

DRIVING

TOWARD A DEGREE

2021

CASELOAD'S IMPACT ON ADVISING PRACTICES AND STUDENT SUCCESS

RESEARCH BRIEF #1



Bay View Analytics

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EXECUTIVE SUMMARY

Driving Toward a Degree is a research collaborative for increasing student success across the higher education landscape. Since 2016, data has been collected and analyzed via longitudinal primary research to understand the state of institutional practices and technology adoption that facilitate holistic student support. The goal is to offer insights to help institutions evolve their student supports and improve overall student success, retention, and completion.

This year's research examines barriers to improving advising in higher education and we are honored to have over 2,800 respondents, representing over 1,300 unique institutions, participating in our survey. Each year, we ask advisors, student support professionals, and administrators about the barriers to improving advising on campus. Where we see cause for concern is that colleges and universities perennially identify the same challenges since 2017.

In this first of four research briefs, we focus on caseloads as a perennial barrier to improving advising, as reported by advisors across all sectors.

Key insights:

- Caseload impacts whether certain advising practices can be scaled.
- There is a statistically significant negative relationship between the size of caseloads and retention rates at four-year institutions (public and private). This relationship spotlights a need to carefully consider the ramifications of having high advisor caseloads.

INTRODUCTION

Caseload is one of many considerations when designing an effective advising program to meet student needs and institutional goals. While NACADA¹ and other institutions assert there is no ideal caseload benchmark because each institution has different expectations of the advisor role, our study finds that caseload sometimes influences which sustained, strategic, integrated, proactive, and personalized (SSIP²) advising practices can be deployed at scale. As institutions seek to support students in the challenges they face, we advocate that caseloads be carefully examined when setting goals for the advisors, as well as equipping advisors with a toolkit of practice recommendations (e.g., mandatory advising).

CHARACTERIZING THE CAPACITY PROBLEM

Four years after launching the first iteration of the *Driving Toward a Degree* survey, advisors still identify 'caseloads for advisors are too high' as a persistent barrier to improving advising. See Figure 1.

1. *Determining and Planning a Realistic Advisor 'Caseload'*, Isaiah Vance, NACADA International Conference Presentation, 2017
2. Community College Research Center (CCRC). (2013). *Designing a system for strategic advising*. <https://ccrc.tc.columbia.edu/media/k2/attachments/designing-a-system-for-strategic-advising.pdf>

Figure 1

TOP THREE BARRIERS TO IMPROVING ADVISING

2017	2019	2020	2021
Limited budget (40%)	Low student engagement with advising resources (28%)	Caseloads for advisors are too high (28%)	Caseloads for advisors are too high (37%)
Low student engagement with advising resources (40%)	Caseloads for advisors are too high (27%)	Limited budget (27%)	Limited budget (28%)
Caseloads for advisors are too high (37%)	Limited budget (26%)	Faculty resistance to change (26%)	Lack of coordination across departments (27%)
Lack of coordination across departments (33%)	Lack of coordination across departments (23%)	Lack of coordination across departments (23%)	Faculty resistance to change (22%)
Faculty resistance to change (32%)	Lack of training for faculty as advisors (23%)	Low student engagement with advising resources (23%)	Low student engagement with advising resources (21%)
Lack of professional development/training (32%)	Poor accountability for advising outcomes (21%)	Poor accountability for advising outcomes (21%)	Advisors are too overburdened with administrative tasks (18%)
Technical integration challenges (27%)	Faculty resistance to change (21%)	Leadership's resistance to making academic advising a priority (21%)	Poor accountability for advising outcomes (17%)
Poor accountability for institutional outcomes (21%)	Advisors are too overburdened with admin tasks to advise students (20%)	Poor accountability for advising outcomes (20%)	Ineffective onboarding / Lack of training for faculty as advisors (17%)



*Survey question: What are the top three barriers to improving advising at your institution? Select up to three.

