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Bloem, M. (2021). The Effects of Minimum College Transfer Admissions Requirements within the University System of Georgia. Georgia Policy Labs. <https://doi.org/10.57709/30728959>

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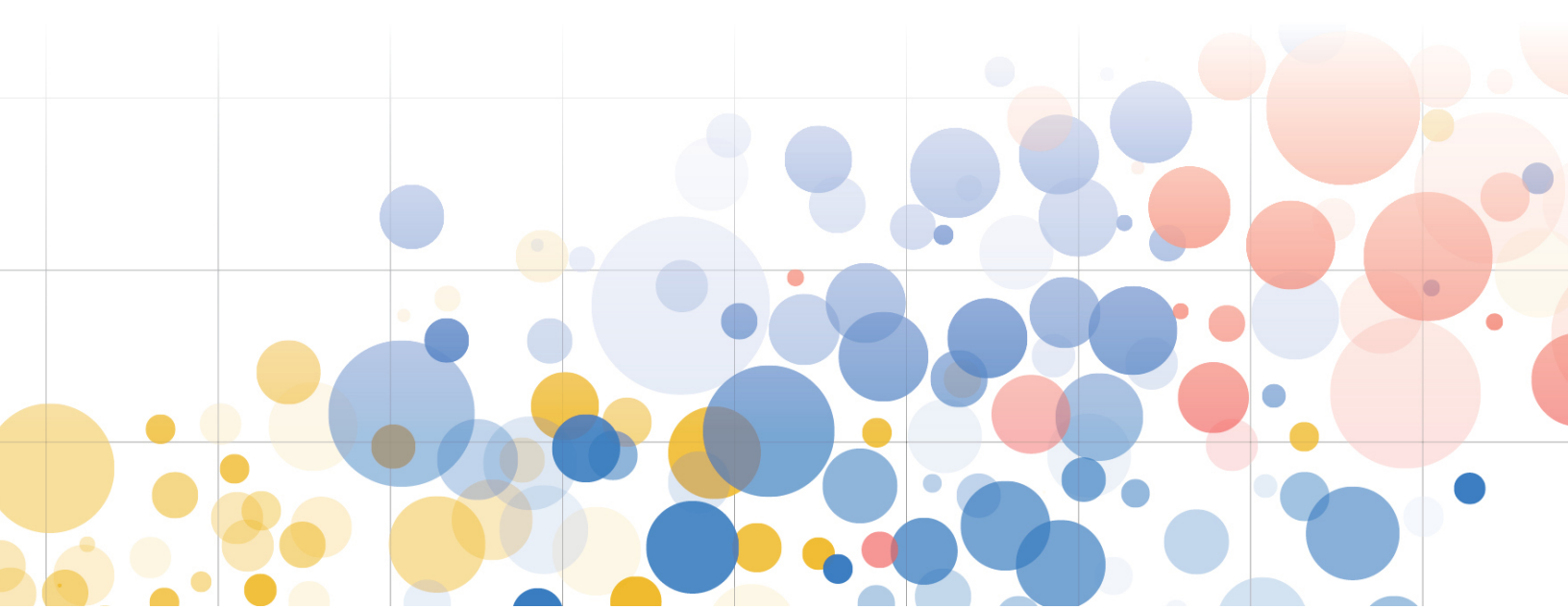
Georgia Policy Labs

The Effects of Minimum College Transfer Admissions Requirements within the University System of Georgia

May 2021

Michael D. Bloem
Georgia Policy Labs

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OVERVIEW

CONTEXT

The University System of Georgia (USG) sets minimum transfer admissions requirements for its institutions that differ with the institution's classification as a research university, comprehensive university, state university, or state college. For the three types of universities, the requirements consist of minimum grade-point-average (GPA) thresholds. Institutions, however, can set thresholds above the USG minimums and set other admissions criteria. The USG and institutional-minimum transfer GPA requirements, which apply for students with at least 30 transferrable credits, can influence students' movement within the system.

THIS REPORT

This report uses administrative records from the USG between 2007 and 2019 to study how the minimum GPA requirements affect transfers within the system. It examines the characteristics of students who transfer. It also investigates how transfer patterns in the short and long run vary with students' 30-credit-hour GPAs, focusing on differences among students who are just above and just below the minimum GPA thresholds—making them barely eligible or ineligible to transfer to a given institution at that point in time. Finally, the report assesses how the impacts of these requirements differ across students of different characteristics and institution types.

KEY FINDINGS

- Transfers are common within the USG. In our data, 22 percent of students who are subject to the minimum admissions requirements transfer between USG institutions at least once. Most of these transfers can be characterized as "upward" transfers in that they represent a change from a state college to a university or from a state or comprehensive university to a research university.
- In many cases, the minimum transfer GPA requirements appear to have an influence on transfer patterns. These effects are most apparent for the minimum GPA (3.2) required to transfer to the University of Georgia. Students with a GPA just above the 3.2 minimum at 30 credits are three times as likely to transfer to the University of Georgia within one year compared to students with a GPA just below 3.2.
- The minimum transfer GPA requirements, however, have a more distinct effect on the *timing* of when students transfer as opposed to whether students ever transfer to a particular institution. This may occur because students have many opportunities to transfer and can improve their GPAs over time, making themselves eligible for transfer admissions in later terms.
- In some cases, the minimum transfer GPA requirements have differential impacts by student characteristics. For instance, the University of Georgia's minimum GPA requirement has a larger impact on students from higher-income families, and Georgia State University's minimum GPA requirement has a larger impact on underrepresented minority students.
- Consistent with state colleges being the most common "sending" institutions in our sample, the effects of the minimum transfer GPA requirements are generally largest for the students at these institutions (as well as those at two-year colleges in the early years of the data).

Contents

Overview	2
Context	2
This Report	2
Key Findings.....	2
Background and Introduction.....	4
Data	5
Findings	6
Research Question #1: What are the characteristics of students who transfer?	6
Research Question #2: To what extent do the minimum GPA requirements influence transfers between USG institutions?	10
Research Question #3: Do the minimum GPA requirements have more influence for students from underrepresented groups or different types of institutions?	14
Conclusion and Policy Considerations	21
References.....	23
Acknowledgments.....	24
Appendix Tables.....	25
Data Appendix.....	27

BACKGROUND AND INTRODUCTION

Many college students attend multiple institutions during their educational careers, primarily due to transfers between institutions (McCormick, 2003). Nearly one-third of all post-secondary students in the United States transfer at least once.¹ Transfers are also common among the students within the University System of Georgia (USG). For example, about one-third of the new students enrolled in USG institutions during academic year (AY) 2018-19 were admitted as transfers;² many of these students transferred from other USG institutions.³ The prevalence of transfers within USG and in the United States more broadly motivates a need to understand transfer patterns and how transfer policies impact those patterns.

This report investigates transfers of students between USG institutions and focuses on one specific transfer policy: the minimum transfer admissions requirements that the system and individual institutions set. According to USG policy, institutions must set minimum transfer admissions requirements based on their institutional sector as either a research university, comprehensive university, state university, or state college. For the three types of universities, this requires setting a minimum college GPA that students must have for transfer admissions consideration. Specifically, USG's minimum transfer admissions requirements for each institutional sector is as follows:

- Research universities must have a minimum transfer GPA of at least 2.3.
- Comprehensive and state universities must have a minimum transfer GPA of at least 2.0.
- State colleges must require that students be eligible to continue or return to their sending institution.

