

STRATEGIC DATA ANALYTICS IN COLLEGE ADMISSION OFFICES

About NACAC

NACAC is an organization of professionals from around the world dedicated to serving students as they make choices about pursuing postsecondary education. NACAC is committed to maintaining high standards that foster ethical and social responsibility among those involved in the college transition process.

To learn more, visit nacacnet.org.

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Introduction

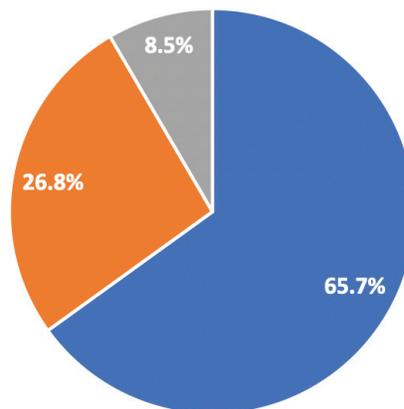
The National Association for College Admission Counseling (NACAC), with support from Salesforce.org, conducted a survey of 1,194 four-year NACAC-member colleges and universities to better understand how admission offices are using data strategically to inform and support institutional goals. Specifically, topics included strategic enrollment management plans, data analytic capabilities, predictive enrollment modeling, and the source of various data analytic functions (in-house or outsourced). Respondents from 377 admission offices completed the survey. The methodology, including sample characteristics, is included at the end of this report.

Survey Results

Strategic Enrollment Management (SEM) Plans

Broadly defined, a strategic enrollment management (SEM) plan aligns the goals of recruitment, admission, enrollment, retention, and student success with the institution's broader vision and mission, while also ensuring fiscal responsibility. Nearly two-thirds (65 percent) of survey respondents reported that their institutions currently have SEM plans. Roughly 27 percent reported having no SEM plan, and nearly 9 percent were unsure.

■ SEM Plan ■ No SEM Plan ■ Unsure



National Association for
College Admission Counseling



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Among those institutions with SEM plans, nearly 72 percent indicated that the plan was very important in guiding recruitment efforts. Roughly 4 percent of respondents from public colleges reported that the SEM plan was not at all important. The smallest institutions (those with fewer than 1,000 students) were much more likely than their larger counterparts to consider the SEM plan somewhat, rather than very, important.

Importance of SEM Plan in Guiding Recruitment Efforts

| | Very Important | Somewhat Important | Not at all Important |
|--|----------------|--------------------|----------------------|
| All Survey Respondents with SEM Plans | 71.7 | 27.1 | 1.3 |
| Control | | | |
| Private | 72.0 | 28.0 | 0.0 |
| Public | 71.1 | 25.0 | 3.9 |
| Undergraduate Enrollment | | | |
| Less than 1,000 | 45.5 | 51.5 | 3.0 |
| 1,000-4,999 | 76.5 | 22.7 | 0.8 |
| 5,000-9,999 | 76.9 | 23.1 | 0.0 |
| 10,000 and up | 73.5 | 24.5 | 2.0 |

N = 240

Those with SEM plans already in place also were asked how far along their institutions were in executing these plans. More than half of respondents (roughly 56 percent) reported that their plans were well underway, and an additional 7 percent indicated they were mostly complete. Survey results showed a relationship between enrollment size and the stage of SEM plan implementation, with smaller schools more likely to have just begun or not yet started implementing their plans.

Stage of SEM Plan Implementation

| | Have Not Started | Just Beginning | Well Underway | Mostly Completed |
|---------------------------------|------------------|----------------|---------------|------------------|
| Total | 2.5 | 34.9 | 55.9 | 6.7 |
| Undergraduate Enrollment | | | | |
| Less than 1,000 | 9.1 | 39.4 | 52.4 | 9.1 |
| 1,000-4,999 | 1.5 | 38.5 | 57.7 | 2.3 |
| 5,000-9,999 | 0.0 | 30.8 | 53.8 | 15.4 |
| 10,000 and up | 2.0 | 24.5 | 61.2 | 12.2 |

N = 238

Reporting Structure for Admission/Enrollment Leadership

According to survey results, the reporting structure for the chief enrollment officer depends largely on institution type. The chief enrollment officer most commonly reports directly to the president, rather than a vice president/provost, at both private colleges (71 percent) and smaller colleges with fewer than 5,000 students (73 percent). At public colleges, only 41 percent of chief enrollment officers report directly to the president. Reporting directly to the president also is less common at larger institutions and those that offer Ph.D. and/or professional degrees.