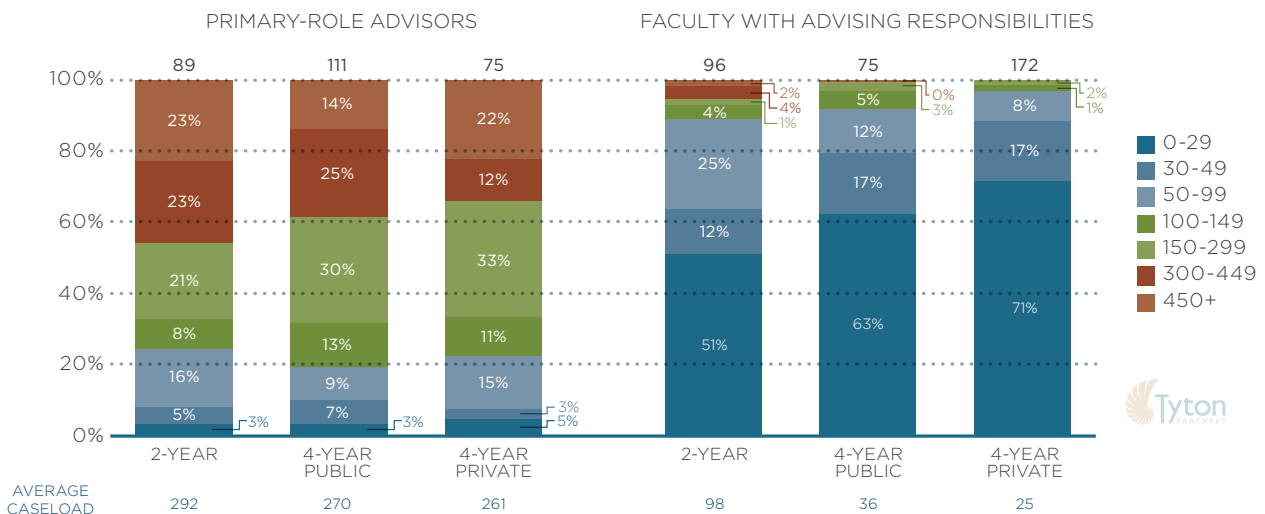
**Changes in magnitude across the respective answer options can be attributed to the addition of barriers to choose from in 2019 and 2020; (2017 n=1,291), (2019 n=1,339), (2020 n=1,440), (2021 n=1,310)

Sources: Driving Toward a Degree 2017-2021, Tyton Partners analysis

In Figure 2, we detail how average caseloads for primary-role advisors are highest at community colleges (292), followed by four-year publics (270), and four-year privates (261). The reported manageability of caseloads does not corroborate the raw caseload averages: only 44% of private institutions report that they “always” or “often” have a manageable caseload to sufficiently meet student needs. In fact, over the past three years, private institutions reported a year-over-year decline in advisors feeling that their caseload was “always” or “often” manageable to sufficiently meet student needs, whereas public institutions remain more stable in this metric.

Figure 2

CASELOAD SIZE*, BY SECTOR, PRIMARY-ROLE ADVISOR AND FACULTY WITH ADVISING RESPONSIBILITIES



*Survey question: What is the size of your advising student caseload for this spring term?

Sources: Driving Toward a Degree 2021, Tyton Partners analysis

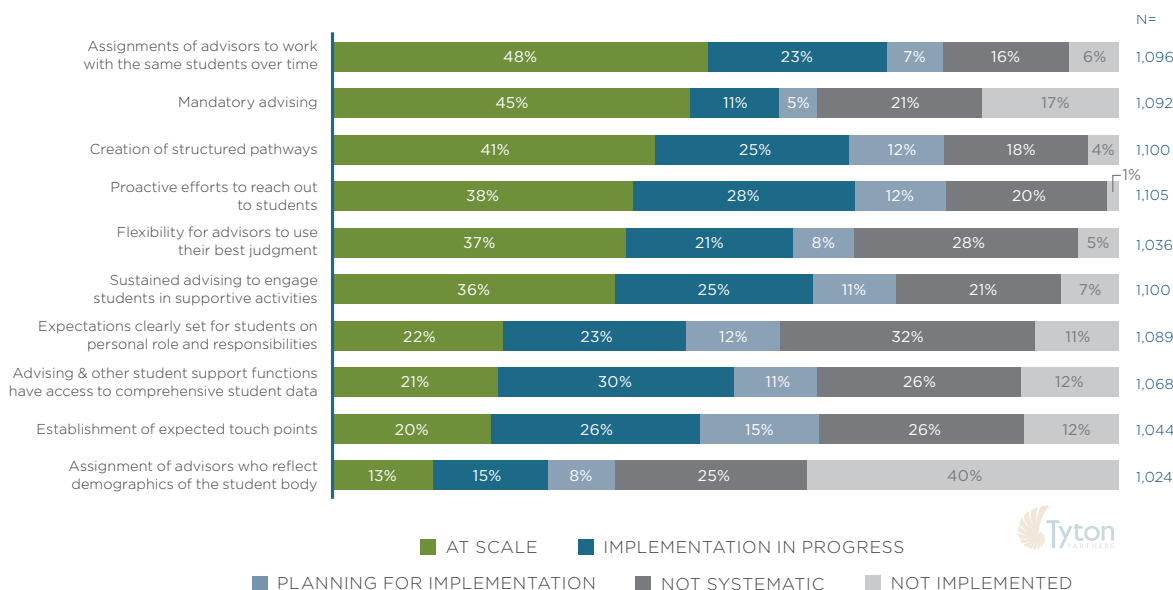
CASELOAD'S INFLUENCE ON ADVISING PRACTICES

In the realm of sustained, strategic, integrated, proactive, and personalized (SSIPP) advising practices, we observed only six practices that are implemented at scale over 30% of the time. These six practices are detailed in Figure 3 (in order of most frequently to least implemented): assignment of advisors to work with the same students over time, mandatory advising, creation of structured pathways, proactive efforts to reach out to students, sustained advising to engage students in supportive activities, and flexibility for advisors to use their best judgment.

