accountable to the data owner and certify the data for their respective business areas.
- *Data Trustees:* The senior administrators overseeing every business area at the university (e.g., Registrar, Institutional Planning and Operations, Administration and Finance, University Human Resources, etc.) are the data trustees, responsible for all data collected in their business area. The data trustees identify and appoint data stewards.
- *Data Stewards:* The directors and area heads who directly oversee the institutional data in the respective business areas (e.g., Registrar, Enrollment Management, course scheduling, etc.). The data stewards are the subject matter experts for data in their business areas, responsible for understanding the meanings and values for all data captured in the Data Dictionary and for

⁴ Tableau desktop for creation is currently not an institution license. The university should investigate the feasibility for institution-wide licensing for Tableau desktop, which will also become increasingly useful for faculty teaching and research.

⁵ A graphic for a sample data governance structure—which includes both individuals and groups—is included in Appendix X.

overseeing integrity and regular review. (Every data element captured in the Data Dictionary must have an assigned data trustee and data steward).

- *Data Users Group*: Includes representation from the chancellor-led and school levels, who help identify the necessary reports and analysis “on the ground,” confirm their value and utility, and provide feedback on revision through iteration.

In addition to the roles noted above, the data governance structure should include consideration for a data governance coordinator, the single point person empowered to oversee and manage data governance efforts; a designated senior business analyst;⁶ the executive vice president for academic affairs; the chief information officer; the vice president for institutional research and decision support; and senior representation from the Office of General Counsel and University Ethics and Compliance.

Subsets of the individuals above will make up the respective governance groups, which will manage the related functions:⁷

- *Data Council*: The enterprise-wide committee responsible for overseeing all data governance matters.
- *Data Policy Committee*: Responsible for creating, approving, and revising all data policy matters.
- *Data Stewards Working Group*: Responsible for managing all regular data governance initiatives, ensuring there is appropriate business area representation for individual data initiatives.
- *Data Request Review Committee*: A standing group responsible for reviewing and prioritizing individual data requests and projects.

Among their responsibilities, the Data Council will:

- Oversee multi-level lines of verification and validation (e.g., “ground-level,” where data is entered, and compliance with university policies are independent).
- Manage data sharing agreements that include provisions for data protection, confidentiality, and appropriate security measures.
- Provide regular training on data protection practices, privacy regulations, and their responsibilities regarding student data security.
- Define data ownership and designate responsible individuals, units, or departments for the collection, storage, processing, and retention of data (including student data).
- Oversee data usage policies for various data sets and systems (e.g., student data, financial aid data, registrar data, etc.) and ensure they are communicated to university stakeholders.
- Develop a template for what the data governance documentation should include and ensure the respective data stewards complete the template.

⁶ “In essence, the business analyst resides at the border between the business and technology sides of the agency and, within the organizational structure, may be in either area. Acting as a link between the two domains, the analyst harvests, assembles, and translates business needs into foundational technical specifications” (National Forum on Education Statistics, 2010, p. 34).

⁷ For examples of detailed roles and responsibilities for the respective individuals and groups, see *Traveling Through Time: The Forum Guide to Longitudinal Data Systems* (National Forum on Education Statistics, 2010).

VII. Conclusions and Next Steps

Rutgers–New Brunswick is behind many of its peer institutions in its ability to manage the data necessary to evaluate and support student success. Our data remains in separate silos with only limited views and reports available to administrators, school and department leaders, students, and parents. As a result, stakeholders make do with incomplete—and often inaccurate—data, and the data and report development work done in one area is not known to other areas that might make use of the same tools.

Overhauling our data ecosystem—in particular, our internal reporting capabilities—will require substantial commitment and sustained effort by a large number of people across different units and areas. But the benefits to Rutgers–New Brunswick institutionally would be profound, particularly in the areas of student support and student success. Greater organizational coordination and collaboration leads to higher quality data capture, reporting, and analysis, which leads to increased opportunities to improve the student experience.

Chapter 8 | University Context: Central Services, Processes, and the Student Experience

The Rutgers–New Brunswick student experience exists within, and is influenced by, the larger institutional context of business and administrative services (referred to in this chapter as “Central Services”) and living, learning, and supportive spaces (the “Physical Environment”). Though these factors do not lie entirely within the purview of Discovery Advantage, several workstreams analyzed the ways these procedural and physical infrastructures affect our students, identified areas of concern, and made the recommendations provided herein.

I. Charges and Expected Outcomes

Charges

General Charge to Discovery Advantage (Objective 1 from the Student Success Pillar of the Academic Master Plan)

- Explore ways to create a welcoming, equitable, and supportive learning environment.

Living-Learning Communities Workstream: Campus Revitalization Subcommittee

- Study the current residential landscape and supporting infrastructure and create a revitalization plan for Rutgers–New Brunswick that includes the future building of new residential spaces and renovation of existing spaces that can support living-learning communities for both first-year and continuing students and support other types of housing, including for upper-class students.

Expected Outcomes

- Create a welcoming, equitable, and supportive learning environment.
- Develop a plan for residential housing, both new and renovated, that can provide an appropriate structure for the planned residential communities.

II. Introduction and Context

Discovery Advantage’s focus on the Rutgers–New Brunswick student experience necessitated an examination of factors that, beyond those covered elsewhere in this report, impact student success and well-being. This chapter is not an exhaustive examination of the central services and processes that may impact the student experience. However, the issues raised here are some that have a major impact on the student experience, and their impact speaks to the need for closer attention to these processes as we work to improve the environment for our campus community. All elements of Rutgers University’s education, research, and service mission are intertwined and require up-to-date procedural and physical infrastructures.

Central Services

Many of Rutgers University's central business and administrative services affect the student experience either directly or indirectly through their impact on academic departments, faculty, and staff. The student impact of services such as human resources and payroll may not be obvious—but if, for example, a department is delayed in hiring needed instructors, students may miss courses required for on-time graduation. If the director of an academic support unit must devote time to a payroll issue, there may be less time to spend directly supporting students.

Since the pandemic began, Rutgers and other higher education institutions have experienced high rates of staff turnover that have created challenges throughout many administrative offices. Resulting delays and gaps in service have affected students, faculty, and staff. Adding to these concerns, Rutgers is in the process of adopting several new systems, including the new financial aid system noted in Chapter 5 and the Common Application discussed in Chapter 3. Even when the rollout for such systems works smoothly, there is a learning curve for every new system and the end-users will—at least at the outset—experience additional work and stress. Unfortunately, recent rollouts for certain systems at Rutgers have not been smooth. The disruption and stress caused by these infrastructure issues have led to more faculty and staff rollover.

Physical Environment

The physical environment shapes the student experience. Students attend classes and live on campus, and rely on our facilities for meals, transportation, and support for academic and co-curricular activities. The physical environment of Rutgers–New Brunswick's five campuses has been shaped by our more than 250-year history, the geography of our host communities, and the age and diversity of our facilities. Over the past two decades, the university has completed several transformative capital projects on our campuses including The Yard and Sojourner Truth Apartments on the College Avenue campus; Richard Weeks Hall of Engineering and the Chemistry and Chemical Biology Building on Busch campus; and 100 Rockefeller Road and the Livingston Apartments on Livingston campus.

However, a significant number of aging buildings and campus areas still need attention. This issue inspired comments from students and parents during Discovery Advantage focus groups and raises concerns about recent trends in higher education: Many of our peer institutions are upgrading their facilities and, correspondingly, students and their families have higher expectations for the amenities and spaces offered on campus (see Appendix E).

Our student population is also changing. Rutgers–New Brunswick expects to welcome more non-traditional students and students with neurodivergent traits—populations for whom physical spaces and resources are particularly important. Non-traditional students may require child-friendly study areas, expanded parking options, and lactation rooms. Students with sensory processing challenges may require low-stimulus study areas and/or strong visual signage for wayfinding.

Additionally, some campus spaces will need enhancements if Rutgers–New Brunswick is to realize the promise of the Living Learning Communities workstream's recommendations for new residential communities.

III. Current Challenges

Central Services

The implementation of the new student financial aid system described in Chapter 5, the Oracle Student Financial Planning (OSFP) System, provides a striking example of the impact that central business processes can have on students and the student experience. The new system has led to delays in payment of financial aid; overpayment of financial aid resulting in increased debt for students who must repay the funds; and inability to rapidly correct these issues. The ensuing stressors placed on students have been felt by staff in offices such as the Dean of Students-Student Support, the One Stop Student Services Center, and Advising offices to which distressed and disheartened students turn for help. Financial Aid and One Stop staff have found themselves in the overwhelming position of being unable to help students with financial aid problems—and this has created a stressful and inhospitable work environment. (See Appendix E for reports from focus groups of these staff that detail the challenges they have experienced.) This is not a welcoming and equitable environment for students, and it is not a welcoming and equitable environment for the faculty and staff most directly involved in student services, courses, and co-curricular activities.

The financial aid system is only one in a series of changes to business systems over the last several years that have created considerable challenges for students, faculty, and staff during their initial rollouts. The number of such changes itself creates problems for end users, as each requires time spent learning the new system and coping with the consequences of glitches. The report of the Working Group on Technological Solutions for Student Success, a committee charged by the vice provost for undergraduate education in Spring 2022, notes that the number of different technological solutions used on campus, many of which cannot share information, also contributes to a loss of faculty and staff time and can be confusing to students.

Other examples of the interrelated effects of central services have come from our undergraduate directors and advisors, who point to the increased number of tasks that have been added to their positions due to the adoption of new systems and policies; these extra responsibilities often leave them with less time for direct student contact and advising. The increasing complexity of hiring through University Human Resources (UHR) is also a contributing factor, as is the loss of UHR staff positions since the pandemic began. Due to these challenges, even departments with the funds to hire staff are unable to post positions expeditiously, causing those positions to remain vacant for extended periods. Many undergraduate directors note that hiring practices for instructors make it difficult to ensure that sections are staffed in time for the beginning of the semester, especially when departments need to add sections late in the summer following first-year registration.

The many ways Rutgers' centralized business services can directly or indirectly impact the student experience highlights the need to consider these processes in our reexamination of undergraduate education; we cannot fully address the undergraduate experience without addressing central issues that create stressful and ineffective work environments for faculty and staff. The issues noted above point to the need for processes and procedures to ensure that the adoption of new systems will allow our faculty and staff to continue performing their jobs with minimal disruption and allow them to continue providing the support and welcoming environment our students need. This will be critically important as the university plans for the adoption of a new student information system with potential broad impacts across our campus community.

Physical Environment

Rutgers–New Brunswick, like many universities, grapples with the repercussions of past, budget-related decisions to postpone maintenance activities (“deferred maintenance”) across its physical plant. Many campus buildings exhibit general disrepair, inadequate climate control, and even recurrent flooding and leaks. Students and parents in focus groups noted residence hall issues, including malfunctioning HVAC units, insect infestations, and bad odors. These are emblematic of the general state of many older buildings on campus.

The complexities of our geography create further challenges for the student experience. Parking is limited, and students must rely on the campus bus system to travel between campuses. Changes in bus routes and bus apps can create challenges for students, especially at the beginning of the semester. Recent capital investment has been uneven across the Rutgers–New Brunswick campuses, creating inequities in the quality of physical environment our students experience. This places further burdens on the campus bus system; students rely on it not only to reach classes but also to access study spaces, preferred dining halls, recreation centers, physical and mental health resources, and other facilities.

We also must re-examine our physical environment to consider the changing needs of our students. As noted above, Rutgers–New Brunswick expects increases in the numbers of non-traditional students and students with neurodivergent traits, groups with specialized needs for physical spaces. We must also consider how our physical environment should address students’ growing awareness of their own mental health concerns, such as with more spaces to support wellness and community building.

The university’s Rutgers 2030 physical master plan, produced in 2015, provided a comprehensive examination of the Rutgers–New Brunswick physical plant and offered proposals centered on the student experience (see Appendix C for the Rutgers 2030 Physical Master Plan). Its guiding principles align with the Academic Master Plan and the goals of Discovery Advantage:

- Learning at Rutgers: Create a world-class learning environment at Rutgers, through new technology and learning environments that foster collaboration and innovation.
- Life at Rutgers: Reinforce amenities that improve the experience at Rutgers for resident students, commuter students, faculty, staff, and visitors.
- Navigating Rutgers: Enhance the experience of moving through and between the districts by developing a multi-modal transportation system.
- Stewardship at Rutgers: Implement strategies for more efficient and effective utilization of land, facilities, and resources.
- Personalizing Rutgers: Utilize technology, consolidated services, and amenities to enable students to better coordinate the choices they make with regard to class schedules, housing, and transportation.

The university has met several of the Rutgers 2030 recommendations, but the pandemic and financial challenges have slowed progress on many others. And in the intervening years, deferred maintenance issues have continued to compound. Rutgers–New Brunswick needs to update the Rutgers 2030 plan to reflect current needs, keeping the student experience as a central focus.

IV. Goals

- Ensure that transitions of business processes and the adoption of new systems proceed smoothly, meet the needs of the Rutgers–New Brunswick campus community, and cause as little disruption as possible for students, staff, and faculty.
- Ensure the Rutgers–New Brunswick campus is a welcoming and safe environment that provides appropriate and convenient services and amenities for all students.

V. Initial Recommendations

Central Services

Recommendation 8.1. Rutgers must ensure that all stages of the planning process for new software or business processes, such as the choice of an appropriate software package or business program, should include many stakeholders, including faculty and staff content experts, end users, and the IT groups that will support them. (Adopted from the report of the Working Group on Technological Solutions for Student Success, 2022; see Appendix C for the Technological Solutions for Student Success Working Group Report.)

Rutgers must embrace collaboration, transparency, and community-wide feedback when selecting software vendors or implementing new systems which impact students and multiple end-users. All software packages and business systems will have strengths and weaknesses, and it is critical to engage content specialists and end-users in defining our needs and identifying programs that most closely align with those needs. The convening of the Working Group on Technological Solutions for Student Success provides a model for a process for defining the needs of end-users and identifying the strengths and weaknesses of various software programs.

Recommendation 8.2. New software system integrations and the decommissioning of old systems must be led by the business area leads responsible for the associated data and processes, supported by OIT and the project management teams. This will ensure that the business area processes are properly understood and reflected in the final product.

Recommendation 8.3. New system integrations must include a transition period during which the new system runs “in parallel” with the existing system and processes for at least one business cycle prior to full use of the new system. End-users and IT support must be consulted during this transition. Systems must not be fully implemented until they are operating efficiently and users are fully trained.

It is critical—and is standard procedure in many organizations—that old systems continue to be maintained and used during the transition period when migrating to new systems. This practice will enable evaluation of the new system by end-users to ensure staff can appropriately address and resolve issues. We also recommend the establishment of a mechanism to make necessary adjustments to such new systems by either university staff or the outside vendor until Rutgers fully implements the system. No system should be fully implemented until the university is certain that the system can handle the necessary volume at an institution of our size, and that any glitches are minor and promptly correctible.

Recommendation 8.4. New system integrations must include detailed user information and well-articulated plans for both initial trainings—which should empower users to provide feedback and enhancement requests—and ongoing, regular training. For each integration, the university should designate a primary point of contact for questions and concerns.

Recommendation 8.5. We recommend that the university undertake a review of University Human Resources to ensure it appropriately serves the needs of the campus community and supports the work of our departments, schools, and programs.

Physical Environment

Recommendation 8.6. We recommend that Rutgers–New Brunswick invest in facilities and infrastructure enhancements to support the Discovery Advantage goals and recommendations and to advance campus life for all our student populations, including the creation of neighborhoods and support for learning communities.

Recommendation 8.7. We recommend that Rutgers–New Brunswick conduct a re-evaluation and update to the Rutgers 2030 physical plan and subsequent plans to ensure alignment with the Academic Master Plan, Discovery Advantage, and the evolving needs of students, faculty, and staff.

VI. Conclusions and Next Steps

All university functions affect the student experience. Student success must be supported by procedural and physical infrastructures that operate efficiently and with stability and that promote a welcoming and adaptable environment.

This chapter’s forward-looking recommendations will ensure that future decisions regarding business practice changes, new systems integrations, and physical plant improvements will consider their likely direct or indirect impact on the student experience. But the challenges described here and in Chapter 5 regarding the new financial aid system must be addressed immediately. Our students, and the faculty and staff who support them, are struggling, and Rutgers must act quickly to protect our community well-being and institutional reputation.

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Appendix A

Discovery Advantage Committee Members

Organizational Structure



Chair

Kathleen Scott, Professor of Cell Biology and Neuroscience, School of Arts and Sciences

Executive Steering Committee

- Andrew Baker, Faculty, School of Arts and Sciences (Spring 2023)
- Brian Ballentine, Senior Administrator, Office of the President
- Stacey Blackwell, Staff, Rutgers Learning Centers
- Melissa Blake, Staff, R-Comm (Fall 2023)
- Wendie Cohick, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Barbara Cooper, Faculty, School of Arts and Sciences
- Alberto Cuitiño, Senior Administrator, School of Engineering
- Jason Geary, Senior Administrator, Mason Gross School of the Arts
- Ann Gould, Senior Administrator, School of Environmental and Biological Sciences & Academic Affairs
- Paul Hammond, Senior Administrator, Technology and Instruction
- Martha Haviland, Faculty, School of Arts and Sciences
- Jennifer Hollingshead, Senior Administrator, R-Comm (Spring 2023)
- Charles Keeton, Senior Administrator, School of Arts and Sciences
- Susan Lawrence, Senior Administrator, School of Arts and Sciences
- Laura Lawson, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- James Masschaele, Senior Administrator, School of Arts and Sciences

- Tara Maise, Faculty, School of Arts and Sciences (Spring 2023)
- Courtney McAnuff, Senior Administrator, Enrollment Management
- Salvador Mena, Senior Administrator, Student Affairs
- Carolyn Moehling, Senior Administrator, Undergraduate Education
- Thu Nguyen, Senior Administrator, School of Arts and Sciences
- Mark Robson, Faculty, School of Environmental and Biological Sciences
- Stuart Shapiro, Senior Administrator, Edward J. Bloustein School of Planning and Public Policy
- Peng Song, Senior Administrator, School of Engineering
- Sandra Tomlinson-Clarke, Senior Administrator, Academic and Faculty Affairs
- Paula Voos, Faculty, School of Management and Labor Relations
- David Wilder, Faculty, School of Arts and Sciences (Fall 2023)

Workstreams

1. Advising and Academic Support Workstream

Co-Chairs

- Ann Gould, Senior Administrator, School of Environmental and Biological Sciences & Academic Affairs
- Carolyn Moehling, Senior Administrator, Undergraduate Education

Representatives

- Andrew Baker, Faculty, School of Arts and Sciences (Spring 2023)
- Stacey Blackwell, Staff, Rutgers Learning Centers
- David Wilder, Faculty, School of Arts and Sciences (Fall 2023)

Steering Committee

- Carlie Andrews, Staff, Undergraduate Education
- Sanjib Bhuyan, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Michael Brown, Staff, School of Engineering
- Neal Buccino, Staff, Office of the Chancellor (Fall 2023)
- Diane DeLauro, Staff, School of Arts and Sciences
- Robin Diamond, Staff, School of Arts and Sciences
- Mallory Everett, Staff, Student Affairs
- Catrina Gallo, Staff, School of Arts and Sciences
- Shu Hsu, Faculty, School of Arts and Sciences
- Meghan Ingstrup, Staff, School of Communication and Information
- William Jones, Senior Administrator, Office of Career Exploration and Success
- Robert Kurland, Staff, Rutgers Business School
- Noshir Langrana, Faculty, School of Engineering (Spring 2023)
- Randi Larson, Staff, Undergraduate Education
- Ellen Leibowitz, Staff, Mason Gross School of the Arts

- Mei Ling Lo, Faculty, University Libraries
- Kareem Mumford, Staff, School of Arts and Sciences
- Ilene Rosen, Staff, School of Engineering
- Lisa Sanon-Jules, Staff, Mason Gross School of the Arts
- Courtney Stanzone, Senior Administrator, School of Arts and Sciences
- Christina Torian, Staff, Mason Gross School of the Arts
- Julie Traxler, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Thomas Vosseler, Senior Administrator, School of Arts and Sciences
- David Wilder, Faculty, School of Arts and Sciences
- Ethan Yoo, Student, School of Communication and Information
- Calvin Yu, Faculty, School of Arts and Sciences

Academic Advising Subcommittee

- Andrew Baker, Faculty, School of Arts and Sciences (Spring 2023)
- Michael Brown, Staff, School of Engineering
- Shu Hsu, Faculty, School of Arts and Sciences
- Robert Kurland, Staff, Rutgers Business School
- Ilene Rosen, Staff, School of Engineering
- Lisa Sanon-Jules, Staff, Mason Gross School of the Arts
- Courtney Stanzone, Senior Administrator, School of Arts and Sciences
- Julie Traxler, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Thomas Vosseler, Senior Administrator, School of Arts and Sciences
- David Wilder, Faculty, School of Arts and Sciences

Career Advising and Experiential Education Subcommittee

- Sanjib Bhuyan, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Diane DeLauro, Staff, School of Arts and Sciences
- William Jones, Senior Administrator, Office of Career Exploration and Success
- Noshir Langrana, Faculty, School of Engineering (Spring 2023)
- Randi Larson, Staff, Undergraduate Education
- Mei Ling Lo, Faculty, University Libraries
- Christina Torian, Staff, Mason Gross School of the Arts
- Ethan Yoo, Student, School of Communication and Information
- Calvin Yu, Faculty, School of Arts and Sciences

Learning Assistance Subcommittee

- Carlie Andrews, Staff, Undergraduate Education
- Stacey Blackwell, Staff, Rutgers Learning Centers
- Robin Diamond, Staff, School of Arts and Sciences
- Catrina Gallo, Staff, School of Arts and Sciences

- Ann Gould, Senior Administrator, School of Environmental and Biological Sciences & Academic Affairs
- Meghan Ingstrup, Staff, School of Communication and Information
- Ellen Leibowitz, Staff, Mason Gross School of the Arts