Oversight of Chief Enrollment Officer

| | President | Vice President/Provost | Vice President for Student Affairs | Other |
|---------------------------------|-------------|------------------------|------------------------------------|------------|
| All Survey Respondents | 60.5 | 28.4 | 5.3 | 5.3 |
| Control | | | | |
| Private | 70.8 | 22.8 | 1.2 | 5.2 |
| Public | 40.8 | 40.0 | 13.6 | 5.6 |
| Undergraduate Enrollment | | | | |
| Less than 1,000 | 73.1 | 15.4 | 5.8 | 5.8 |
| 1,000-4,999 | 74.0 | 17.9 | 4.1 | 4.1 |
| 5,000-9,999 | 45.5 | 45.5 | 2.3 | 6.8 |
| 10,000 and up | 30.1 | 53.0 | 9.6 | 7.2 |
| Highest Degree Offered | | | | |
| Bachelor's Degree | 79.7 | 11.9 | 5.1 | 3.4 |
| Master's Degree | 73.6 | 16.0 | 6.6 | 3.8 |
| Ph.D./Professional Degree | 49.0 | 39.5 | 4.8 | 6.7 |

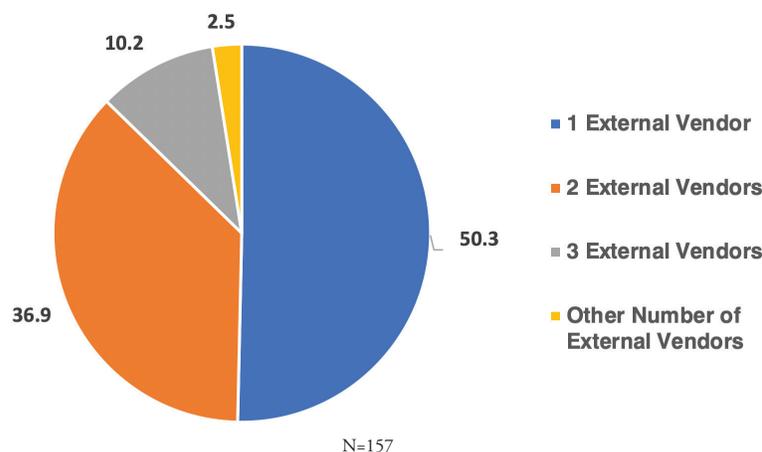
N = 375

Source of Data Analytic Function for Undergraduate Admission and Recruitment

The survey also examined the source of the data analytic function for undergraduate admission and recruitment. A very small proportion of survey respondents (nearly 4 percent) indicated that the entire data analytic function was solely outsourced. The vast majority either kept all data analysis in house (47 percent) or used a combination of in-house and outsourced expertise (48 percent). Public colleges were significantly more likely than private colleges to perform the data analytic function entirely within their institutions (61 percent compared with 40 percent, respectively).

