# Unlocking Potential: Recommendations for Improving the College Navigator Tool for the Future of Higher Education

*Author*
Samantha Gutter

December 2023

National Postsecondary Education Cooperative, 2023
U.S. Department of Education

## Contents

# Introduction

The College Navigator tool (https://nces.ed.gov/collegenavigator) is a website designed to help students, parents, and school counselors search for and compare information on different postsecondary institutions, one of the first steps they can take in the college search process. College Navigator is also a useful tool for researchers and practitioners to understand, explore, and analyze robust data about higher education institutions. In an age defined by the relentless pursuit of knowledge, the College Navigator website stands as a beacon in the realm of postsecondary education, offering a wealth of information to the public. As we navigate the complexities of the college search process in a changing world, it is imperative to ensure that this invaluable tool not only serves its intended purpose but also adapts to the evolving needs of its users.

Our goal in this paper is to answer three pivotal research questions that hold the key to enhancing the usability of the College Navigator website in a time marked by unprecedented change. We explore the website's intended purpose, the need for future evolution through data updates, the vital role of usability and design in supporting college access and success, the information most crucial to stakeholders, and ways to present this information more compellingly. Moreover, we delve into the current context to clarify the website's goals and challenges as well as the untapped opportunities it holds. The College Navigator tool should not merely be a repository of data; it can be a transformative force in the pursuit of higher education, and this paper endeavors to unlock its full potential in the service of students, families, and educators alike.

College Navigator was developed by the National Center for Education Statistics (NCES) and released in September 2007 as the U.S. Department of Education's primary source for comparing postsecondary institutions that participate in federal student financial aid programs.

In 2008, the Higher Education Opportunity Act (HEOA) detailed several new data requirements to be included on the College Navigator website. Most of the data on the site are gathered through the Integrated Postsecondary Education Data System (IPEDS), an annual data collection conducted by NCES. NCES implemented the HEOA-required additions to the College Navigator site between 2009 and 2010. The U.S. Department of Education requires annual IPEDS reporting on broad categories of institutional information to provide basic statistics to educational agencies, researchers, and others interested in the data. These statistics include institutional prices, financial aid data, enrollment, admissions requirements, and retention and graduation rates. In addition, IPEDS provides information on programs or majors offered, veterans and service members receiving aid, athletics, accreditation, campus security and safety, and educational loan default rates. IPEDS data are then pulled into College Navigator.

The College Navigator tool was designed to summarize institutional information for students and families (consumers), school counselors, researchers, policymakers, and other stakeholders to help them compare over 6,000 postsecondary institutions. The National Postsecondary Education Cooperative (NPEC) has an interest in helping ensure that data made available through the site are easily comprehended and useful to users. Given the large amount of information available on the site and the current context of challenges and opportunities in higher education across the

country, NPEC is interested in College Navigator evolving to be a lever of change by providing recommendations on how the presentation of the data and the overall design, function, and purpose of the website may be improved to enhance its usability by students, families, and educators in order to positively affect postsecondary access and success.

# Organization

This paper provides background information on the data elements found on College Navigator; the reporting requirements for College Navigator in HEOA; an exploration of ways to design and make College Navigator more accessible and consumer friendly; and recommendations for the future goals, challenges, and opportunities for NPEC to consider that support the college access and success and career pathways of students.

# Methodology

This NPEC paper is unique in that it focuses on the usability and design of a tool for students and families (consumers) and also on how the data in IPEDS reach those in the field and students who can benefit most from the tool. In that spirit, the methodology consisted of an environmental landscape scan, a literature review, and qualitative interviews of school counselors and college access professionals.

### *Research Questions*

The following research questions guide this paper:
**Research Question #1 (RQ.1):** What is the intended purpose of the College Navigator website, and how does it need to evolve in the future?

**Research Question #2 (RQ.2):** How can the College Navigator website be improved to better support students, families, and school counselors for increased college access and success?

**Research Question #3 (RQ.3):** What are the challenges and opportunities for expanding usage of the College Navigator website in the current context?

### *Environmental Scan*

The Institute of Education Sciences, the arm of the U.S. Department of Education that oversees IPEDS, carries out its mission by disseminating information that meets high standards of quality, integrity, and accuracy (U.S. Government Publishing Office 2016). Looking at the current context of challenges for students making decisions about college enrollment and career pathways, we determined a critical need to improve access to information about higher education to better inform student behaviors and decisions, starting with the way that information is presented and shared with students.

To begin this work, we analyzed the existing infrastructure and usability of College Navigator and reviewed reporting requirements in the statute. Then we analyzed governmental and nongovernmental sources related to postsecondary access, financial aid, and college search information for students, including, but not limited to, the following:

- **Federal Government Sources**
    - College Navigator
    - College Scorecard
    - Federal Student Aid
    - IPEDS Survey Components
    - Net Price Calculator
- **Nongovernment Sources**
    - College Board's Big Future College Search
    - College Greenlight
    - College Welcome Guide by The Hechinger Report and USA Today
    - Common Data Set Initiative
    - Get Schooled
    - Georgetown University Center on Education and the Workforce
    - National College Attainment Network
    - National Community College Benchmarking Project
    - uAspire
    - U.S. News and World Report Best Colleges

***Literature Review***

To help answer the research questions, we explored previous focus group findings conducted after the HEOA authorization in *Student and Guidance Counselor Feedback on the College Navigator Website* by MacAllum and Glover (2012). Next, we reviewed the IPEDS survey components using *The History and Origins of Survey Items for the Integrated Postsecondary Education Data System (2022–23 Update)* by McNeely (2023). Then we reviewed published articles addressing college choices, financial aid, and access to higher education. Because postsecondary access is a consumer-facing topic, both higher education policy literature and consumer-oriented articles are included.

***Expert Interviews***

Interviews were conducted virtually and consisted of a total of six interviews with school counselors at large urban high schools and rural high schools and with college access advisors at nonprofit organizations across the United States. All counselors and advisors serve public schools where the majority of student populations come from economically disadvantaged backgrounds. The counselors and advisors were diverse with respect to race/ethnicity and gender. The interview protocol can be found in appendix A.

# Purpose and Overview of College Navigator

## **Research Question #1:** What is the intended purpose of the College Navigator website, and how does it need to evolve in the future?

***RQ.1 Environmental Scan: College Navigator and Statute Review***

*College Navigator Review*

College Navigator provides a search interface for prospective students seeking information about colleges and universities in the United States, and the search options available on the website are listed below by category and data element.

| Category | Data element |
|---|---|
| Name of school | Users can search for specific institutions by name |
| States | Users can search by geographic location, including<br>● All U.S. states and territories<br>● Option to select no preference if users do not wish to search by geographic location<br>● Option to select more than one state in map view: Offers a map-based search option to filter schools located in multiple states |
| Zip code | Users can find schools within a specified radius of a given zip code:<br>● Option to select "Miles from" with<br>○ 5–250 miles from zip code |
| Programs/majors | The tool provides a program-specific search for colleges offering academic majors or programs from a comprehensive list with the number of majors or programs designated:<br>● Agricultural/animal/plant/veterinary science, and related fields (91)<br>● Architecture and related services (20)<br>● Area, ethnic, cultural, gender, and group studies (50)<br>● Biological and biomedical sciences (92)<br>● Business, management, marketing, and related support services (106)<br>● Communication, journalism, and related programs (27)<br>● Communications technologies/technicians and support services (16)<br>● Computer and information sciences and support services (35)<br>● Construction trades (26)<br>● Culinary, entertainment, and personal services (33)<br>● Education (109)<br>● Engineering (60)<br>● Engineering/engineering-related technologies/technicians (77)<br>● English language and literature/letters (13)<br>● Family and consumer sciences/human sciences (36)<br>● Foreign languages, literatures, and linguistics (85)<br>● Health professions and related programs (257)<br>● History (9)<br>● Homeland security, law enforcement, firefighting, and related protective services (39)<br>● Legal professions and studies (36)<br>● Liberal arts and sciences, general studies and humanities (4) |