Institutions can set minimum transfer admissions requirements that are higher than what USG requires. The University of Georgia (UGA) and the Georgia Institute of Technology (Georgia Tech) do this, with minimum transfer GPAs of 3.2 and 3.0, respectively. Importantly, the GPA criteria only apply to students with at least 30 transferrable credit hours. Students with fewer credit hours are subject to the freshman admissions requirements at each institution (e.g., SAT/ACT scores). Finally, the GPA requirements are minimum admissions criteria, so meeting an institution's GPA requirement does not guarantee transfer admission to that institution.

The USG currently consists of 26 public institutions. These institutions are grouped into the four sectors based on each institution's specific mission and function.⁴ While teaching is a core focus at all USG institutions, the four sectors differ in their emphasis on research and the types of degrees offered. Research is emphasized the most at research universities, followed in order by comprehensive universities

¹ This share of transfers is relatively consistent across different datasets, including among students in Texas public institutions at 31 percent (Andrews et al., 2014), the National Longitudinal Survey of Youth 1997 cohort at 27 percent (Dillon & Smith, 2020), the National Educational Longitudinal Study at 33 percent (Goldrick-Rab & Pfeffer, 2009), and the High School & Beyond Survey at 22 percent (Hilmer, 2000).

² The calculations are derived from USG's fiscal year 2019 enrollment reports, which can be found at usg.edu/research/enrollment_reports.

³ USG creates annual reports of transfers within the system. An archive of the reports can be found at usg.edu/research/student_progression.

⁴ Due to consolidations, some institutions have a "blended" function, where institutions serve the functions of multiple sectors. Institutions that operate with a blended function include Georgia State University, Albany State University, Middle Georgia State University, and the University of North Georgia.

and state universities. Research and comprehensive universities typically do not offer Associate degree programs but do offer master's-level and doctoral programs. State universities offer undergraduate and master's-level programs, while typically having very few or limited doctoral or Associate degree programs. State colleges offer bachelor's and Associate degree programs, as well as general education courses, but offer no graduate programs. Some state colleges offer mostly Associate degree programs and only a few select, professionally-oriented bachelor's degree programs.

We use administrative records from USG between AY 2007-08 and AY 2018-19, containing information on transfers and other outcomes. Our data include students who earned at least 30 credit hours at a USG institution and were therefore plausibly subject to the GPA requirements. The report studies three research questions:

1. What are the characteristics of students who transfer between USG institutions?
2. To what extent do the minimum GPA requirements influence transfers between USG institutions?
3. Do the minimum GPA requirements have more influence for students from underrepresented groups or different types of institutions?

The report begins by documenting the average characteristics of transfer students who were plausibly subject to the transfer admissions policies. It then investigates how transfers vary with students' 30-credit-hour GPAs, focusing on differences among students who are just above and just below the minimum GPA thresholds—making them barely eligible or ineligible to transfer to a given institution. Next, the report considers how these GPA requirements differentially affect the transfer patterns across student groups and "sending" institution types. Overall, this study helps us understand how USG's existing policies affect the movement of its students.

DATA

We use USG administrative data between AY 2007-08 and AY 2018-19. These data include student-by-term enrollment records, which allow us to identify all student transfers between USG institutions during this period. The data also contain students' cumulative GPAs at the end of each term, which is critical for determining students' eligibility for transfer admissions to different institutions. We follow students' enrollment histories at all USG institutions and track whether, when, and where students transfer between institutions. We observe transfers by using an identifier that indicates whether students were admitted as a transfer student. Thus, we focus on officially recorded transfers, as opposed to simply observing whether students enroll in multiple institutions over time.

We make three restrictions in our analysis data. First, we limit the analysis to students who enter a USG institution as a first-time freshman in order to exclude students who may have entered USG as transfer student from outside USG and other types of students. Second, we restrict the analysis to students who enter a USG institution between the Fall 2007 and Fall 2013 terms to allow students sufficient time to progress through a degree program. Finally, we limit the analysis to students who have earned at least 30 credit hours because these are the students who are plausibly subject to USG's minimum transfer admissions requirements.

We create an analysis data set that includes one observation per student. Key variables include students' GPA and institution in the term in which they complete 30 credits, indicators for whether students transfer after earning 30 credits, and the institution to which students transfer. The term that students complete 30 credits and students' GPAs in that term are determined by using institution-specific credit hours.⁵

The analysis data also include student demographic variables such as race, ethnicity, and gender. To determine these variables, we use the information recorded in the student's first term of enrollment in a USG institution. We also use the first (non-missing) adjusted gross income (AGI) for each student to classify students as "higher income" (AGI \geq \$60,000) and "lower income" (AGI $<$ \$60,000). AGI is recorded from students' filings of the Free Application for Federal Student Aid (FAFSA); thus, we only have information on a student's family income if they have ever completed the FAFSA. We provide more detail on the construction of our measures and key variables in the [Data Appendix](#).

FINDINGS

RESEARCH QUESTION #1: WHAT ARE THE CHARACTERISTICS OF STUDENTS WHO TRANSFER?

We address the first research question by first grouping all transfer students in the analysis data set by the sector of their sending and receiving institutions.⁶ We plot the transfer patterns in Figure 1 as a Sankey diagram, which visualizes the frequency with which different transfer transitions occur between different types of sending (left-hand side) and receiving (right-hand side) institutions.

Currently, and through most of the years in our analysis data, most of USG's institutions primarily grant bachelor's degrees; however, a few institutions were classified as two-year colleges (which only offer sub-baccalaureate awards) during the first few years of the data. Each of these institutions was subsequently either reclassified as a state college or was consolidated with another state college or state university. Overall, 22 percent of the students in our data set (62,287 of 284,375) transferred between USG institutions. Much of the attention on college transfers in the academic literature focuses on transfers between two-year and four-year colleges. Because USG institutions predominantly granted bachelor's degrees during our study period, we highlight that transfers between four-year colleges are also common—further motivating the analysis of this student population.

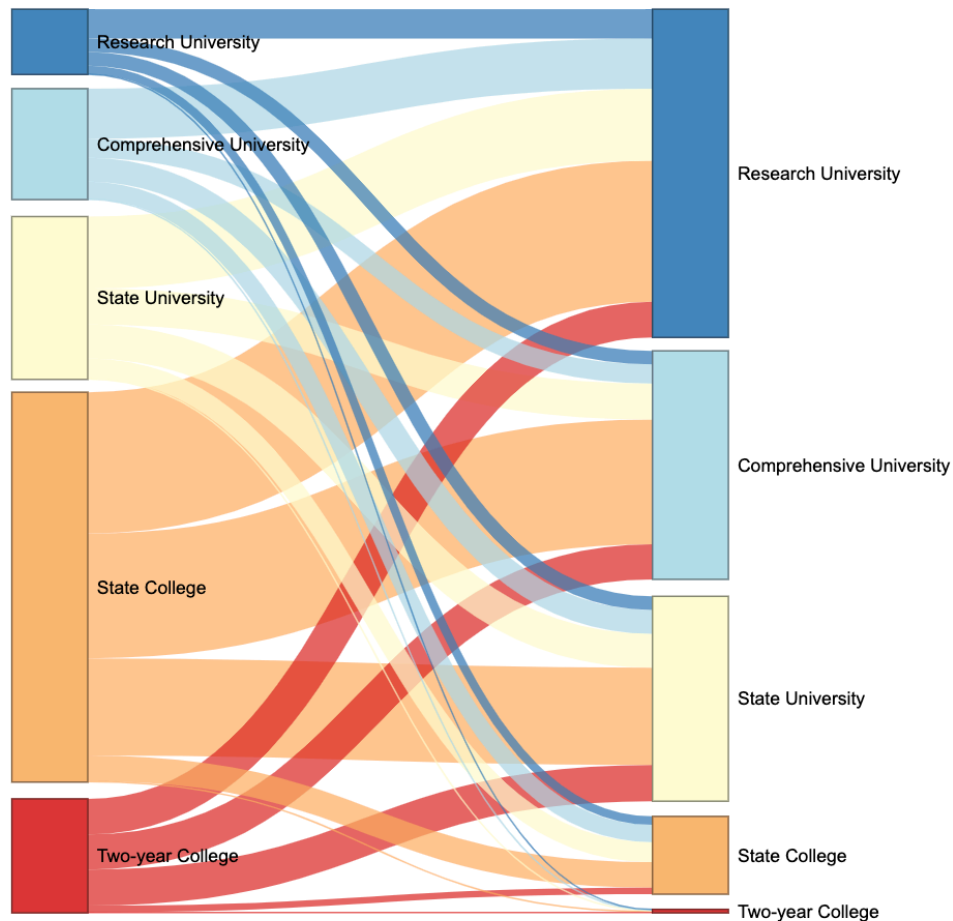
Several findings stand out from Figure 1. First, a plurality of transfer students come from state colleges. Second, research universities are the most common transfer destination. Third, most transfers (66 percent) can be considered as "upward" transfers in the sense of moving to an institution with a higher USG classification (i.e., from a state college to a university or from a state or comprehensive university to a research university). Fourth, "lateral" transfers (i.e., transfers between institutions of the same USG classification) and "downward" transfers (i.e., transfers to an institution with a lower USG classification)