External Vendors

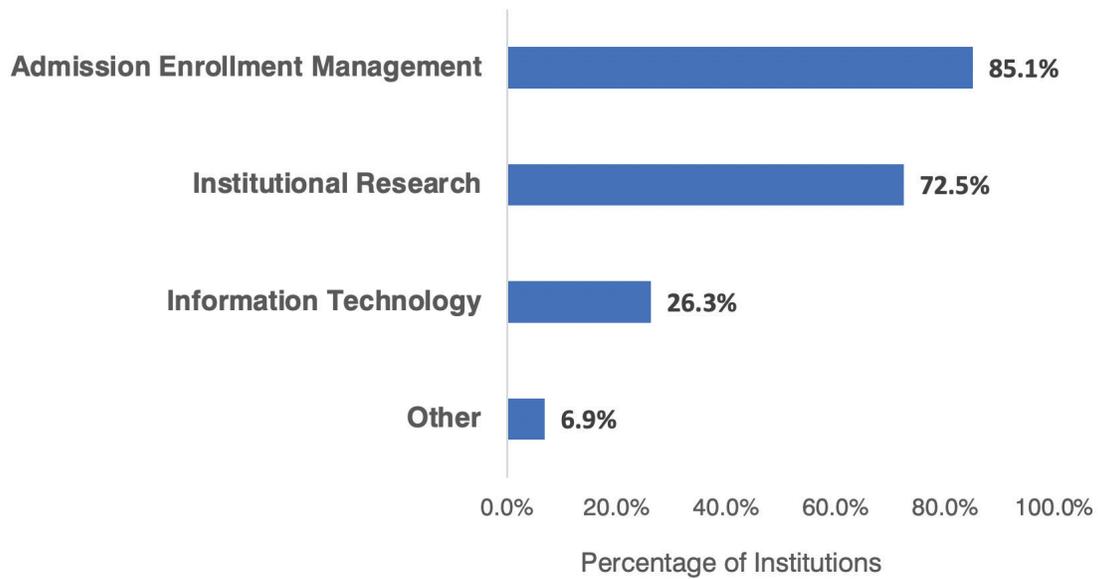
Among respondents that outsource any of their data analytic function, a large majority reported using only one vendor (50 percent) or two vendors (37 percent).



Internal Offices that Provide Data Analytic Support

Institutions that conducted data analytic support internally were asked to describe the offices that supported this function. Just over 85 percent of institutions using in-house support reported relying on admission enrollment management offices. About 73 percent utilize their institutional research department, and 26 percent use their school's information technology office.

Offices that Provide In-House Data Analysis for Admission



N = 272. Note: Percentages add up to more than 100 as respondents were able to select multiple responses.

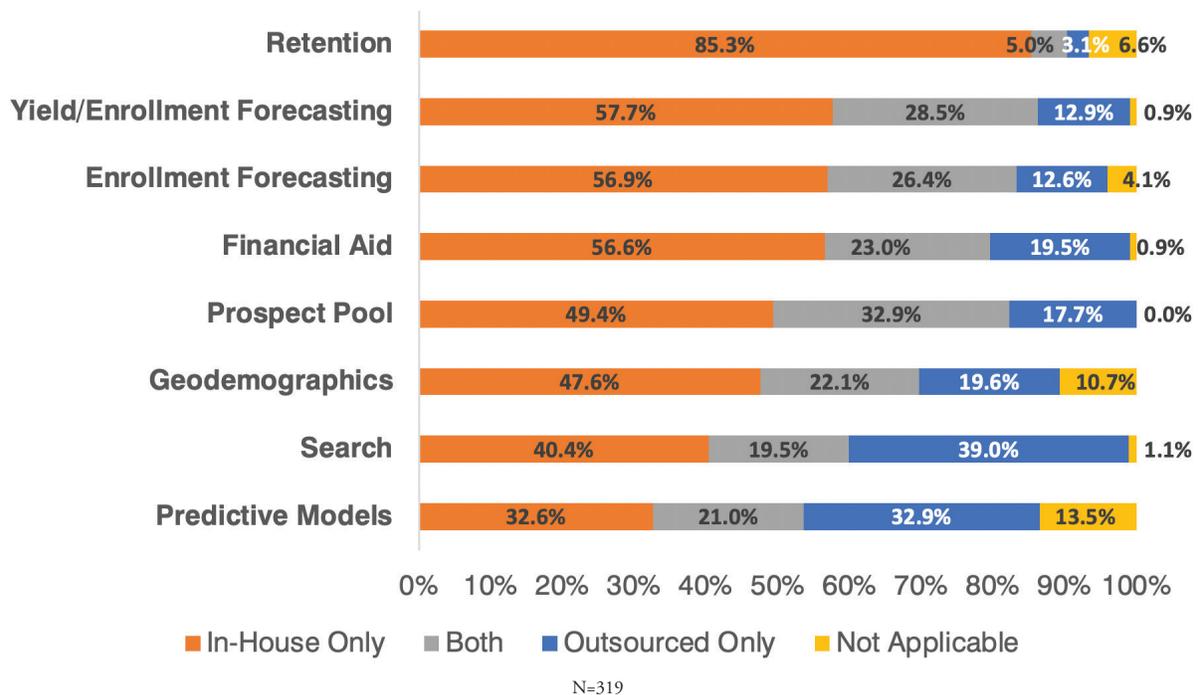
Survey results showed some differences by institutional characteristics in the likelihood that the institutional research office provides data analytic support. Admission offices at both public and larger institutions were more likely to receive support from institutional research, when compared to their private and smaller counterparts. Institutions that offer Ph.D. and/or professional degrees also were more likely to utilize their institutional research offices to support recruitment and admission.