| Category | Data element |
|---|---|
| | ● Library science (6)<br>● Mathematics and statistics (18)<br>● Mechanic and repair technologies/technicians (44)<br>● Military technologies and applied sciences (28)<br>● Multi/interdisciplinary studies (66)<br>● Natural resources and conservation (24)<br>● Parks, recreation, leisure, fitness, and kinesiology (12)<br>● Philosophy and religious studies (17)<br>● Physical sciences (45)<br>● Precision production (20)<br>● Psychology (31)<br>● Public administration and social service professions (16)<br>● Science technologies/technicians (9)<br>● Social sciences (40)<br>● Theology and religious vocations (24)<br>● Transportation and materials moving (20)<br>● Visual and performing arts (69) |
| Level of award | ● Certificate<br>● Bachelor's degree<br>● Associate's degree<br>● Advanced degree |
| Institution type | ● Public<br>● Private nonprofit<br>● Private for-profit<br>● 4-year<br>● 2-year<br>● Less than 2-year |
| *More search options* | |
| Tuition and fees | ● Users can set a minimum and maximum range for the tuition and fees of institutions<br>● Users can choose the state they live in (possibly for in-state tuition considerations) |
| Undergraduate student enrollment | Users can set minimum and maximum enrollment numbers to match their preferences |
| Housing | Users can select "Yes" or leave the box unchecked (default) to filter institutions with or without on-campus housing options |
| Campus setting | ● Rural<br>● Town |

| Category | Data element |
|---|---|
| | ● Suburban<br>● City |
| Percentage of applicants admitted | Users can specify a minimum and maximum admission rate for their search criteria |
| Test scores—25 percent percentile | ● SAT Reading/Writing<br>● SAT Math<br>● ACT Composite |
| Varsity athletic teams | Users can filter institutions on the basis of the presence of men's and women's athletic teams and view a list of sports offered |
| Extended learning opportunities | The tool offers users the chance to check a box for the following options:<br>● Distance learning only<br>● Weekend/evening<br>● Credit for life experience |
| Religious affiliation | Users can search for institutions affiliated with specific religions and view a list of these affiliations |
| Specialized mission | Users can search for institutions with specialized missions and view a list of these missions |
| *Search result options* | Once users view a result or list of results for institutions of higher education, they have the option to complete the following:<br>● Save<br>○ Enter and send an email with search results<br>● Add to favorites<br>○ Export results<br>○ Compare up to four institutions at one time |

*Statute Review*
The Higher Education Act of 1965 (HEA), as amended by HEOA, includes many disclosure and reporting requirements to be posted on College Navigator. The reporting requirements are listed below; these include the most recent data additions.

| **Institutional Information** |
|---|
| ● Statement of the institution's mission<br>● The number of certificates, associate's degrees, baccalaureate degrees, master's degrees, professional degrees, and doctoral degrees awarded<br>● The undergraduate major areas of study at the institution with the highest number of degrees awarded |

- Information on campus safety required to be collected under section 485(f)

**Student Enrollment and Demographics**

- The total number of undergraduate students who applied to, were admitted by, and enrolled in the institution
- For institutions that require SAT or ACT scores, the reading, writing, mathematics, and combined scores for the middle 50 percent range of the institution's freshman class
- The number of first-time, full-time, and part-time students enrolled at the institution, at the undergraduate and graduate levels
- The number of degree- or certificate-seeking undergraduate students who have transferred from another institution
- The percentage of male and female undergraduate students enrolled at the institution
- The percentages of first-time, full-time, or degree- or certificate-seeking students enrolled at the institution, disaggregated by race and ethnic background
- The percentage of undergraduate students enrolled at the institution registered with the office of disability services

**Student Financial Aid**

- The average annual grant amount for federal, state, and institutional aid awarded to a first-time, full-time undergraduate student enrolled at the institution who receives financial aid
- The total annual grant aid awarded to undergraduates from various sources
- The average annual amount of federal student loans provided to undergraduate students
- The percentage of first-time, full-time undergraduate students receiving federal, state, and institutional grants; student loans; and other types of financial assistance
- Number of students enrolled at the institution receiving federal Pell Grants

**Cost of Attendance**

- The cost of attendance for first-time, full-time undergraduate students living on and off campus
- The cost of attendance for residents and nonresidents of the state for public institutions

**Student Outcomes**

- The percentages of first-time, full-time, or degree- or certificate-seeking undergraduate students who obtain a degree or certificate within specified time frames
- The institution's cohort default rate

**Faculty and Staff**

- The student–faculty ratio, the number of full-time and part-time faculty, and the number of graduate assistants with primarily instructional responsibilities

**Website Information**

- A link to the institution's website with information on student activities, services for individuals with disabilities, career and placement services, and transfer of credit policies

**Tuition and Net Price**

- The tuition and fees for the three most recent academic years
- The average annual percentage change and average annual dollar change in tuition and fees for the three most recent academic years
- The net price for the three most recent academic years
- Net price data for students receiving federal student financial aid, disaggregated by income categories

**Alternative Tuition Plans**

- Information on the availability of alternative tuition plans, which may include guaranteed tuition plans

**Labor Statistics Information**

- A link to the Bureau of Labor Statistics website providing regional data on starting salaries in major occupation

***RQ.1 Literature Review***

Navigating education after high school can be one of the most significant steps a student will take; deciding if and where to pursue education and training beyond high school is a pivotal decision that can affect long-term goals and social and economic mobility. College choice theory is an essential framework for comprehending the dynamics of postsecondary education access and selection for students. Several models have been proposed to understand how students make decisions about which college to attend. Alfattal (2017) adopted a "marketing mix" approach, utilizing the 7Ps model by Kotler and Fox (1995) to analyze choices based on seven overarching aspects, namely, program, place, promotion, price, process, physical facilities, and people. Program pertains to available programs and services, place encompasses education accessibility in terms of time and location, promotion entails institutional communication with prospective students, price refers to educational costs and financial aid, process deals with enrollment and learning facilitation, physical facilities concern the infrastructure, and people encompass individuals working with and assisting students. This approach highlights the understanding that different student populations perceive the degree of importance across the seven dimensions differently, noting that higher education institutions should regularly engage and understand the needs of relevant student populations.

In one of the most prevalent models, by Hossler and Gallagher (1987), students move through three distinct phases in their college choice journey: predisposition, search, and choice. The predisposition phase is where students decide whether to pursue higher education after high school. Those who decide to attend college enter the search phase, during which they begin exploring options and create a "choice set"—a list of universities to which they will apply. The last phase, the choice phase, involves finalizing the decision about which school to attend. It is worth noting that universities are not usually directly involved in all three phases. Positive influences on the predisposition phase include attending high-quality high schools, possessing positive attitudes toward education, receiving early information on financial aid, and gaining knowledge of institutional costs.

While the Hossler and Gallagher model has proven useful, it has received criticism because of its linear nature, as it does not adequately account for the intricacies of the college choice process, particularly for nontraditional students or those who follow alternative pathways to college (Cabrera and La Nasa 2000, Mullen 2010, Perna 2006).

Alternative theories of college choice can be categorized into economic and sociological perspectives. Economic theories, rooted in Becker's human capital theory, assume that individuals make rational economic decisions concerning the investment in higher education, weighing anticipated costs against the benefits of pursuing a postsecondary degree (Becker

1962). Sociological theories emphasize the role of students' social and cultural capital, exploring how the college choice process differs among specific student populations.

Perna (2006) expanded on these perspectives by proposing a new model consisting of four layers: habitus; school and community context; higher education context; and social, economic, and policy context. This framework acknowledges the impact of parents, friends, teachers, high schools, and communities on students' educational and career aspirations, thus honoring the individual differences among students (Cabrera and La Nasa 2000, Mullen 2010).

NPEC (2007) highlighted that the progression through these phases may not be linear and that students might shift their focus among the three phases on the basis of new information or experiences. Later, Iloh (2018) introduced a revised college choice model that emphasizes flexibility among three bidirectional forces: information, time, and opportunity. This model, informed by anthropology and ecological principles, sheds light on the complex decisionmaking processes in contemporary college-going, considering the diverse backgrounds and circumstances of prospective students. This model provides a comprehensive view of the dynamics and inequalities in modern college attendance while offering insights and solutions for a diverse array of students. College Navigator should consider the variety of college choice theories affecting student decisionmaking processes and how the tool can provide necessary support for a diverse population of students who will come to the process from different places, but all deserving of the opportunity to lead a choice-filled future.