⁵ Because we limit the analysis to students who enter USG as a first-time freshman, analyses are not substantively different if we use credit hour variables that include transfer credits.

⁶ We use the terms "sending" and "receiving" or "destination" throughout this report to refer to the institution of origin and the institution to which the student transferred, respectively. We note that these terms are slightly misrepresentative because the students take an active role in this process.

are relatively rare. Therefore, within the population of students who are subject to the minimum transfer admissions requirements, upward transfers are the most common.

Figure 1. College Transfer Transitions by Sending and Receiving Institution Classification



Notes: This figure is a Sankey diagram of the 62,287 college transfers in the sample. On the left-hand side are the institution classification of transfer students' sending institution. On the right-hand side are the institution classification of transfer students' receiving institution. The size of the paths between sending and receiving institution type are proportional to the number of students taking each transfer path.

Next, we examine the average characteristics of students who earned at least 30 credit hours and are plausibly subject to the transfer admissions requirements. Table 1 displays average demographic, student background, and academic characteristics across several sub-samples within the data.

The second and third data columns in Table 1 make comparisons between transfer and non-transfer students. Demographically, transfer and non-transfer students are very similar on average. For instance, Black students make up about 26 percent of transfer students and 24 percent of non-transfer students. On average, transfer students have a lower AGI than non-transfer students, although the difference is modest. Academically, there is little difference between transfer and non-transfer students' GPAs at 30 credits; however, transfer students are much more likely to earn an Associate degree within six years of entering USG than non-transfer students. This potentially reflects that transfer students are more likely to have initially attended a state college or two-year college that offers Associate degree programs. Finally,

rates of bachelor's degree completion within six years of entering USG are similar between transfer students (53.6 percent) and non-transfer students (56.9 percent). Among those who complete a bachelor's degree, however, transfer students take longer on average to earn the degree (5.13 years) than non-transfer students (4.37 years).

The last five columns show the characteristics of students who transferred to specific destinations. Specifically, we split transfer students by whether they transferred to the University of Georgia, Georgia Tech, or Georgia State University (the three large research universities);⁷ any state or comprehensive university; and any state college. By characterizing transfer students by their destination institution, some significant differences in student characteristics emerge relative to non-transfer students. Students who transfer to the University of Georgia are more likely to be male, White, and have a higher AGI than other students and other transfer students. Students who transfer to Georgia Tech are more likely to be male, Asian, and have a higher AGI; the proportion of Georgia Tech transfers who are men is especially striking at 88 percent. In contrast, students who transfer to Georgia State University or any comprehensive university, state university, or state college are more likely to be female, Black, and have a lower AGI than other students and other transfer students.

⁷ Georgia State University is classified as a research university. However, the institution has had a dual mission since consolidating with Georgia Perimeter College in 2016.

Table 1. Average Characteristics of Transfer Students

	Full sample	Non-transfer students	USG Transfer Destination					State or Comp. Universities	State Colleges
			Any	University of Georgia	Georgia Tech	Georgia State University			
<i>Demographics</i>									
Female	57.0	57.3	56.2	48.3	22.2	60.4	58.8	63.1	
White	56.3	56.6	55.3	73.4	53.7	34.5	55.6	54.2	
Black	24.6	24.3	25.8	5.9	11.0	35.7	30.1	30.0	
Asian	6.8	6.8	6.9	8.9	20.8	12.6	3.6	4.6	
Other race	2.9	3.0	2.6	2.3	2.6	3.8	2.4	2.4	
Unknown race	3.5	3.4	3.6	3.8	4.6	4.8	3.0	4.2	
Hispanic	5.9	5.9	5.8	5.7	7.3	8.7	5.2	4.6	
URM	30.8	30.5	32.0	11.8	18.6	44.9	35.6	35.1	
<i>Background</i>									
Georgia resident	93.1	92.1	96.6	97.9	98.0	96.0	96.0	97.6	
AGI (in \$1,000s)	\$92.3	\$94.4	\$85.1	\$115.0	\$105.0	\$70.6	\$78.6	\$79.3	
Missing AGI	10.2	11.1	6.8	9.0	9.3	6.4	6.0	6.8	
Financially independent	9.4	9.6	8.8	4.9	7.9	13.1	9.2	6.9	
<i>Academics</i>									
GPA at 30 credits	3.0	3.0	3.0	3.5	3.6	3.0	2.9	2.7	
Total credits	119.6	106.4	121.2	126.2	138.0	124.9	120.0	105.1	
Earned Associate degree	8.2	4.9	19.8	14.3	9.5	23.8	21.7	20.2	
Earned bachelor's degree	56.2	56.9	53.6	80.3	74.7	53.3	47.7	29.1	
Years to bachelor's	4.6	4.4	5.1	4.6	5.0	5.3	5.3	5.6	
<i>Original institution</i>									
Research university	27.2	32.3	8.7	10.6	20.2	4.1	6.8	11.0	
Comp. university	18.1	18.8	15.3	19.2	21.8	13.6	12.5	22.8	
State university	24.5	25.7	20.5	25.9	28.6	19.0	17.3	25.6	
State college	25.9	20.8	44.0	39.2	23.8	49.3	49.1	33.1	
Two-year college	4.4	2.4	11.5	5.1	5.5	14.0	14.4	7.5	
Number of students	284,375	222,088	62,287	9,822	3,492	9,249	32,100	6,178	

Notes: This table shows average characteristics, where each column refers to a student population. The sample includes all first-time freshmen students entering between Fall 2007 and Fall 2013 who completed at least 30 credits. AGI stands for adjusted gross income. All averages are reported in percentages except for AGI, GPA at 30 credits, and total credits. Associate and bachelor's degree completion are computed within six years of students' entry into USG.

RESEARCH QUESTION #2: TO WHAT EXTENT DO THE MINIMUM GPA REQUIREMENTS INFLUENCE TRANSFERS BETWEEN USG INSTITUTIONS?