Figure 3

ADVISING PRACTICES BY SCALE OF IMPLEMENTATION

Sustained, Strategic, Integrated, Proactive, and Personalized Practices



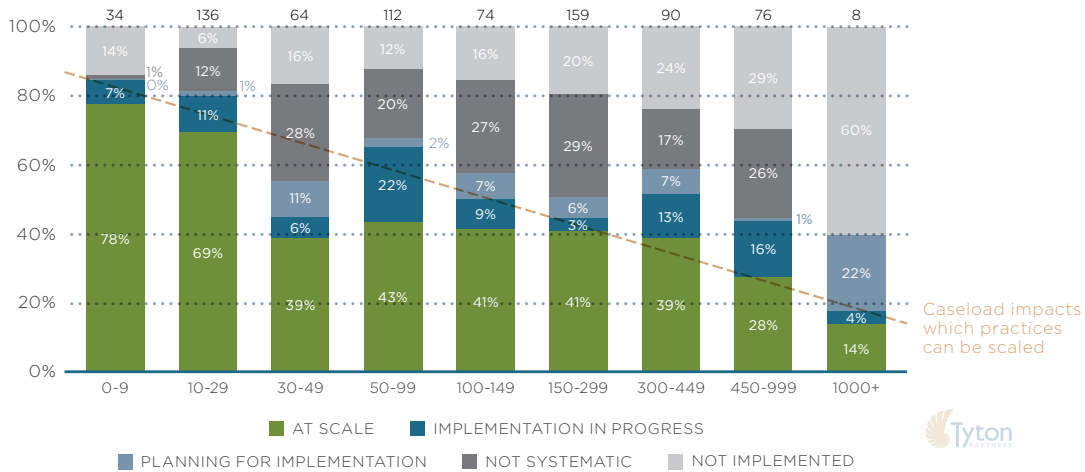
*Survey question: Please assess the degree to which your institution implements these student advising policies and practices.

Sources: Driving Toward a Degree 2021, Tyton Partners analysis

When we examined the prevalence of scaled adoption of SSIPP advising practices by caseload, we found that some SSIPP practices were rolled out at scale across a variety of caseloads, but others were really limited to caseloads of less than 30 students. Specifically, as seen in Figure 4, mandatory advising cannot be scaled if caseloads are too large but proactive outreach appears to be scalable even if caseloads are large. Mandatory advising—ensuring that students engage with an advisor at least once a year—was practiced at scale (50%+) by advisors with caseloads of less than 30 students. Advisors with caseloads of 30 to 449 students were only able to scale mandatory advising an average of 40% of the time. Beyond caseloads of 450 students per advisor, mandatory advising was primarily reported as not implemented or not systematic.

Figure 4

**SCALE OF IMPLEMENTATION:
MANDATORY ADVISING, BY ADVISING CASELOAD**



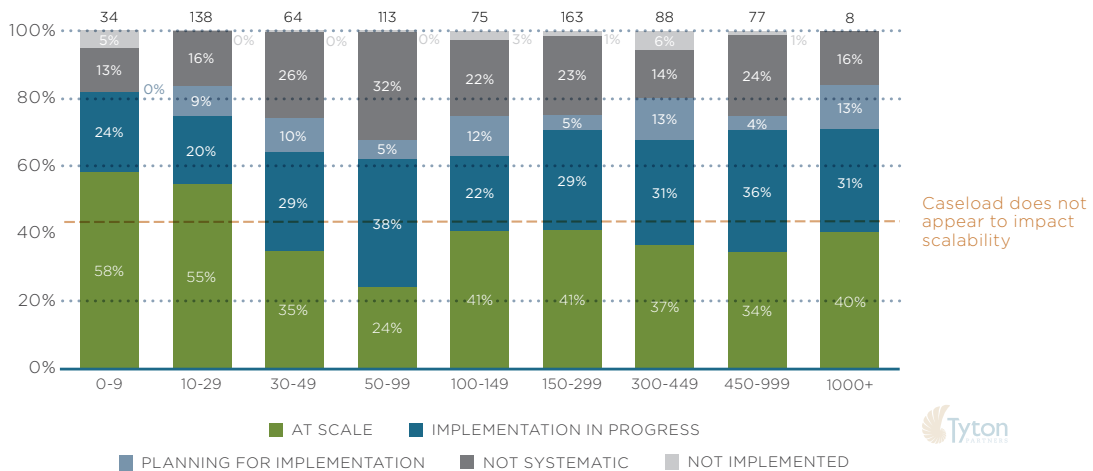
*Survey question: Please assess the degree to which your institution implements these student advising policies and practices.
Sources: Driving Toward a Degree 2021, Tyton Partners analysis