### *RQ.1 Interviews*

On the basis of college choice theory, it is understood that students make decisions about whether and where to pursue education after high school from different starting points, perspectives, and life circumstances that can affect their priorities, timelines, and career pathways. Notably, the college choice phase is a period in which higher education institutions have a less direct impact on student decisions. Therefore, prospective students and families rely heavily on internet searches to obtain information about higher education opportunities.

To better understand where information could be more relevant in fulfilling the purpose of College Navigator and providing needed support during the college choice phase, the tool's functionality and data presentation were assessed through interviews with expert college access practitioners, yielding valuable feedback. This feedback emphasizes the need to make the College Navigator tool more accessible to students and optimize information presentation.

#### *Strong Starting Point*

Interviewees began by offering first impressions and feedback on the main landing page of College Navigator, which all interviewees noted to be overwhelming. The summative recommendation is to streamline this page, focusing on the essential objectives that College Navigator aims to serve. In reviewing the landing page with interviewees, the question of whom the tool is intended to serve came up frequently. Determined through discussions with NCES staff and a review of the statute, the primary intended user of College Navigator is consumers—students and families. While College Navigator serves a broad audience beyond consumers, the ultimate purpose should be to provide information that can increase opportunities for students. Interviewees overall noted how all of the robust data on the tool are useful and could be even

more powerful in college search processes for students. One interviewee commented, “I don’t know where I am supposed to go first.” That sentiment was common across all interviews. To address this issue, the landing page should provide a clearer path for consumers.

*Clarity of Purpose*
While serving a variety of diverse audiences and fulfilling legal requirements, College Navigator should determine its intended objectives and goals and state those clearly so that users understand the possibilities it can offer. A few overall questions to consider regarding the intended goal for students as College Navigator evolves in the future: Is the goal for students to find an institution of higher education and go on to explore the college website? Is it for students to identify the best fit in terms of an institution type? Is it for students and families to better understand the elements and programs of study offered by different institutions? Is it for students to better understand college affordability? If the answer is that the goal encompasses all of these elements, College Navigator will need to adapt to meet the unique needs of users as well as the reporting requirements in the statute.

*Improve Search Paths*
One critical aspect of enhancing the College Navigator tool is improving the search functionality. One interviewee noted upon beginning a search, “I am overwhelmed with where to begin, and I can only imagine how my students feel in starting a search, since the way it is structured, it seems like you need to know what you are looking for right off the bat.” Since HEOA requires that significant amounts of data be included on College Navigator, it could be useful to consider providing channels that allow users to learn about the site with digestible information or ways to search along a specific set of criteria. One interviewee noted that having different ways to search would be beneficial for students.

*Optimize Information Presentation*
One of the most critical aspects of College Navigator is how the vast amount of information is presented to consumers. Since there are significant statutory requirements for reporting on College Navigator and the data are robust and useful to researchers, one interviewee recommended finding a way to curate the most student-centric information up to the top. For example, a design interface could toggle between the details and the topline data points that are most relevant to the decisionmaking process.

This means that while College Navigator offers access to all the information for users who need a more in-depth view, it must ensure that the most critical details are front and center for those who seek a quick and straightforward experience. NCES should aim to make College Navigator consumer friendly for students, families, and school counselors seeking essential information about college options, financial aid, and career guidance. Organizing the data by audience and purpose could optimize the presentation.

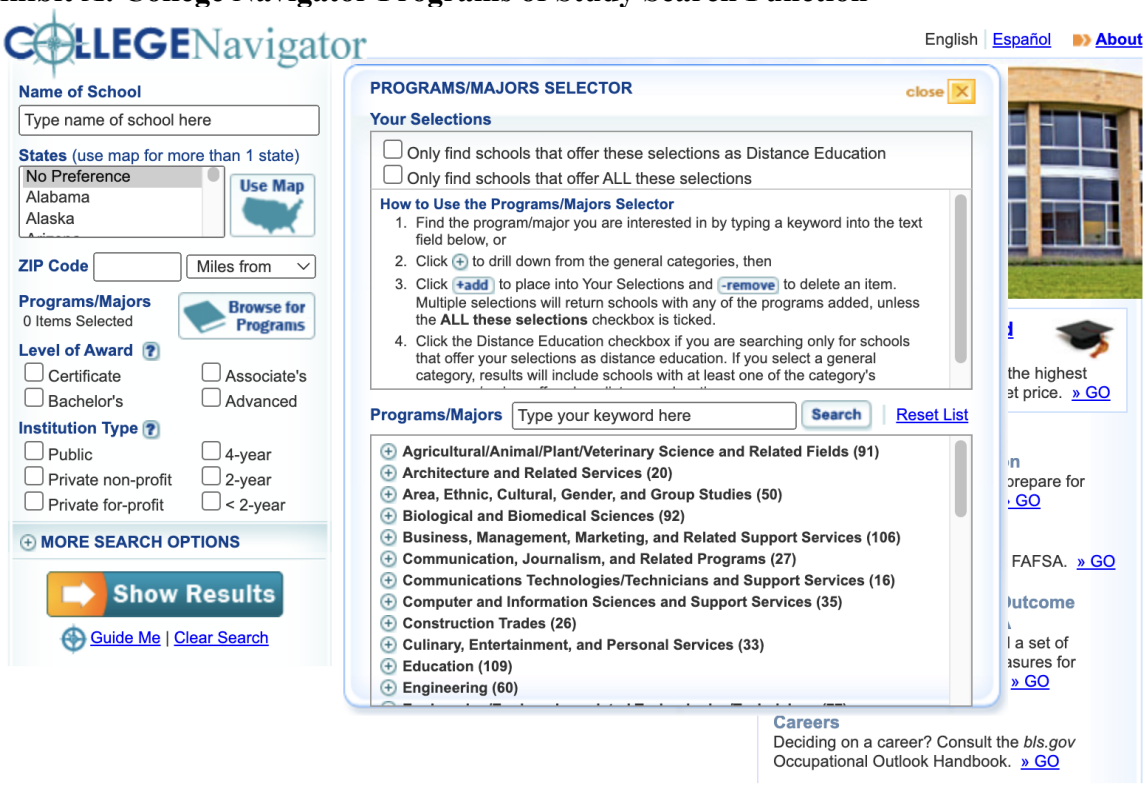
*Enhance Financial Aid Information and Affordability Selection Criteria*
Understanding that affordability and financial aid are important topics for students and families to explore and understand, interviewees noted how helpful the multiyear tuition calculator and direct links to institutional net price calculators could be for students and families and appreciated these functions being embedded in the institution profile. However, interviewees

shared that these resources and the overall information on financial aid could be more user-friendly and actionable. One interviewee suggested clear calls to action for users to access federal financial aid resources or apply for aid and to use resources created by the U.S. Department of Education that present information in a clear and compelling manner. Embedding the student resources available on the Find Your College section on the IPEDS main website into College Navigator could have a significant impact on the website's usability.

*Opportunity for Programs of Study*

One of the biggest areas of opportunity on College Navigator cited frequently in interviews was the programs of study section (see exhibit A). School counselors often do not have information to connect specific institutions with what students want to do in their career or what they want to study. Given the way the search function is set up on the front end, interviewees wanted this section to be more intuitive and user-friendly. In completing a search based on a program/major, a user selects "Browse for Programs" and then views a box of options. Interviewees noted how the framing of the selections is confusing. Because students might begin with a career in mind, NCES should consider building out this section to link career pathways and condense the information into an easily understandable format, particularly for high school students who are exploring various options for the future. The majors and programs are currently organized by the Classification of Instructional Programs (CIP) code, and NCES should consider arranging them by Standard Occupational Classification (SOC) code in addition to CIP code.

**Exhibit A: College Navigator Programs of Study Search Function**




To note a challenge, users of College Navigator might not know what they are looking for when they visit. The tool should be a resource for students to explore college opportunities and

understand the college-going process. As highlighted by the feedback, making the tool more accessible and filtering the way that information is presented are essential. The search function should be more robust, allowing users to filter and refine their search criteria efficiently. A possible option could be to include more keywords associated with each program code in the program of study section, with the understanding that students might have an idea of what they want to pursue in a future career, but not knowing where to begin or how that aim connects to higher education opportunities. This ensures that students, families, and researchers can quickly access the data that are most relevant to their needs.

# Recommendations for Improving College Navigator

## **Research Question #2:** How can the College Navigator website be improved to better support students, families, and school counselors for increased college access and success?