| | Institutional Research |
|---------------------------------|-------------------------------|
| All Survey Respondents | 72.5 |
| Control | |
| Private | 67.9 |
| Public | 81.7 |
| Undergraduate Enrollment | |
| Less than 1,000 | 61.5 |
| 1,000-4,999 | 67.9 |
| 5,000-9,999 | 84.1 |
| 10,000 and up | 85.4 |
| Highest Degree Offered | |
| Bachelor's Degree | 61.7 |
| Master's Degree | 68.6 |
| PhD/Professional Degree | 78.0 |

N=272

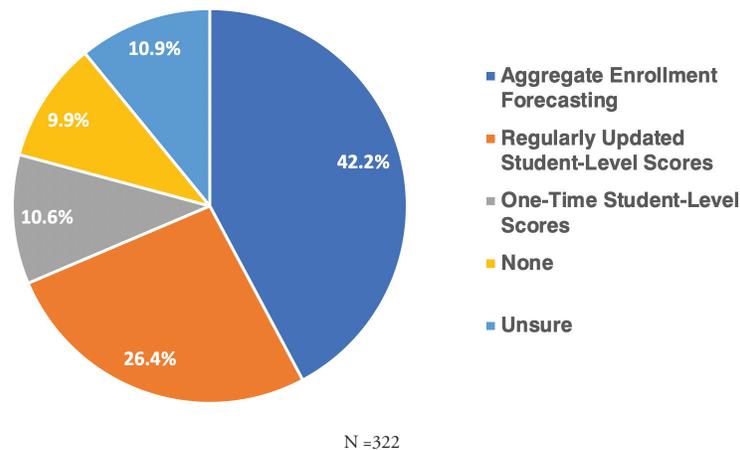
Source of Data Analysis by Function

Survey results also provided additional information on whether specific data analytic functions were outsourced or kept in-house. As shown in the following figure, retention-related data analytics was, by far, the most likely to be handled entirely within the institution. More than half of institutions also performed in-house data analytics for yield and enrollment forecasting and for financial aid distribution. The most common functions that were completely outsourced included search (39 percent) and predictive modeling (33 percent).