We now analyze how the minimum GPA requirements at a given institution impact transfers to that institution. To do this, we compare transfer rates for students with GPAs just above a given minimum transfer GPA threshold to the rates for students with GPAs just below. This methodology is valuable because where students' GPAs fall within very small ranges should be unrelated to other factors that might explain transfer patterns, including students' interest in transferring to a given institution. Students just above and just below a particular threshold should be very similar on average. The only difference is that students just above are eligible for transfer admission and students just below are ineligible. Thus, we can interpret any observed "jump" in transfer rates that occurs at a GPA threshold as the effect of the minimum GPA requirement. Additionally, a jump in the transfer rate at a GPA threshold would illustrate that there likely are students who desire to transfer but are unable to do so because their GPA makes them barely ineligible. We separately analyze four different transfer eligibility thresholds: 1) the 3.2 minimum GPA requirement to transfer to the University of Georgia, 2) the 3.0 minimum GPA requirement to transfer to Georgia Tech, 3) the 2.3 minimum GPA requirement to transfer to Georgia State University,⁸ and 4) the 2.0 minimum GPA requirement to transfer to a state or comprehensive university.

The main results of this analysis are shown graphically in Figures 2-5; however, we also report estimates from corresponding regression specifications in the appendix.⁹ To conduct these graphical analyses, we first observe students' cumulative GPA in the term in which they complete 30 credits, which is the last term before students become subject to the minimum transfer admissions requirements. Then, we put the GPAs into bins with widths of 0.05 GPA points and plot these binned GPAs on the horizontal axis. Finally, we plot the percentage of students in each GPA bin who transfer to the relevant institution (or group of institutions) on the vertical axis. For each of the four admissions thresholds, we plot two outcomes: one that shows the share of students who *ever* transfer after earning 30 credits and one that shows the share of students who transfer *within one year* after earning 30 credits. Plotting both these outcomes helps to assess how the minimum GPA requirements affect the timing of transfers. For example, while the figures place students above or below each threshold based on their GPA at 30 credits, students' position relative to the threshold can change over time as students earn more grades. Thus, the effect of the GPA thresholds may become smaller as more time passes. The key analysis in each of the figures is identifying how transfer rates change at the transfer eligibility threshold.

We focus first on the impacts of the University of Georgia's minimum transfer GPA requirement, shown in Figure 2. The solid dots show the proportion of students transferring to the University of Georgia within one year of observing their GPAs. Overall, transfer rates are low (less than 5 percent for any GPA level) because we consider only one transfer destination institution, and the sample includes students from all other USG institutions when they earn 30 credits. At the 3.2 GPA threshold, we observe a sharp and

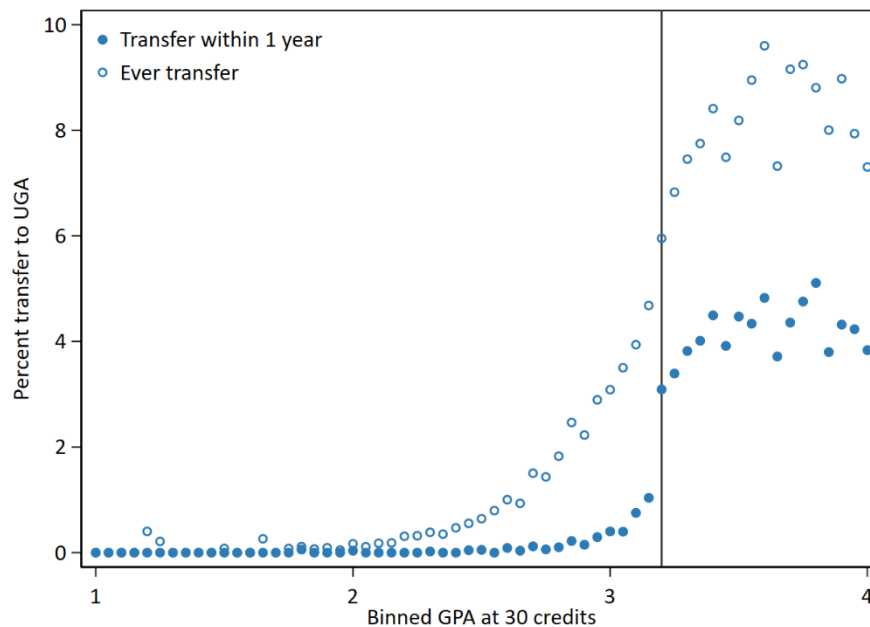
⁸ Although a 2.3 GPA is USG's required minimum for research universities, the University of Georgia and Georgia Tech set higher thresholds. Accordingly, we only consider this threshold for transfers to Georgia State University. There is a fourth research university, Augusta University; however, we do not analyze the effects of the transfer GPA requirements at Augusta University because it enrolls a modest number of undergraduate students during the time period of our analysis data set.

⁹ The regression analyses estimate the size of the "jump" in transfer rates at each threshold and test whether they are statistically significantly different from zero.

distinct jump in the probability of transferring to the University of Georgia. Just below the threshold, about 1 percent of students transfer, while 3.1 percent transfer just at the threshold. This indicates that students just above the University of Georgia's transfer eligibility threshold at 30 credits are three times more likely to transfer there within one year than students just below the threshold.

We use hollow dots to indicate the percentage of students in each GPA bin who *ever transfer* after earning 30 credits. Widening the transfer measurement window necessarily increases overall transfer rates. It not only includes students who transfer within a year but also all students who transfer later. At the 3.2 GPA threshold, there is still a small discontinuous jump in transfer rates by 1.5 percentage points, but the relationship has become much less distinct. A substantial number of students were below UGA's 3.2 GPA threshold at 30 credits but eventually transferred to UGA. This is likely due to the dynamic nature of college transfer opportunities. Students can attempt to transfer in nearly any term. A student who is ineligible to transfer to the University of Georgia at one point in time may become eligible at a later point in time by improving their GPA in future terms. As the later analyses will indicate, this pattern where the effects of the minimum transfer GPA requirements are more distinct in the short run than in the long run is consistent across different institutions and types of institutions.

Figure 2. The Impact of University of Georgia's Minimum Transfer GPA Requirements

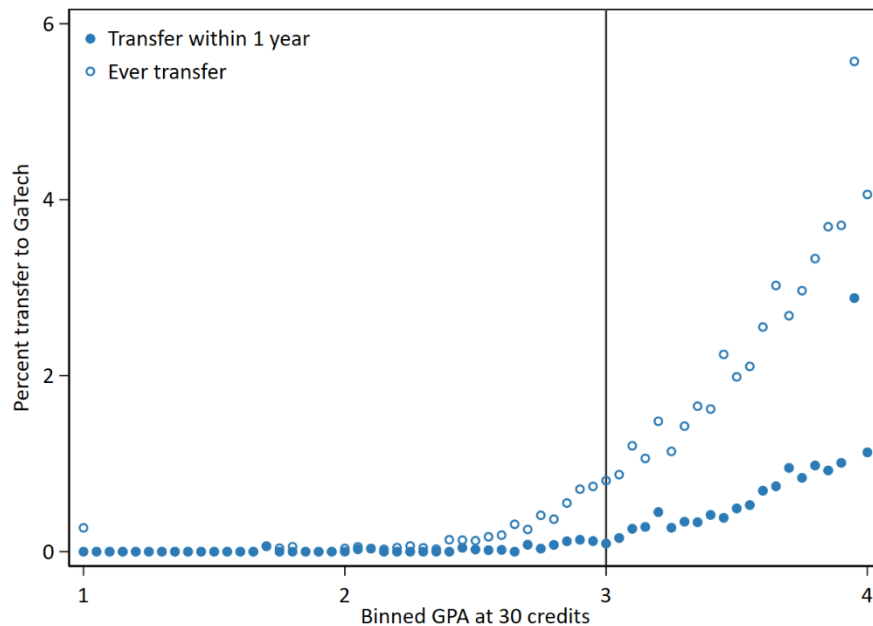


Notes: This figure shows the impact of UGA's 3.2 minimum transfer GPA. On the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points. The solid dots show the percentage of students in each GPA bin that transfer to the University of Georgia within one year of earning 30 credits. The hollow dots show the percentage of students in each GPA bin that ever transfer to the University of Georgia after earning 30 credits.