### *RQ.2 Literature Review*

NPEC had previously proposed the creation of a redesigned College Profile for the College Navigator website, and the report titled *Student and Guidance Counselor Feedback on the College Navigator Website* was aimed at providing consumer groups with a preliminary overview of institutions (MacAllum and Glover 2012). The new institution profile would encompass several key data points, linking users to more detailed information in various informational categories, including general institution details, undergraduate admissions, tuition and fees, student financial aid, estimated student expenses pre- and post-grant/scholarship aid, undergraduate student characteristics, student persistence, success, and degrees awarded.

In the context of focus group discussions presented in the report, participants generally agreed that the proposed informational categories in the draft College Profile were suitable. Notably, the most valued and crucial data points included undergraduate admissions, tuition and fees, estimated expenses before and after financial aid, financial assistance availability, and undergraduate student details, especially for 4-year institutions. However, participants also emphasized the importance of other factors in their college search process, such as location, campus environment, and program availability. The perception of the value of this information varied among different groups, with counselors emphasizing the importance of persistence and success data, while both students and counselors agreed on the significance of cost and financial aid data, particularly for parents.

Participants stressed the significance of effective visual presentation (MacAllum and Glover 2012). They expressed reservations about the draft College Profile's graphics and suggested enhancing its visual appeal, potentially incorporating elements like campus photos, school colors, and mascots. Furthermore, they recommended the use of diverse data presentations, including graphs and comparisons to national averages. Participants also noted the need for mouse rollovers or explanatory notes to clarify terminology and concepts, as some data charts were open to multiple interpretations, potentially requiring external assistance to interpret and apply the information accurately.

In *Improving the IPEDS Student Average Net Price to Be More Relevant for Consumers*, a college access partner provided suggestions to improve College Navigator in order to make it an even stronger resource for consumers, including an idea to provide channels that allow users to learn about the site in digestible-sized pieces of key information (Ingram 2023). The following channels were suggested:

- **New to the site:** Provide a pared-down version with options using the most frequently selected criteria, as a simpler option for those who are new to the process.
- **Affordability:** Create a channel specifically devoted to affordability selection criteria (tuition and fees, average net price [ANP], etc.), and simplify the results by displaying cost of attendance, average financial aid, and ANP. Students are easily overwhelmed by the details that describe "number receiving," "percentage receiving aid," and "total amount received."
- **Program of study:** Create a channel that starts by searching for a program of study, followed by more specific criteria.
- **Inclusivity of part-time and transfer students:** Collect and report on part-time and transfer student populations in the IPEDS ANP data, and include the information for these student populations on College Navigator.

***RQ.2 Interviews***

To build on the focus groups from 2012 and suggestions from recent considerations (Ingram 2023) and to create a more consumer-friendly and engaging experience, school counselors and college access professionals shared that there is room for improvement in the overall design of College Navigator to enhance how students, families, and school counselors could use the tool. There is an opportunity to modernize design and provide high-quality channels of information that allow consumers to get pertinent information and increase postsecondary access and advance opportunities, while, at the same time, the challenges of incorporating the significant HEOA reporting requirements are met.

*Modernize Design and Enhance Usability*

As determined through interviews and an environmental scan, College Navigator seems to lack a strong design presence, making it appear less appealing and user-friendly than it could be to diverse audiences. The expert practitioners who provided feedback in interviews expressed the importance of a welcoming and relevant design of the tool to encourage student engagement and ultimately to drive access to opportunity. While the data and information could be game-changing for students and families and their life goals, College Navigator will not be able to support consumers if they feel overwhelmed or unclear about where to begin. A stronger College Navigator would also support researchers using the site to provide important analysis and insights to ultimately support positive student outcomes. To achieve this, the landing page, search functions, and institution profiles should be reimagined and designed to be more visually appealing, intuitive, and user centered. Users should feel that they have embarked on a journey to successfully find the information they need in the college search or information-gathering process.

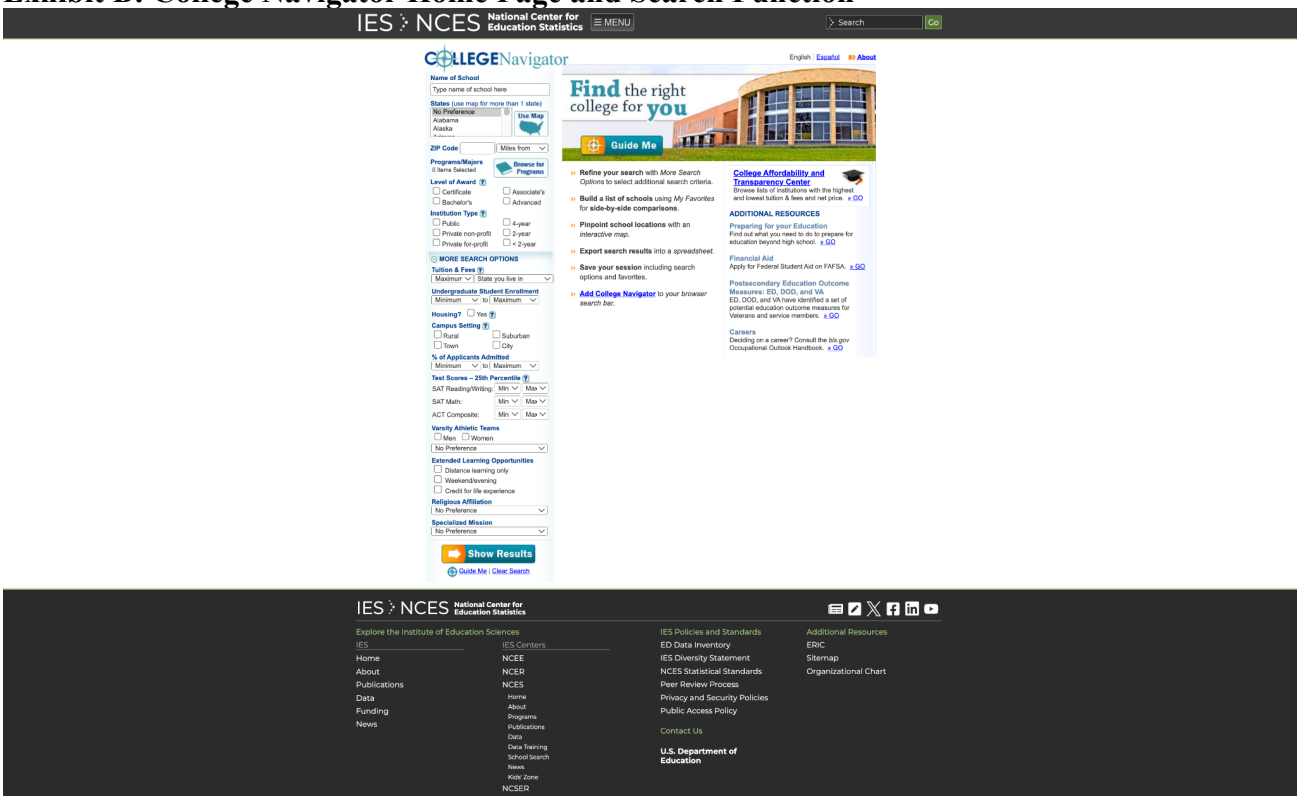
*Landing Page and Search Function*

The usual first comments on College Navigator were about the large amount of information available without a clear sense of action steps. A clearer, more modern and more inviting

aesthetic can significantly enhance the overall experience for consumers and draw students, families, and school counselors in. A clear action item should be on the landing page. All interviewees commented on the building depicted in the photograph on the main page, as shown in exhibit B, as coming across as old-fashioned, dated, and uninviting; one interviewee noted that it does not read as a college campus. Although a simple design fix, a refreshed design should be mindful of the modern college experience and seek to plainly show students the variety of options that are available for higher learning and career paths of today and that can be adapted for future paths.