Enrollment Predictive Modeling

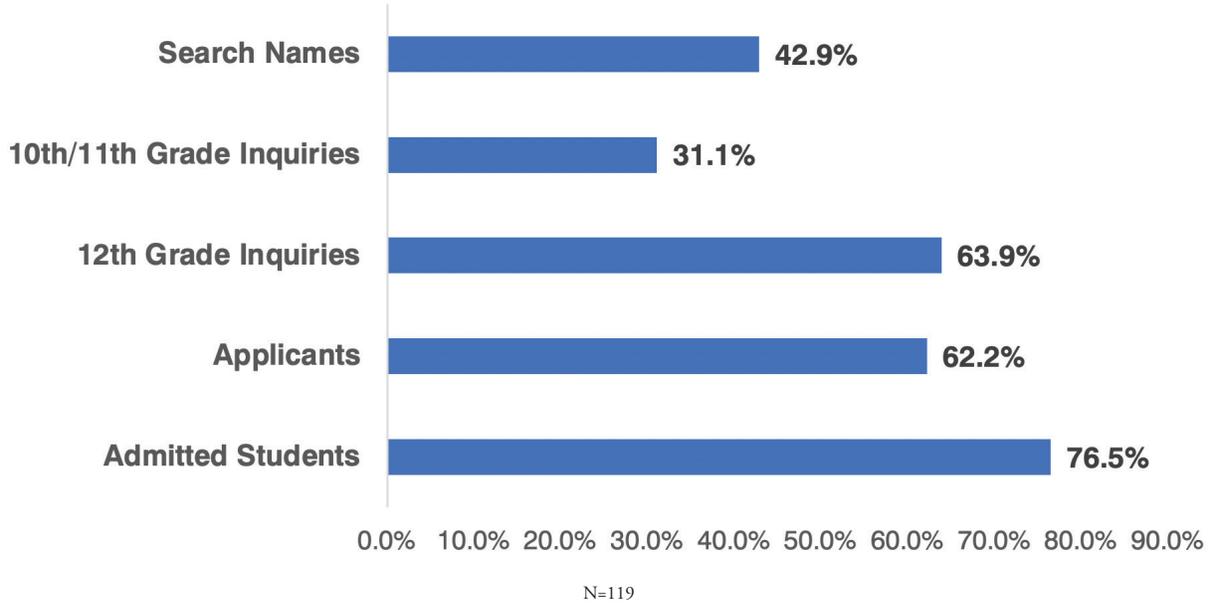
Survey participants were asked to provide additional detail on enrollment modeling by indicating what type of predictive enrollment modeling their institutions use. Roughly 42 percent of institutions reported using aggregate enrollment forecasting, and 37 percent are using student-level predictive scores (either one-time or regularly updated). Overall, 10 percent of institutions indicated that their institutions do not do any enrollment modeling. However, among both the smallest institutions (enrolling fewer than 1,000 students) and those with liberal/open admission policies, 21 percent reported no enrollment modeling.



Student-Level Predictive Scores

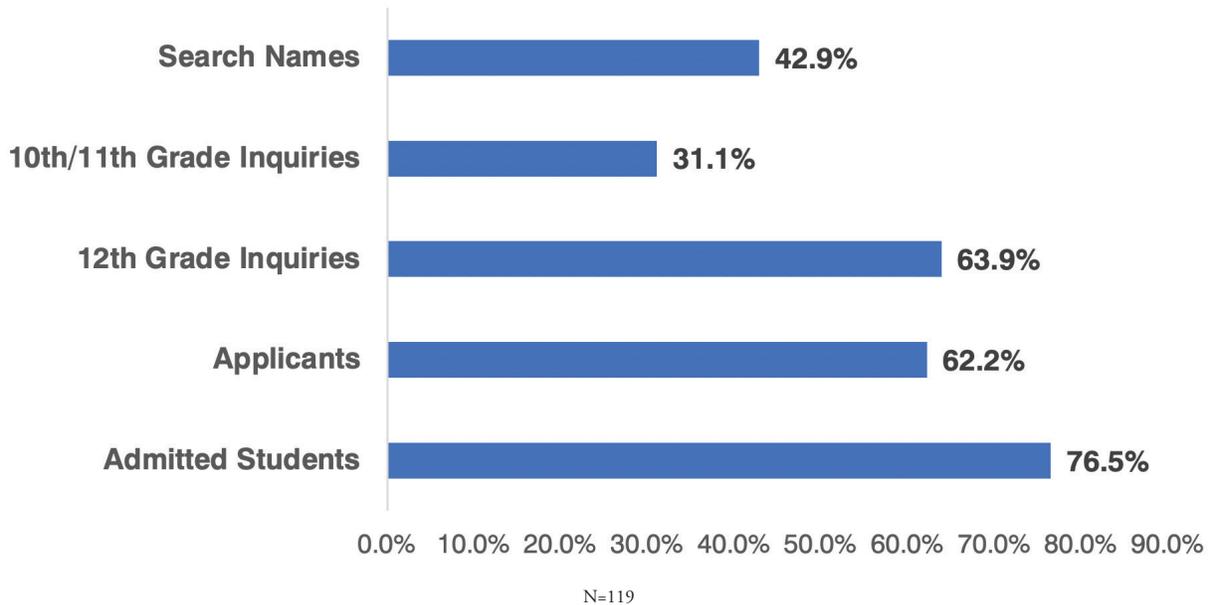
The group of institutions that reported using either one-time or regularly updated student-level predictive scores were asked to indicate which student groups they use to generate these scores and how the scores are used. The most common group was admitted students, followed by applicants and 12th grade inquiries. Less common were search names and 10th/11th grade inquiries.