2. Curriculum Workstream

Co-Chairs

- Susan Lawrence, Senior Administrator, School of Arts and Sciences
- Sandra Tomlinson-Clarke, Senior Administrator, Academic and Faculty Affairs

Representatives

- Martha Haviland, Faculty, School of Arts and Sciences
- Laura Lawson, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Peng Song, Senior Administrator, School of Engineering

Steering Committee

- Atif Akin, Faculty, Mason Gross School of the Arts
- DuWayne Battle, Faculty, School of Social Work
- Sharon Bzostek, Staff, School of Arts and Sciences
- Olivia Cardile, Student, School of Arts and Sciences
- Rebecca Cypess, Senior Administrator, Mason Gross School of the Arts
- Laura Esteban, Student, School of Arts and Sciences
- William Field, Faculty, School of Arts and Sciences
- Anita Franzione, Faculty, Edward J. Bloustein School of Planning and Public Policy
- David Goldman, Staff, School of Arts and Sciences
- Coby Green-Rifkin, Staff, Graduate School of Education
- Nicole Houser, Faculty, School of Arts and Sciences
- Brian Kurisky, Staff, Collaborative Center for Community Engagement
- Terri Kurtzberg, Faculty, Rutgers Business School
- Francis Lewis, Staff, School of Arts and Sciences
- Xenia Morin, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Akhila Naik, Senior Administrator, School of Management and Labor Relations (Spring 2023)
- Michelle Neumyer, Staff, School of Arts and Sciences
- Elizabeth O'Connell-Ganges, Staff, Student Affairs
- Scott Ordway, Faculty, Mason Gross School of the Arts
- Faustina Owoh, Student, School of Arts and Sciences
- Neela Patel, Staff, Student Affairs
- Heather Pierce, Faculty, School of Arts and Sciences
- Suzanne Pye, Staff, Office of Career Exploration and Success
- Robert Scott, Faculty, School of Arts and Sciences

- Jonah Siegel, Faculty, School of Arts and Sciences
- Sharon Stoerger, Senior Administrator, School of Communication and Information
- Kristen Syrett, Faculty, School of Arts and Sciences
- Wade Trappe, Senior Administrator, School of Engineering
- Daniel Waite, Staff, Global Affairs
- Dayna Weintraub, Staff, Student Affairs
- Elin Wicks, Faculty, School of Engineering

Curriculum Mapping Subcommittee

- DuWayne Battle, Faculty, School of Social Work
- Anita Franzione, Faculty, Edward J. Bloustein School of Planning and Public Policy
- Martha Haviland, Faculty, School of Arts and Sciences
- Francis Lewis, Staff, School of Arts and Sciences
- Michelle Neumyer, Staff, School of Arts and Sciences
- Faustina Owoh, Student, School of Arts and Sciences
- Sharon Stoerger, Senior Administrator, School of Communication and Information
- Kristen Syrett, Faculty, School of Arts and Sciences
- Saundra Tomlinson-Clarke, Senior Administrator, Academic and Faculty Affairs
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High-Impact Practices and Experiential Learning Subcommittee

- Rebecca Cypess, Senior Administrator, Mason Gross School of the Arts
- Laura Esteban, Student, School of Arts and Sciences
- Coby Green-Rifkin, Staff, Graduate School of Education
- Nicole Houser, Faculty, School of Arts and Sciences
- Brian Kurisky, Staff, Collaborative Center for Community Engagement
- Susan Lawrence, Senior Administrator, School of Arts and Sciences
- Xenia Morin, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Elizabeth O'Connell-Ganges, Staff, Student Affairs
- Neela Patel, Staff, Student Affairs
- Suzanne Pye, Staff, Office of Career Exploration and Success
- Wade Trappe, Senior Administrator, School of Engineering
- Daniel Waite, Staff, Global Affairs
- Dayna Weintraub, Staff, Student Affairs

Learning Goals Subcommittee

- Atif Akin, Faculty, Mason Gross School of the Arts
- Sharon Bzostek, Staff, School of Arts and Sciences
- Olivia Cardile, Student, School of Arts and Sciences
- William Field, Faculty, School of Arts and Sciences
- David Goldman, Staff, School of Arts and Sciences
- Terri Kurtzberg, Faculty, Rutgers Business School

- Laura Lawson, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
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- Scott Ordway, Faculty, Mason Gross School of the Arts
- Heather Pierce, Faculty, School of Arts and Sciences
- Robert Scott, Faculty, School of Arts and Sciences
- Jonah Siegel, Faculty, School of Arts and Sciences
- Peng Song, Senior Administrator, School of Engineering

3. Enrollment and Marketing Workstream

Co-Chairs

- Wendie Cohick, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Courtney McAnuff, Senior Administrator, Enrollment Management

Representatives

- Alberto Cuitiño, Senior Administrator, School of Engineering
- Charles Keeton, Senior Administrator, School of Arts and Sciences

Steering Committee

- Erica Anderson, Staff, School of Arts and Sciences
- Kimberly Apadula, Staff, Douglass Residential College
- Natasha Benjamin, Staff, Enrollment Management
- Deepa Bhalla, Staff, Enrollment Management
- Melissa Blake, Staff, R-Comm (Spring 2023)
- Robert Boikess, Faculty, School of Arts and Sciences
- Neal Buccino, Staff, Office of the Chancellor (Spring 2023)
- Luke Collins, Student, School of Arts and Sciences
- Jessica DePaul, Staff, R-Comm (Fall 2023)
- Kelly Dietz, Staff, Enrollment Management
- Laura DiMarcantonio, Staff, School of Social Work
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- Anthea Jeffrey, Staff, Student Accounting
- Krista Klein, Staff, Honors College
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- Thomas Leustek, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
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- Jean McDonald-Rash, Senior Administrator, University Enrollment Services
- Lauren Olsen, Staff, Enrollment Management

- Paul Schalow, Faculty, School of Arts and Sciences
- Jason Schweitzer, Staff, Enrollment Management
- Gina Sharpe, Faculty, School of Social Work
- Brenda Sheridan, Staff, School of Communication and Information
- Jay Stefanelli, Staff, Enrollment Management
- Kavira Thakker, Student, School of Arts and Sciences
- Jacqueline Thaw, Faculty, Mason Gross School of the Arts
- Debbie Vogel, Staff, School of Management and Labor Relations
- Scott Walker, Staff, Academic Services for Student Athletes
- Sherell Watson-Hall, Staff, Enrollment Management
- Kait Weiss, Staff, Office of Career Exploration and Success
- Steve Weston, Staff, Edward J. Bloustein School of Planning and Public Policy
- Donald Woodard, Senior Administrator, Ernest Mario School of Pharmacy
- Iris Zipkin, Staff, School of Arts and Sciences

Enrollment Modeling and Recruitment Subcommittee

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- Alberto Cuitiño, Senior Administrator, School of Engineering
- Kimberly Apadula, Staff, Douglass Residential College
- Robert Boikess, Faculty, School of Arts and Sciences
- Neal Buccino, Staff, Office of the Chancellor (Spring 2023)
- Kelly Dietz, Staff, Enrollment Management
- Marco Dinovelli, Staff, Enrollment Management
- Paul Schalow, Faculty, School of Arts and Sciences
- Jason Schweitzer, Staff, Enrollment Management
- Gina Sharpe, Faculty, School of Social Work
- Steve Weston, Staff, Edward J. Bloustein School of Planning and Public Policy
- Donald Woodard, Senior Administrator, Ernest Mario School of Pharmacy
- Iris Zipkin, Staff, School of Arts and Sciences

Marketing Subcommittee

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- Courtney McAnuff, Senior Administrator, Enrollment Management
- Natasha Benjamin, Staff, Enrollment Management
- Melissa Blake, Staff, R-Comm (Spring 2023)
- Luke Collins, Student, School of Arts and Sciences
- Jessica DePaul, Staff, R-Comm (Fall 2023)
- Laura DiMarcantonio, Staff, School of Social Work
- Carl Leikhram, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Thomas Leustek, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Brenda Sheridan, Staff, School of Communication and Information

- Kavira Thakker, Student, School of Arts and Sciences
- Debbie Vogel, Staff, School of Management and Labor Relations
- Kait Weiss, Staff, Office of Career Exploration and Success

Strategic Retention and Financial Aid Subcommittee

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- Charles Keeton, Senior Administrator, School of Arts and Sciences
- Erica Anderson, Staff, School of Arts and Sciences
- Deepa Bhalla, Staff, Enrollment Management
- Juli Hibbard, Staff, Enrollment Management
- Anthea Jeffrey, Staff, Student Accounting
- Krista Klein, Staff, Honors College
- Jorge Marcone, Faculty, School of Arts and Sciences
- Jean McDonald-Rash, Senior Administrator, University Enrollment Services
- Lauren Olsen, Staff, Enrollment Management
- Jay Stefanelli, Staff, Enrollment Management
- Jacqueline Thaw, Faculty, Mason Gross School of the Arts
- Scott Walker, Staff, Academic Services for Student Athletes
- Sherell Watson-Hall, Staff, Enrollment Management

4. Living-Learning Communities Workstream

Co-Chairs

- Salvador Mena, Senior Administrator, Student Affairs
- Mark Robson, Faculty, School of Environmental and Biological Sciences

Representatives

- Barbara Cooper, Faculty, School of Arts and Sciences
- Jason Geary, Senior Administrator, Mason Gross School of the Arts

Steering Committee

- Jean Patrick Antoine, Staff, School of Engineering
- Christy Beal, Faculty, Undergraduate Education
- G. Tony Bell, Faculty, Rutgers Business School
- J.D. Bowers, Senior Administrator, Honors College
- Jennifer Buckman, Faculty, School of Arts and Sciences
- Christopher Cartmill, Faculty, Mason Gross School of the Arts
- Ana Paula Centeno, Faculty, School of Arts and Sciences
- Jeanette Covington, Faculty, School of Arts and Sciences
- Leslie Danehy, Staff, Douglass Residential College
- Ghada Endick, Staff, Student Affairs
- Ryan Greenbaum, Faculty, School of Management and Labor Relations

- Erin Johnson, Staff, University Strategy
- Diane Kim, Student, School of Arts and Sciences
- Nancy Kranich, Faculty, School of Communication and Information
- Ariel Leget, Staff, Student Affairs
- Katie Lynch, Student, School of Engineering
- Christine Morales, Faculty, School of Social Work
- Anne Newman, Staff, Student Affairs
- Mary Nucci, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Brian Schilling, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Dave Schulz, Staff, Institutional Planning and Operations
- John Shulack, Senior Administrator, Institutional Planning and Operations
- Nico Toepfer, Student, School of Arts and Sciences
- Henry Velez, Senior Administrator, Institutional Planning and Operations
- Donel Young, Staff, Honors College
- Tanya Washington, Staff, School of Arts and Sciences

Campus Revitalization Subcommittee

- Jennifer Buckman, Faculty, School of Arts and Sciences
- Ana Paula Centeno, Faculty, School of Arts and Sciences
- Jason Geary, Senior Administrator, Mason Gross School of the Arts
- Ryan Greenbaum, Faculty, School of Management and Labor Relations
- Erin Johnson, Staff, University Strategy
- Brian Schilling, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Dave Schulz, Staff, Institutional Planning and Operations
- John Shulack, Senior Administrator, Institutional Planning and Operations
- Henry Velez, Senior Administrator, Institutional Planning and Operations
- Donel Young, Staff, Honors College

Learning Communities Subcommittee

- Christopher Cartmill, Faculty, Mason Gross School of the Arts
- Barbara Cooper, Faculty, School of Arts and Sciences
- Leslie Danehy, Staff, Douglass Residential College
- Ghada Endick, Staff, Student Affairs
- Diane Kim, Student, School of Arts and Sciences
- Nancy Kranich, Faculty, School of Communication and Information
- Christine Morales, Faculty, School of Social Work
- Mark Robson, Faculty, School of Environmental and Biological Sciences

Living and Learning Communities Subcommittee

- Jean Patrick Antoine, Staff, School of Engineering
- Christy Beal, Faculty, Undergraduate Education
- G. Tony Bell, Faculty, Rutgers Business School
- J.D. Bowers, Senior Administrator, Honors College
- Ariel Leget, Staff, Student Affairs
- Katie Lynch, Student, School of Engineering
- Salvador Mena, Senior Administrator, Student Affairs
- Anne Newman, Staff, Student Affairs
- Mary Nucci, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Nico Toepfer, Student, School of Arts and Sciences

5. Administrative and Financial Structure Workstream

Co-Chairs

- Melissa Blake, Staff, R-Comm (Fall 2023)
- Jennifer Hollingshead, Senior Administrator, R-Comm (Spring 2023)
- James Masschaele, Senior Administrator, School of Arts and Sciences

Representatives

- Paula Voos, Faculty, School of Management and Labor Relations

Steering Committee

- Melissa Blake, Staff, R-Comm
- Wanda Blanchett, Senior Administrator, Graduate School of Education
- Neal Buccino, Staff, Office of the Chancellor
- Jessica DePaul, Staff, R-Comm (Fall 2023)
- Jason DiPaolo, Staff, Finance
- Barbara Faga, Faculty, Mason Gross School of the Arts
- Coby Green-Rifkin, Staff, Graduate School of Education
- Kenneth Irvine, Faculty/Staff, Waksman Institute
- Michelle Jefferson, Staff, Student Affairs (Spring 2023)
- Kenneth McKeever, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Kareem Mumford, Staff, School of Arts and Sciences
- Jillian Prior, Staff, R-Comm
- Elaine Stroud, Staff, School of Management and Labor Relations (Spring 2023)
- Megan Ulozas, Student, School of Engineering
- Thomas Vosseler, Senior Administrator, School of Arts and Sciences
- Nadav Warszawski, Student, School of Arts and Sciences

- Phil Wisneski, Staff, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station (Spring 2023)
- Donel Young, Staff, Honors College
- Jeff Zahn, Faculty, School of Engineering

6. Data Core Workstream

Co-Chairs

- Paul Hammond, Senior Administrator, Technology and Instruction
- Tara Matise, Faculty, School of Arts and Sciences (Spring 2023)
- Thu Nguyen, Senior Administrator, School of Arts and Sciences (Fall 2023)

Representatives

- Thu Nguyen, Senior Administrator, School of Arts and Sciences (Spring 2023)
- Stuart Shapiro, Senior Administrator, Edward J. Bloustein School of Planning and Public Policy

Steering Committee

- Jean Patrick Antoine, Staff, School of Engineering (Living-Learning Communities Workstream Liaison)
- Christine Bifulco, Staff, Office of the Executive Vice President for Academic Affairs
- Madhavi Chakrabarty, Faculty, Rutgers Business School
- Vanessa Coleman, Staff, School of Arts and Sciences
- Enrique Curchitser, Faculty, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station
- Mary Elgayar, Student, Rutgers Business School
- Kevin Ewell, Staff, School of Communication and Information
- Martha Haviland, Faculty, School of Arts and Sciences (Curriculum Workstream Liaison)
- Ellen Law, Staff, Office of Information Technology
- Thomas Leustek, Senior Administrator, School of Environmental and Biological Sciences/New Jersey Agricultural Experiment Station (Enrollment and Marketing Workstream Liaison)
- Tugrul Ozel, Faculty, School of Engineering
- David Pickens, Senior Administrator, School of Graduate Studies
- Lisa Sanon-Jules, Staff, Mason Gross School of the Arts (Advising and Academic Support Workstream Liaison)
- Elaine Stroud, Staff, School of Management and Labor Relations (Administrative and Financial Structure Workstream Liaison) (Spring 2023)
- Sangya Varma, Faculty, School of Arts and Sciences
- Amy Wollock, Staff, Graduate School of Education

Appendix B

Glossary of Terms

Academic Support: A wide variety of instructional methods, educational services, or school resources provided to students in the effort to help them accelerate their learning progress, catch up with their peers, meet learning standards, or generally succeed in school (The Glossary of Education Reform, n.d.).



Advising: A developmental process which assists students in the clarification of their life/career goals and in the development of educational plans for the realization of these goals. It is a decision-making process by which students realize their maximum educational potential through communication and information exchanges with an advisor; it is ongoing, multifaceted, and the responsibility of both student and advisor. The advisor serves as a facilitator of communication, a coordinator of learning experiences through course and career planning and academic progress review, and an agent of referral to other campus agencies as necessary.

Big Ten Academic Alliance: Member institutions are the following: Michigan State University, Northwestern University (Private), The Ohio State University-Main Campus, Pennsylvania State University, Purdue University-Main Campus, Rutgers, The State University of New Jersey, University of Illinois at Urbana-Champaign, Indiana University-Bloomington, University of Maryland-College Park, University of Michigan-Ann Arbor, University of Minnesota-Twin Cities, University of Nebraska-Lincoln (Public, not AAU), University of Wisconsin-Madison, University of Iowa.

Brand Lift: The measurement of how ads are shifting and shaping consumers' perceptions and behaviors. Essentially, it summarizes any positive sentiment or result that Rutgers–New Brunswick experiences because of a marketing campaign (i.e., increased consumer engagement).

Capstone Projects: Designed to reflect a student's deep engagement with a specific discipline, question, or problem, the Capstone projects typically involve a substantial, sustained, and original writing, research, or performance usually leading to at least 6 credits. For example, see <https://sebshonors.rutgers.edu/gh-cook-scholars/>.

Career Advising: An umbrella term that encompasses both career coaching and career counseling; however, the two are distinct, although often used interchangeably. Definitions below are from the [National Association of Colleges and Employers](#) (NACE).

- **Career coaching**—Focuses on solutions, insight, and action. It is a positive approach that focuses on a client's capabilities, helping him or her to practice and hone skills needed in the job search.

Coaching is active, focused, positive, and outcome oriented. Within Career Exploration and Success (CES), nine staff members are assigned to major-agnostic career communities. They participate in professional development, connect with employers, and have communitywide advisory boards that keep them informed as specialists within their assigned occupational clusters. Typically, these staff members also have industry experience.

- **Career counseling**—Focuses on establishing a therapeutic and confidential alliance with clients using core counseling techniques requiring adherence to all state and federal regulations related to counseling. Within CES, three staff members help students to discover themselves and clarify their career goals. This occurs primarily through listening and various self-assessments that all three are certified to interpret. Additionally, two graduate counseling interns from other universities earn counseling practicum hours through our office and work with students under the supervision of our licensed professional counselor.

Career Explorations Courses: Also known as career readiness courses, they vary by school. Designed to help students build awareness of career options, competencies, and pathways. Typically, they also involve practical preparation such as resume writing, developing a LinkedIn page, and networking opportunities. For example, see <https://sasundergrad.rutgers.edu/career-explorations/course-information>.

Community Engagement Opportunities: A broad range of opportunities to engage with local and global communities through service, either as a co-curricular or credit-bearing experience. See <https://nbdiversity.rutgers.edu/community-engagement>.

Brand Conversion: The point at which the targeted audience (the recipient of a marketing message) performs a desired action.

Diversity: Based on Rutgers University Diversity Strategic Plan, “diversity” equates to the variety of experiences based on race, ethnicity, gender, gender identity, age, religion, language, disability status, sexual orientation, socioeconomic status, geographic region, and more. See <https://nbdiversity.rutgers.edu/diversity-plan>.

Educational Opportunity Fund (EOF): The [New Jersey Educational Opportunity Fund](#) provides financial assistance and support services to students from educationally and economically disadvantaged backgrounds who attend participating institutions of higher education in the state of New Jersey.

Expected Family Contribution (EFC): An index number used to determine a student’s eligibility for federal student financial aid. The index number results from the information provided in the FAFSA, and considers the family’s taxed and untaxed income, assets, and benefits (such as unemployment or Social Security). EFC will be replaced with the Student Aid Index (SAI) as part of the 2021 FAFSA Simplification Act implementation.

Experiential Education: Often used interchangeably with experiential learning in conversation but with distinct meanings (adapted from [Brock University](#)). Kolb’s (1984) model of experiential learning is one of the most widely used theoretical frameworks in education. The model is grounded in a constructivist and development perspective of learning. Experience itself plays a key role in learning; however, it is only one phase in Kolb’s experiential learning cycle.

- Experiential education (EE) is defined as the philosophical process that guides the development of structural and functional learning experiences.

- Experiential learning (EL) is defined as the specific techniques or mechanisms that an individual can implement to acquire or meet learning goals (Roberts, 2012).
- Within Career Explorations and Success (CES), the staff takes a practical approach by helping students to connect to experiences (e.g., internships, co-ops, leadership, research, service, etc.). CES also engages with campus partners to help students unpack the experiences through intentional reflection, connections to career readiness competencies, and practice articulating what was learned to a future employer or graduate student representative.

Field Work: Hands-on experiential learning in a broad range of settings from archeological digs to clinical settings and more; required for some majors. For examples, see <https://socialwork.rutgers.edu/academics/field-education>; and <https://sasoue.rutgers.edu/curriculum-courses/experiential-learning#internships-field-study-opportunities>.

Free Application for Federal Student Aid (FAFSA): A form by which students apply for federal student aid such as grants, work-study funds, and loans. Many states and colleges use FAFSA information to determine eligibility for state and school aid. See <https://studentaid.gov/h/apply-for-aid/fafsa>.

High-Impact Practices: “The teaching and learning practices listed and described below are designated as ‘high-impact practices,’ or HIPs, based on evidence of significant educational benefits for students who participate in them—including and especially those from demographic groups historically underserved by higher education. These practices take many different forms, depending on learner characteristics and on institutional priorities and contexts.

- Capstone Courses and Projects
- Collaborative Assignments and Projects
- Common Intellectual Experiences
- Diversity/Global Learning
- ePortfolios
- First-Year Seminars and Experiences
- Internships
- Learning Communities
- Service Learning, Community-Based Learning
- Undergraduate Research
- Writing-Intensive Courses” (Association of American Colleges & Universities, n.d.).