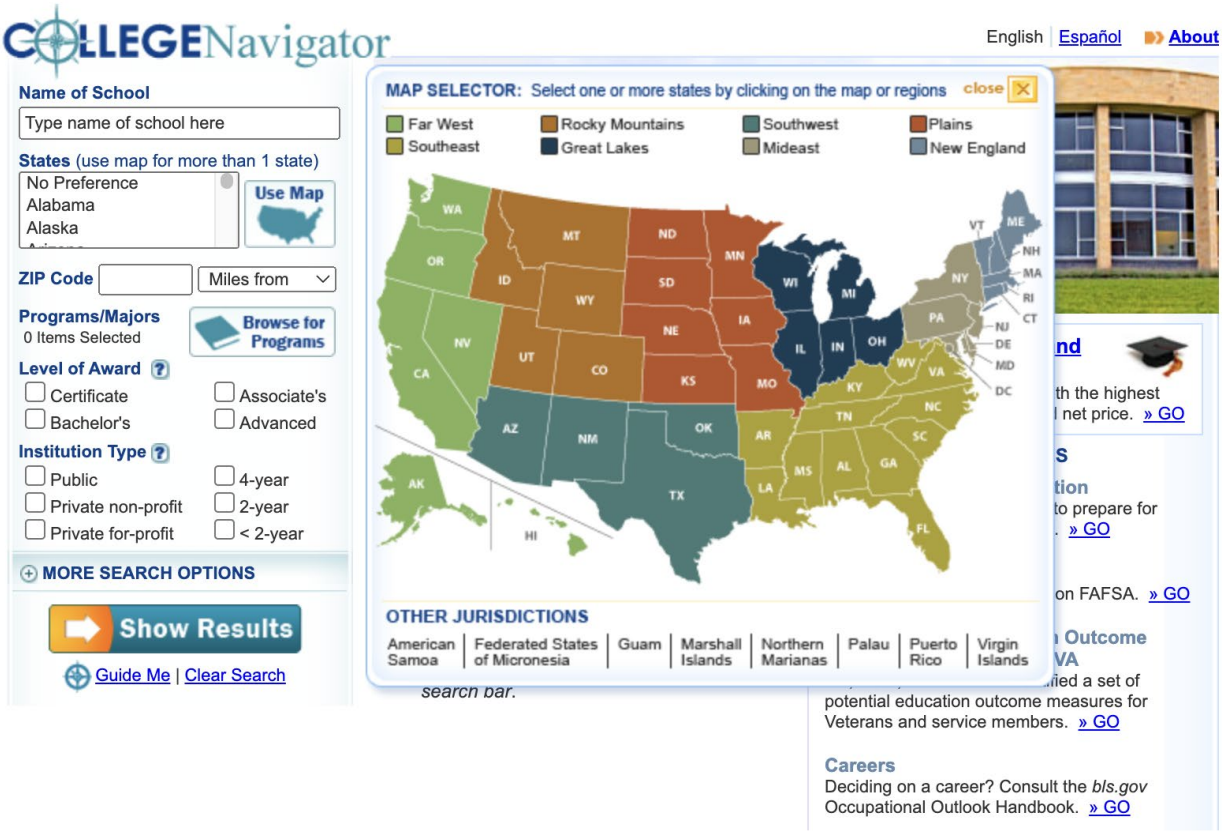
Currently, the majority of information and search functions is in a small search box, slightly larger than 2 inches wide, on the left side of the main page. The information in the middle of the site, underneath the heading "Find the right college for you," is less relevant to the overall goals and purpose. Since the search function on the left-hand side is where the main source of data is generated and the key priority for the site, that area should be larger and a more integrated part of the site.

**Exhibit B: College Navigator Home Page and Search Function**



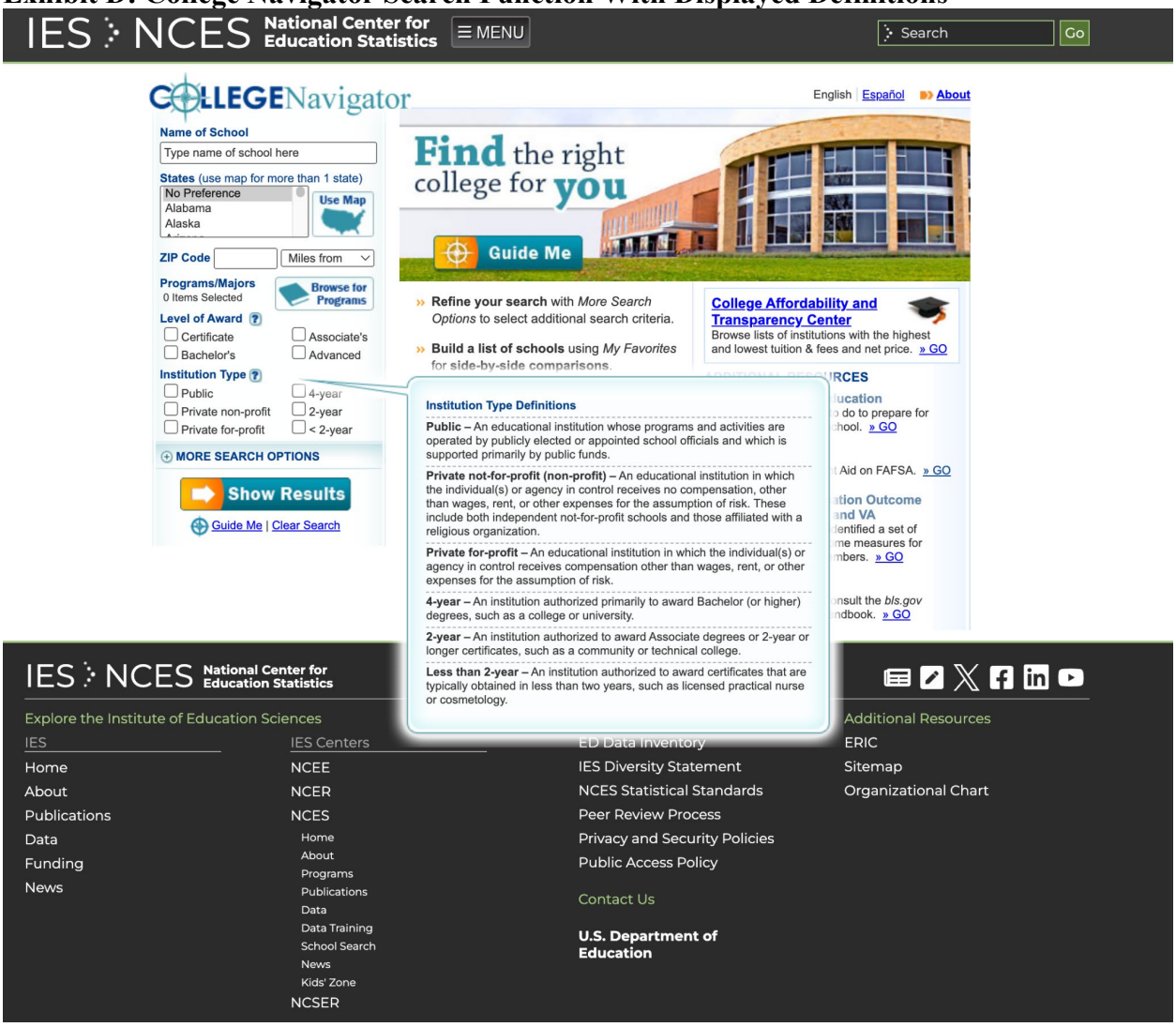

For the location search, interviewees noted how the small search function box makes it challenging to select a geographic state of location (see the map selector function in exhibit C). The box displays only three states at one time, and it can be difficult to scroll down. Interviewees noted that the map function is helpful and should be leveraged as a starting point to build out future iterations of the site. It was suggested that the map should be made larger and more interactive for students both to select the state and to identify institutions.

**Exhibit C: College Navigator Search Function With Map**



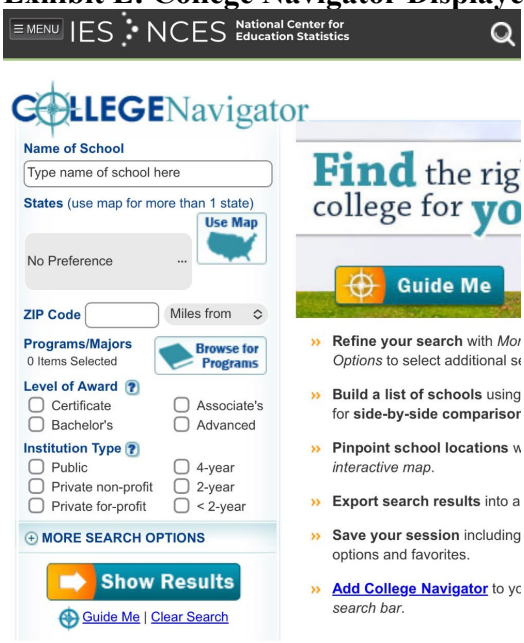

Users can access the College Navigator's information on and definitions of terminology in the search functions by hovering over the question marks (see exhibit D). School counselors and college access practitioners noted that this feature is helpful because most students will not know what the terms mean without references. We determined from the environmental scan that the U.S. Department of Education's College Scorecard includes a section at the top of the site titled "About the Data," which includes data download options and a glossary. A glossary with terms and data that is readily accessible and visible on College Navigator throughout the site for students and school counselors would be a helpful addition to consider.