We acknowledge there is variation in what a mandatory advising session looks like in practice. For some schools, this may simply be signing a registration form, in other scenarios, it may be a half-hour conversation about goal-setting – our analysis does not differentiate between these definitions and we believe there is an opportunity to further understand the definition and relevance of mandatory advising for targeted student populations (and sub-populations).

In contrast, looking at Figure 5, for some advising practices like proactive efforts to reach out to students when they appear to be struggling, there was a more consistent level: 38% of advisors, regardless of caseload size. One hypothesis to investigate in future research is that technology can more readily support proactive efforts of advisors to engage with students than ensure mandatory engagement from students.

Figure 5

**SCALE OF IMPLEMENTATION:
PROACTIVE EFFORTS TO REACH
OUT TO STUDENTS WHEN THEY APPEAR TO BE STRUGGLING,
BY ADVISING CASELOAD**



*Survey question: Please assess the degree to which your institution implements these student advising policies and practices.
Sources: Driving Toward a Degree 2021, Tyton Partners analysis

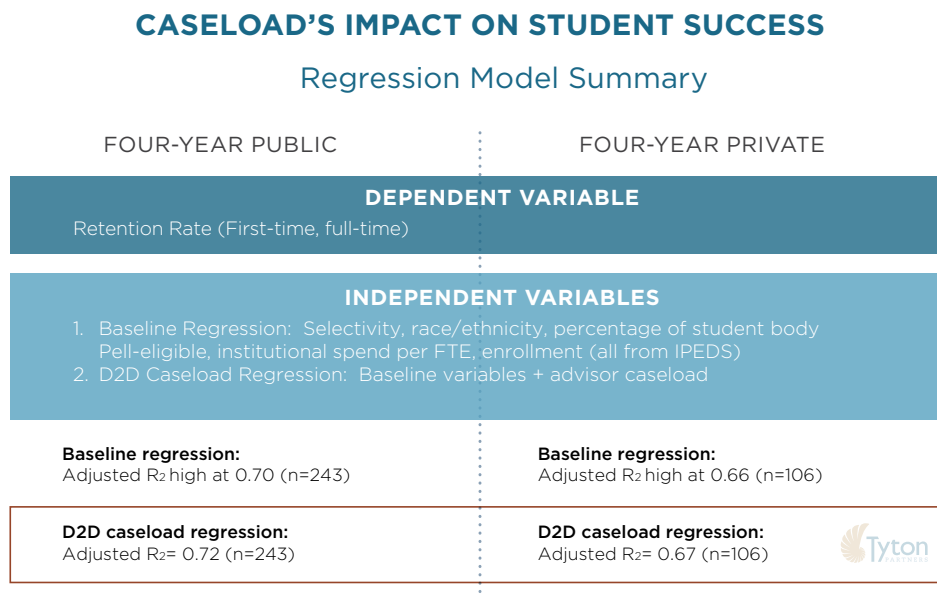
A caveat: certain student populations may require more in-depth, prescriptive, or specialized advising which can impact the effectiveness of proactive outreach. These students include transfer, international, or first-year students. Also, we should be cautious not to over-rely on outreach so as to be sensitive to student contact fatigue.

CASELOAD’S IMPACT ON STUDENT SUCCESS

Using regression analysis, we discover a significant negative relationship between caseload and first-time, full-time student retention rates. As summarized in Figure 6, we modeled public institutions and private institutions separately because of their structural differences in funding and historical mission and find that our regression model explains over 70% of the variation in retention rates at four-year institutions.

The primary insight from the regression is that holding the other factors constant (selectivity, race/ethnicity, percentage of student body that is Pell-eligible, enrollment, and institutional spend per full-time student equivalent), decreasing caseload for an advisor by 100 students could lead to a one percentage point increase in retention rates.

Figure 6



Sources: IPEDS, Driving Toward a Degree 2021, Tyton Partners analysis

Our data on two-year colleges did not lend itself to similar regression analyses. Utilizing a dependent variable of part-time student retention rates from IPEDS, we found our survey sample skewed to a lower average part-time retention rate than the two-year universal average. Lack of variation in the dependent variable resulted in a very low adjusted-R-squared value of 0.08.