Internships: Internship opportunities offer students the chance to gain unique insight into a particular field and to achieve work experience and skills essential to success in today’s marketplace. Many are offered for credit, some in the student’s major field. For examples, see <https://careers.rutgers.edu/students-alumni/courses-high-impact-mentoring-programs/rutgers-internship-and-co-op-course-ricc>; <https://sebsspin.rutgers.edu/>; <https://myrbs.business.rutgers.edu/office-career-management/undergraduate/internship-guidelines-policies/new-brunswick-internship-coop>; <https://www.masongross.rutgers.edu/degrees-programs/art-design/resources/>; <https://soe.rutgers.edu/interns-get-work>; <https://sasundergrad.rutgers.edu/career-explorations/job-internship-resources/internships>; and <https://sasundergrad.rutgers.edu/major/additional-academic-programs/internships>.

Learning Assistance: “Supportive activities beyond the regular curriculum that promote the understanding, learning, and application of knowledge; remediation for prescribed entry and exit levels of academic proficiency; and the development of new academic and learning skills. Some activities

include study skills instruction, tutoring, course-based learning assistance, reviews, study groups, special topic workshops, time management, exam preparation, and self-paced instruction. These services may be provided in a center that can be staffed with professionals, paraprofessionals, and peers.” (Arendale, 2020).

Learning Communities: Rutgers–New Brunswick learning communities are a self-selected group of students who share similar academic interests and explore them together in common courses and out-of-classroom activities at no extra cost to the student. Students in learning communities report making friends quickly and expanding their faculty and staff network. Learning community residents are afforded unique opportunities for academic and social success. The majority of communities are residentially-based (living-learning communities), which means that participating students not only co-enroll in common courses but also live in the same residence hall. These communities are a wonderful opportunity for students who are undecided about their major or want to explore a particular academic topic. <http://ruoncampus.rutgers.edu/rulc/>

Learning Goals: Articulated educational priorities and expressed institutional aspirations and expectations for student learning.

Learning Objectives/Outcomes: Measurable knowledge, skills, or behaviors that students are expected to be able to demonstrate at the conclusion of a learning experience. Generally, learning objectives/outcomes should be aligned with relevant learning goals.

Marketing Automation: Technology that manages marketing processes and multifunctional campaigns automatically. With marketing automation, Rutgers can target prospective students with automated messages across multiple channels and provide opportunities for retargeting.

Name Buy: A longstanding college admission practice where institutions purchase student names (leads) or receive hand raisers (active inquiries) through third-party tools like College Board, [CBSS](#), [Encoura](#), Cappex, Carnegie, and [Niche](#).

Non-Traditional Students: A non-traditional is an undergraduate student enrolled in a [degree-granting school](#) and meets at least one of the following criteria:

- Has been out of high school for four-plus years at the time of a first undergraduate registration
- Has had at least a two-year interruption in their undergraduate education
- Is a veteran or active duty military service member
- Is enrolled in a Rutgers–New Brunswick off-campus or on-line bachelor’s degree completion program
- Is pursuing post-baccalaureate studies, primarily in undergraduate courses
- Must take less than 12 credits due to significant non-academic commitments*
- Is a parent, pregnant or legal guardian
- Is married or in a domestic partnership
- Is financially emancipated

* Significant non-academic commitments may include being self-supporting, having to work full time (34 hours a week or more based on need), having financial dependents.

Oracle Student Financial Planning (OSFP): A financial aid tool that is available as part of Oracle Student Cloud or as a stand-alone product.

Peer Aspirant Institutions: The AAU institutions that Rutgers-New Brunswick uses as benchmarks, including University of California-Berkeley, University of California-Los Angeles, University of California-San Diego, University of Illinois at Urbana-Champaign, University of Michigan-Ann Arbor, University of North Carolina at Chapel Hill, University of Virginia-Main Campus, University of Washington-Seattle Campus, University of Wisconsin-Madison

Pell Grant: Federal need-based grants provided to low-income students and provide a measure of the overall financial need of our student population.

Research With Faculty: There are a wide array of opportunities for undergraduates to conduct research with faculty, often for credit in the major; indeed, some majors require research experience. See <https://newbrunswick.rutgers.edu/undergraduate-research> and for examples, see <https://sasoue.rutgers.edu/curriculum-courses/experiential-learning#research-methods-workshop-opportunities>.

Reserve Officer Training Corps (ROTC): Rutgers–New Brunswick has Air Force, Army, and Naval units. For examples, see <https://www.armyrotc.rutgers.edu/home> and <https://www.youtube.com/watch?v=QKUjvS9jXR8>.

RU-Fit: RU-FIT (First-year International Student Transition course) is a 1-credit course taught by peer leaders designed to aid international students in a successful transition to Rutgers–New Brunswick. This course, mandatory for first-year international students enrolled in SAS, SOE, RBS, and SEBS, aims to help students develop a foundation for a well-rounded college experience by connecting them to Rutgers resources, promoting engagement within and outside the classroom, and communicating university expectations. Peer leaders are trained by faculty and staff advisors and, as mentors, become an important resource for international students during their time at Rutgers. See <https://success.rutgers.edu/resource/ru-fit-first-year-international-student-transition-course>.

Satisfactory Academic Progress (SAP): SAP is a requirement for all students receiving federal, state, or university assistance while enrolled at Rutgers. Financial aid recipients must meet both a qualitative and a quantitative academic standard to maintain eligibility for aid. In addition, the student must complete the program within the maximum timeframe. See <https://scarlethub.rutgers.edu/financial-services/eligibility/satisfactory-academic-progress-sap/>.

Service Learning: Combines academic study with community service, offering undergraduate students the opportunity to attain real world work experience while earning college credit. See <https://nbdiversity.rutgers.edu/community-engagement>.

Student Aid Index (SAI): With the 2021 FAFSA Simplification Act implementation, students and families will see a different measure of their ability to pay for college and experience a change in the methodology used to determine aid. SAI removes the number of family members in college from the calculation, allows a minimum SAI of -1500, and implements separate eligibility determination criteria for Federal Pell grants. See <https://studentaid.gov/help-center/answers/article/what-is-sai>.

Tuition Discounting: Institutional grant aid to offset tuition and fee costs for specialized participants.

Appendix C

Rutgers Reports

Career Services Benchmarking Survey Results (Individual Response Group). (2019).
First-Year Experience Task Force Report. (2016).
Notes from Previous Reports Related to the Student Experience. (2021).
Report of the Task Force to Enhance Experiential Education for Undergraduate Students at Rutgers University–New Brunswick. (2017).
Report of the Working Group to Enhance Experiential Education for Undergraduate Students at Rutgers University–New Brunswick. (2022).
Rutgers–New Brunswick Academic Master Plan. (2022).
Rutgers–New Brunswick Academic Master Plan: Survey Responses. (2021).
Rutgers–New Brunswick Middle States Self-Study. (1998).
Rutgers–New Brunswick Post-Graduation Survey.
Rutgers 2030. (2015).
Student Success Information Working Group Report. (2020).
Task Force on Non-Traditional Students Report. (2018).
Task Force on Transfer Students Report. (2016).
Technological Solutions for Student Success: Working Group Report. (2022).
The Rutgers–New Brunswick Career Advantage Blueprint. (2019).
The Rutgers Dialogues: A Curriculum for Critical Awareness. (1992).
Transforming Undergraduate Education: Report of the Task Force on Undergraduate Education. (2005).
Working Group on Student Success Report. (2019).

Appendix D

Related Rutgers–New Brunswick Initiatives

Academic Master Plan

The Rutgers University–New Brunswick Academic Master Plan (AMP), led by the Office of the Chancellor, serves as the roadmap for the institution’s future, clarifying strategies to accomplish the university’s academic mission.

For more information, please visit <https://newbrunswick.rutgers.edu/chancellor/strategic-priorities-initiatives>.

Pillar I: Scholarly Leadership

The Institute for Teaching, Learning, and Inclusive Pedagogy

The Institute for Teaching and Learning Innovation and Inclusive Pedagogy (ITLIP) will support effective and inclusive teaching that empowers all students to succeed while at Rutgers and in their future careers. It will provide a space for collaboration, experimentation, and research on innovation in teaching and learning.

Center for Faculty Success

The [Center for Faculty Success](#) promotes faculty success, leadership, and excellence through a variety of inclusive professional development supports and works in conjunction with campus, university, and external partners to support the growth and development of faculty throughout all stages of their careers. A new physical center will open in Fall 2023.

ScarletWell

[ScarletWell](#) is a public health and prevention-focused approach to mental health and wellness for our students, faculty, and staff. The *ScarletWell* Task Force will make recommendations for Rutgers–New Brunswick’s wellness initiatives and will develop a strategy for establishing our institution as a center of excellence in behavioral health.

Pillar II: Innovative Research

Chancellor Challenge

The Office of the Chancellor invites Rutgers–New Brunswick faculty, staff, and students to propose innovative ideas that catalyze exploration, collaboration, concept-testing, and risk-taking, and advance the goals and objectives of the Academic Master Plan through the [Chancellor Challenge](#). The first Challenge will support proposals from Scholarly Communities focused on 1) Climate and Energy; and 2) Artificial Intelligence, Data Science, Cybersecurity.

A New Strategy for the Life Sciences

The [Rutgers–New Brunswick Office for Research](#) is developing a new strategic framework to re-envision STEM research, particularly in the life sciences, across Rutgers–New Brunswick and in partnership with RBHS. This new approach will foster interdisciplinary collaborations, new opportunities for joint research and external funding, and stronger relationships with government, nonprofit, and industry partners.

Pillar III: Student Success

Discovery Advantage

[Discovery Advantage](#) is reimagining the student experience—from enrollment to retention and, ultimately, graduation—to ensure students are supported in their belonging and well-being and best prepared to succeed in their academic and co-curricular pursuits and life after graduation.

Graduate Education and Student Support Initiative

The Graduate Education and Student Support Initiative seeks to improve the graduate student experience through enhanced coordination of recruitment, enrollment management, scholarships, academic support, and support for graduate student life.

Scarlet Guarantee

This signature Rutgers–New Brunswick program aims to make college more accessible and affordable, offering a "last dollar" financial aid award that covers the cost of in-state tuition and mandatory fees. The [Scarlet Guarantee](#) is a supplemental program to the [Garden State Guarantee](#).

15+ to Finish

Students can graduate on time and minimize their educational costs if they complete 15 or more credits per semester. The 15+ to Finish initiative helps students get there by connecting them with academic, wellness, and career support services and opportunities for experiential learning and involvement.

Non-traditional Learners

The chancellor-appointed a committee to investigate the feasibility, need, and scope for a Rutgers–New Brunswick school for non-traditional learners—a group that may include veterans, working students, part-time students, returning students who seek to change majors/careers, students who took time off to work or volunteer, professionals, and/or others. This idea, and the committee's thorough analysis and conclusions, remain under review.

Pillar IV: Community Engagement

Brandt Behavioral Treatment Center

Scheduled to open in Fall 2023, the [Brandt Center](#) is the centerpiece of the Rutgers Youth Behavioral Health Initiative and a partnership that includes multiple units: Rutgers–New Brunswick, RBHS, and the Rutgers University Foundation. It will be New Jersey's first behavioral health treatment center exclusively for adolescents and young adults and backed by an academic health leader like Rutgers.

Diversity Strategic Plan

The aim of the [Diversity Strategic Plan](#) is to adopt the means for the cohesive, coherent, and collaborative integration of diversity and inclusion into New Brunswick's shared pursuit of excellence.

Rutgers Distinction

Rutgers–New Brunswick proudly connects students with hands-on, experiential opportunities for research, internships, and public service. Inspired by the success of the [Rutgers Summer Service Internship Initiative](#), the Rutgers Distinction Initiative will focus on expanding industry and community partnerships.

Innovation and Economic Prosperity

Rutgers–New Brunswick strives to serve the common good as a driver of economic opportunity and community engagement and is working toward recognition by the Association of Public and Land Grant Universities as an Innovation and Economic Prosperity University.

Operational Excellence**Campus Improvement Initiative**

Through the [Campus Improvement Initiative](#), the chancellor's office has committed to investing \$5M over five years for infrastructure repairs and upgrades. Students are a top priority in this effort, which includes the development of collaborative and innovative spaces.

Operational Excellence Listening Tour

The [Operational Excellence Listening Tour](#) explores our successes and challenges as well as the manner in which we can continue to improve the ways Rutgers–New Brunswick's units interact with the administrative offices—including Human Resources, Planning and Operations, Finance and Administration, Research, and Information Technology—to achieve our shared goals.

Appendix E

Focus Groups

Invitations to focus groups were sent to key stakeholders, including Rutgers–New Brunswick students, alumni, parents/family, and specific Rutgers–New Brunswick units, to obtain feedback to guide the work of the workstreams. There were 10 focus groups with students; one focus group with recent alumni; one focus group with parents/family; two focus groups with undergraduate directors, faculty advisors, and vice chairs; and three focus groups with support staff from the Office of the Dean of Students, the Office of Financial Aid, and the One Stop Student Services Center. Participation from students and alumni was a key challenge, which the Discovery Advantage committees will work to increase for focus groups in Fall 2023.

Student Focus Groups

1. ***Why did you come to college? What do you hope to get out of your experience? Why did you choose Rutgers–New Brunswick?***

Many students said they went to college because of family expectations or because it was the “next thing” to do. They chose Rutgers because of its good reputation, it was close to home, or because it was the best option financially.

2. ***Name the three things you like best about attending Rutgers–New Brunswick.***

Most students liked the number of opportunities at Rutgers and the fact that it was a large school which offered many majors and programs. Several remarked that although it was a large school, there were ways to make it seem small.

3. ***What are some things you like least about Rutgers–New Brunswick?***

Buses were the most common response. Some specific reasons include courses (e.g., chemistry, calculus, and other STEM courses), registration, etc. Most general responses centered around difficulty finding resources and opportunities, scheduling courses, getting courses, or figuring out what they needed to do, as well as advising. There were numerous complaints about information on websites (e.g., not enough, broken links, and difficulty finding information).

4. ***If you were in charge of Rutgers–New Brunswick, what is the most important thing that you would do to make the campus experience better for students? Why do you think that is important?***

Responses often involved the transportation system. Other responses include better communication, better/proactive advising, and improving residence halls (e.g., air conditioning).

5. ***Have you found your community at Rutgers–New Brunswick? Do you feel like you belong here?***

Most students said they had found community, often from student clubs. Several students found a community in the Honors College and residence halls, especially in engineering. Alternatively, one

student, who lived in Rainbow Perspectives special interest housing, mentioned being disappointed because they felt that no effort was made to help them form a community, which was why they joined. Some non-traditional students noted they were not looking for community. Some students had friends already here.

6. *Advising*

Many students were dissatisfied with advising, especially with scheduling advising appointments, having to wait for appointments, and being shuffled from advisor to advisor. Several wished advising was more proactive or that they had one person to go to who knew them. Many students mentioned self-advising.

7. *Where do you get advising/academic support information?*

A number of students mentioned using Degree Navigator, websites, or social media. One student received advice from their mother, who got it from Reddit. Some students noted the Rutgers–New Brunswick websites were often out of date.

8. *What is a better way to reach students than email?*

Canvas and social media were favored. Although Canvas is a universitywide platform, it would be worth exploring ways of using it within schools or campuses.

9. *Have you used any type of academic support?*

Not many students talked about academic support, although some said it should be more widely available on all the campuses.

10. *Would curriculum maps help?*

In some focus groups, students were given a brief description of curriculum maps and asked if they would help. The responses were mostly positive, although one student said a better solution would be more advisors.

11. *What event/opportunity/relationship/resources/program/supports have made you feel connected to/in Rutgers–New Brunswick or what would have made you feel more connected? What experiences or programs helped with your transition to Rutgers–New Brunswick?*

Students generally liked the summer orientation and found it useful, although they felt they were kept sitting in one place too long. Many students make connections through clubs and liked the Involvement Fair, although several remarked it was too large and disorganized to find everything. They suggested separating it, so different types of clubs were available on different days. Some students discussed problems relating to remote orientation.

12. *First-Year Interest Group Seminars (FIGS) and Byrne Seminars*

Not many students took a FIGS or Byrne Seminar. A few students mentioned not being able to get into a FIGS that matched their interest or dropping one because it was not a good match. Students

who took a Byrne Seminar seemed to enjoy them but did not feel it really helped them orient to the university.

13. ***There are many opportunities at Rutgers–New Brunswick. How do you find out about special programs and opportunities? Do you participate in as many as you would like? If not, what obstacles prevent you from joining opportunities or initiatives on campus? Where do you look for information about classes/social opportunities/cool places on campus/events?***

Students noted difficulty in finding out about things, especially from emails. Some students commented that they did not have time to read all the emails they received. The few students that had internships found them in various ways.

14. ***Do you participate in internships or community service?***

A few students participated in internships or community service. They found these opportunities through Google, Handshake, and emails from professors. A student noted they were aware of Handshake but found it unhelpful because it was mostly for pharmaceutical companies.

15. ***How many of you have identified at least one career path you would like to pursue, or have a good idea of what you are looking for? Where do you go for career-related advice? What was the most/least helpful source of advice?***

What experiences have you had outside of your classes that helped you develop your particular career interests or career skills? How did you decide which experiences to choose? What kinds of experiences do you think would have been most valuable in helping you explore career interests and decide on career pathways to pursue?

Not many students talked about this, and very few used Career Explorations and Success. Several students mentioned finding information on the internet. Some students spoke about the Career Fairs, but said they were not helpful because they were primarily oriented toward business careers. Experiences outside of class included research and department websites.

16. ***How did you go about finding your major?***

Responses varied. Some students in the sciences always knew what they wanted to do. One student switched majors because they tried a course and found it interesting.

17. ***Do you anticipate completing your degree in four years? What do you think the biggest challenge is to completing your degree in four years?***

Most students said they would finish in four years, although some noted that it could be difficult to find courses or get into them.

18. ***What obstacles do you face in completing your major? Where do you seek assistance in overcoming those obstacles?***

Some students mentioned math prerequisites as a stumbling block. Other students expressed concern about getting the courses they need, or in one case, a required internship.

19. How do you choose classes outside of your major?

There were few responses. Students said they chose courses based on interest or suggested by friends.

20. Online vs. In-Person Classes

A few students said they liked online or hybrid courses better than in-person learning. Most students valued the convenience and that they made scheduling easier.

21. Housing

There were many complaints about the condition of the residence halls and not being able to get housing where they wanted it. Several students mentioned they did not like the lottery system. Some noted they made housing decisions based on where their classes were offered. Some said they moved off-campus when they could not get the housing they wanted (e.g., the Livingston apartments) or the option they were offered was too expensive. Laundry facilities and cost were issues for some students.

22. Have you ever considered joining a living-learning community, and if so, how did you find out about the learning communities available on campus? What factors did you consider in deciding whether or not to join one? If you did not join, why did you decide not to join a learning community? What type of housing did you choose instead?

There were few responses. Some students joined because they had social anxiety, wanted a community, or were friends with a peer mentor. They noted that effective implementation creates a sense of community.

23. What would make campuses more attractive?

Students appreciated the “different vibes” on the different campuses, and several remarked Rutgers–New Brunswick should preserve that. There were concerns about (a) parking (especially at the stadium, which is far from everything); (b) the buses, with transportation being a factor in where students want to live; (c) the need for improvements on the Cook campus, especially places to eat and more options, (e.g., vegan options); (d) the need for a convenience store on each campus; (e) outdated facilities at the College Avenue and Cook/Douglass campuses, including recreational facilities; (f) the Busch campus being too isolated (e.g., there are no places to eat other than the student center, so the area around the Allison Road Classroom building [ARC] and the library have no services, including Woody’s closing early); (g) the need for services like tutoring, advising, and One Stop being available on all campuses; (h) the need for services being available where commuters are allowed to park; and (i) the need for more places to socialize, similar to the Zone on Livingston, and places to study.

24. What is the one thing you wish prospective students knew about Rutgers–New Brunswick?

This is another context in which students talked about large size and many opportunities at Rutgers–New Brunswick, but also that smaller communities make it less overwhelming. They also spoke

about the need to be self-sufficient/assertive and find your own way. They offered some good study advice, including getting to know professors, expecting to spend time outside of class, and learning time management.

25. *Would you recommend Rutgers–New Brunswick to a friend? Why or why not?*

In most cases students said they would recommend Rutgers–New Brunswick, based on its opportunities and strong academics. Alternatively, some students said it would depend on what a friend wanted in a school.

Recent Alumni

1. *Why did you come to college? Why did you choose Rutgers–New Brunswick, and do you feel you got what you wanted from your experience here?*

Reasons include (a) reputation; (b) their family’s experience at Rutgers; (c) experiencing life outside of their “bubble”; and (d) feeling homesick at an out-of-state school. They felt they got what they wanted out of their Rutgers experience and were able to explore new identities, embrace their personality, connect with others through clubs, organizations, and jobs.

2. *Would you recommend Rutgers–New Brunswick to a friend? Why or why not? What would you want that friend to know about it?*

Yes. They would want their friends to know about its opportunities (even if they do not know what they want to do), its clubs and activities, its opportunities to find different communities (e.g., Douglass Residential College), the importance of finding a mentor, and the opportunity to make connections all over Rutgers–New Brunswick to make it feel more like home.

3. *Positives*

Positives include (a) its large, interesting community; (b) resources; (c) taking courses in interesting locations, like the Zimmerli Art Museum; (d) programs/activities; (e) connections; (f) proximity to New York; (g) location; (h) food options; (i) class size; and (j) professors.

4. *Negatives*

Negatives include Rutgers–New Brunswick not utilizing its space in the best way possible (e.g., dining halls, bus stop locations, transportation) and some negative experiences with specific professors.

5. *What was your experience with academic advising? What could have made it better?*

One alumnus had a positive experience; they felt supported, provided with resources, and offered recommendation letters if needed. They got to know their advisor personally. Alternatively, they had a negative experience with general school advisors relating to gender and race, which was alienating. They were misgendered several times by general school advisors. Another alumnus self-advised because it was hard to get one person as an advisor. They wish

they sought out more guidance from an advisor and that there were more departmentalized advisors for each major.