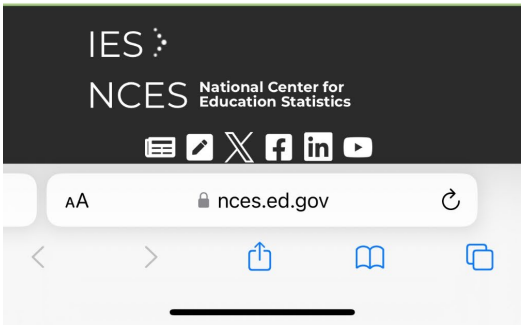
**Exhibit D: College Navigator Search Function With Displayed Definitions**




With the ever-increasing use of smartphones and other technology and devices, College Navigator should be adaptable to encounter a seamless and visually pleasing interface no matter the technology; with more students relying on phones and tablets, a mobile-responsive design is imperative to reach students. Interviewees commented that their Gen Z students are more likely to access sites such as College Navigator on their phone. Upon review of the interface on a mobile device, the site simply mimics the same layout as on a desktop and is not mobile friendly (see exhibit E).

**Exhibit E: College Navigator Displayed on a Mobile Device**

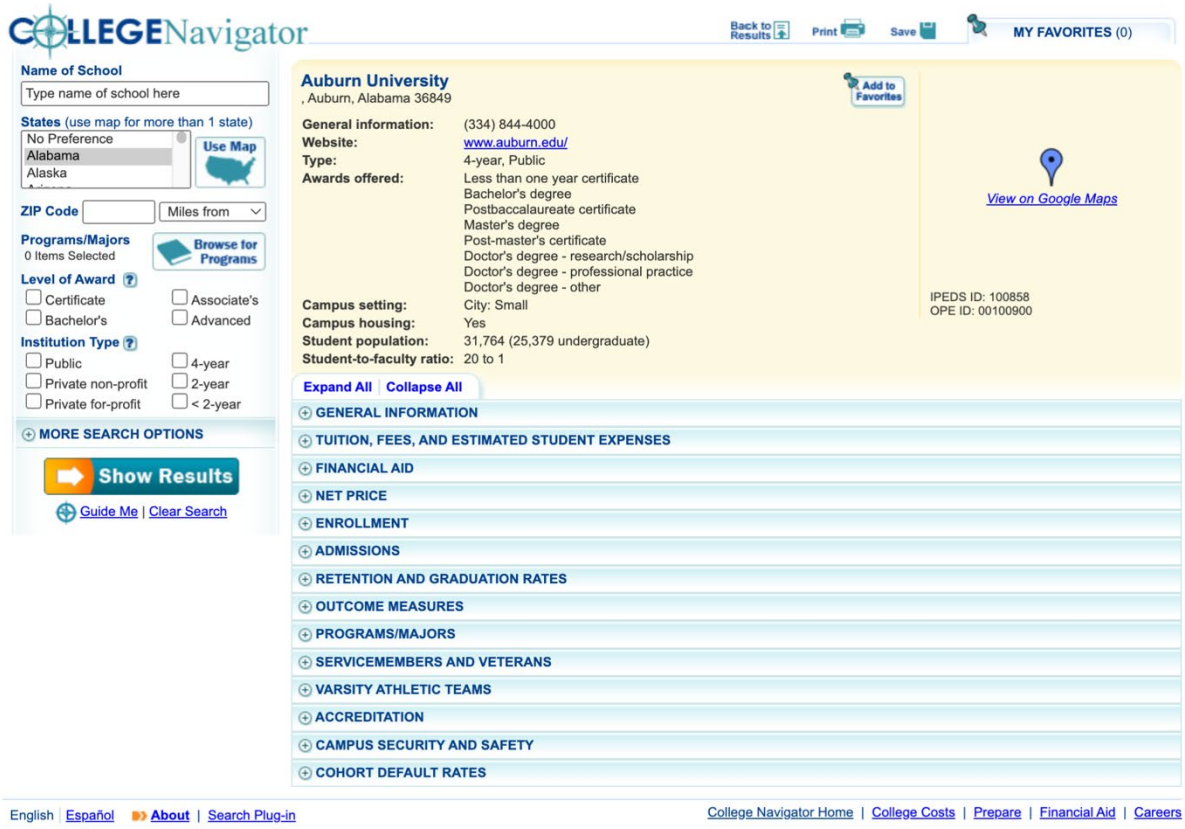



*Institution Profiles*

Once a user identifies an institution to explore on College Navigator, the information is vast in the current configuration of college profiles (see exhibit F). Drawing from the mockup of redesigned college profiles (MacAllum and Glover 2012), it would be helpful to pull out high-level key data points and information that are presented in student-accessible charts and create the functionality to go more in depth for researchers and other stakeholders using the site.

**Exhibit F: Example of Current Institution Profile on College Navigator**




The recommendations drawn from the interviews with expert college access practitioners underscore the need to evolve the College Navigator tool to cater to its intended audience. Ultimately, this user-centered approach will better serve the needs of students, families, and researchers in their educational endeavors.

# Future Outreach and Opportunities

**Research Question #3:** What are the challenges and opportunities for expanding usage of the College Navigator website in the current context?

### *RQ.3 Environmental Scan*

Students face a myriad of issues in their college search process today. With the shifting economic and education landscape, consumers are talking about education and training beyond high school in new ways that relate to the value and return on investment. Resources like College Navigator can serve as an important lever to support students to access information about opportunities and create smoother transitions between education and careers. As of September 2023, page views of College Navigator were up year over year to annually reach over 8.3 million page views and 1 million users. The majority of referral sources came from Google searches, followed by the Common Application, Bing, and Google Classroom in descending order (appendix B).

Upon review and analysis of governmental and nongovernmental websites and resources related to postsecondary access, financial aid, and college search information for students, it is clear that there is a need for students to gain access to robust information on higher education institutions and connections to postsecondary opportunities beyond high school. The college search process is multifaceted. With the number of resources available and varying levels of information, it is important for resources to engage and interest students from all backgrounds, facilitate a user-friendly interface, and provide accessible data to allow students to make an informed decision about their futures. In a time when the public narrative is increasingly questioning the value of higher education, resources available to students that empower their choice-making, display the many postsecondary opportunities available to pursue, inform on ways to pay for college, and show the ways that postsecondary education can open doors of opportunity are critical. Unlocking the potential of College Navigator should, in turn, unlock the potential of students.

### *RQ.3 Interviews*

The data elements and search options included make College Navigator a comprehensive tool for consumers looking for higher education institutions that match their criteria and preferences or consumers beginning a broad search. Users can refine their searches to find colleges and universities that best suit their academic, financial, and lifestyle needs. However, consumers need to know that such a tool exists to find it and use it. As one interviewee noted, "You cannot build it and assume students will come. You have to give them a compelling reason to use it and find value to keep them interested and engaged."

#### *Outreach Strategy*

We recommend that NCES consider developing an outreach strategy and corresponding marketing campaigns, potentially in partnership with other federal agencies to leverage existing resources and untapped potential. The following are suggestions from interviews that could be expanded upon:

- **Conference Presentations:** Use national conferences as platforms to showcase the benefits of College Navigator. Consider collaborating with other federal agencies or nongovernmental and nonprofit partner organizations to maximize visibility and reach.
- **School Counselor Engagement:** Develop and disseminate actionable lesson plans for school counselors. These resources should enable counselors to effectively guide students in using College Navigator as a part of their college planning process. Lesson plans could be developed and kept updated as a section is embedded on College Navigator and cross-shared across other U.S. Department of Education resources.
- **User-Friendly Tools:** Create user-friendly tools and resources that simplify College Navigator's features for students. These could include tutorials, walk-throughs, or interactive guides that make it easier for users to navigate and utilize the platform.
- **Federal Financial Aid Promotion:** Highlight the role of College Navigator in facilitating access to federal financial aid opportunities. Emphasize the need to encourage and guide students toward federal aid programs, thereby enhancing the platform's value.
- **Equity:** Address the need to make College Navigator accessible to traditionally underserved or underrepresented communities in higher education. Develop strategies to ensure that outreach efforts are inclusive and reach a diverse range of students, including those from marginalized backgrounds.