Next, we consider the impact of Georgia Tech's 3.0 minimum transfer GPA requirement. In Figure 3, we observe no effect of being above Georgia Tech's threshold on transfer either within one year or ever after earning 30 credits. We cannot determine from the data why there is an effect of other minimum transfer GPA requirements but not Georgia Tech's threshold. One potential reason could be that Georgia Tech is so selective with transfer admissions that students generally need a much higher GPA to be competitive.

Institutional and curricular factors at Georgia Tech, which offers relatively distinct majors with specific pre-requisites, could also be at play.

Figure 3. The Impact of Georgia Tech's Minimum Transfer GPA Requirements

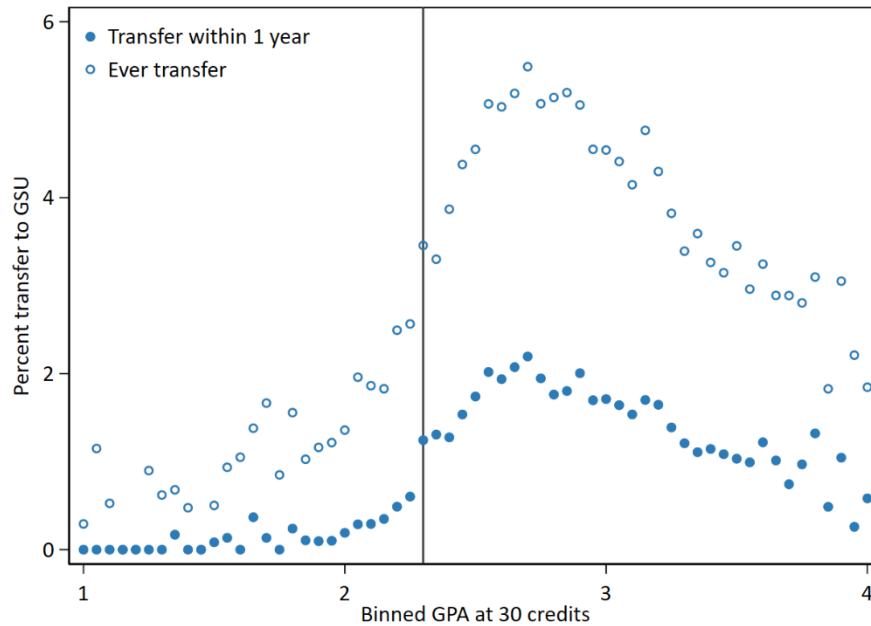


Notes: This figure shows the impact of Georgia Tech's 3.0 minimum transfer GPA. The horizontal axis shows students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points. The solid dots show the percentage of students in each GPA bin that transfer to Georgia Tech within one year of earning 30 credits. The hollow dots show the percentage of students in each GPA bin that ever transfer to Georgia Tech after earning 30 credits.

Next, in Figure 4, we consider the impact of Georgia State University's minimum transfer GPA requirements. The solid dots show that students with a GPA just above Georgia State University's 2.3 requirement at 30 credits are a little less than one percentage point more likely to transfer to Georgia State University within one year than students just below the threshold. This represents an increase of nearly 100 percent. The jump at the 2.3 GPA threshold in ever-transfer rates to Georgia State University is of a similar magnitude as the jump in transfer rates within one year. Although, similar to the impact of the University of Georgia's minimum GPA, the relationship is less distinct in the long run.

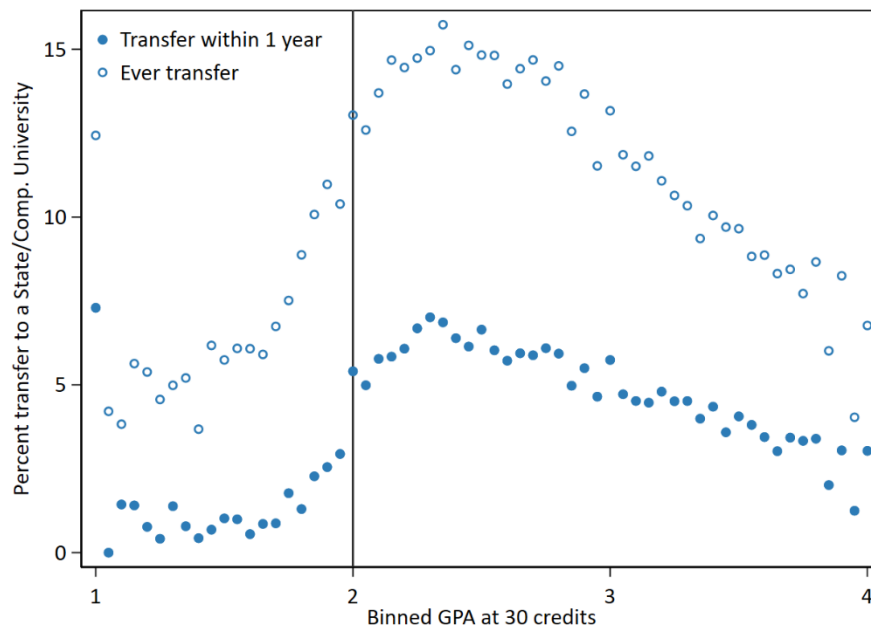
Finally, Figure 5 evaluates the impact of the minimum GPA requirements to transfer to a state or comprehensive university. Rather than considering transfers to one specific institution, here we consider transfers to any of the 13 institutions that make up the state and comprehensive universities within USG. Because we are considering many institutions, overall transfer rates are much higher than in Figures 2 and 3. At the 2.0 minimum GPA threshold, the solid dots show that having a GPA just above the threshold at 30 credits increases the probability of transfer to a state or comprehensive university within one year by about two percentage points (or roughly 67 percent). The jump in the ever-transfer rates at the 2.0 threshold is also roughly two percentage points, although this relationship is less distinct than with transfer rates within one year.

Figure 4. The Impact of Georgia State University's Minimum Transfer GPA Requirements



Notes: This figure shows the impact of Georgia State University's 2.3 minimum transfer GPA. The horizontal axis shows students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points. The solid dots show the percentage of students in each GPA bin that transfer to Georgia State University within one year of earning 30 credits. The hollow dots show the percentage of students in each GPA bin that ever transfer to Georgia State University after earning 30 credits.