They explained that meeting advisors in a situation like speed dating would be helpful, so students would know who the advisors were and how they could serve students.

6. ***When you came to Rutgers–New Brunswick as a transfer student, did you talk to anyone before you came?***

They attended a transfer day event, which was fun, but no one developed a lasting relationship as a result.

7. ***Thinking about now from your post-graduate life and looking back, is there any advice that you wish you had gotten at Rutgers–New Brunswick that you did not get, any advice you wish you had not gotten because it was not helpful, or perhaps advice you wish you had paid more attention to at the time?***

They wish they had received advice on how to take your passions into the workforce, make your major into a reality, market yourself, and find everything that you need.

8. ***What experiences or classes did you have at Rutgers–New Brunswick that helped you develop career interests or skills that were useful to you?***

Courses such as Child Development and Writing for Media were helpful. They enjoyed learning from professors who created scenarios that were similar to working in their fields. They wish they took advantage of more classes and campus life. One alumnus discussed struggling with their mental health; they wish someone had reached out and that there were more conversations about mental health and warning signs.

9. ***What kinds of skills or experiences do you think are important for undergraduates?***

Alumni remarked that important skills/experiences include learning to advocate for yourself, knowing what resources are available, and knowing you're allowed to ask for help. Nurture the relationships with professors that believe in you because they will be helpful resources/connections after you graduate.

10. ***Is there anything that was not discussed that would be helpful for the committee to know?***

Alumni noted the importance of outreach to all individuals because everybody has a different voice on how they experience Rutgers, which is valuable. More virtual conversations are appropriate.

Parent/Family Focus Group

1. *Reasons for Students Coming to Rutgers–New Brunswick*

Participants noted that deciding factors included (a) students are able to do research in their first year; (b) a school program showing Rutgers–New Brunswick has a variety of majors they were interested in; (c) financial reasons; (d) a good job outlook and opportunities for employment in New York City; (e) climate; (f) proximity to home; (g) its large, urban environment; (h) diversity; (i) prestige; (j) study abroad opportunities, including shorter opportunities; (k) summer internships; and (l) research options. A parent remarked that making choices among schools is challenging for parents/families who did not go to college in the United States, such as understanding competition between schools and dollar value.

2. *Recruiting Materials/Tours, etc.*

Participants remarked that Rutgers–New Brunswick had less recruiting material than other schools. They noted (a) in-state students do not get as much information as they receive from other schools; (b) the disappointment in not getting more “hoopla,” such as lawn signs, a personalized welcome sign, or a physical acceptance letter compared to other schools; (c) they did not get much information before their campus visit; and (d) not getting clarity on how to customize their student’s experience, which resulted in their choosing a different college. Positives include (a) meeting students at Admitted Student Day, (b) receiving great swag during their campus visit; and (c) the virtual tour/bus tour; (d) meeting enthusiastic students during the engineering open house.

3. *Enrollment Pathway Issues*

Participants noted issues with the Enrollment Pathway. Many parents are doing this for their students and are confused. They explained that if it is confusing for them, it may be much more so for the students. This also affects first impressions of the university. Issues include confusing instructions, broken links, and links taking users in circles or not where they need to go. A number of Rutgers–New Brunswick faculty and staff have been contacting the Office of the Chancellor about these issues.

4. *Other Issues*

Participants remarked about concerns with advising, safety, food, communication, and specific courses. Advising concerns include difficulty in getting appointments, not being proactive, and students not being able to get answers. They would like their students to have a dedicated advisor. There are concerns about safety on the buses, students travelling alone late at night, unhomed individuals on College Avenue campus and buses, and no security in dorms at night. There are facilities concerns, including the need for more study spaces, the need for residence hall improvements (e.g., the lack of air conditioning, moldy smells, and rundown appearances). Food concerns include dining hall food and the availability of food on the Cook/Douglass campus. Participants noted Rutgers–New Brunswick has lots of opportunities, but it is hard to get information. They also explained that calculus courses are very hard, and their students want to take them elsewhere.

5. *Positive Aspects of Rutgers–New Brunswick*

Participants noted several positive aspects, including (a) summer orientation, especially parent sessions; (b) professors who are great and dedicated; (c) discipline-specific residence halls (e.g., Barr Hall for engineering); and (d) its many opportunities (e.g., study abroad).

The Office of the Dean of Students, the Office of Financial Aid, and the One Stop Student Services Center Staff Focus Groups

1. *Systemic Issues*

Staff remarked that systemic issues have a major impact on their ability to serve students, particularly the new financial aid system. The most significant issues include:

- *The system seems unable to deal with the complexities of Rutgers–New Brunswick and is beset by problems.*

Issues include (a) rebate errors; (b) aid not being disbursed; (c) the Office of Financial Aid staff no longer having the ability to correct errors themselves and instead having to submit a ticket to University Enrollment Services (UES); (d) UES appearing to having insufficient staff to handle the number of errors; (e) the ticket system creating a backlog which often takes months to resolve and affects the ability of staff to meet federal aid deadlines (e.g., individual staff may have 60+ tickets waiting for resolution); (f) the inability to assist Ph.D. students; (g) the inability to properly assist students who transition from the undergraduate level to the graduate level; (h) the inability to handle scholarships well; (i) its lateness in getting financial aid packages together; (j) the inability of staff to see tickets submitted by other staff, so no one else can provide feedback; and (k) the document review being completed centrally and taking too long. Participants noted that UES staffers are not “student-facing” and wonder if they understand the need for urgency.

- *Widespread negative impacts on students.*
 - Financial aid is not posting in a timely manner. Students are in danger of eviction, losing their cars, and having to leave school. The effects are being seen by staff in Financial Aid, One Stop, and Dean of Students offices.
 - Students are being issued refunds to which they are not entitled. Because of the time lag in when they are notified of the error and issues with students not reading email, many students have spent the funds and are not in a position to repay them. This increases the overall financial burden on students and may lead to increased withdrawals.
 - All of this is happening in an environment where students are already stressed, and it disproportionately affects many of our most vulnerable students who are dependent on financial aid.
 - The system is confusing. For example, when uploading documents, it asks for your ID when it wants your NetID.
 - It potentially can affect Rutgers–New Brunswick’s reputation as word of these issues gets around.

- Students not receiving financial aid information early on can lead to their electing to go elsewhere.
- The system is especially difficult for Spanish-speaking first-generation students. Instructions are not available in Spanish. These students are not as likely to speak up or ask for help.

- *Negative Impacts on staff*

Staff are frustrated that they can no longer directly help students as they have in the past. There is a higher stress level because they are hearing about all of the problems that have been created for students, often in repeated visits over several months. Their workload has increased to handle these systemic problems. Students create multiple tickets because problems are not resolved in a timely manner by UES.

2. **Other Systemic Issues**

- *Human Resources*

Human Resources is very slow, and it makes it hard for departments/units to hire staff. This impacts student services. It also creates issues for undergraduate directors (UGDs) when they need to hire part-time lecturers (PTLs). It is a real problem when there is an unexpected demand for a course, and they cannot hire by the beginning of the semester. This is on top of a job with increasing responsibilities that makes it hard for them to devote time to advising.

- *Problems Hiring Students*

Students can earn more working remotely or off campus. This makes it hard to hire FIGS instructors, RAs, LAs, peer mentors and tutors, staff in student centers, LRCs, MSLC, and library assistants. There is not only a pay issue, but Rutgers no longer seems to do a good job of selling the value of working on campus. These problems are compounded by issues with work-study. It is a part of the financial system problems because fewer staff are assigned.

3. **Challenges for Staff**

- Staff need to help students navigate the financial aid system, which is very complex because aid comes from different sources (e.g., federal, state, and Rutgers). This is even in the best of times.
- Staff need to provide holistic counseling to students, but they now cannot help them with problems related to the new financial system.
- It can be challenging to get answers for student accounting issues when there is no specialist for them to talk to.
- Students who are stressed and angry over financial aid problems are upsetting and difficult to deal with, and some staff do not feel safe. This is a concern over many different student-facing departments and roles. Most staff are not trained to deal with these kinds of issues.
- Staff try to educate students in financial literacy while the system is creating financial problems.

- Because of all the delays and waiting for resolutions from UES, students have lost confidence in One Stop staff.

4. ***Other Points***

- Staff in the Financial Aid, Dean of Students, and One Stop offices have had good working relationships, but financial issues are causing stress across the board.
- Students take “One Stop” literally and come in with all sorts of questions. There needs to be more interaction among advisors, especially in schools and One Stop, so they know where to send students, particularly after any changes are made in advising. One Stop staff are clearly very knowledgeable but being sent from person to person to person to get answers is a major source of frustration to students and parents. Staff strive to provide excellent customer service.
- Most questions to One Stop are about money, and students are often very anxious when they come in.

Undergraduate Program Directors, Faculty Advisors, and Vice Chairs Focus Group

1. ***Student Issues***

- Many students do not know what is available (e.g., study abroad, scholarships, activities). Some ideas include (a) a Canvas link to learning centers; (b) a centralized database of all out-of-classroom events/activities; (c) consistent syllabi with mental health and other resources at the end; and (d) more emphasis on discovery of the breadth of what students can do at Rutgers.
- Communicating with students is difficult, and many students do not read emails. Some helpful communication methods include (a) social media; (b) introducing themselves to students in intro courses; (c) newsletters, and (d) an Office of Academic Programs app.
- Participants feel like they are reacting instead of being proactive. Faculty members and major departments are the best source of specific advice. A majority of participants agreed there should be a requirement for students to see an advisor. Alternatively, it would be difficult to require seeing an advisor due to the advisor to student ratio. Some students will not see an advisor unless it is required.
- An undergraduate program director information session would be helpful.
- There should be a system where a student can choose to have their advisor notified of their disability accommodations, as opposed to having to give it to their advisors.
- Students direct the same questions to the wrong people. Efforts should be made to explain procedures to incoming students, and there should be a central list of who to talk to.

2. ***Position and Systemic Issues***

- Reports and meetings that filter down from the top prevent them from doing work on the ground with students.
- More support staff and advisors, as well as space, are needed. Advisor structure should be redesigned.
- Using Course Atlas is more time consuming than doing it on your own.

- There should be more communication between offices and more collegiality between schools. Units also need organization.
- There are gender and rank issues with the UGD position. Some UGDs have a large array of duties, whereas others are able to delegate tasks and have support staff. The role should be clarified.
- Some items and roles can be centralized (e.g., SPNs)
- Some helpful tools and needs include (a) a photo roster; (b) an interface to keep in touch with alumni; (c) in-person scheduling; (d) peer advisors; and (e) enough seats in courses for all students.

3. ***Staff Training and Access to Information***

- UGD training and some specific training (e.g., neural diversity, technology) would be helpful. There could be a Canvas site, an outline, or a searchable document. One department created a resource account that all faculty have access to. Advisors and UGDs also meet many students in crisis (e.g., assault, homelessness), and they do not know what to do. The DEI lens should be woven into advisor training.
- It is frustrating that not all information is in one place (e.g., transfer course evaluations, language evaluations, which courses count, who to talk to), which leads to a lack of confidence in providing answers to students. Information should be accessible.
- There should be a central location for administrative information (e.g., clerical items) to streamline the process.
- Better data is needed in order to understand where the breaking points are (e.g., demographics, concentrations, AP credits, dual enrollment).
- There is a need for a system to change your own website and resources to develop more effective communication through websites.

Appendix F

Big Ten Learning Goals and General Education Requirements

1. Rutgers University

Description

Rutgers University graduates should possess the skills and knowledge to be responsible citizens and productive contributors to society in their workplaces and their intellectual, cultural, and social endeavors. Therefore, the university community will work to provide the education that supports the following learning goals.

Goals

See <https://academicaffairs.rutgers.edu/rutgers-university-learning-goals>

2. University of Illinois Urbana-Champaign

Description

As a preeminent public land grant university, the University of Illinois at Urbana-Champaign serves society and transforms lives, producing leaders who value excellence, innovation, inclusivity, stewardship, and accountability. Through a uniquely Illinois experience that takes place both inside and outside the classroom, our graduates are broadly educated yet have expertise in specific fields of study. They are intellectually curious, having the ability to think critically and imaginatively. They exhibit a consciousness of global connectedness and interdependencies, possess a critical appreciation of social and cultural communities, and participate knowledgeably and responsibly in civic life. Ultimately, our graduates understand how to employ knowledge in order to generate new ideas, discoveries, and solutions, and are adept in building and sustaining productive relationships in order to create positive change.

**The Illinois Student Learning Outcomes Snapshots were compiled using data from the Chancellor's Senior Survey, the National Survey of Student Engagement, and Program Learning Outcomes Assessment.*

Goals

- *1: Intellectual Reasoning and Knowledge (IRK)*
Definition: Illinois students will acquire broad and deep knowledge across academic disciplines and fields.
- *2: Creative Inquiry and Discovery (CID)*
Definition: Illinois students will apply knowledge to promote inquiry, discover solutions, and generate new ideas and creative works.
- *3: Effective Leadership and Community Engagement (ELCE)*

Definition: Illinois students will build and sustain productive relationships to respond to civic and social challenges at local, national, and global levels, creating positive change in their communities.

- *4: Social Awareness and Cultural Understanding (SACU)*

Definition: Illinois students will develop a critical and reflective orientation toward such social and cultural differences as race, indigeneity, gender, class, sexuality, language, and disability.

- *5: Global Consciousness (GC)*

Definition: Illinois students will discover how complex, interdependent global systems—natural, environmental, social, cultural, economic, and political—affect and are affected by the local identities and ethical choices of individuals and institutions.

3. Indiana University Bloomington

Description

[Framed as IUB General Education] An undergraduate education at Indiana University Bloomington will develop students' understanding of themselves, their sense of responsibility to others, and their knowledge of the social and natural worlds. Students will therefore be able to analyze problems, generate solutions, pose questions, and construct defensible answers based on reason and appropriate evidence. IUB graduates will be curious, independent, and responsible participants in their communities and their places of work, and citizens of the world.

To achieve these ends, every Indiana University Bloomington baccalaureate degree program includes common course and disciplinary requirements that integrate these general developmental goals with the special resources of the campus. These common requirements articulate the ideals that Indiana University Bloomington faculty hold for the general education of undergraduate students and assure that all students are afforded the opportunity to explore a breadth of academic opportunities as well as the more specialized demands of a chosen major field of study. An IUB undergraduate education is an experience that deepens, broadens, and extends students' skills, knowledge, abilities, and dispositions, and fosters a love of and dedication to learning.

Goals

See <https://gened.indiana.edu/requirements/index.html>

1. University of Iowa

Description

We could only find "requirements and learning outcomes" for Liberal Arts and Sciences.

Goals

N/A

2. University of Maryland

Description

The Provost's Commission on Learning Outcomes Assessment produced "learning goals that span multiple common expectations for all UM undergraduates, including critical thinking and research skills, written and oral communication, science and quantitative reasoning, information literacy, and technological fluency." They are available at https://irpa.umd.edu/Assessment/loa_overview.html. The Provost's Commission researched and formulated the following universitywide learning goals for UM students, which correspond to the essential elements of an undergraduate education as stated by Middle States Standard 12. These goals articulate the educational outcomes to which we as a university aspire for our graduates. The goals for these elements are not exhaustive, and not every student will necessarily master each goal. Finally, these goals must be understood as articulating with the goals and objectives of our General Education program and those of academic disciplines.

**Each program has its own learning goals spelled out and available online.*

Goals

See https://www.irpa.umd.edu/Assessment/loa_overview.html

3. University of Michigan

Description

We only found the report, "Engaged Learning at Michigan: Understanding the Impact of the Transforming Learning for a Third Century Initiative."

Goals

N/A

4. Michigan State University

Description

Michigan State University has outlined a set of undergraduate learning goals. An integrated arts and science foundation enhances the potential that MSU graduates will be outstanding leaders and lifelong learners. A liberal arts foundation enhances the potential that MSU graduates will be outstanding leaders and lifelong learners. These liberal learning goals are intended to provide a framework for students' active engagement in learning both in and out of the classroom.

**We didn't find information on assessment, how programs meet learning goals.*

Goals

See <https://undergrad.msu.edu/programs/learninggoals>

5. University of Minnesota

Description

The university has a long history of commitment to assessing student learning. With the adoption of the current University of Minnesota's undergraduate student learning outcomes (SLOs), the university has undertaken a renewed effort to establish more consistent assessment framework across all departments, provided stronger central leadership, simplified expectations, and worked to connect the multiple streams of assessment data to better inform academic planning.

Our mission is to support all academic and support units in their assessment of the student learning/development process to continuously enhance the student experience.

**There is a nice graphic of their learning goals. The link to more details was broken.*

Goals

See <https://slo.umn.edu/undergraduate-experience/university-student-learning-development-outcomes>

6. Northwestern University

Description

We found learning goals under Student Affairs, but we are not sure if this is what we need.

Goals

N/A

7. The Ohio State University

Description

Ohio State's General Education is designed to develop and refine qualities, abilities and characteristics that prepare its students to be engaged, resilient, and adaptable citizens and leaders for life. It aims to develop in students an engagement with and an ability to apply a range of important modes of thought and inquiry. Through it, students will examine significant aspects of the human condition in local, state, national, and global settings today and in the foreseeable future. Students gain awareness of the major academic disciplines and approaches through the Foundations component of the GE program. The seven universal categories within Foundations integrate these disciplinary approaches in the context of topical Themes. (An eighth category in Foundations—World Languages—applies only to students in the College of Arts and Sciences.) A pair of Bookend seminars support students in navigating and understanding their experiences in the Foundations and Themes. The GE program and each of its components have goals and expected learning outcomes.

**A graphic is helpful to explain this. <https://oaa.osu.edu/ohio-state-ge-program>*

Goals

See <https://ugeducation.osu.edu/general-education-ohio-state>

8. Penn State University

Description

The General Education curriculum will enable students to acquire skills, knowledge, and experiences for living in interconnected contexts, so they can contribute to making life better for others, themselves, and the world. General Education encompasses the breadth of knowledge involving the major intellectual and aesthetic skills and achievements of humanity. This must include understanding and appreciation of the pluralistic nature of knowledge epitomized by the natural sciences, quantitative skills, social and behavioral sciences, humanities, and arts. To achieve and share such an understanding and appreciation, skills in self-expression, quantitative analysis, information literacy, and collaborative interaction are necessary. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. General Education, in essence, aims to cultivate a knowledgeable, informed, literate human being. The baccalaureate degree General Education program consists of 45 credits that are distributed among three General Education components:

- Foundations courses in writing, speaking, and quantification (15 credits)
- Knowledge Domains in the Arts, Humanities, Natural Sciences, Social and Behavioral Sciences, and Health and Wellness (30 credits)
- Integrative Studies that bridges commonality and intersections between the Knowledge Domains

Goals

See <https://bulletins.psu.edu/undergraduate/general-education/learning-objectives/>

9. Purdue University

Description

The core curriculum is a set of common learning outcomes required of all undergraduate students. It acts as a mechanism by which all Purdue University students share a similar educational experience and, in doing so, achieve a set of common goals.

The core curriculum consists of two levels of learning outcomes: foundational and embedded.

All undergraduate students must meet the foundational learning outcomes, which are the same for all students, regardless of discipline or major. The courses students take to meet foundational learning outcomes provide a similar educational experience across programs and colleges and should be open to all undergraduate students.

Embedded learning outcomes are included in the core requirements of particular degrees or plans of study and are addressed within discipline-specific programs and majors.

Students must complete a minimum of 30 credit hours satisfying the specific foundational learning outcomes. There is no credit requirement for embedded learning outcomes, which will be assessed at the college/school level. Students may meet embedded outcomes by completing identified courses and/or target activities as determined by their program of study.

Goals

- *Human Cultures: Behavioral/Social Sciences*
- *Human Cultures: Humanities*
- *Information Literacy*
- *Oral Communications*
- *Quantitative Reasoning*
- *Science*
- *Science, Technology, and Society*
- *Written Communication*

10. University of Wisconsin-Madison

Description

The universitywide General Education Requirements are designed to convey the essential core of an undergraduate education by providing breadth across the humanities and arts, social studies, and natural sciences; competence in communication, critical thinking, and analytical skills necessary for success in college and beyond; and investigation of the issues raised by living in a culturally diverse society. This core is intended to provide students with intellectual and practical skills, basic knowledge of human cultures and the physical world, strategies for understanding these topics, and tools intended to contribute to their sense of personal and social responsibility. General Education complements the work students do in their majors and degrees, and by doing this, helps students learn what they need to know not just for making a living, but also for making a life.

To complete the General Education Requirements, students choose from many courses in communication, ethnic studies, quantitative reasoning, and breadth of study across disciplines in the natural sciences, humanities, literature, arts, and social and behavioral sciences. Courses meeting these requirements have been reviewed and approved to determine that basic criteria for GER courses are met, and that the courses support learning relative to GER learning outcomes.