Overall, the coefficient on caseload could be thought of as the largest possible effect you could expect on retention (i.e.; there still is omitted variable bias) if you were to lower the caseload. Practically speaking, only a randomized control trial regression model will ever predict retention to a level of precision that will result in straightforward implications for policy setting or advising change. Rather, we take these regression results to highlight that caseload and retention are generally inversely related. We are not simply advocating to hire more advisors. Instead, hiring advisors should align with a shift in technology, practices, and expectations of those advisors as well.

In the Appendix to this brief, we include detailed tables on the regression analysis.

ROLE OF CASELOAD MANAGEMENT TECHNOLOGY

Advising technologies are intended to support advising strategies and to increase the level of student engagement. Each year Driving Toward a Degree monitors 250+ technology companies across 13 product categories which impact advising. One of the tracked categories is focused on caseload management technology and is defined as a set of workflow technologies which:

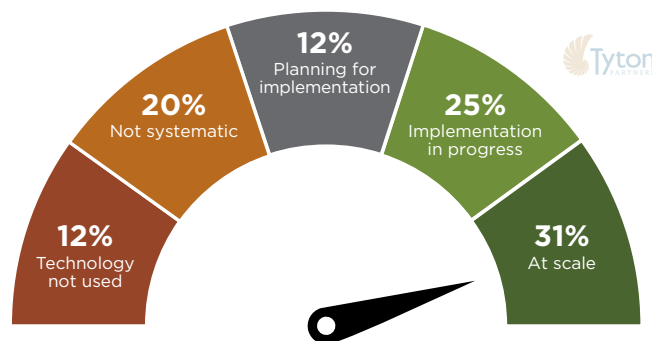
- Support student intervention processes by facilitating the allocation of advising, tutoring, and career resources.
- Support scheduling, communication between stakeholders, case management, and matching of students to specific advisors, tutors, and career services officers.

Exemplar case management technologies for advising include products from Aviso Retention, Blackboard, Civitas Learning, EAB, Ellucian, and Unicon.

Of the primary advising technology categories that we track, Caseload Management is the most at scale at 31% adoption across all sectors with many others planning or in progress of implementing solutions as seen in Figure 7. Scaled adoption of Caseload Management solutions is even higher at larger institutions across all sectors (enrollments 5,000+).

Figure 7

ADOPTION OF CASELOAD MANAGEMENT SOLUTIONS



*Survey question: Which of the following primary advising functions does your institution use technology to support?, n= 1,096
Sources: Driving Toward a Degree 2021, Tyton Partners analysis

CONCLUSION

Designing an advising system that accounts for caseload is important, as caseload can limit the advising practices that can be scaled at a given institution. Caseloads are inextricably related to the advising practices a school, department, or support service can deploy; a notable example of this is if caseloads are too large, mandatory advising is not feasible. Recognizing this, and the push for more holistic advising, we need to be mindful of complexities and interdependencies of the advisor role, the resources, practices, and tools they have at their disposal.

CASELOAD MANAGEMENT IN ACTION:

When reviewing the appropriate caseload for your academic advisors, it is important not to simply focus on the raw number of students assigned to each advisor. Rather, investigate whether advisors can sufficiently meet the needs of students (beyond requests for meetings, inclusive of the range of topics that students are seeking advice on) and set caseloads at levels which allow advisors to reliably meet student demands.

Additionally, if you can decrease advisor caseload, be sure to consider the new advising practices you can deploy with a lower caseload.

APPENDIX: PART 1 – CASELOAD REGRESSION ANALYSES

Utilizing regression analysis, we find that the four-year sector, caseload helps explain the variation in retention rates and is a significant predictor of student success above size, selectivity, Pell-eligibility, institutional spend per full-time student equivalent (FTE), and race / ethnicity.

PUBLIC FOUR-YEAR INSTITUTIONS

In Table 1 below, we explain how to interpret the model for public institutions and the affect that each variable has on retention rate while holding all other variables constant.

For example, at four-year public colleges, enrollment positively relates to retention rate: for every 10,000 students enrolled, retention rate goes up by two percentage points. The key research finding of this brief is that caseload negatively impacts retention rate: for every 100 unit increase in caseload size, retention rate falls by 1 percentage point.

Table 1

FOUR-YEAR PUBLIC INSTITUTIONS: CASELOAD IS A SIGNIFICANT PREDICTOR OF STUDENT SUCCESS AFTER CONTROLLING FOR SIZE, SELECTIVITY, PELL-ELIGIBILITY, SPEND, AND RACE / ETHNICITY

SUMMARY INTERPRETATION

A 100-student decrease in caseload size results in a 1 percentage point increase in retention rate, while all other variables (Enrollment, Percent Hispanic/Black, Institutional Expense per FTE, Percent Pell, and Selectivity) are held constant.