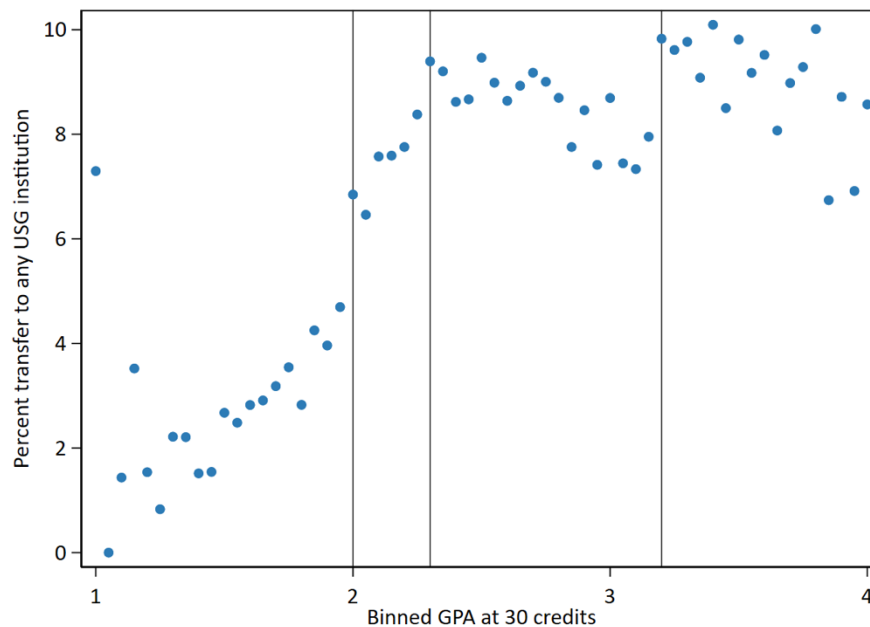
Figure 5. The impact of minimum transfer GPA requirements for State/Comprehensive Universities



Notes: This figure shows the impact of the 2.0 minimum GPA requirement to transfer to a state or comprehensive university. The horizontal axis shows students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points. The solid dots show the percentage of students in each GPA bin that transfer to a state or comprehensive university within one year of earning 30 credits. The hollow dots show the percentage of students in each GPA bin that ever transfer to a state or comprehensive university after earning 30 credits.

In summary, we find an effect of the minimum transfer GPA requirements on transfers at the University of Georgia, Georgia State University, and the state and comprehensive universities but not at Georgia Tech. These effects can also be seen within a broader context of transfer within USG. In Figure 6, we plot the share of students within each GPA bin who transfer to *any* USG institution within one year of earning 30 credits. The figure shows jumps in the overall transfer rate at each of the three transfer admissions thresholds for state and comprehensive universities, Georgia State University, and the University of Georgia that are a similar magnitude of the jumps documented in Figures 2, 4, and 5. This indicates that the local effects of these transfer GPA requirements are also meaningful in determining broader transfer patterns within USG.

Figure 6. Transfer Rates to Any USG Institution Within 1 Year of Earning 30 Credits



Notes. This figure shows the impacts of the three minimum transfer GPA requirements on overall transfer rates to any destination institution. The horizontal axis shows students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to any USG institution within one year. The three vertical lines represent the minimum transfer GPA requirements for state/comprehensive universities, GSU, and UGA, respectively.

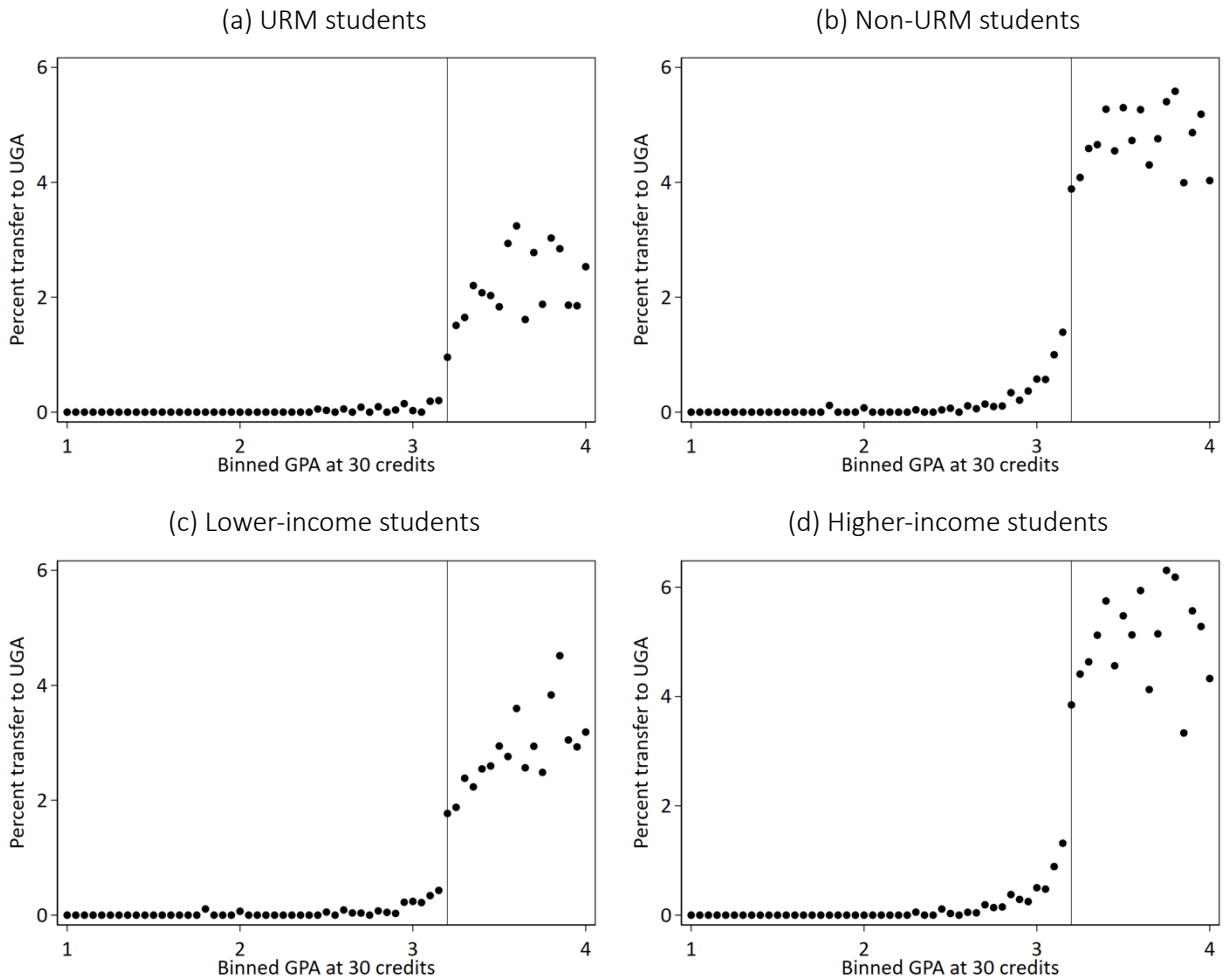
RESEARCH QUESTION #3: DO THE MINIMUM GPA REQUIREMENTS HAVE MORE INFLUENCE FOR STUDENTS FROM UNDERREPRESENTED GROUPS OR DIFFERENT TYPES OF INSTITUTIONS?

We next analyze whether the effects of the minimum transfer GPA requirements differ by students' characteristics and classification of institution attended. We conduct the same graphical analyses used for the second research question, but here we separately analyze different subpopulations of students. For each of these figures, we just focus on the one-year transfer window. We also omit the analyses for Georgia Tech because we found no effect for the general set of transferring students in the second

research question. For student characteristics, we classify students as an underrepresented minority (URM) if they identify as Black, Hispanic, or Native American and non-URM if they identify as any other race, which includes White, Asian, or other race. We classify students as "lower" or "higher" income based on whether their AGI was reported to be less than or greater than \$60,000. For types of institutions, we observe the institution students were enrolled in during the term in which they earned 30 credits. Then, we use USG's institution classifications combining students attending two-year colleges and state colleges as well as students attending state universities and comprehensive universities. We report estimates from the corresponding regression specifications in the Appendix.