Goals

See <https://gened.wisc.edu/general-education-requirements/general-education-learning-outcomes/>

Appendix G

Rutgers–New Brunswick School Learning Goals and General Education Requirements

RU Learning Goals: 3 Foundational Areas	Rutgers University Learning Goals	SAS learning goals implemented through Core Curriculum and used by SAS, EJBSPPP, SC&I, SMLR, SSW, and RBS (RBS also has a set of school-level learning goals)	SEBS -modified SAS + additional	SOE Learning Goals (accreditation-based) and Gen Ed	MGSA BFA and BM General Education Learning Goals are distinct from Program Learning Goals (see MGSA website), some overlap with gen ed.
I. Intellectual and Communication Skills Critical thinking, communication, mathematical reasoning and analysis, scientific inquiry, information, and computer literacy.	a. Critical Thinking (Infused throughout schools' learning goals) Students will develop their ability to engage in logical thinking and complex critical analysis this goal is infused throughout.				
	b. Communication Students will develop their skills in expressing complex ideas through written and oral communication.	First-year writing course: College Writing, College Writing Extended (01:335:101 or 01:355:104), or Exposition & Argument (01:355:103).	First-year writing course: College Writing, College Writing Extended (01:335:101 or 01:355:104), or Exposition & Argument (01:355:103).	Learning Goal 3 An ability to communicate effectively with a range of audiences. First-year writing course: College Writing, College Writing Extended, or Exposition & Argument.	Cognitive Skills and Processes: Writing Same learning goal language as Core WCR goal. First-year writing course: College Writing, College Writing Extended, or Exposition & Argument (01:355:103).
		Cognitive Skills and Processes: Writing with Revision (WCR Core Goal) Communicate complex ideas effectively, in standard written English, to a general audience, and respond effectively to editorial feedback from peers,			

		instructors, &/or supervisors through successive drafts & revision.			
		<p>Cognitive Skills and Processes: Writing in Discipline (WCD Core Goal)</p> <p>Communicate effectively in modes appropriate to a discipline or area of inquiry; evaluate and critically assess sources and use the conventions of attribution and citation correctly; and analyze and synthesize information and ideas from multiple sources to generate new insights.</p>	<p>Cognitive Skills and Processes: Writing in Discipline (WCD Core Goal)</p> <p>Communicate effectively in modes appropriate to a discipline or area of inquiry; evaluate and critically assess sources and use the conventions of attribution and citation correctly; and analyze and synthesize information and ideas from multiple sources to generate new insights.</p>		<p>Cognitive Skills and Processes: Literature or Second Writing-Intensive Course</p> <p>Same learning goal language as WCD Core goal.</p>

	<p>c. Mathematical Reasoning and Analysis Students will develop their skills in analyzing and interpreting numerical data, and in reasoning and problem solving through mathematical processes.</p>	<p>Cognitive Skills and Processes: Quantitative and Formal Reasoning, Quantitative Methods (QQ Core Goal) Formulate, evaluate, and communicate conclusions and inferences from quantitative information.</p>	<p>Cognitive Skills and Processes: Quantitative and Formal Reasoning, Quantitative Methods (QQ Core Goal) Formulate, evaluate, and communicate conclusions and inferences from quantitative information.</p>		<p>Cognitive Skills and Processes: Quantitative/Technical Skills - Employ current technologies to access information, to conduct research, and to communicate findings. - Analyze and critically assess information from traditional and emergent technologies. - Understand the principles that underlie information systems.</p>
		<p>Cognitive Skills and Processes: Quantitative and Formal Reasoning, Math and Formal Reasoning (QR Core Goal) Apply effective and efficient mathematical or other formal processes to reason and to solve problems. (Includes 640 courses and formal reasoning courses)</p>	<p>Cognitive Skills and Processes: Quantitative and Formal Reasoning, Math and Formal Reasoning (QR Core Goal) Apply effective and efficient mathematical or other formal processes to reason and to solve problems. (Includes 640 courses and formal reasoning courses)</p>	<p>Learning Goal 6 An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.</p>	

	<p>d. Scientific Thinking Students will develop their understanding of scientific methods of inquiry, including the use of observation and experimentation to answer questions and generate new knowledge.</p>	<p>Areas of Inquiry, Natural Sciences (NS-2 Core Goal) Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.</p>	<p>Integral to all majors at SEBS.</p>	<p>Learning Goal 1 An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.</p>	<p>- Understand and apply basic principles and concepts in the physical or biological sciences. - Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.</p>
	<p>e. Information and Computer Literacy Students will develop their skills in gathering, accessing, analyzing, and interpreting information, in part through using the tools of modern computer technology.</p>				
	<p>f (proposed). Creative and Empathetic Inquiry</p>	<p>AHr core goal (Engage critically in the process of creative expression) may apply here).</p>			<p>The category of creative and empathetic thinking is where the vast majority of MGSA's program learning goals lie.</p>

<p>II. Understanding Human Behavior, Society, and Natural Environment Historical understanding, multicultural and international understanding, understanding literary and artistic expression, understanding the basis of individual and social behavior, understanding the physical and biological world.</p>	<p>a. Historical Understanding</p>	<p>Areas of Inquiry: Historical Analysis (Students must meet either HST-1 or HST-2)</p> <p>HST-1 Core Goal Explain the development of some aspect of a society or culture over time.</p> <p>HST-2 Core Goal Employ historical reasoning to study human endeavors, using appropriate assumptions, methods, evidence, and arguments.</p>	<p>Areas of Inquiry: Historical Analysis (Students must meet either HST-1 or HST-2)</p> <p>HST-1 Core Goal Explain the development of some aspect of a society or culture over time.</p> <p>HST-2 Core Goal Employ historical reasoning to study human endeavors, using appropriate assumptions, methods, evidence, and arguments.</p>	<p>Four Humanities/Social Sciences Electives from Selected Options</p>	<p>Areas of Inquiry: Social Science and History (Minimum 3 credits)</p> <ul style="list-style-type: none"> -Understand the bases and development of human and societal endeavors across time and place. -Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in social and historical analysis. -Understand different theories about human culture, social identity, economic entities, political systems, and other forms of social organization. -Identify and critically assess ethical issues in social science and history.
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	<p>b. Multicultural and International Understanding</p>	<p>Areas of Inquiry: Contemporary Challenges, Diversities and Social Inequalities (Students must meet either CCD-1 or CCD-2)</p> <p>CCD-1 Core Goal Analyze the degree to which forms of human differences and stratifications among social groups shape individual and group experiences of, and perspectives on, contemporary issues. Such differences and stratifications may include race, language, religion, ethnicity, country of origin, gender identity, sexual orientation, economic status, abilities, or other social distinctions and their intersections.</p> <p>CCD-2 Core Goal Analyze contemporary social justice issues and unbalanced social power systems.</p>	<p>Areas of Inquiry: Contemporary Challenges, Diversities and Social Inequalities (Students must meet either CCD-1 or CCD-2)</p> <p>CCD-1 Core Goal Analyze the degree to which forms of human differences and stratifications among social groups shape individual and group experiences of, and perspectives on, contemporary issues. Such differences and stratifications may include race, language, religion, ethnicity, country of origin, gender identity, sexual orientation, economic status, abilities, or other social distinctions and their intersections.</p> <p>CCD-2 Core Goal Analyze contemporary social justice issues and unbalanced social power systems.</p>	<p>Four Humanities/Social Sciences Electives Total</p> <p>Learning Goal 4 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.</p> <p>Learning Goal 5 An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.</p>	<p>Areas of Inquiry: Social Science and History (see learning goals above)</p>
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	<p>c. Understanding of Literature and Artistic Expression</p>	<p>Areas of Inquiry: Arts and Humanities (Students must take complete <i>two courses and meet at least two of these goals</i>)</p> <p>AHo Core Goal Examine critically philosophical and other theoretical issues concerning the nature of reality, human experience, knowledge, value, and/or cultural production.</p> <p>AHp Core Goal Analyze arts and/or literatures in themselves and in relation to specific histories, values, languages, cultures, and technologies.</p> <p>AHq Core Goal Understand the nature of human languages and their speakers.</p> <p>AHr Core Goal Engage critically in the process of creative expression.</p>	<p>Students must complete one course to meet one of the AH Core goals</p>		<p>Areas of Inquiry: Arts and Humanities Same learning goal language as AH Core goals.</p> <p>Minimum 3 credits + Liberal Arts Electives (to reach a total of 24 credits, specified for each major)</p>
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	<p>d. Understanding the Bases of Individual and Social Behavior</p>	<p>Areas of Inquiry: Social Analysis (Students must meet either SCL-1 or SCL-2)</p> <p>SCL-1 Core Goal Understand different theories about human culture, social identity, economic entities, political systems, and other forms of social organization.</p> <p>SCL-2 Core Goal Employ tools of social scientific reasoning to study particular questions or situations, using appropriate assumptions, methods, evidence, and arguments.</p>	<p>Areas of Inquiry: Social Analysis Students must complete two courses to meet the SCL Core goals.</p> <p>One course must be in either social/cultural analysis or economic analysis, and one course must be in governmental or regular analysis.</p>	<p>Learning Goal 2 An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.</p>	<p>Areas of Inquiry: Social Science and History (Minimum 3 credits, see learning goals above)</p>
	<p>e. Understanding the Physical and Biological World</p>	<p>Areas of Inquiry, Natural Sciences (NS-1 Core Goal) Understand and apply basic principles and concepts in the physical or biological sciences.</p> <p>Areas of Inquiry, Natural Sciences (NS-2 Core Goal) Explain and be able to assess the relationship</p>	<p>Areas of Inquiry: Natural Sciences</p> <p>Students must take two courses to satisfy the NS Core goals, one of each in two of the following disciplines: physical, biological, or environmental sciences.</p>	<p>Learning Goal 1 An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.</p> <p>Learning Goal 7 An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.</p>	<p>Areas of Inquiry: Natural Science Same learning goal language as NS-1 and NS-2 Core goals</p>

		among assumptions, method, evidence, arguments, and theory in scientific analysis.			
III. Responsibility of the Individual in Society	a. Citizenship Education Students will develop their understanding of the political and policy making processes of the United States and of their role as citizens in a democratic society.				
	b. Social and Ethical Awareness Students will develop their ability to recognize and assess ethical questions, and to make reasoned judgments about alternative solutions to those issues.	Areas of Inquiry, Contemporary Challenges (Students must meet either CCO-1 or CCO-2) CCO-1 Core Goal Analyze a contemporary global issue from a multidisciplinary perspective. CCO-2 Core Goal Analyze the relationship that science and technology have to a contemporary social issue.	CCO-1 or CCO-2 Core Goal	Learning Goal 4 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	Areas of Inquiry: Social Science and History (see learning goals above)

	<p>c (proposed). Community Engagement</p>		<p>Experiential Learning (3 credits)</p> <p>Complete and report on an applied experience (e.g., professional practice, service learning, or research) in order to examine and evaluate ideas within a discipline.</p>	<p>First-Year Experience and Capstone Project</p> <p>Students are required to complete a capstone project - a culminating major engineering design experience that:</p> <ol style="list-style-type: none"> 1) incorporates appropriate engineering standards and multiple constraints; and 2) is based on the knowledge and skills acquired in earlier course work. 	<p>All artistic creation is a form of experiential learning. In addition to their final projects for individual coursework, students generally complete rigorous portfolio reviews, recitals, or culminating performances that demonstrate their skill, creativity, and independent artistic voices. MGSA is seeking to expand students' participation in community engagement through partnerships with community organizations as well as our developing work in the field of Arts in Health. Community engagement is often undertaken in the Art & Design Department through the Visiting Artist Program, Design Practicum, and others; Art & Design is leading the way at MGSA on community-engaged art making.</p>
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Appendix H

Comparison of the Existing Rutgers University Learning Goals and the Proposed Rutgers–New Brunswick Learning Goals

1. Intellectual and Communication Skills

- **Existing University Goal: Critical Thinking:** Students will develop their ability to engage in logical thinking and complex critical analysis.
 - **Recommendation for Rutgers–New Brunswick:** Students will develop their ability to engage in logical thinking and complex critical analysis and to conduct interdisciplinary inquiry.
- **Existing University Goal: Communication:** Students will develop their skills in expressing complex ideas through written and oral communication.
- **Existing University Goal: Mathematical Reasoning and Analysis:** Students will develop their skills in analyzing and interpreting numerical data, and in reasoning and problem-solving through mathematical processes.
- **Existing University Goal: Scientific Inquiry:** Students will develop their understanding of scientific methods of inquiry, including the use of observation and experimentation to answer questions and generate new knowledge.
- **Existing University Goal: Information and Computer Literacy:** Students will develop their skills in gathering, accessing, analyzing, and interpreting information, in part through using the tools of modern computer technology.
 - **Recommendation for Rutgers–New Brunswick:** Students will develop competency in navigating, gathering, analyzing, and interpreting information effectively, responsibly, and ethically in an increasingly data-driven environment.
- **Creative and Empathetic Inquiry** (proposed new learning goal for Rutgers–New Brunswick): We see an opportunity to acknowledge creativity and the arts as a form of intellectual inquiry and communication that broadens thinking and enables empathy. Cultivation of such creative and empathetic thinking, both types of which are sorely lacking in today’s fractured society, may be achieved through courses in the arts and humanities.
 - **Recommendation for Rutgers–New Brunswick: Creative and Empathetic Inquiry:** Students will understand and engage in creative practices as a means of self-expression and relating to others.

2. Understanding Human Behavior, Society, and the Natural Environment

- **Historical Understanding:** Students will develop their understanding of the historical bases of the societies and world in which we live.
- **Existing University Goal: Multicultural and International Understanding:** Students will understand the multicultural aspects and international dimensions of the societies and world in which we live.
 - **Recommendation for Rutgers–New Brunswick: Global and Diverse Understandings:** Students will understand how individual and group identities, histories, perspectives, and experiences both shape and are shaped by broader societal, political, and economic systems and power differentials. This should include developing an awareness of other cultures and societies.

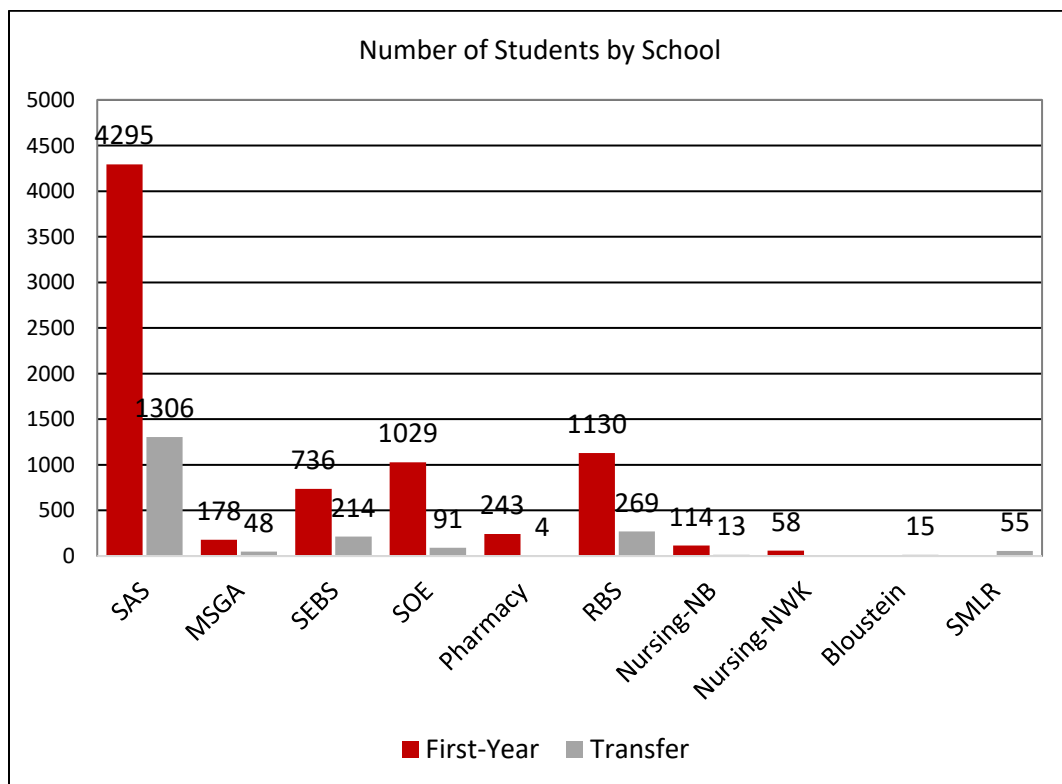
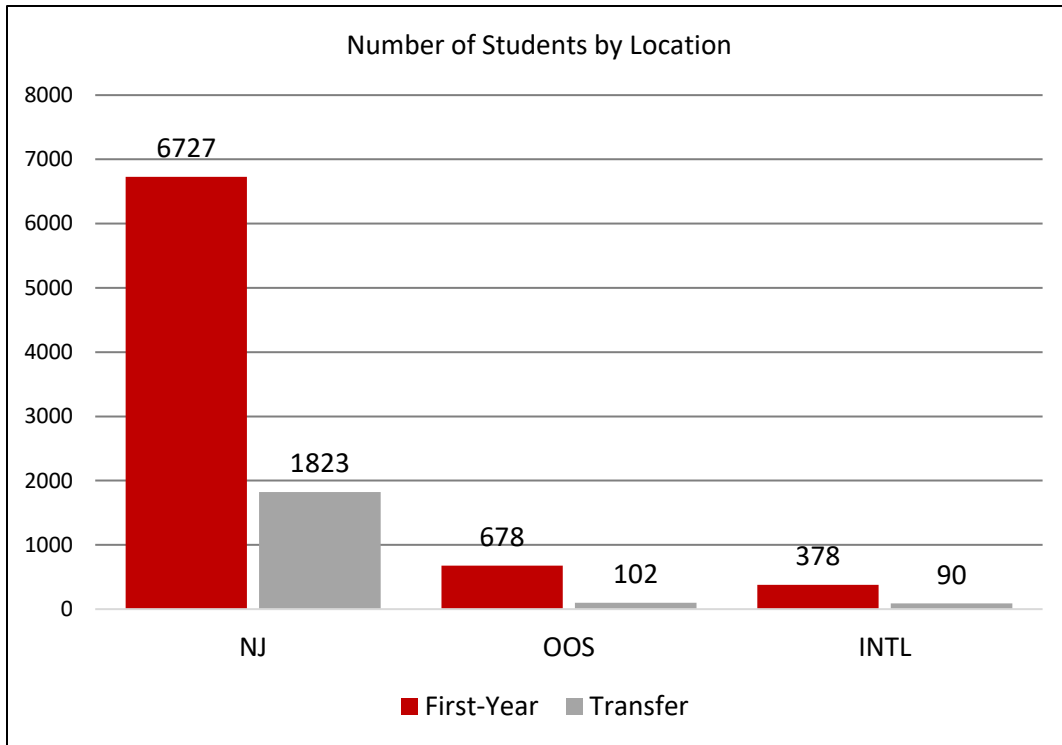
- **Understanding of Literary and Artistic Expression:** Students will develop their understanding of and appreciation of the various creative literary and artistic endeavors.
- **Understanding the Bases of Individual and Social Behavior:** Students will develop their understanding of the nature of human behavior.
- **Understanding the Physical and Biological World:** Students will develop their understanding of the natural environment in which we live and the forces that have shaped it.

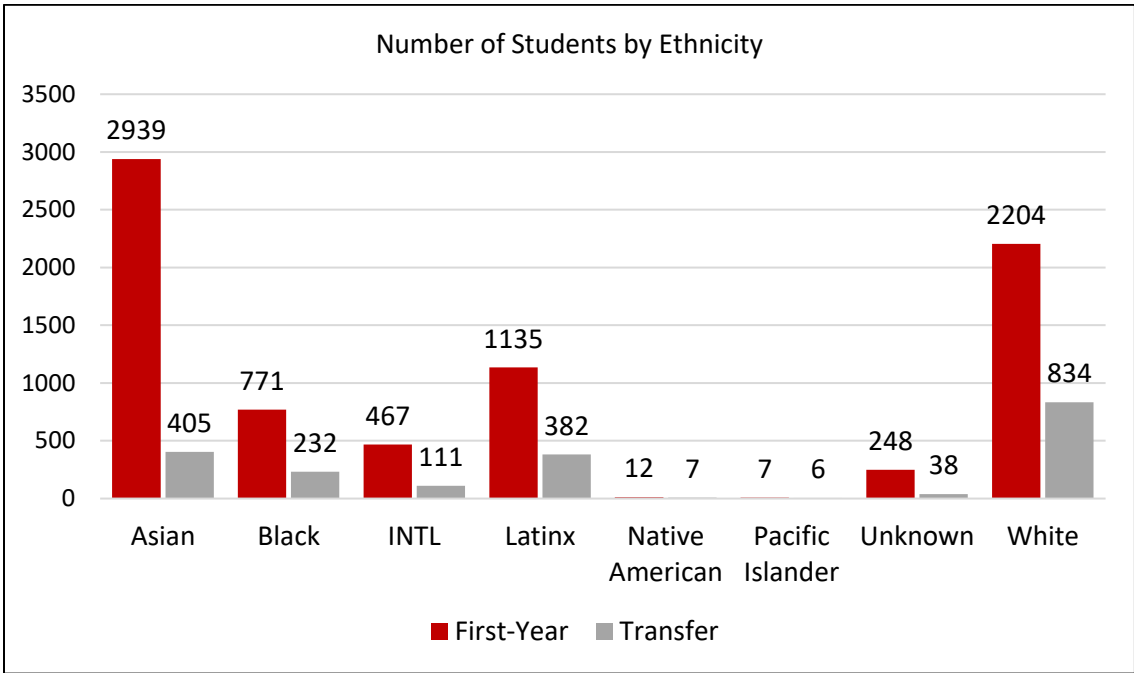
3. Responsibilities of the Individual in Society

- **Existing University Goal: Citizenship Education:** ~~Students will develop their understanding of the political and policy-making processes of the United States and of their role as citizens in a democratic society.~~
 - **Recommendation for Rutgers–New Brunswick: Community and Civic Engagement (proposed new learning goal to replace existing Citizenship Education goal):** Students will become informed and active members of their communities who understand local, national, and global governance systems and contemporary challenges
- **Existing University Goal: Social and Ethical Awareness:** Students will develop their ability to recognize and assess ethical questions, and to make reasoned judgments about alternative solutions to those issues.
 - **Recommendation for Rutgers–New Brunswick:** Students will have the ability to recognize and address ethical questions, to make reasoned judgments about alternative solutions, and to adhere to ethical standards in their academic, personal, and professional pursuits.