With the higher education landscape shifting and students faced with challenges, students need more resources to make seamless transitions to postsecondary education and the workforce. With an effective outreach strategy and plans to reach students, particularly those who have traditionally been underrepresented and underserved, College Navigator has the potential to serve as an even stronger informational resource.

## Conclusion

The overall goal of this paper is to create a framework to build upon the foundation of College Navigator in order to fulfill the intended purpose of serving consumers and increasing college access and success in light of challenges in the current and future context of higher education. College Navigator is an important resource in supporting prospective students, families, school counselors, policymakers, and researchers in making well-informed decisions about education paths beyond high school. College Navigator has the potential to evolve to better serve consumers, aligning its features with the diverse needs of those embarking on the path to higher education, families, school counselors, policymakers, and researchers. In this era of digital support tools, platforms like College Navigator can offer students a bridge to a brighter future, where their aspirations meet the reality of educational and career goals. This ongoing evolution will shape the way students approach the future and lead to more confident, informed, and successful choices in the dynamic landscape of higher education.

# References


Alfattal, E. (2017). International Students' College Choice Is Different! *International Journal of Educational Management*, *31*(7): 930–943.

Becker, G.S. (1962). Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy*, *70*(5), Part 2: 9–49.

Cabrera, A.F., and La Nasa, S.M. (2000). *On the Path to College: Three Critical Tasks on Facing America's Disadvantaged*. Report to the Association for Institutional Research. University Park: Center for the Study of Higher Education, The Pennsylvania State University.

Hossler, D., and Gallagher, K.S. (1987). Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers. *College and University*, *62*(3): 207–221.

Iloh, C. (2018). Toward a New Model of College "Choice" for a Twenty-first-Century Context. *Harvard Educational Review*, *88*(2): 277–244.

Ingram, J. (2023). *Improving the IPEDS Student Average Net Price to Be More Relevant for Consumers* (NPEC 2023). U.S. Department of Education. Washington, DC: National Postsecondary Education Cooperative. Retrieved from https://nces.ed.gov/pubsearch.

Kotler, P., and Fox, K.F.A. (1995). *Strategic Marketing for Educational Institutions* (2nd ed.). Prentice Hall.

MacAllum, K., and Glover, D. (2012). *Student and Guidance Counselor Feedback on the College Navigator Website*. U.S. Department of Education. Washington, DC: National Postsecondary Education Cooperative. Retrieved [date] from http://nces.ed.gov/npec.

McNeely, E.M. (2023). *The History and Origins of Survey Items for the Integrated Postsecondary Education Data System (2022–23 Update)* (NPEC 2023). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

Mullen, A.L. (2010). *Degrees of Inequality: Culture, Class, and Gender in American Higher Education*. Johns Hopkins University Press.

National Postsecondary Education Cooperative. (2007). *Deciding on Postsecondary Education: Final Report* (NPEC 2008–850), prepared by K. MacAllum, D.M. Glover, B. Queen, and A. Riggs. Washington, DC.

Perna, L.W. (2006). Studying College Access and Choice: A Proposed Conceptual Model. In J.C. Smart (Ed.), *Higher Education: Handbook of Theory and Research*, Vol. 21 (pp. 99–157). Springer.

U.S. Government Publishing Office. (2016). *GPO Style Manual: An Official Guide to the Form and Style of Federal Government Publishing* (31st ed.). Washington, DC: Government Publishing Office.

# Appendixes

## Appendix A
## College Navigator Interview Discussion Guide

***Overview***
We appreciate your willingness to share your perspective on College Navigator to add to the research and inform recommendations to improve the tool. As an independent consultant, Samantha Gutter is facilitating research for the National Postsecondary Education Cooperative (NPEC) of the U.S. Department of Education to explore areas of improvement and future goals for College Navigator. We want to assure you your answers will be kept confidential and anonymous. In the final report, we will not disclose the names of any schools, organizations, or individual respondents without explicit permission.

**The interviews will support the following research questions:**

- What is the intended purpose of the College Navigator website, and how does it need to evolve in the future?
- How can the College Navigator website be improved to better support students, families, and school counselors for increased college access and success?
- What are the challenges and opportunities for expanding usage of the College Navigator website in the current context?

**Usability Task 1: College Navigator Exploration**
*Please open the website https://nces.ed.gov/collegenavigator/ and share your screen with interviewer. Narrate what you notice and see on the website. What are things that jump out at you? What questions do you have? How can the site be improved upon first look?*

**Usability Task 2: Finding Colleges Matching Specific Program Criteria**
*This usability task aims to evaluate the website's ease of use and efficiency in helping users find colleges that meet their specific program, location, and campus setting preferences.*

**Scenario:** Imagine you are a high school senior interested in pursuing a degree in Computer Science. You want to find colleges that offer a Bachelor's degree in Computer Science and are located within a certain distance from your home. Additionally, you want to ensure that these colleges are in a suburban or urban setting and have a reasonable undergraduate student enrollment. Your goal is to create a list of potential colleges to explore further.

**Instructions:**

1. Open the college search website.

2. On the website's homepage, locate where to begin your search.

3. In the search form, under "Programs/Majors," select "Browse for programs."

4. In the program search interface, type "Computer Science" in the search bar.

5. Return to the main search form, and then select "Bachelor's" as the level of award. Then, under "States," use the map feature to select your home state (or any other state if you prefer).