Groups Used for Student-Level Predictive Scores



The most common uses for student-level predictive scores are recruitment and marketing/communications. Using scores to plan travel and to predict net tuition revenue were each reported by 45 percent of institutions.

How Student-Level Predictive Scores are Used



Although only 22 percent of all survey respondents reported using student scores to predict enrollment by program, this purpose was more common at public schools (36 percent) and those that award Ph.D. and/or professional degrees (30 percent).

| | Enrollment by Program of Study |
|-------------------------------|---------------------------------------|
| All Survey Respondents | 22.0 |
| Type | |
| Private | 17.2 |
| Public | 35.5 |
| Highest Degree Offered | |
| Bachelor's Degree | 5.9 |
| Master's Degree | 10.7 |
| Ph.D./Professional Degree | 30.1 |

N =119

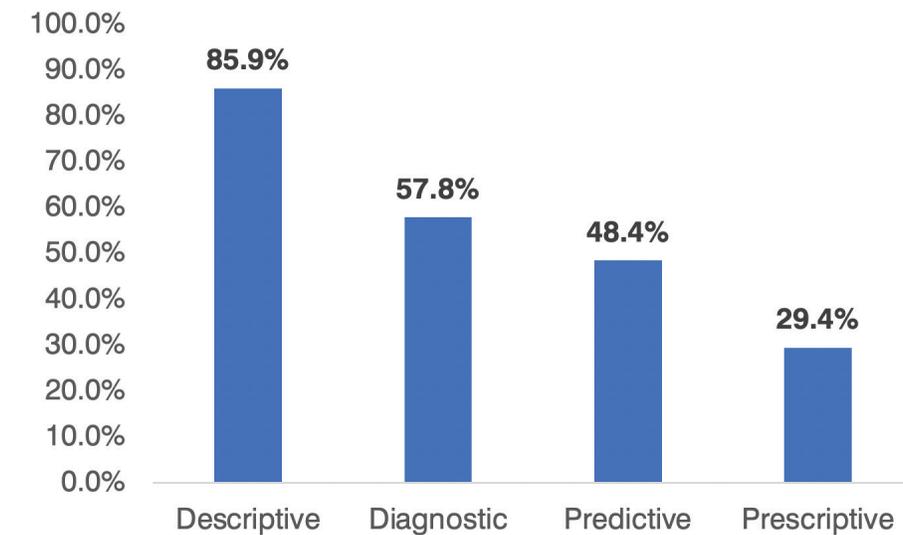
In-House Data Analytic Capabilities

Survey respondents were asked to indicate their current in-house data analytic capabilities by selecting any of the following options.

- Descriptive—what happened or is currently happening
- Diagnostic—why did a certain outcome occur
- Predictive—what outcome will, or is likely to, occur in response to a particular action(s)
- Prescriptive—what action(s) will, or is likely to, result in the desired outcome(s)

A large majority of respondents (86 percent) indicated having descriptive data analytic capabilities, followed by diagnostic (58 percent) and predictive (48 percent). Only 29 percent reported the ability to utilize prescriptive analysis.

In-House Data Analytic Capabilities



N=320. Note: Percentages add to more than 100 because respondents could select multiple options.

Larger institutions were more likely than their smaller counterparts to report predictive data analytic capabilities. Institutions with liberal or open admission policies were least likely to report the capacity for prescriptive analysis.

In-House Data Analytic Capabilities by Institutional Characteristics

| | Predictive | Prescriptive |
|---------------------------------|-------------|--------------|
| All Survey Respondents | 48.4 | 29.4 |
| Undergraduate Enrollment | | |
| Less than 1,000 | 37.2 | -- |
| 1,000-4,999 | 41.9 | -- |
| 5,000-9,999 | 65.0 | -- |
| 10,000 and up | 61.4 | -- |
| Selectivity | | |
| Highly Selective/Selective | -- | 34.0 |
| Traditional | -- | 30.8 |
| Liberal/Open | -- | 15.9 |

N=320. --Indicates no significant difference were found.