Appendix I

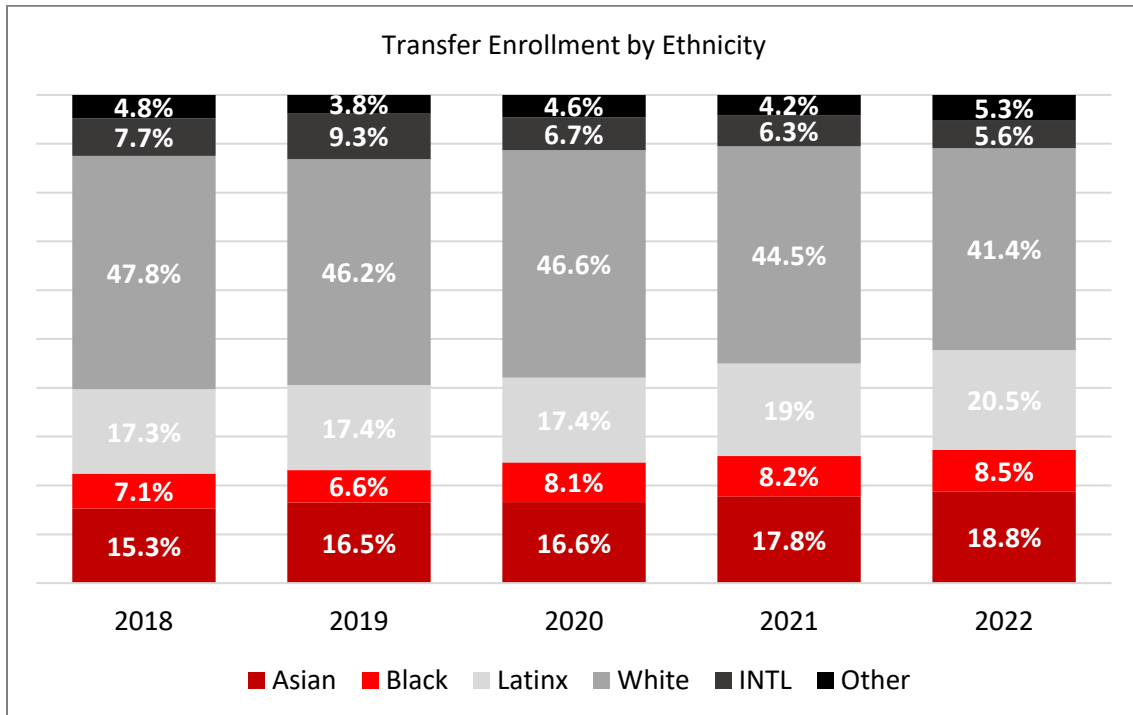
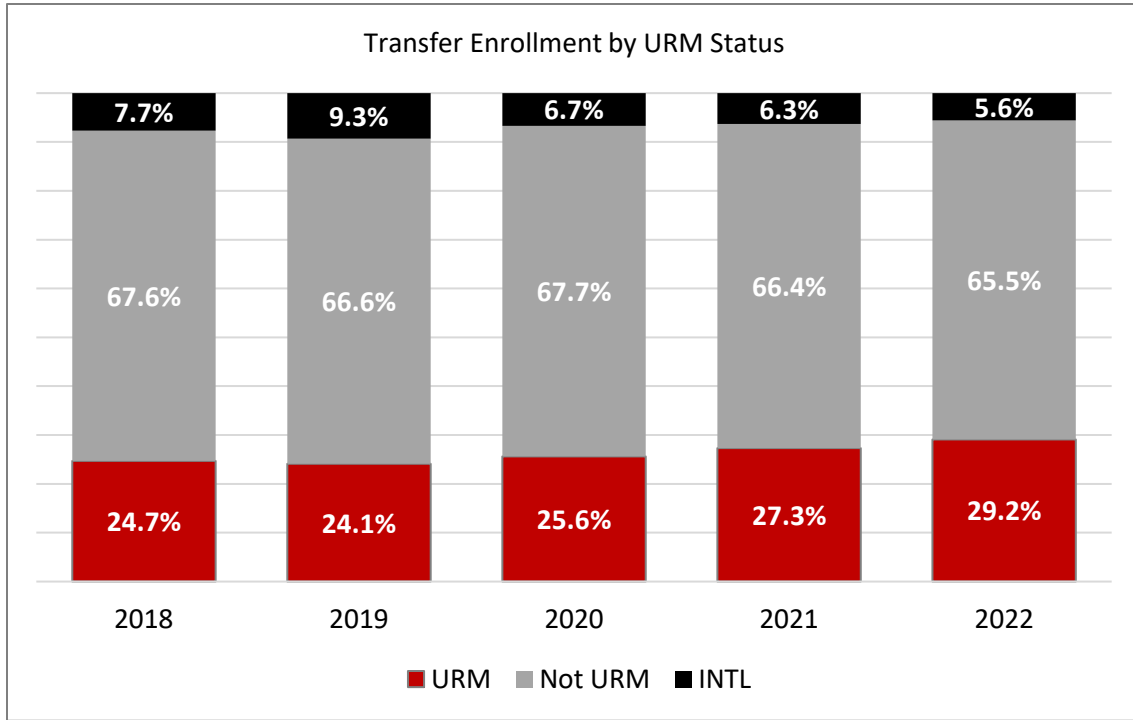
Overview of Fall 2022 Class





Appendix J

Overview of Transfer Enrollment



Note: Other includes two or more races, unknown, Pacific Islander, and Native American

Appendix K

Suggested Template and Rubric for Review of High-Impact Practices and High-Impact Experiential Learning Opportunities: To Be Used for Existing Programs and Proposed New Ones

Suggested Template and Rubric for Review of High-Impact Practices and High-Impact Experiential Learning Opportunities: To be used for existing programs and proposed new ones.

Name of Course/Program/Initiative:

Name of Proposer and Contact Information:

Categories of High-Impact Practices and Experiential Learning Opportunities: Check those that apply.

- **FY or Transfer Experience** - bring small groups of students together with faculty or staff on a regular basis; place a strong emphasis on critical inquiry, collaborative learning, and other skills that develop students' intellectual and practical competencies.
- **Learning Community** - encourage integration of learning across courses and to involve students with "big questions" that matter beyond the classroom, link courses for students to take together and work closely with one another and with their professors, explore a common topic and/or common readings through the lenses of different disciplines.
- **Writing Intensive Course** - emphasize writing at all levels of instruction and across the curriculum, including final-year projects, encourage a process to produce and revise various forms of writing for different audiences in different disciplines (may overlap with writing general education courses).
- **Collaborative Projects** - learn to work and solve problems in the company of others and sharpen one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences, generally over the course of a full semester. Typically, if this is a course, the project should be the primary focus of the course, rather than simply active learning pedagogies incorporated in a typical course.
- **Research /Scholarly Collaboration with Faculty** - involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions. Include working in labs.
- **Diversity/Global Learning** - help students explore cultures, life experiences, and world views different from their own; may be achieved through experiential learning in the community and/or by study abroad.
- **Service Learning /Community Engagement** - direct experience with issues being studied in the curriculum and with ongoing efforts to analyze and solve problems in the community, apply learning in real-world settings and reflect in a classroom setting on their service experiences, model the idea that giving something back to the community is an important college outcome and that working with community partners is good preparation for global citizenship, work, and life. Central to service learning and community engagement is the development of an understanding of the needs of the community, the social/cultural factors that have led to the need, and the ethics of engagement and service.
- **Internships/Field Experiences/Student Employment** - direct experience in a work setting—often related to career interests—giving students the benefit of supervision and coaching from professionals in the field.

- **Capstone Courses and Projects** - culminating experiences near the end of college years to create a project of some sort that integrates and applies what they've learned or significantly builds on what they have learned in a new way.

○ **Other:**

Number of student participants each semester:

Ratio of students to instructor/peer leader/director:

If credit-bearing, please provide course number(s) and number of credits:

Optimal timeframe for student participation: check all that apply.

- 1st Year
- 2nd Year
- 3rd Year
- 4th Year
- Graduate student

Description and Learning Outcome Goals—they should include a robust mix of the following:

1. Content-driven learning outcomes.
2. Affective outcomes: Belonging, Engagement, and Retention; enhanced knowledge, understanding of diverse world views, life experiences and perspectives.
3. Empowerment outcomes: Connection to university resources, advisors, and mentors
4. Preparation for post-graduation success: Development of 21st century skills and competencies/Real-World Application and/or Alignment with Career Goals.

Please attach a description of (or web link to) the Course/Program/Initiative program and list here the Learning Goals and the Assessment Measures that will be used to demonstrate achievement of those goals:

Rubric: Characteristics of High-Impact Practices (HIPs) and High-Impact Experiential Learning (HIEs):

This rubric is provided for use in vetting existing programs and in guiding any revisions as needed, and it serves as a check list to be used in the development of new of new HIPs and HIEs.

To be completed by the HIPs and HIEs Oversight Committee

Criteria	Score	High Degree (3)	Somewhat (2)	Little (1)
Articulated and Assessable Learning Goals		Clearly articulated and assessed. Furthers Academic Excellence, Beloved Community, and/or the Common Good		Vague and not assessed
Sustained structured, individual or small-group interactions with faculty member, advisor, supervisor, or peer mentors around the HIPs learning goals		Students meet weekly and are held accountable for absences. Generally, these span most of the semester or are shorter, very high intensity experiences. Each meeting with the mentor centers around conversations that are specific to the goals, subject matter, assignments, and/or learning goals of the HIP/HIEL.	Students meet a few times per month (or the intensity of shorter experiences does not rise to expectations), and absences are noted. Meetings with the mentor are sometimes structured around the subject matter, assignments, and/or learning goals of the HIP/HIEL, but they often leave room for digression.	Students meet monthly, and there is little or no accountability for absences. The experience is brief. The plan for the HIP/HIEL suggests that conversations will be informal and casual and open to explore a range of topics, including those not relevant to the HIP/HIEL.
Critical Reflection: students develop an awareness of their own learning process or learn to question the methodologies of a given field and/or integrated learning with frequent feedback.		Students are encouraged and prompted to engage in critical reflection and/or integrated learning. Students learn to "connect the dots" between the HIP/HIEL and other classes, extracurricular activities, community needs, or aspects of students' personal lives. Students receive regular feedback (oral and written) on their	Some suggestions are made that encourage students' critical reflection and/or integrated learning, but these matters are not actively discussed. Students receive some feedback on participation in activities related to the practice, but it is informal and conveys minimal suggestions for revision, rethinking, or improvement.	Students are not made aware of how the activity might encourage critical reflection or integrated learning. Students receive little to no feedback on their participation in activities related to the practice.

		participation in activities related to the practice, such as written assignments, performances, and other skills.		
Diverse Perspectives		Students are encouraged regularly to share their own experiences, reactions, and interests as they relate to the practice, and these are affirmed and respected within the broader discussions. Students are asked to reflect on how others' responses may differ and why.	Students are sometimes encouraged to share their own experiences, reactions, and interests as they relate to the practice, but there is little opportunity to incorporate those responses in activities. There is minimal reflection on why there might be responses different than their own.	The learning is entirely "frontal" and leaves no room for students to share their own experiences, reactions, and interests as they relate to the practice or to consider those of others.
Real-World Application and/or Alignment with Career Goals		Students discuss and learn how to articulate how the practice relates to real-world situations and/or how it can support their desired career outcomes including articulating what NACE career readiness skills/competencies they are developing. Career outcomes may include graduate study.	Students occasionally discuss how the practice relates to real-world situations and/or career outcomes and competencies, but these discussions seem disconnected from students' own interests.	Students do not discuss or articulate how the practice relates to real-world situations and/or career outcomes or competencies.

Appendix L

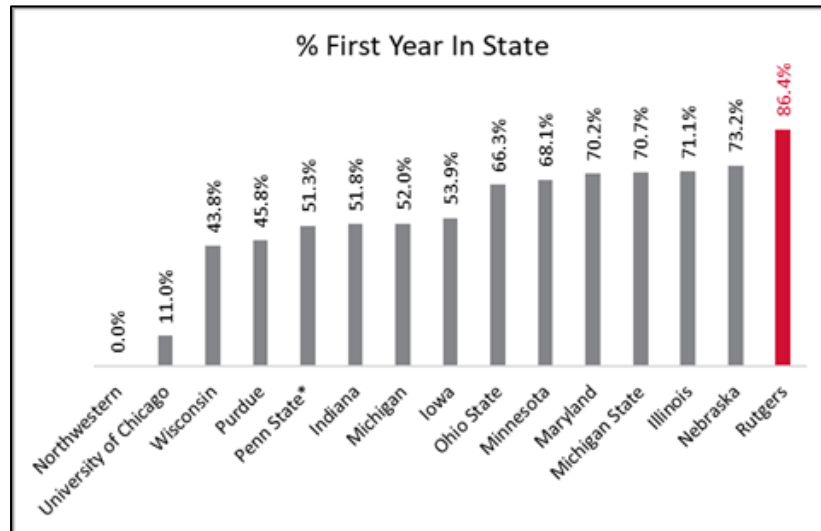
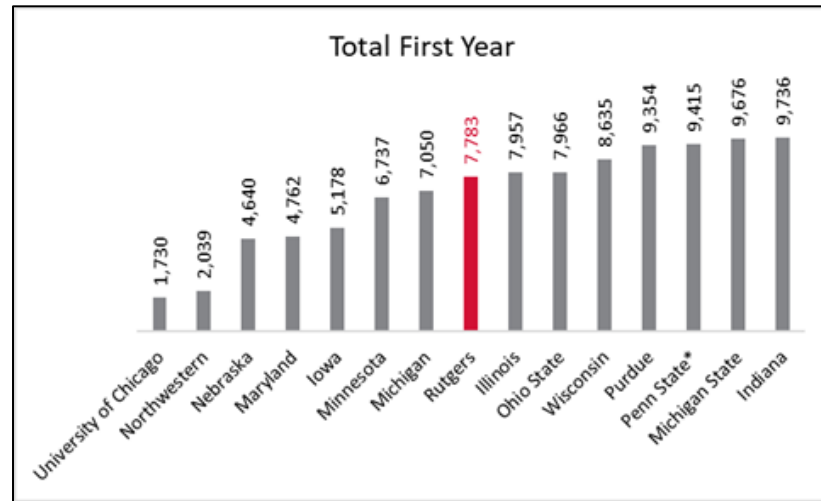
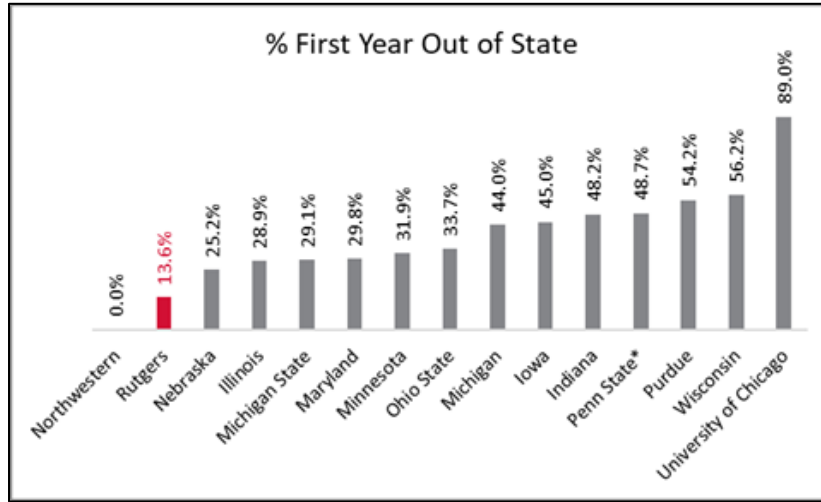
Discovery Neighborhood Proposed Locations

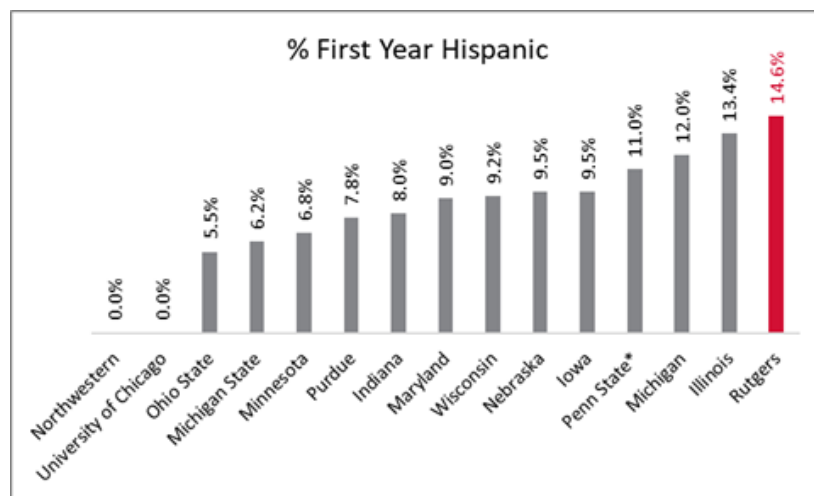
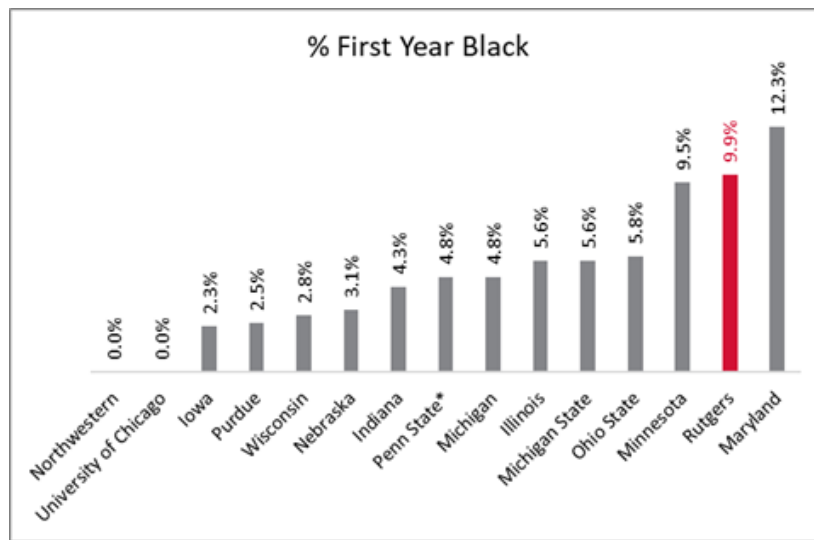
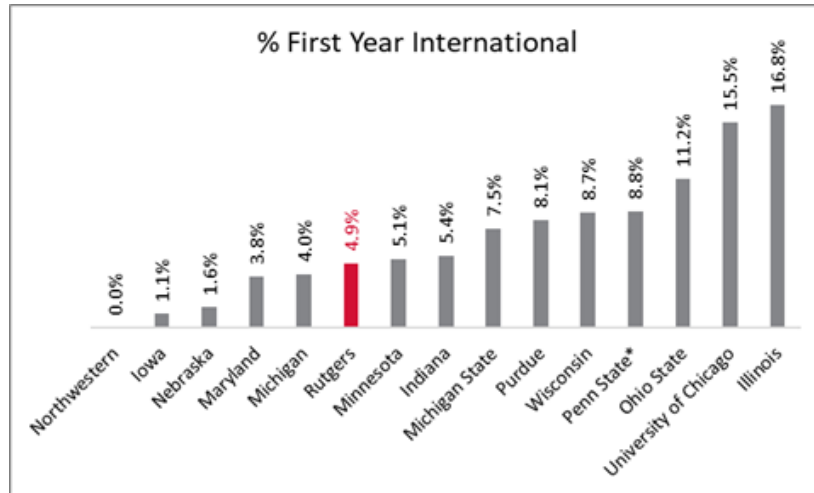
The following residential locations have been identified as having potential for being converted into Discovery First-Year Neighborhoods:

Livingston Campus 2,250 students	Busch Campus 2,600 students	College Ave Campus 1,200 students	Cook/Douglass 1,050 students
<p>1. The Quads – 1,400 student capacity (plus commuters affiliated)</p> <p>2. The Towers – 650 student capacity (plus commuters affiliated).</p>	<p>3. BEST and BAMB Halls – 1,300 student capacity with 500 BEST students and 800 Barr, Allen, Matia, and Metzger (plus commuters affiliated).</p> <p>4. The Suites (McCormick, Morrow, Judson, Thomas, Winkler) – 1,100 student capacity (plus commuters affiliated).</p>	<p>5. Honors College and SAS Honors in Bishop Quad Halls (500 HC students plus 600 Bishop Quad students) plus commuters.</p> <p>This scenario would provide a Discovery Neighborhood for honors students possibly leveraging and building upon some of the resources available at the Honors College.</p>	<p>6. Cook Campus – 400 students</p> <p>New Gibbons – 400 residents plus commuter students.</p> <p>7. Douglass College – 650 students</p> <p>Woodbury Bunting-Cobb – 200 residents plus commuter students</p>
<p>Total First-Year Students: 7,100 residential students plus commuter affiliates</p>			

Appendix M

Big Ten Comparative Data

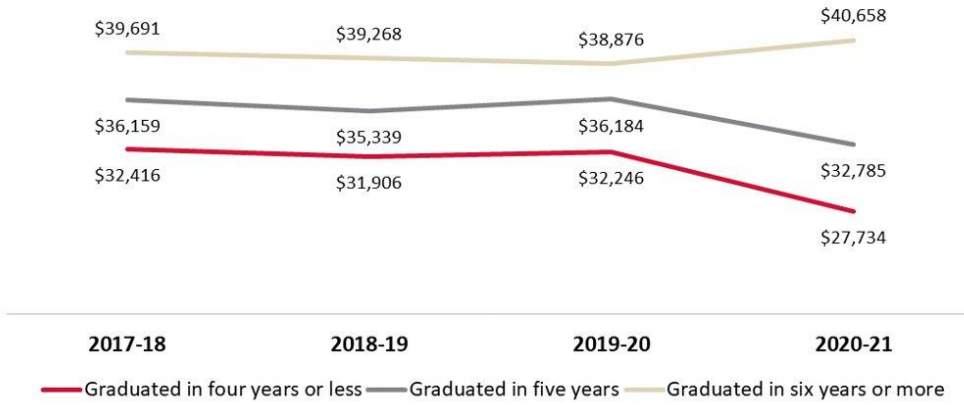




Appendix N

Rutgers–New Brunswick Average Student Debt

Rutgers–New Brunswick Average Debt
by Graduation Rate Groups, Academic Year 2016-17 to 2020-21



Appendix O

Oracle Student Financial Planning Benchmarking with Peer Institutions

Note: University names have been removed to preserve anonymity. Responses have been synthesized.