Starting with UGA's 3.2 transfer GPA requirement, Figure 7 shows the differential impacts of the admissions requirement by students' race/ethnicity and family income. Panels A and B indicate the impact of the University of Georgia's GPA requirement is concentrated among non-URM students. There is about a three-percentage-point increase in the probability of transfer to the University of Georgia within one year at the threshold for non-URM students and about a one-percentage-point increase for URM students. Panels C and D show that the effect is also concentrated among students of higher-income families (about three percentage points). Both these findings are consistent with the summary statistics reported in Table 1, which show that students who transfer to the University of Georgia are relatively more likely to be White and from higher-income families.

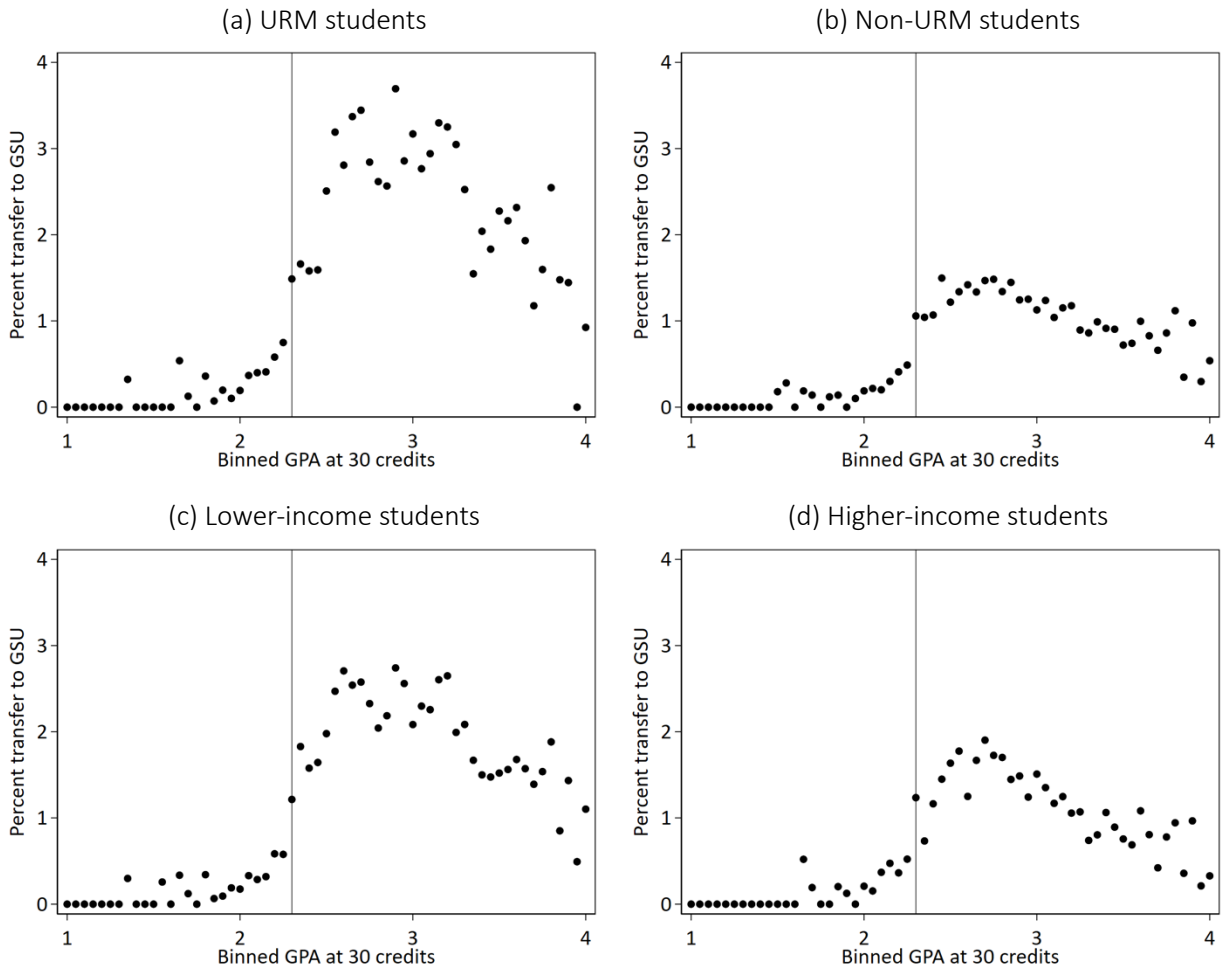
Figure 7. Differential Impact of University of Georgia's Minimum Transfer GPA Requirements by Student Characteristics



Notes: This figure shows the differential impact of the University of Georgia's 3.2 minimum transfer GPA by student characteristics. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to the University of Georgia within one year of earning 30 credits. Panels A and B split the sample by whether the student belongs to an underrepresented minority (URM), defined as either Black, Hispanic, or Native American. Non-URM is defined as any other race, including White, Asian, or other race. Panels C and D split the sample by whether the student is from a higher or lower income family, defined as being above or below an AGI of \$60,000.

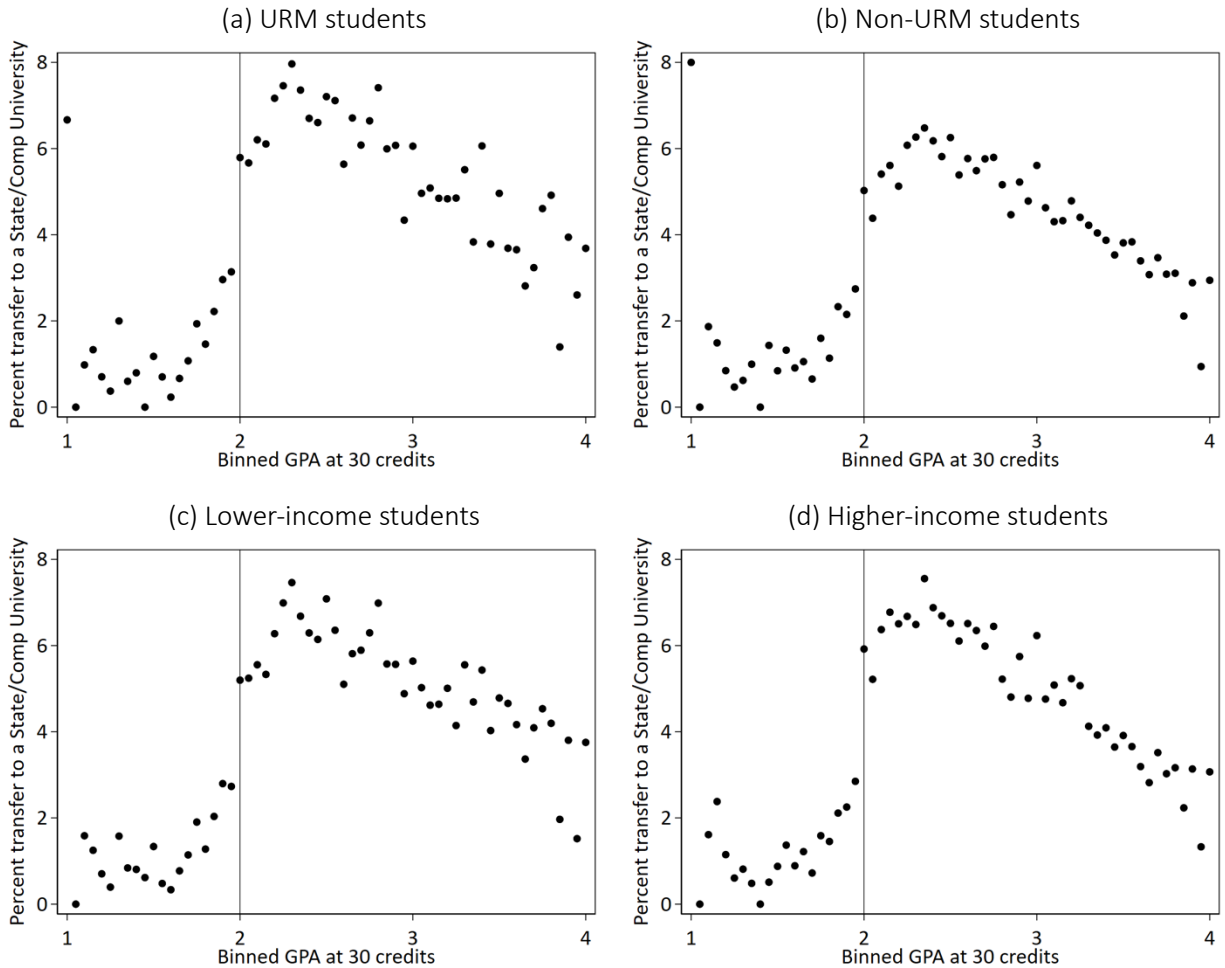
Figure 8 displays the differential impacts of Georgia State University's 2.3 minimum transfer GPA requirement. Unlike the analysis of the University of Georgia's threshold, Georgia State University's threshold has a slightly larger impact on URM students. Also, while transfer rates are somewhat higher overall for lower-income students, the increase in transfer rates at the threshold for lower-income students is similar to the increase for higher-income students. The larger impacts for URM students are consistent with the summary statistics of students who transfer to Georgia State University. Finally, Figure 9 shows the differential results for the GPA requirement to transfer to state or comprehensive universities. Here, effects are slightly larger for URM students compared to non-URM students, but differences between lower- and higher-income families are negligible.