For example, an institution with a retention rate at 74% will expect to see it increase to 75% if it were to decrease its average caseload size by 100 students per advisor.

	COEFFICIENT (BETA)	P-VALUE	INTERPRETATION
Statistically Significant Variables			
Percent Pell	-0.13	0.02	For each 1 percentage point increase in Pell-eligible student population, retention rate is expected to decrease by 13 percentage points (ppts)
Percent Hispanic	0.14	0	For each 1 percentage point increase in Percent Hispanic, retention rate is expected to increase by 14 ppts
Enrollment	0.02	0	For every 10,000-student increase in Enrollment, retention rate is expected to increase by 2 ppts
Institutional Expense per FTE	0.09	0	For every \$100,000 increase in Institutional Expense per FTE, retention rate is expected to increase by 9 ppts
Caseload Size	-0.01	0	For every 100-student increase in Caseload Size, retention rate is expected to decrease by 1 percentage point
Selectivity*	####	< 0.05	
Statistically Insignificant Co-Variables			
Percent Black	-0.07	0.3	
Selectivity*	####	> 0.10	



Note: All variables other than Caseload Size are taken from IPEDS.

* Selectivity classification describes the undergraduate population with respect to three characteristics: the proportion who attend part- or full-time; achievement characteristics of first-year students; and the proportion of entering students who transfer in from another institution. Each of these captures important differences in the nature of the undergraduate population.

Sources: IPEDS, Driving Toward a Degree 2021, Tyton Partners analysis

At public four-year schools, we defined a baseline regression which had an adjusted R-squared value of 0.70. Therefore, through use of this baseline set of variables, we were able to explain 70% of the variation in retention rates. Then, when we add caseload from the *Driving Toward a Degree* survey to the baseline list of independent variables, we find that caseload marginally increased the fit of the regression model to an adjusted-R-squared value of 0.72.

PRIVATE FOUR-YEAR INSTITUTIONS

At private four-year schools, we defined a baseline regression which had an adjusted R-squared value of 0.66. Therefore, through use of this baseline set of variables, we were able to explain 66% of the variation in retention rates. Then, when we add caseload from the Driving Toward a Degree survey to the baseline list of independent variables, we find that caseload marginally increased the fit of the regression model to an adjusted R-squared value of 0.67.

In the model for four-year private institutions, we have a slightly different set of significant variables. In Table 2 below we carefully explain how to interpret the model for private four-year institutions and the effect that each independent variable has on retention rate while holding all other variables constant. Caseload again negatively relates to retention rate—for every 100 student increase in caseload size, retention rate falls by 1 percentage point.

Table 2

FOUR-YEAR PRIVATE INSTITUTIONS: CASELOAD IS A SIGNIFICANT PREDICTOR OF STUDENT SUCCESS AFTER CONTROLLING FOR SIZE, SELECTIVITY, PELL-ELIGIBILITY, SPEND, AND RACE / ETHNICITY

SUMMARY INTERPRETATION			
A 100-student decrease in caseload size results in a 1 percentage point increase in retention rate, while all other variables (Enrollment, Percent Hispanic/Black, Institutional Expense per FTE, Percent Pell, and Selectivity) are held constant.			
For example, an institution with a retention rate at 74% will expect to see it increase to 75% if it were to decrease its average caseload size by 100 students per advisor.			
	COEFFICIENT (BETA)	P-VALUE	INTERPRETATION
Statistically Significant Variables			
Percent Pell	-0.44	0	For every 1 percentage point increase in Pell-eligible student, retention rate is expected to decrease by 44 percentage points
Institutional Expense per FTE	0.02	0	For every \$100,000 increase in Institutional Expense per FTE, retention rate is expected to increase by 2 percentage points
Caseload Size	-0.01	0.03	For every 100-student increase in Caseload Size, retention rate is expected to decrease by 1 percentage point
Selectivity = Four-year, full-time, inclusive, lower transfer-in	-0.12	0	Retention rates for four-year, full-time, inclusive, lower transfer-in institutions are 12 percentage points lower than four-year, full-time, inclusive, higher transfer-in institutions
Statistically Insignificant Co-Variables			
Percent Black	-0.01	0.96	
Percent Hispanic	0.01	0.91	
Enrollment	0	0.97	
Selectivity*	####	> 0.10	

Note: All variables other than Caseload Size are taken from IPEDS.