University A

- Began implementation in Fall 2020 (previously used PeopleSoft for student portal and verification process)
 - System issues
 - Cost of Attending (COA) continually shifting
 - Incorrect awarding
 - Manual scholarship entry
 - Summer packaging
 - Manual Pell entry as system cannot automate
 - Reporting is a particular challenge (utilizing campus solutions instead)
 - Recommendations
 - Collaborative calls with other schools utilizing OSFP
 - Join Student Financial Planning list-serv as part of The Higher Education User Group (HEUG)

University B

- 15 months into implementation
 - System issues:
 - Scholarships are processed manually
 - Enrollment mismatches between campus system and OSFP
 - Pell mismatches and double awards
 - Academic and billing is a pain point for student accounting
 - SAP internal process issues and need for manual overrides
 - Data not easily accessible, OIT needed to find a solution
 - Summer processing is unable to process Pell and other institutional aid
 - Return of Title IV Funds (R2T4) is broken and is a manual process
 - SAFI and SAP broken
 - Double disbursements with refund requested, resulting in many issues with students and parents
 - Aid cancellations or aid not awarded
 - Issues with loan originations and professional judgments
 - Frontline staff primarily responding to all complaints
 - Staff turnover high
 - President created additional jobs for customer service and OIT
 - Audit
 - A133 findings were bad for 2021-22 academic year
 - State and federal issues at reporting time

University C

- Implementation January 2023 (did not disburse any aid as system is broken)

- System issues:
 - Student portal (access, uploading documents, loan acceptance)
 - SAFI
 - Scholarships (currently using legacy system)

University D

- Support only 1,500 students in OSFP (originate and disburse federal aid only)
 - System issues:
 - Data and reporting
 - SAP process
 - Awarding endowed scholarships
 - Cannot work with a no-grading system
 - Unprepared with technical resources needed to undo incorrect awarding

University E

- Began implementation two years ago
 - Oracle not responsive to feedback and requests for system changes/updates even though they say you are a “partner institution”
 - Needed to keep legacy aid system running to package students correctly
 - System issues:
 - Aid cancellations and not disbursing, as well as issues with double disbursement
 - SAFI and SAP are broken, manual processes
 - Scholarships did not work, endowed scholarships processed manually
 - Federal Grad/Plus loan issues
 - Federal Work Study (FWS) disbursement incorrect
 - COD issues and manual processing
 - Could not process summer
 - Pell tables updated by OIT
 - Cannot generate reports or data
 - Issues with Student Portal, cannot log in or upload documents
 - Unable to accept or cancel loans
 - R2T4 all manual and results in human error
 - OSFP only works for basic federal aid
 - Audit: Flagged on SAR disbursements
 - Recommendations
 - Use only Jasper Soft and OTBI reports from Oracle
 - Hire additional OIT and OFA staff for necessary manual work as a result of the system

Appendix P

Enrollment Marketing Cost Overview

Proposed Enrollment Marketing Costs to Support Recommendations

Branding:

- The College Tour Series (Amazon)*: \$200,000.00

Digital Marketing:

- Out-of-state digital advertisements**: \$500,000.00
- Out-of-state OOH (billboard) advertisements**: \$100,000.00
- Experiential AR marketing implementation***: \$130,000.00

Print:

- Prospect “R” brochure: \$110,000.00
- Admit welcome packet: \$130,000.00
- Admit Honors College packet: \$7,000.00
- Postage for print: \$100,000.00

Marketing Operations:

- Marketing attribution tool (Carnegie Clarity)****: \$70,000.00
- Annual subscriptions: \$2,500.00
- Photography: \$10,000.00

*[The College Tour](#) is an Amazon-produced television series that provides an inside look at colleges and universities from the student perspective. This will help to increase awareness of Rutgers–New Brunswick within our out-of-state markets.

**Out-of-state digital and OOH (out-of-home/billboard) advertisements will focus on geo-targeted ads, paid search, targeted competitor ads, OOH ads in current primary out-of-state markets and new territories.

***Experiential augmented reality (AR) marketing implementation will help to reach our Generation Z audience through innovative methods, elevating the Rutgers–New Brunswick brand while supporting on-campus programming, recruitment on the road, and strategic collaborative work with the state of New Jersey Division of Travel and Tourism.

****[Carnegie Clarity](#) is a marketing attribution tool that provides insight on enrollment data and creates personalized website experiences based on interests and actions of users. In connection with the Division of Enrollment Management’s current Salesforce CRM tool, Carnegie Clarity will help to effectively track marketing leads and conversions, support retargeting capabilities, and move beyond the traditional name-buy funnel.

Appendix Q

Curriculum Mapping Integration

Map Your Rutgers Journey
Remember, Finish in Four and 15+ to Finish!

Our headers help to orient and direct students

We are reminding students of how their credits determine status

We are reminding students of this messaging

We chose these headings to be inclusive of all students, including a range of transfer students

<i>I am...</i>	Getting started on my journey (0-30 credits)	Continuing my journey (31-90 credits)	Finishing up my journey (91-120 credits)
Choosing my courses	<ul style="list-style-type: none"> Meet with an academic advisor Seek out tutoring at the Learning Centers Attend the major/minor fair Align your courses with the Core Start tracking degree requirements 	<ul style="list-style-type: none"> Meet with an academic advisor Talk with your advisor and UGD about your choice of major(s)/minor(s) and course selections Enroll in more advanced courses Continue tracking your degree and Core Curriculum requirements 	<ul style="list-style-type: none"> Explore advanced courses, special topics courses, and capstone courses Meet with your academic advisor and your UGD to confirm graduation Complete courses as pre-reqs for graduate school programs Finish your degree and Core requirements
Getting involved in research and on campus	<ul style="list-style-type: none"> Attend the Involvement Fair Join student-led clubs or organizations Take a FIGS or Byrne Seminar Learn more about research opportunities at the Aresty Research Center, your home department, labs, and in your school Attend a student wellness workshop 	<ul style="list-style-type: none"> Participate in the Involvement Fair Become a leader in a student-led club or organization Apply to teach with FIGS Continue to pursue research opportunities with faculty Apply to become a peer instructor or learning assistant (LA) Consider a senior honors thesis Apply for internships and/or fellowships Apply for a leadership position (e.g., New Student Orientation Leaders, Resident Assistant, Student Center Manager, Peer Health Educator, Diversity Peer Educator, etc.) Apply for an on-campus employment position 	<ul style="list-style-type: none"> Become a member of your club or organization's executive board and promote it to incoming students Teach as a peer instructor or LA Present your independent research Become involved in the Rutgers Alumni Association
Becoming engaged in my local and global communities	<ul style="list-style-type: none"> Attend Rutgers Day Attend talks, speaker series, and other colloquia and conferences Attend a festival, an exhibition, or other cultural event to expand your horizons Identify volunteer and service opportunities Explore study abroad opportunities through RU Global Participate in the annual Scarlet Day of Service Get involved in the political process by registering to vote and/or voting in an election Volunteer to assist with the Winter Wish event 	<ul style="list-style-type: none"> Attend Rutgers Day Help organize talks, a speaker or colloquium series, or conference Continue to attend cultural events, and consider volunteering Consider taking a community-engaged learning course Consider Rutgers University Alternative Break (RUAB) trips Apply to study abroad through RU Global 	<ul style="list-style-type: none"> Engage in outreach at Rutgers Day Join a professional association or scholarly society related to your career

This row is where we can link to high impact practices!

**Preparing for my
career beyond
Rutgers**

- Join Handshake
- Explore resources and workshops offered by Career Exploration & Success
- Develop a resume and sample cover letter
- Attend the Career & Internship Mega Fair
- Attend networking and alumni events

- Actively use Handshake
- Take advantage of resources and workshops offered by Career Exploration & Success to develop your resume, job search, and interviewing skills
- Participate in the Career & Internship Mega Fair
- Attend an information session about graduate school programs
- Connect with alumni and professionals in your field of interest
- Help organize alumni events

- Actively use Handshake
- Take advantage of resources and workshops offered by Career Exploration & Success to develop your resume, job search, and interviewing skills
- Participate in the Career & Internship Mega Fair
- Apply to jobs, graduate programs, post-bac opportunities, or plan on other adventures
- Connect with alumni and professionals in your field of interest
- Explore “gap year” opportunities
- Get involved in the Lead Up Academy

Appendix R

Majors to Pilot the Curriculum Map

School of Arts and Sciences

- Cognitive Science
- DLS
- English
- French
- Genetics
- German
- Philosophy
- Physics
- Political Science

School of Environmental and Biological Sciences

- Agriculture and Food Systems
- Animal Science
- Biochemistry
- Environmental and Business Economics
- Environmental Science
- Food Science
- Marine Sciences
- Microbiology

School of Management and Labor Relations

- Undergraduate Labor Studies and Employment Relations (LSER)
- Undergraduate Human Resource Management (HRM)

Rutgers Business School

- Marketing Department

Edward J. Bloustein School of Planning and Public Policy

- Public Health

School of Communication and Information

- Information Technology and Informatics (LIS Department)

School of Engineering

- Industrial Engineering
- Electrical & Computer Engineering

School of Social Work

- BASW
- BSW

Appendix S

Rutgers–New Brunswick Academic Advising

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
EJB undergraduate https://bloustein.rutgers.edu/undergraduate/advising/current-students/	Structure: mainly academic advising staff with some faculty advising around research, careers, and graduate school Staffing: 1 Associate Dean, 1 Assistant Dean, 3 staff advisors	Varies, Assistant Dean meets with all prospective students; staff advisors are assigned students based on last name and special population (student-athletes, veteran/military-affiliated); one advisor is designed to have fewer students because she handles transfer evaluations. So ~250:1	Yes. Transfer credit evaluations, processing school-to-school and re-enroll apps, planning UG Convocation, certifying students for graduation, Fall New Student Information Session, STAR Day sessions, each oversees one or more student orgs/honoraries, all attend Admitted Open House, updating NJTransfer, hosting events throughout the academic year, supervise student workers.	Yes, based on last name. Direct admit EJB students receive their advisor's info in their welcome letters. Current RU students declaring an EJB major receive their advisor's info in their acceptance email. This information is also listed on the EJB website on several UG pages.	Yes. New direct admit transfer students are required to attend a STAR session. Also, direct admit students in their second semester of third year must meet with their advisor to discuss their remaining requirements and the senior year academic plan. This is extended as an option for SAS students in our major programs. We strongly recommend they confirm their remaining core or minor requirements with SAS/other dept. if they have questions about what is shown in Degree Navigator (DN).	DN, IMS, MyAdvisor - advising notes, Zoom, Webex, Salesforce - prospective students/app review, RU Transfer - TSRs, NJ Transfer - RTPs, evals for NJCC prospective students, Perceptive Content-transcripts, IG and FB social media platforms -marketing events and sharing important info. Mailchimp for pre-registration announcements. Canvas for flyers, quick vids, and bi-weekly newsletter.	Email listservs, social media accounts on IG and FB, Canvas page for direct admit students, Canvas page for career and internship announcements, and graduate school/career prep events
Graduate School of Education (5-year Ed program) Five-Year Teacher Education & Post Baccalaureate Programs - Rutgers GSE	Structure: Faculty Director and Program Advisor who works for both Faculty Director and Office of Student and Academic Services Staffing: 1 Program Advisor + Assistant Dean when needed. All assigned faculty advisor within specialization.	90 to 1		Yes, assigned faculty advisor upon admission and all students work with the Program Advisor		Zoom, DN, Audit Excel file, Salesforce, email (no advising note system)	Entirely via email and a Canvas site

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
MGSA https://www.masongross.rutgers.edu/resources/advising/	Structure: Advising (academic, professional/career, personal) centralized within the Dean's Office-Office for Advising & Student Success. Services provided by professionals serving as advisors specialized in the appropriate area of Music, Film, Art & Design, Theater and Dance. Undergraduate Program Directors or department staff provide some graduate advising and general information around program requirements, graduate studies, and professional opportunities. Staffing: 1 Assistant Dean, 3 advisors, 1 part-time coordinator		Yes. Transfer credit evaluations, processing school-to-school and re-enrollment applications, certifying students for graduation, New Student Orientation & Information Session, transfer student sessions, departmental artistic evaluations, academic standing, artistic standing, MGSA and department-specific recruitment events, updating NJTransfer, hosting events throughout the academic year, supervision of graduate student assistant.	Yes. Students are automatically assigned an advisor based on their artistic discipline. Advisors assigned early on in the admissions process.	Yes. Every newly admitted student (first-year and transfer) must meet with their assigned academic advisors who manage and create the first-semester course selection process. Changes must be approved. Students on Academic Warning, Artistic Probation, and Academic Probation must regularly see their advisor. Advising at MGSA is an accepted part of the culture and meetings are frequent.	DN and Navigate for BFA/BM students. Navigate and/or My Advisor for BA students in other schools.	Navigate email system, Rutgers email, departmental liaisons, drop-in hours, scheduled appointments, limited on-line chat options, and phone calls.
RBS undergraduate https://myrbs.business.rutgers.edu/undergraduate-new-brunswick	Structure: All advisement done with staff members Staffing: 1 Associate Dean, 3 Assistant Deans, 8 Advisors	"Advisor" ratio is 625:1, Assistant Deans handle more administrative work along with troubleshooting and specialized populations (S2S, HC, HP, Reenrollments)	Yes, professional advisors handle a variety of other responsibilities such as overseeing drop-in hours, transcript reviews (for accuracy), status determination, senior certification for graduation, probation/dismissal review.	Assigned by class year (2 advisors per class year). Students change advisors each year.	Only when onboarding new (FY and TR) students.	IMS, DN, zoom, Webex, EAB for notes, Salesforce for admissions	Canvas shells, e-mail listservs

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
SAS Undergraduate https://sasundergrad.rutgers.edu/	<p>Structure: The OAAS supports holistic academic advising for students on all SAS degree requirements, building an individualized degree plan infused with high impact practices. We operate as a hub from which students build a wider network of support including specialized advising, Learning Centers, ODS, Dean of Students, and referrals to academic department coordinators/advisors for discipline-specific advising. The OAAS also benefits from its position within the larger SAS Office of Undergraduate Education ecosystem, liaising and learning from/with colleagues in Teaching & Learning, Career Explorations in Arts & Sciences, and faculty partners.</p> <p>Staffing: When fully staffed, OAAS is home to 33 advising professionals and 17 administrative professionals: 1 Associate Dean; 1 Director for Student Records and Systems; 5 Assistant Dean/Directors that oversee specialized administrative groups (First-Year, Soph/Junior, Senior, Transfers, Special Pops/Nontraditional/Int'l/Re-enrolling, and Academic Standing); 3-4 Assistant Deans per group when fully-staffed; 5 Student Counselors who serve as advisors only (no admin work); 10 Senior Admin Assistants and 2 Program Coordinators that support the specialized administrative groups; and 5 Secretarial Assistants that support general work. Larger departments also appoint a faculty advisor for majors and these tasks fall to the undergrad chair/director in smaller departments.</p>	<p>Fully staffed (20,000 students and 33 advisors) 1:606 - current staffing (20,000 students and 28 advisors) 1:714. <i>All SAS undergraduate students were included in this calculation as OAAS serves all students, including those in HC, Athletics, EOF and our Honors Program. While those students also have the support of advisors through those programs, they avail themselves of OAAS resources including Live Chat, appointments, and workshops.</i> Frequently OAAS staff includes these students in services that they provide to the general student population such as reaching out about warning grades, reminders of various deadlines and other notifications, and handling questions regarding how to request special permission numbers, pre-req overrides, repeated course policies, and other processes listed in column G.</p>	<p>Yes, professional advisors in OAAS are responsible for staffing Live Chat shifts, responding to 1-2 general email inboxes in addition to their personal email, and completing process work. That work includes AP/IB evaluations, transfer transcript evaluations, school-to-school application processing, re-enrollment processing, academic review and status determination, senior certification for graduation, and vetting policy appeals. What's more, the scope of advising reaches far beyond the appointment to include assistance with grad school applications, letters of recommendation, and personal referral follow up. Advisors pride themselves on contributing to the larger Beloved Community through program support, volunteerism, and collaboration beyond the OAAS as well.</p>	<p>Each student interacts with multiple deans and advisors in their APA and STAR Day registration experiences and leaves with the names of at least two advising professionals who supported their registrations. SAS students in specialized programs are assigned advisors; examples include EOF scholars, Honors Program and ROTC students, students participating in our College Support Program, our Rutgers Future Scholars, and students in our First-Year Retention Program. In 2022, we sought to provide incoming students with assigned advisors, but the myRutgers portal was not able to accommodate that.</p>	<p>Yes; all newly enrolling students (first year at APA and Transfer students at STAR Day) must meet with one or more academic advisors who guide their course selection and approve their schedule. Students in our First-Year Retention Program and students on Academic Warning/Probation are required to see an advisor before they can register for the following semester. We also ad hoc require advising of students who have successfully appealed a policy, for example seniors with certain credit overrides, to ensure that there is support around that decision and its effects. In addition, students declaring majors in areas like Art History, Biology, Exercise Science, Sport Management, and Physics are required to meet with their departmental advisors at the point of declaration.</p>	<p>MyAdvisor is used to record all advising notes and communications with students or correspondences about students; Degree Navigator, the university degree audit tool, is both maintained and employed by our office; Zoom for student appointments and professional meetings; IMS for all registration adjustments and other various info; Perceptive Content for storing student files; SAS RU Scheduler as appointment database; PHP Live! Chat; Salesforce for finding official transcripts received; EIS Application Systems for School-to-School, RU Transfer Evals, AP Evals; MyGradDate for degree completion date adjustments; MyMajor is a shared resource for OAAS, faculty, and students alike in declaration; Box and W:Drive for storing files; Reenrollment Database; Senior Review Database</p>	<p>RAMS listservs are used sparingly and for most time-sensitive action items (e.g. registration, add/drop deadlines, W); Canvas pages for incoming first years, transfers, school-to-school transfers, non-traditional students, and seniors are employed for content sharing and calendaring events and deadlines; EAB SSC Campus is employed by Academic Standing to create campaigns for students in academic difficulty; our OAAS website is a robust resource of policies, calendar items, and academic announcements. We also partner with colleagues to promote events via social media and embed ourselves in the community via FIGS course visits and advising programs.</p>

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
School of Communication and Information http://comminfo.rutgers.edu	<p>Structure: Advising (academic, personal, career) within the Office of Student Services is provided by professional advising staff. Undergraduate Program Directors provide some advising around program requirements, research opportunities, careers.</p> <p>Staffing: Assistant Dean I, Assistant Dean III, two Undergraduate Student Counselors, Administrative Assistant. Assistant Director for Careers. (Four Undergraduate Program Directors also provide advising support to their own populations, but typically refer advising to the Student Services team.)</p>	AD3 and two UG counselors for about 2,000 SCI students plus RU students interested in SCI programs		No assigned advising		DN, IMS, MyAdvisor (advising notes), TargetX Engage, Bookings, Zoom, Teams, myMajor portal, WordPress, student transcripts, REGIS, Canvas, phone, email, internet/other websites, Adobe Connect (on demand advising – chat)	Twitter, listservs, bulletins (Salesforce CRM), email, phone, Zoom, WordPress, Canvas, Adobe Connect (on demand advising – chat)

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
School of Engineering https://soe.rutgers.edu/oas	<p>Structure: Most academic advising is handled by the Office of Academic Services (OAS). Students can make an appointment with any available dean or advisor, but certain administrative tasks are assigned to the various assistant deans, with some of those tasks associated with certain years (i.e., graduation, first-year issues, etc.). The Office of Student Access & Inclusion provides advising for our EOF & EOP students.</p> <p>Staffing: .5 associate dean, 4 assistant deans, 2 advisors, 1.5 administrative assts., and 15-20 student staff who help with walk-ins and Live Chat</p>	Approximately 1:615	<p>Yes. Registration of new students (first years and transfers). Readmission, re-enrollment, grade replacements, reclassifications, transfer credit review, humanities/social science elective review, scholastic standing review and academic actions, updating Degree Navigator, updating retention programs (from creation to results analysis), individual course withdrawals, degree audits, senior certification, SoE Convocation, SoE New Student Kick-Off, training student staff and student volunteers to assist with some facets of the work.</p>	<p>There is a First-year Team (1 assistant dean and 1 advisor, .5 AA) that all incoming students work with for their first year. Sophomores, juniors, and seniors can meet with any of the assistant deans or advisors, although each of those assistant deans has some specific administrative responsibilities (i.e., one handles transfer students, one handles scholastic standing, one handles graduation). The undergraduate directors from each department are also available to students who have specific questions within their majors.</p>	<p>In general, a student in good academic is not required to see an advisor. The only exception are students in the Engineering Honors Academy, who meet once a semester with the director of the program. Students who are on academic probation are required to meet with an advisor at least twice a semester. Some EOF students are also required to meet with their advisors.</p>	DN, IMS, Zoom, Teams, Salesforce (admissions), RU Transfer, PureChat, NJ Transfer, Canvas, Box, Qualtrics, EAB for Advising Notes, EAB for booking appointments, EAB for campaign mailings, Instagram	<p>Zoom for remote advising, LiveChat/Pure Chat for online access to quick questions, EAB Campaigns for sending out targeted emails to specific cohorts, emails to various listservs within SoE, Canvas for first-year students and students on academic probation</p>