6. Under "Campus Setting," select both "Suburban" and "City."

7. In the "Undergraduate Student Enrollment" section, set the minimum and maximum values to your preferred range.

8. Click the "Search" button to retrieve a list of colleges that match your criteria.

9. Review the search results, and select at least three colleges that seem interesting to you.

10. Add these selected colleges to your "My Favorites" list.

11. Export the search results into a spreadsheet for reference.

12. Finally, click to save your session and test out sending the results to your email.

13. Report any issues or difficulties you encounter during this task.

***Now, explore different parts of the site and share your overall thoughts.***

***Interview Questions***

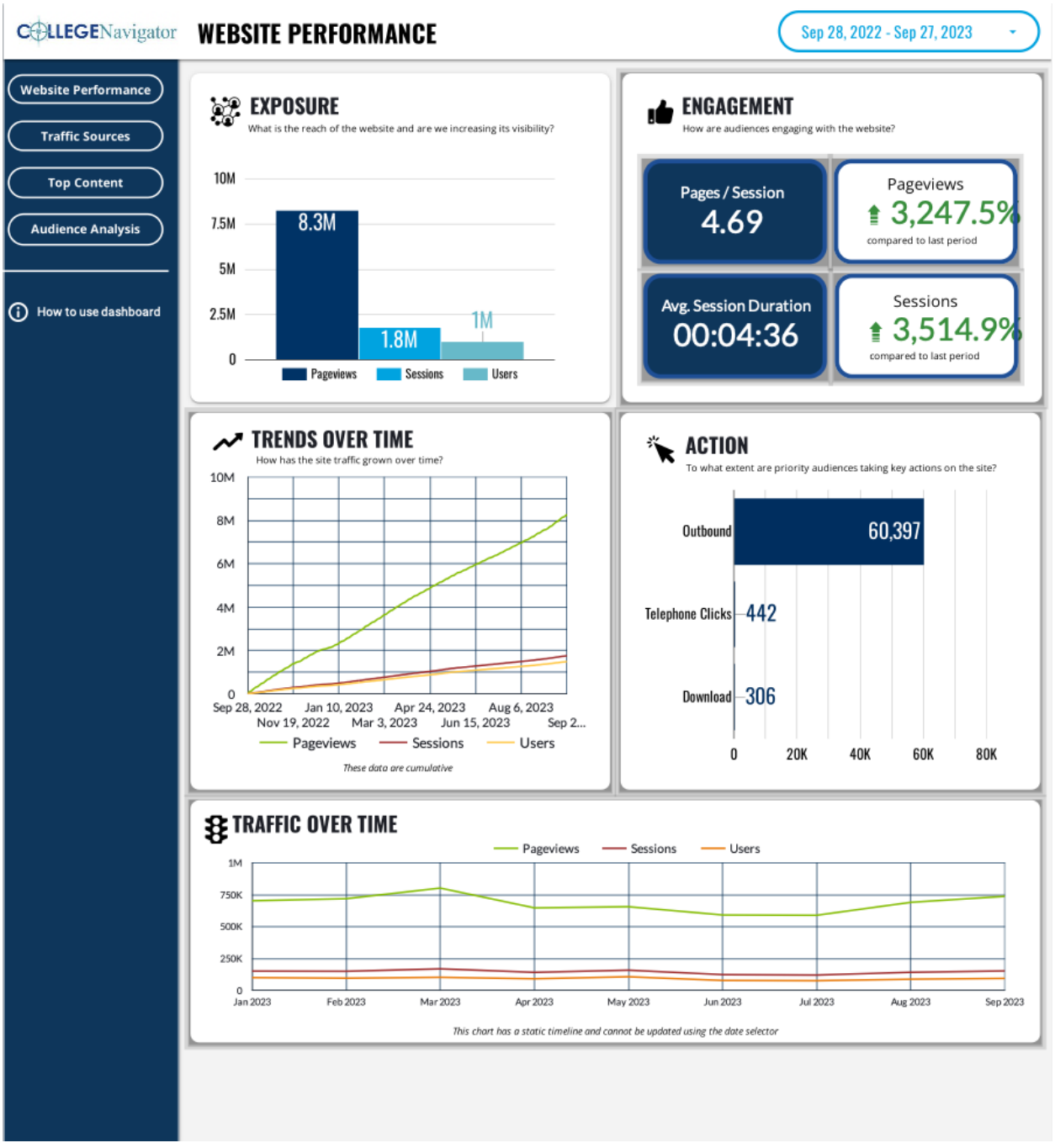
*These questions will follow the usability task and are intended to provide insights from school counselors and college access leaders to identify areas for improvement in the College Navigator website.*

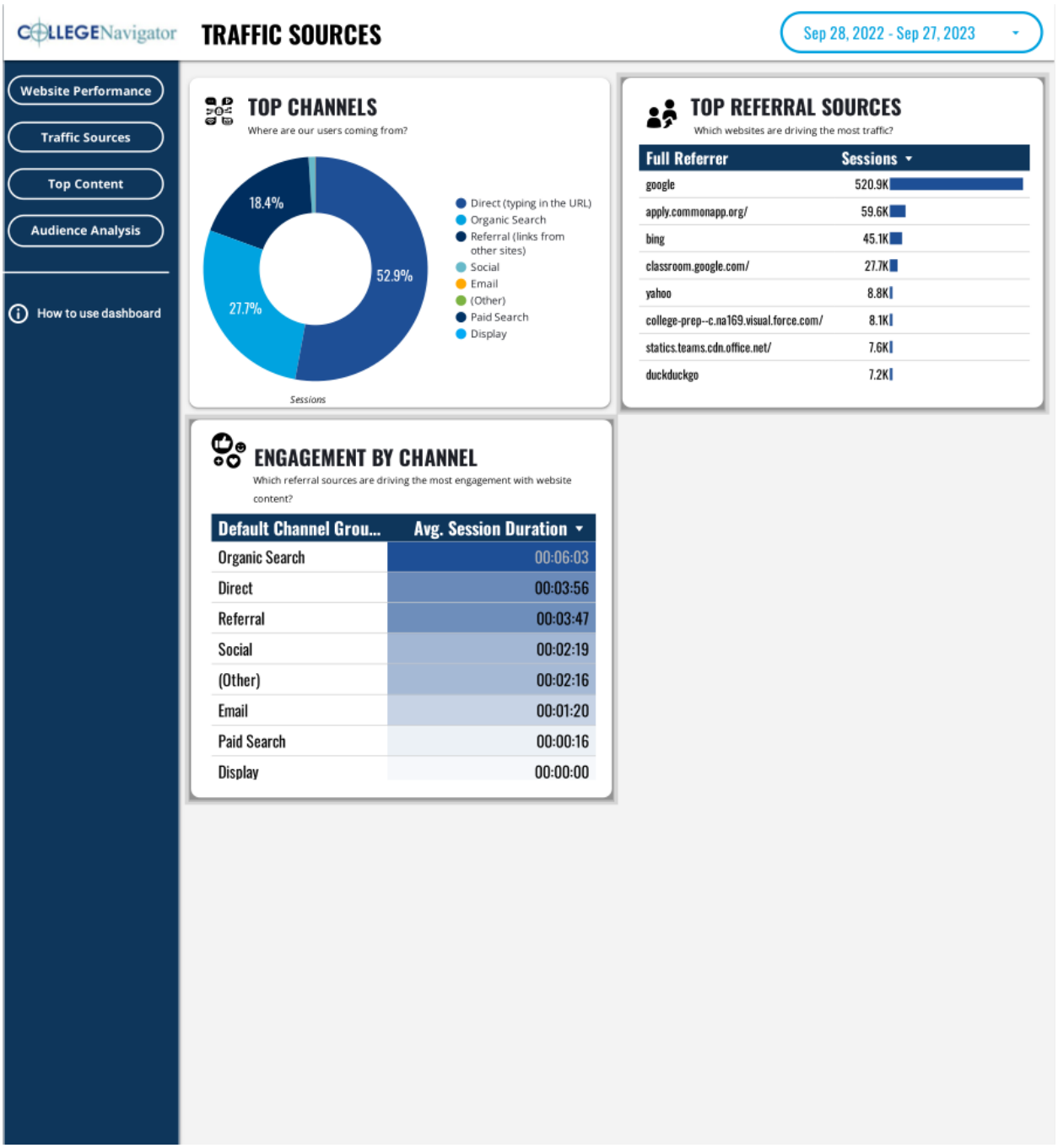
1. Did you know about College Navigator before today?
2. In your experience, what are the most common challenges students face when using online college search tools like the College Navigator website?
3. How do you currently assist students in finding colleges that match their preferences and goals? Are there any limitations or gaps in the existing tools or resources?
4. What features or functionalities do you believe are essential for a college search website used by both students and counselors?
5. How can the website better support counselors in guiding students through the college search process? Are there specific tools or resources you'd like to see added?
6. Are there any data or information points that are particularly important for counselors to have access to when assisting students with their college search?
7. What suggestions do you have for improving the website's user interface and overall usability, especially for high school counselors?
8. How well does the website address the diverse needs and preferences of students considering various types of institutions (e.g., 2-year, 4-year, public, private)?
9. Do you believe that the website adequately helps students explore colleges across the country, even if they are undecided about their major or institution type preference?

10. Are there any additional resources or tools that you think would be valuable to include on the website to enhance the college search experience for both students and counselors?
11. How can the website better support communication between counselors and their students throughout the college search process? How can it better support families and students in making informed decisions?

We would like to extend a special thanks to the school counselors and college access professionals who shared their perspective and expertise. Your feedback is important to understanding the impact of higher education exploration and outreach on student outcomes.

## Appendix B
## College Navigator Analytics




COLLEGENavigator
TRAFFIC SOURCES
Sep 28, 2022 - Sep 27, 2023
Website Performance
Traffic Sources
Top Content
Audience Analysis
How to use dashboard
TOP CHANNELS
Where are our users coming from?
18.4%
52.9%
27.7%
Direct (typing in the URL)
Organic Search
Referral (links from other sites)
Social
Email
(Other)
Paid Search
Display
Sessions
TOP REFERRAL SOURCES
Which websites are driving the most traffic?
Full Referrer
Sessions
google 520.9K
apply.commonapp.org/ 59.6K
bing 45.1K
classroom.google.com/ 27.7K
yahoo 8.8K
college-prep--c.na169.visual.force.com/ 8.1K
statics.teams.cdn.office.net/ 7.6K
duckduckgo 7.2K
ENGAGEMENT BY CHANNEL
Which referral sources are driving the most engagement with website content?
Default Channel Grou...
Avg. Session Duration
Organic Search 00:06:03
Direct 00:03:56
Referral 00:03:47
Social 00:02:19
(Other) 00:02:16
Email 00:01:20
Paid Search 00:00:16
Display 00:00:00