* Selectivity classification describes the undergraduate population with respect to three characteristics: the proportion who attend part- or full-time; achievement characteristics of first-year students; and the proportion of entering students who transfer in from another institution. Each of these captures important differences in the nature of the undergraduate population.

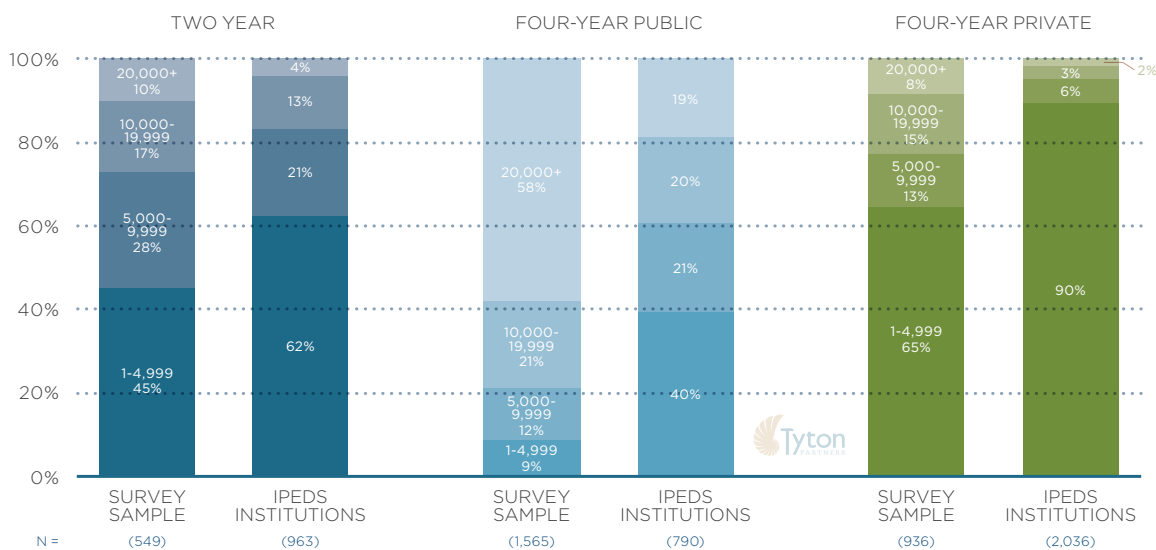
Sources: IPEDS, Driving Toward a Degree 2021, Tyton Partners analysis

APPENDIX: PART 2 – SURVEY

SURVEY DEMOGRAPHICS

Figure A1

RESPONDENT DISTRIBUTION BY INSTITUTION TYPE AND SIZE, 2021



Sources: IPEDS, Driving Toward a Degree 2021, Tyton Partners analysis

METHODOLOGY

Information for this research brief comes from a national survey of higher education administrators and advisors—including faculty. The survey was distributed through the help of the following partners: Achieving the Dream (ATD), NACADA: The Global Community for Academic Advising, NASPA - Student Affairs Administrators in Higher Education, Complete College America, EDUCAUSE, and the Reinvention Collaborative. The survey was in the field from February 2 through February 26, 2021.