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
SEBS undergraduate https://sebs.rutgers.edu/advising/	<p>Structure: Shared advising structure, split model with both faculty and professional advisors</p> <p>Staffing: 1 Associate Dean, 6 Assistant Deans, 2 staff advisors, 15 faculty first-year advisors</p>	<p>Varies, Approx 1:355 for staff advising of all students, with intensity and frequency changing across time and milestones; we assign first-year advisors so staff advisors generally have 50:1 for new first-year students, faculty ratios vary by student interests; continuing and transfer students are assigned faculty advisors in their major department but continue to be advised on broad issues, SEBS Core and grad requirements by staff advisors in OAP.</p>	<p>Registration of new students (first year and transfers). Teaching sections of Academic Mentoring and Portals to Academic Study Success. Readmission, re-enrollment, grade replacements, reclassifications, transfer credit review, scholastic standing review and academic actions, updating Degree Navigator, SAP plans for Financial Aid, updating retention programs (from creation to results analysis), degree audits, senior certification, SEBS New Student Induction, Academic & Career Extravaganza, and other student programming and special events; Recruitment events, including tour presentations, fall open house, Admitted Student Open House, and attending events at NJCC campuses; responding to student and other inquiries via personal and general email boxes as well as online chat questions.</p>	<p>First year students are assigned an advisor during their entry summer; transfer students are assigned a faculty advisor during STAR Day or when they declare their major.</p>	<p>Students on probation and dismissal are required to see advisors at different times in the semester/year. EOF students are required to see their assigned counselors.</p>	<p>IMS, Perceptive Content for files and back-end processes, MyMajor system (in-house SAS system), MyAdvisor for advising notes, Tawk for Online Chat</p>	<p>Email, online chat, Canvas courses for incoming first-year and for incoming transfer students; Canvas courses for individual majors</p>

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
School of Management and Labor Relations https://smlr.rutgers.edu/about-smlr/dean-students	Structure: Undergraduate academic advisement available by staff members (4). Graduate advisement by staff (3). Career advisement by dedicated staff (4) also available to students & SMLR alumni. Staffing: UNDERGRAD & GRAD HRM - 4 student counselors, 3 program directors. LABOR ST - 2 student counselors, 2 program directors.	Support majors & minors. SAS 1:320, SMLR: 1:300	Undergraduate Academic Counselors are involved in marketing events such as major/minor fairs, open houses, special events (lunar new year, de-stresser, etc.), class scheduling, faculty offer letters, scheduling TAs for classes, ordering books, etc. For the BS in Labor, Academic Advisors deal with the direct admit process including transcript review and waivers.	no assigned advising	Students are not required to meet with advisors unless there are academic issues to deal with (incomplete grades, failing a class, not meeting requirements, etc.). We encourage all students to meet with Academic and Career Advisors. We are exploring making it mandatory once a student declares the HR or Labor major.	IMS, DN, Zoom, Webex, Salesforce for admissions, email, Google Forms for students, MyAdvisor, Course Atlas, Handshake, Canvas	Email distribution, LinkedIn, Instagram, YouTube, Canvas
School of Social Work https://socialwork.rutgers.edu/academics	Structure: All advisement done by Assistant Dean with support from Program Coordinator Staffing: Assistant Dean and Program Coordinator	The student to faculty ratio is 180 to 1.	Yes. Faculty teaching, service, research and dissemination. Program administration.				
Ernest Mario School of Pharmacy https://pharmacy.rutgers.edu/info-for/current-students/	Structure: Academic Services staff Staffing: Sr. Associate Dean, Assistant Dean, Administrative Assistant	Pre-professional Years 1& 2 is 450:1; and Professional Years 1-4, faculty advisors 12:1.	Yes. Recruitment, enrollment management, scholastic standing review, registration. Faculty advisors are also responsible for teaching, research, and service.	The Office Academic Services provides advising to students in the pre-professional years. Professional Year students are assigned a faculty advisor in the third year of the program by random assignment.	Pre-professional year students are not required to see the Office of Academic Services; however, they are strongly encouraged. Professional year faculty advisors evaluate and provide feedback on professional development materials each semester. This can be done in-person, virtually, or by email.	Canvas, Sakai, IMS, DN, Flexbooker, MyAdvisor, Live Chat, Webex, Zoom, Salesforce, Perceptive Content, Teams, RU Transfer, Course Atlas, REGIS, EIS Applications, Transcripts	Email, listserv, in-person class announcements, Zoom.
Douglass Residential College https://douglass.rutgers.edu/mentoring-douglass		1 staff: 150 students	Yes, the CARFs have mentoring in them, listed at 5-10 percent, and these Mentors have roles ranging from program coordinators to Associate Deans.	Students are assigned mentors when they enter DRC. This mainly happens during the summer, but we get students who come into DRC all through the academic year.	Technically no, however, we often integrate visiting a mentor into an assignment within our Douglass Mission Course (WGSS Knowledge & Power)	Email, Zoom and EAB Navigate	Emails from staff mentors, as well as Director of mentoring, standing check-in emails guiding students on things they want to be doing at a certain point of time in the AY, or their class year.

Unit	Organizational structure & staffing	Student to professional advisor ratio	Do professional advisors have other responsibilities that should be considered when evaluating advising caseloads? What are these responsibilities?	Are students assigned advisors? When and how?	Are students required to see advisors? If yes, which students and for what purposes?	Technological tools used	Communication tools and strategies
Honors College https://honorscollege.rutgers.edu	Structure: Advising (academic, personal, career) within the Dean's Office provided by professional advising staff including program requirements, research opportunities, careers, study abroad, and co-curricular excellence. Staffing: 1 Assistant Dean, 1 Director of Advising, 2 Advisors	1 staff, 400 students	Assistant Dean oversees all academic affairs; Director of Advising carries the load for reporting, system entry, review of policies and practices; each advisor carries a requirement for leadership of one HC student organization.	no assigned advising	No, except for those who fall into academic probation, who must then meet several times to establish a plan of action and monitor progress on that plan.	DN, IMS, Salesforce, EAB Navigate, email, Zoom, and more.	EAB Navigate, email, Zoom
Academic Services for Student-Athletes https://scarletknights.com/sports/2017/6/11/academics	Structure: Advising within Academic Services for Student-Athletes provided by professional advising staff. Staffing: 1 Executive Director, 2 Assistant Directors, 2 Senior Advisors, 5 Advisors, 2 Learning Specialists, 1 Tutor Coordinator, 1 Department Admin.	80-1 but varies greatly by advisor (based on teams/at-risk students)	Number of at-risk students. Team profile. Share NCAA & B1G eligibility rules....always monitoring progress towards degree. Evaluate both high school students and transfers for admissibility. Lead the charge in getting the students to Career Services, ODS, other campus resources. Secondary responsibilities such as Teamworks liaison, new staff trainer, website management, etc.	Students are assigned advisors based on their athletic team. Students are introduced to their advisor prior to the start of the first year.	At-risk and first-year students meet weekly/bi-weekly depending on the team/student. In some cases, students are seeing their advisor 5 days a week. Other team members meet with the advisor 2 or 3 times a semester.	IMS, DN, Teamworks, Zoom, Webex, Degree Audits, Salesforce for admissions, email, text messages	Teamworks messages, email, phone/text, Instagram, Canvas for Orientation & tutoring
Health Professions Office hpo.rutgers.edu	Structure: 1 Director and staff supported by SAS and serving all New Brunswick schools Staffing: 1 Director, 3 part-time advisors, 2 support staff	Approximately 2,000 students, class years 2023-26 have files with our office. We have 1.5 advisors and 2 staff members		No assigned advising		HPOdrome for records and advising notes	Listserv for registered students, social media, and website

Appendix T

Learning Assistance Services at Rutgers–New Brunswick

The table below demonstrates a sampling of learning assistance services at Rutgers–New Brunswick. These were collected by students who were charged to find all of the learning assistance services they could identify on the Rutgers website. It is, therefore, not exhaustive but is a representation of the services students find when seeking support.

Program Title	Services Available								Who Can Use the Services?
	1-1 Tutoring	Study Groups or Review Sessions	Supplemental Instruction	In-Class Support (e.g., teaching interns, learning assistants, etc.)	Academic Coaching	Writing Support	Workshops	Peer Mentoring/ Coaching	
Learning Centers	X	X		X	X	X	X	X	All RU Students
Student Support Services	X	X			X	X	X	X	Only SSS Students
EOF	X				X		X	X	Only EOF-Accepted Students
Athletics Academic Support	X	X		X	X	X			Students On Any Current Sports Roster
ODASIS		X	X	X			X		ODASIS Students
Chemistry TI Program	X	X		X			X		All General and Organic Chemistry Students

SAS Honors Program	X	X						X	All RU Students
Math & Science Learning Center		X	X				X		All RU Students
Writing Program	X					X			All RU Students
School of Nursing	X					X			All RU Nursing Students
School of Engineering	X	X			X				All School of Engineering Students
ECE Department	X								Students Taking Specified ECE Courses
History Writing Tutors	X					X			All RU Undergraduate Students
Italian Tutoring	X								All RU Students
Molecular Biosciences Tutoring	X								Students in Molecular Biosciences PhD Program
German Tutoring	X								All RU Students
Physics Tutoring	X								All RU Undergraduate Students
PALS/ELL Tutoring	X	X	X						All Non-Native English-Speaking Program Students

School of Dental Medicine	X								All Dental Degree Students. Assigned One-On-One Tutoring is for Referred Students (By Advisor or Self-Referred). Walk-In Hours Open to All Dental Students.
Rutgers Business School Tutoring	X								RBS Students
Math Help Center	X								All RU Students

Appendix U

First-Year Course Options

Rationale

First-year seminars have been named as a high-impact practice by the American Association of Colleges and Universities, with particular emphasis on critical thinking, writing, information literacy, collaborative learning, and other skills (Kuh, 2008). These courses typically benefit students by connecting them to campus resources, increasing their sense of belonging, and providing instruction in college-level academic skills and critical thinking. First-year seminars can increase retention and persistence, as well as improve academic outcomes (Goodman & Pascarella, 2006; Klatt & Ray, 2014; Schnell & Doetkott, 2016). Additionally, first-year seminars that focused on learning strategies instruction fared better than those that focused on academic socialization (Ryan & Glenn, 2014). These learning strategies interventions improved the use of metacognitive learning strategies (Steiner, Trivedi, & Brown, 2019), which is a significant predictor of success for college students. First-year seminars can also be a mechanism for increasing embeddedness and normative pressures, which have been found to be strong predictors of re-enrollment after experiencing shocks (Wangrow et al., 2022), thus first-year seminars have potential for increasing re-enrollment after the first year.

A Framework for First-Year Instruction at Rutgers–New Brunswick

First-year seminars can come in many forms, are designed for diverse purposes, and may have diverse learning objectives. Below is a framework that can be used to discuss the various elements that may be part of a first-year course. These elements can be combined or stand alone, depending on the intended learning goals:

- **Transition:** course curriculum is explicitly focused on academic skills, critical thinking, problem solving, task management, and the academic transition to college learning.
- **Seminar:** course content is focused on a topic, typically within or related to a discipline, and is primarily intended to develop understanding and curiosity around that topic or discipline. These tend to have small instructor-to-student ratios to facilitate discussion, engagement, and connections.
- **Core content:** a department-based course that enrolls a large number of first-year students.

Rutgers currently has several courses available to students that fit into these three formats or are a hybrid of them. The courses that exist, however, are not universally available to all students or are not required of all students and lack uniform learning outcomes.

The list below highlights new ways to think about expanding existing first-year transition and seminar courses at Rutgers-New Brunswick. We recommend options 1 and 2 as the most promising of the list.

1. **Expanded seminar course:** A first-year seminar (similar to Byrne or FIGS) could be team-taught and paired with instruction in learning strategies, campus resources, critical thinking, and experiential learning. These “transition” topics are taught as part of the course but either asynchronously or during a separate synchronous meeting time, similar to a recitation. They can be led by peer leaders or TAs from a relevant academic program (such as psychology, cognitive

science, or the GSE). The “transition topics” would be connected to the seminar activities. For example, project planning, writing strategies, or presentation coaching can be connected to an assignment for the seminar. The seminar itself would not change from its current curriculum.

2. **Paired courses:** Students enroll in a 1-credit transition course connected to a core course (math, chemistry, sociology, etc.), in a method similar to a recitation. The transition course closely follows the core course; activities align with—and are supportive of—the assignments and activities in the core course. For example: reading strategies can be taught using the current textbook chapter assignment; problem-solving strategies can be taught using examples from a test review packet; project planning can be taught using a term project.
3. **Required stand-alone transition course:** A first-year transition course focusing on learning strategies, campus resources, critical thinking, problem solving, and experiential learning is required of all students. Existing first-year seminars that meet the same set of shared learning goals can fulfill the requirement. A new course is created to accommodate students who are not already enrolled in an existing option.
4. **Standardized learning objectives without additional courses:** All first-year transition courses share a set of learning objectives. Pre-made Canvas modules and in-person lesson plans can be shared as a resource for instructors across programs, or instructors can create unique resources for their individual courses. These resources should not be stand-alone instructional modules, but rather should be incorporated into a course that already has a platform for community building and engagement.

Models for Consideration:

Institution	Required? (Y/N/Unknown)	Single course format	Multiple options	Notes
University of Michigan	Unknown	X		
Michigan State University	Unknown		X	
University of Kansas	Unknown	X		
Purdue University	Yes (attached to advising access)	X		Online, self-paced
Penn State University	Yes (part of legislation since 1997)		X	Additional info: L-9: First-Year Seminars Academic Administrative Policies and Procedures Manual The Pennsylvania State University (psu.edu)
Northwestern University	Yes	X		2 courses
Ohio State University	Yes	X		
University of Illinois	Yes	X		
University of Iowa	Unknown	X		
University of Minnesota	Unknown	X		
University of Nebraska	Yes	X		
University of Wisconsin	No		X	
University of Kentucky	No		X	UK 101 is widely available, but some schools have their own as alternative options.

Appendix V

Curriculum Mapping Template

	1 st Year	Middle Years	Final Year	What will I learn in my major?
Get the courses you need	<academic courses>			<div style="background-color: #800000; color: white; padding: 5px; text-align: center; font-weight: bold;">What can I do after graduation?</div> <div style="background-color: #e0e0e0; padding: 5px; text-align: center;"><Example careers, graduate programs></div>
Get Involved & Discover your interests	<i>Institutional campus opportunities and programs</i> <experiential education, Aresty, research opportunities w/faculty, fellowship, campus organizations, FIGS instructor, peer leader>			
Connect with Community and Engage with the World	<i>Community-based campus events</i> <Rutgers Day, speaker series, on-campus conferences> <i>And Non-campus related community activity</i> <volunteering & community service, attending a festival, visit an exhibition, study abroad, join a professional association>			
Prepare for life beyond The Banks.	<internships, career exploration & success, networking events>			
Wellness				

Flex Section below the chart. Some ideas...Key facts/stats, "Did you know?", student quote, academic checklist, developed skills, employers, student groups.



The number of new hires in <industry> has come from <major> has increased 11% in the last three years. Data shows it is only growing!

Appendix W

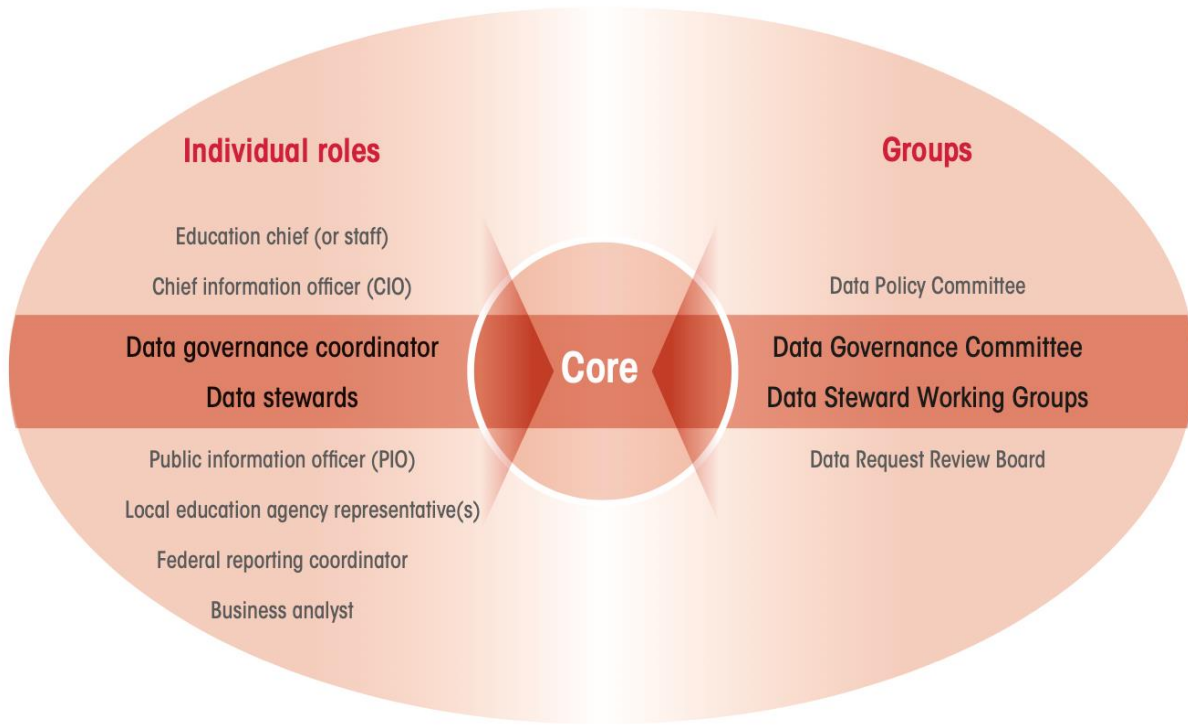
Specific Recommendations for Institutional Data Management

- Students should be able to have multiple careers at the same level in the student records database (SRDB) so that they have the opportunity to earn new GPAs in their careers; this occurs at other institutions.
 - For example, a traditional undergraduate earns a bachelor's degree in biology at Rutgers with a GPA lower than a 3.0. The person would like to come back as a non-traditional student for a second bachelor's degree in English—they will not be able to start with a new GPA like a transfer or first-year student. As such they are saddled with a poor GPA as a starting GPA and most likely will not see success in their second career as an undergraduate student. This could cause individuals to go to another university to obtain another degree. Similar issues occur at the graduate level. By changing the process, we would be able to understand completion GPAs clearly without having the data skewed when two degrees (or more) are earned at the same degree level.
- We should be able to calculate completion rates for non-degree certificate programs in the same way we can calculate completion rates for degree programs. Currently, the university has a web-based application for degree students that must be completed in order to begin the final degree audit. This application helps the university to populate fields in the student records database (SRDB) for calculating completion rates. There is not a similar application for non-degree students that leads to an easy way to calculate completion rates as well as other information that may be used for federal, state, and grant reporting.
- Programmatic concentration codes are part of the application for admission but not part of the student record as admitted students move through their career(s) at the university. This leaves units to calculate information by hand or in shadow systems. This is information that can be used for reporting to agencies as well as for units to easily understand which concentrations are successful and which may need to be altered.
- The SRDB should provide the ability to have students registered in two schools and/or two programs at the same time (this does not work at the graduate level). Students who were admitted and are currently enrolled in a degree program may not be eligible to be recognized in the SRDB as simultaneously enrolled in a non-degree certificate program. This type of activity is tracked in a shadow database, which leads to errors in collection and calculation.
- Institute a process by which various stakeholders can access and utilize data from Canvas and other learning technologies to support student success and optimize learning. There remains a large quantity of data and real-time information about how students are engaging in their courses and making progress toward graduation within Canvas and other technologies that could and should be utilized for instruction and learning. This information has been shown to be helpful to advisors ([example at Penn State](#)), instructors ([example from Iowa State](#)), departments and units ([example from Notre Dame](#)), and even students themselves ([example from University of Michigan](#)) to support learning and success. The Rutgers community needs the ability to review and analyze the collected and compiled information.
- Discussions of student data primarily refer to enrolled students. For small departments and programs (and maybe big ones as well) admissions information is highly important for recruiting purposes. For example, of the many applicants stating *that* major preference, how many of those admitted ultimately enrolled, and finally declared that major. Of course, all the attached

demographics of those students are also vital. Having access to this data at the departmental/program level is important.

Appendix X

Data Governance Example



(National Forum on Education Statistics, 2010, p. 28)

Appendix Y

Initial Data Core Queries from Individual Workstreams

Profile of All Undergraduate Students (Rutgers–New Brunswick), New Brunswick-wide, and by School

Report will include (but not limited to):

- First-year start versus transfer students (if possible, breaking out transfers by community colleges vs. other schools; those with associate degrees and those without)
- Non-traditional, first-generation, out-of-state, international, military-affiliated
- Race and gender breakdowns
- Disability status
- Pell eligibility

Report should include retention and graduation rates for these groups (New Brunswick-wide and broken down by school)

There is a strong interest in using this information to investigate time-to-degree, and what if any, internal hurdles might be extending time-to-degree. Specifically, we would want to know:

- What is the average number of credits students graduate with, broken down by time to degree/four-year graduation rates and by school or major? When it is more than 120, is that because:
 - School-to-school transfer?
 - Excess credits that are remedial credits at the beginning of their career?
 - AP credits that they come in with? Is this why they are graduating with excess credits?
 - Completing double majors?
 - Completing more majors and/or minors than required for their degree?

School-to-School Transfers (past 3-5 years)

Report will need to be divided between sending school and receiving school, the number of credits at the time of transfer, and whether the transfer was precipitated by a dismissal from the sending school. (For example, we know that RBS sometimes dismisses students in their senior year, and they transfer to SEBS or SAS, but have made almost no progress on a non-RBS major.)

It should include:

- Number of credits at time of transfer
- Attempted vs. successful
- Percentage initially denied admission to their school of choice and were eventually admitted