Admission Staff Training

Just over two-thirds of survey respondents (68 percent) reported that their institutions provide training for admission staff on the topic of data analytics. Colleges with more liberal or open admission policies were least likely to provide data training for staff.

| | Percent Yes |
|-------------------------------|-------------|
| All Survey Respondents | 68.1 |
| Selectivity | |
| Highly Selective/Selective | 70.7 |
| Traditional | 72.4 |
| Liberal/Open | 54.7 |

N = 376

Barriers to Maximizing Strategic Data Use

In an open-response format, survey participants were asked to share what, if any, barriers exist that prevent their institutions from maximizing strategic use of data in support of institutional goals. The most common barrier, noted by 62 percent of survey respondents, related to limited internal resources, particularly a lack of staff with the necessary skills. Just over 21 percent of respondents reported issues with the data itself, including inaccuracies, complexity, and mismanagement. For example, some specific comments included the following:

- *Poor data in the system. We have several home-grown systems that don't all "speak to each other."*
- *Old student information system which makes it challenging to access and analyze data across the university, which is key to understanding student success and retention.*
- *Having shared data definitions across campus and multiple best-in-class databases that don't always play well together.*

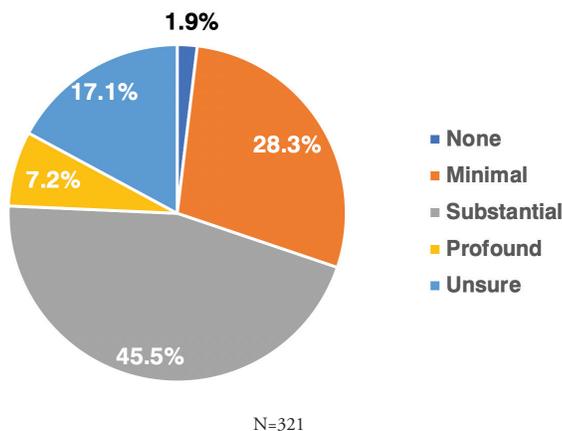
Key Themes from Open Response Question: Barriers to Maximizing Strategic Use

| | Number | Percent |
|---|--------|---------|
| Limited resources/staff/time | 179 | 62.4 |
| Problems with data: Data is inaccurate/mismanaged/too complex | 61 | 21.3 |
| Lack of money | 27 | 9.4 |
| Problems with systems | 25 | 8.7 |
| No barriers | 13 | 4.5 |
| Environment is changing/in development | 11 | 3.9 |
| Lack understanding of value by supervisor/audience | 9 | 3.1 |
| COVID-19/Uncertain times | 4 | 1.4 |
| Other | 35 | 12.2 |

N=287. Percentages add to more than 100 because a single response could have included more than one theme.

Expected Impact of COVID-19 on Prospect Development

Because of the disruptions in the typical admission process caused by COVID-19, the survey included a few questions to learn more about how institutions expected changes in data availability to impact prospect development for Fall 2021 and subsequent classes. More than half of survey respondents expected either a substantial (46 percent) or profound (7 percent) impact on their ability to build a prospect pool.



Measures to Understand/Mitigate Impact of COVID-19

In an open-response format, survey respondents shared what measures their institutions were taking to both understand and mitigate the impact of data availability disruptions on prospect development. The most common theme that emerged, noted by 26 percent of respondents, related to expanding on usual prospect sources and parameters. Purchasing additional names and better utilizing current data were each mentioned by 14 percent of respondents. Some specific comments to illustrate these themes included the following:

- Theme: Increased Prospect Sources/Parameters
 - *Exploring alternate lead sources from those we typically utilize*
 - *Broadening search and app cultivation criteria and increasing number of sources*
- Theme: Better Utilize Current Data
 - *Rely more on historical data*
 - *Spending more time at the top of the funnel with the inquiries we have*
 - *Using past data to determine the impact of COVID on current data*
 - *More closely watching and analyzing the prospect pool*