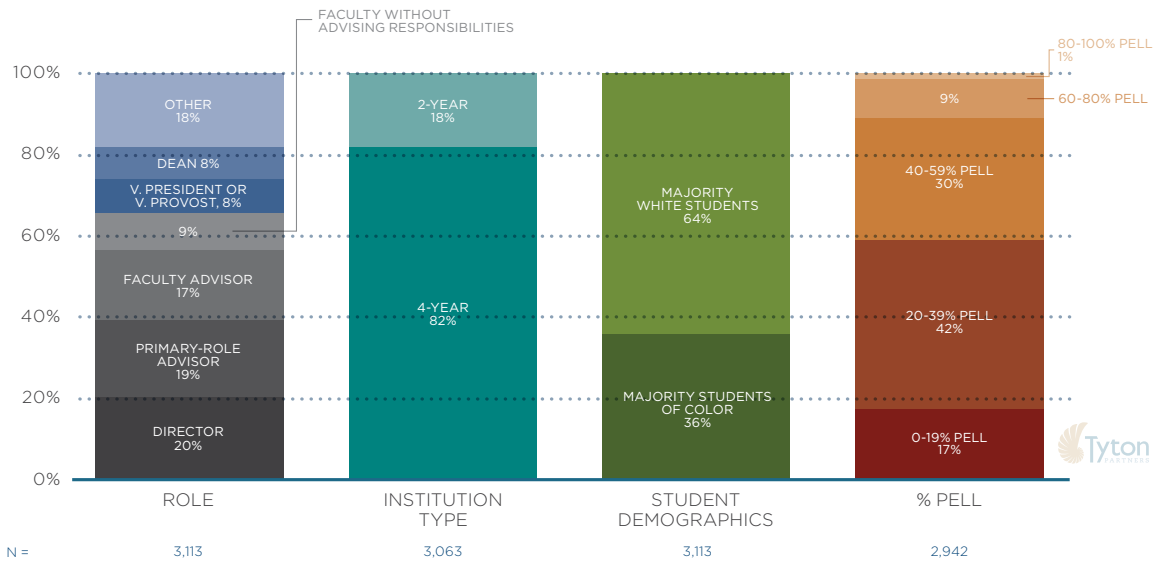
PARTICIPANTS

For the study, 2,894 higher education administrators and advisors representing over 1,300 institutions from across the U.S. higher education landscape participated in the survey. Participant institutional affiliation was matched to the federal Integrated Postsecondary Education Data System (IPEDS) to retrieve institutional characteristic data, allowing for analyses to be conducted by institutional characteristics such as sector, size, and student demographics.

The largest sectoral representation in the sample comes from public four-year institutions (51%), followed by 31% from private four-year institutions and 18% from two-year institutions. The survey sample is reasonably well-aligned to the national sample by sector and size.

Figure A2

RESPONDENT DISTRIBUTION BY INSTITUTION TYPE AND SIZE, 2021



Note: Other includes: Student affairs professional, Other (Please specify), Provost, Career services professional, Chief Business Officer / Chief Financial Officer, Financial aid professional, Chief Technology/Information Officer (CTO/CIO), Mental health professional

Sources: IPEDS, Driving Toward a Degree 2021, Tyton Partners analysis

MATERIALS

The survey consisted of questions designed for administrators and advisors with roles in the following student supports: academic advising, career services, financial aid and literacy, student life, counseling & psychological services, academic support/ tutoring, and teaching.

PROCEDURES

All data were checked for completeness, missing values, or erroneous codes. All responses entered as 'other' were reviewed to determine if they should also be coded as one of the fixed responses. Data weighting was used to adjust the survey sample size to more accurately represent the national postsecondary education institutions. To ensure confidentiality and anonymity, results are presented in aggregate and summary statistics.

ABOUT THE INITIATIVE

Driving Toward a Degree is a data-driven resource designed to help institutions pursue integrated student supports. Since 2016, data has been collected and analyzed via longitudinal primary research studies by Tyton Partners, with the support of the **Bay View Analytics** and in partnership with **NASPA** —Student Affairs Administrators in Higher Education, **NACADA: The Global Community for Academic Advising**, **Achieving the Dream** (ATD), **EDUCAUSE**, **Complete College America**, and the **Reinvention Collaborative**. Contact Tyton Partners (drivetodegree@tytonpartners.com) to take advantage of the *Driving Toward a Degree* initiative as a data-driven resource for improved student success through supports redesign. To learn more about our organization, visit tytonpartners.com.

We welcome the opportunity to help institutions and suppliers alike address the gaps in their policies, practices, and technological products, and to assess current capabilities and identify future needs. To learn more and access other research briefs in this series or prior year studies, visit drivetodegree.org.

We also invite you to share this series and your perspective on holistic student supports via the Twitter hashtag **#drivetodegree**.

This publication was created with feedback from the **Advising Success Network** (ASN). ASN is a dynamic network of five organizations partnering to engage institutions in holistic advising redesign to advance success for Black, Latinx, Indigenous, Asian, and Pacific Islander students and students from low-income backgrounds. The network develops services and resources to guide institutions in implementing evidence-based advising practices to advance a more equitable student experience to achieve our vision of a higher education landscape that has eliminated race and income as predictors of student success. The ASN is coordinated by **NASPA - Student Affairs Administrators in Higher Education**, and includes **Achieving the Dream**, the **American Association of State Colleges and Universities**, **EDUCAUSE**, **NACADA: The Global Community for Academic Advising**, and the **National Resource Center for the First-Year Experience and Students in Transition**.

Driving toward a Degree and the Advising Success Network are made possible thanks to generous support from the **Bill & Melinda Gates Foundation**.

ABOUT TYTON PARTNERS

Tyton Partners is the leading provider of advisory services to the education market, with a unique dual practice offering in investment banking and strategy consulting services. In the higher education ecosystem, we work with a wide range of colleges and universities to tackle their biggest strategic challenges and develop and execute on plans that enable them to grow, evolve, and thrive. Tyton Partners helps clients drive teaching and learning innovation, scale online operations, diversify and grow revenue, improve student success, better align with workforce outcomes, and realize transformative public/private partnerships, mergers, and affiliations. For more information, visit tytonpartners.com.

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