Key Themes from Open Response Question: Measures to Understand/Mitigate Impact of COVID-19

| | Number | Percent |
|---|--------|---------|
| Increase prospect sources/parameters | 55 | 26.3 |
| Purchase additional names | 29 | 13.9 |
| Better utilize current data | 29 | 13.9 |
| Nothing being done | 27 | 12.9 |
| Look for additional outsourcing opportunities | 25 | 12.0 |
| Create new ways of gathering data | 20 | 9.6 |
| Invest more in digital/virtual experiences | 14 | 6.7 |
| Increase communication | 13 | 6.2 |
| Work more with current vendor | 9 | 4.3 |
| Add additional data points | 7 | 3.3 |
| Unsure | 7 | 3.3 |
| Changes are a work in progress | 6 | 2.9 |
| Add internal positions | 5 | 2.4 |
| Other | 44 | 21.1 |

N=209. Percentages add to more than 100 because a single response could have included more than one theme.

About the Survey

The 21-question survey was administered using SurveyMonkey to 1,194 four-year, US colleges that are members of NACAC. Responses were collected from Aug. 26 through Sept. 25, 2020. Respondents from 377 admission offices completed the survey, representing a 32 percent response rate. For the purpose of this survey, respondents were asked to indicate how they would describe their institution's selectivity level. Most respondents chose either selective or traditional. A little less than 4 percent indicated having an open admission policy.

Respondents Self-Reported Institutional Admission Selectivity

| | Number | Percent |
|------------------|--------|---------|
| Highly Selective | 50 | 13.3 |
| Selective | 117 | 31.7 |
| Traditional | 134 | 35.6 |
| Liberal | 62 | 16.5 |
| Open | 13 | 3.5 |

The following table shows characteristics of the respondents compared to all US institutions using information provided through the survey, as well as data from the US Department of Education. NACAC survey respondents were representative of all colleges in terms of institutional type (public/private). They were also roughly representative based on other institutional characteristics, with a few exceptions. Survey respondents were somewhat more likely to offer Ph.D./professional degrees and tended to have slightly lower acceptance rates. Private college respondents had somewhat larger enrollments compared to all institutions.

NACAC 2018–19 Admission Trends Survey Sample Compared to National College Population

| | NACAC Respondents | All Colleges | NACAC Public Respondents | All Public Colleges | NACAC Private Respondents | All Private Colleges |
|-------------------------------------|-------------------|--------------|--------------------------|---------------------|---------------------------|----------------------|
| N (%) | 377 | 1,558 | 127 (33.5%) | 518 (33.2%) | 250 (66.5%) | 1,040 (66.8%) |
| Undergraduate Enrollment (%) | | | | | | |
| Fewer than 1,000 | 14.1 | 19.6 | 4.0 | 3.7 | 19.2 | 27.6 |
| 1,000 – 4,999 | 52.1 | 45.7 | 21.4 | 23.2 | 67.6 | 56.9 |
| 5,000 – 9,999 | 11.7 | 13.9 | 17.5 | 23.7 | 8.8 | 9.0 |
| 10,000 – 20,000 | 12.2 | 11.1 | 27.8 | 24.3 | 4.4 | 4.5 |
| More than 20,000 | 9.8 | 9.6 | 29.4 | 25.1 | 0.0 | 1.9 |
| Highest Degree Offered (%) | | | | | | |
| Bachelor's | 16.0 | 16.2 | 9.5 | 8.1 | 19.2 | 20.3 |
| Master's | 28.2 | 33.8 | 19.8 | 27.0 | 32.4 | 37.1 |
| Ph.D./Professional | 55.9 | 50.1 | 70.6 | 64.8 | 48.4 | 42.6 |
| Acceptance Rate* | | | | | | |
| Mean | 62.9 | 67.0 | 67.3 | 71.4 | 60.8 | 64.9 |

*For all institutions, acceptance rate data only includes institutions that are not open admission. Only 3.5 percent of NACAC survey respondents self-identified as open admission.

SOURCE: US Department of Education, National Center for Education Statistics. (2018-19). Integrated Postsecondary Education Data System (IPEDS) Data Center. Washington, DC: NCES.

NOTE: Data for all colleges includes institutions meeting the following criteria: US location; four-year, not-for-profit; baccalaureate degree-granting; Title IV-participating; enrolls full-time first-time freshmen; not open admission.