Figure 8. Differential Impact of Georgia State University's Minimum Transfer GPA requirements by Student Characteristics



Notes: This figure shows the differential impact of Georgia State University's 2.3 minimum transfer GPA by student characteristics. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to Georgia State University within one year of earning 30 credits. Panels A and B split the sample by whether the student belongs to an underrepresented minority (URM), defined as either Black, Hispanic, or Native American. Non-URM is defined as any other race, including White, Asian, or other race. Panels C and D split the sample by whether the student is from a higher or lower income family, defined as being above or below an AGI of \$60,000.

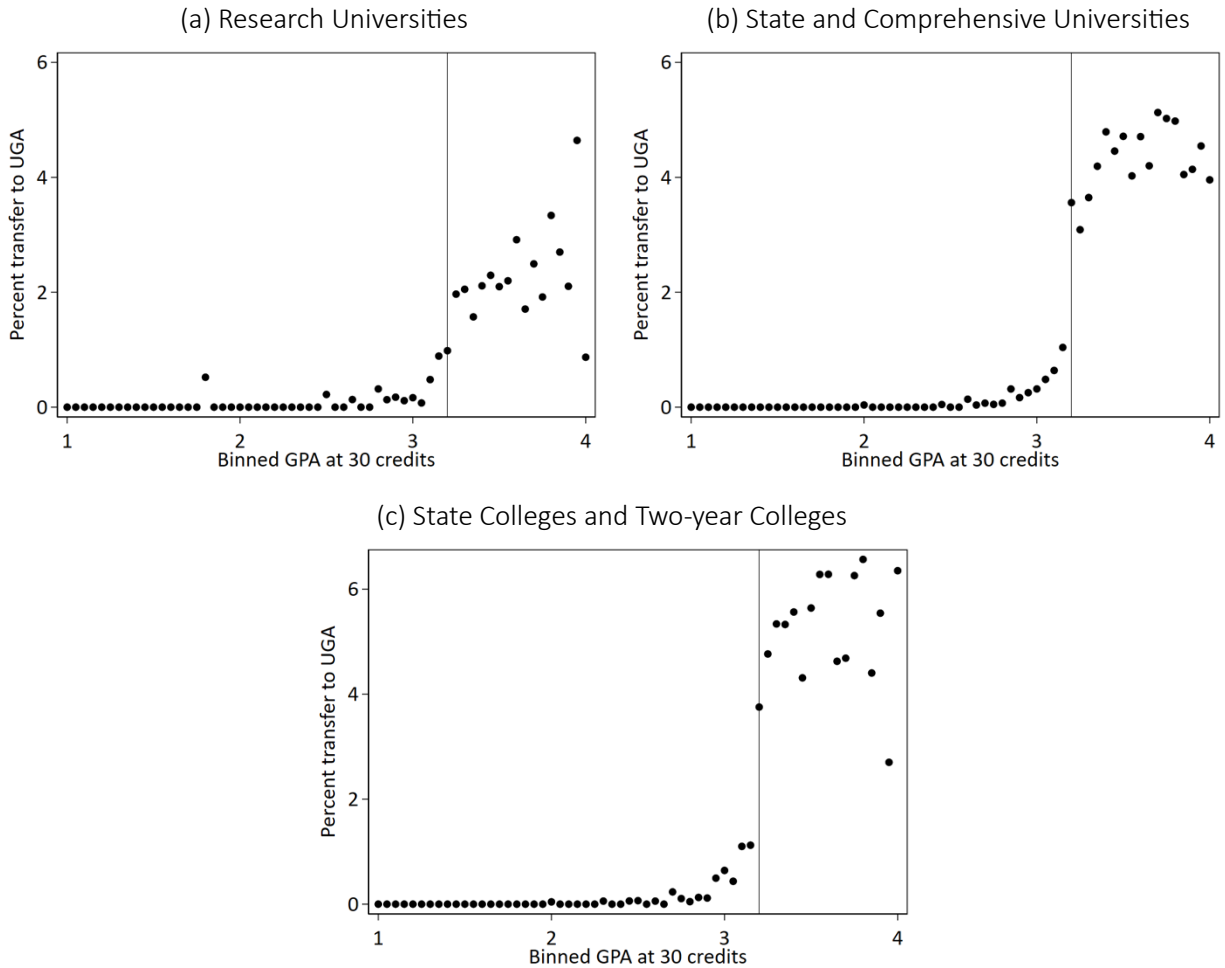
Figure 9. Differential Impacts of Minimum Transfer GPA Requirements for State/Comprehensive Universities by Student Characteristics



Notes: This figure shows the differential impact of the minimum 2.0 GPA requirement to transfer to a state or comprehensive university by student characteristics. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to a state or comprehensive university within one year of earning 30 credits. Panels A and B split the sample by whether the student belongs to an underrepresented minority (URM), defined as either Black, Hispanic, or Native American. Non-URM is defined as any other race, including White, Asian, or other race. Panels C and D split the sample by whether the student is from a higher or lower income family, defined as being above or below an AGI of \$60,000.

Next, we turn to the differential impacts of the minimum transfer GPA requirements by the classification of institutions students attended at the term they earned 30 credits. Beginning with the University of Georgia's transfer admission threshold, Figure 10 shows that the effects of the 3.2 GPA threshold on transfers to the University of Georgia are concentrated among students at state and comprehensive universities and state and two-year colleges, with minimal impacts on students at other research universities. The estimated jump in transfer rates at the 3.2 GPA threshold is about one percentage point for students at research universities, 2.4 percentage points for students at state and comprehensive universities, and 3.1 percentage points for students at state and two-year colleges.

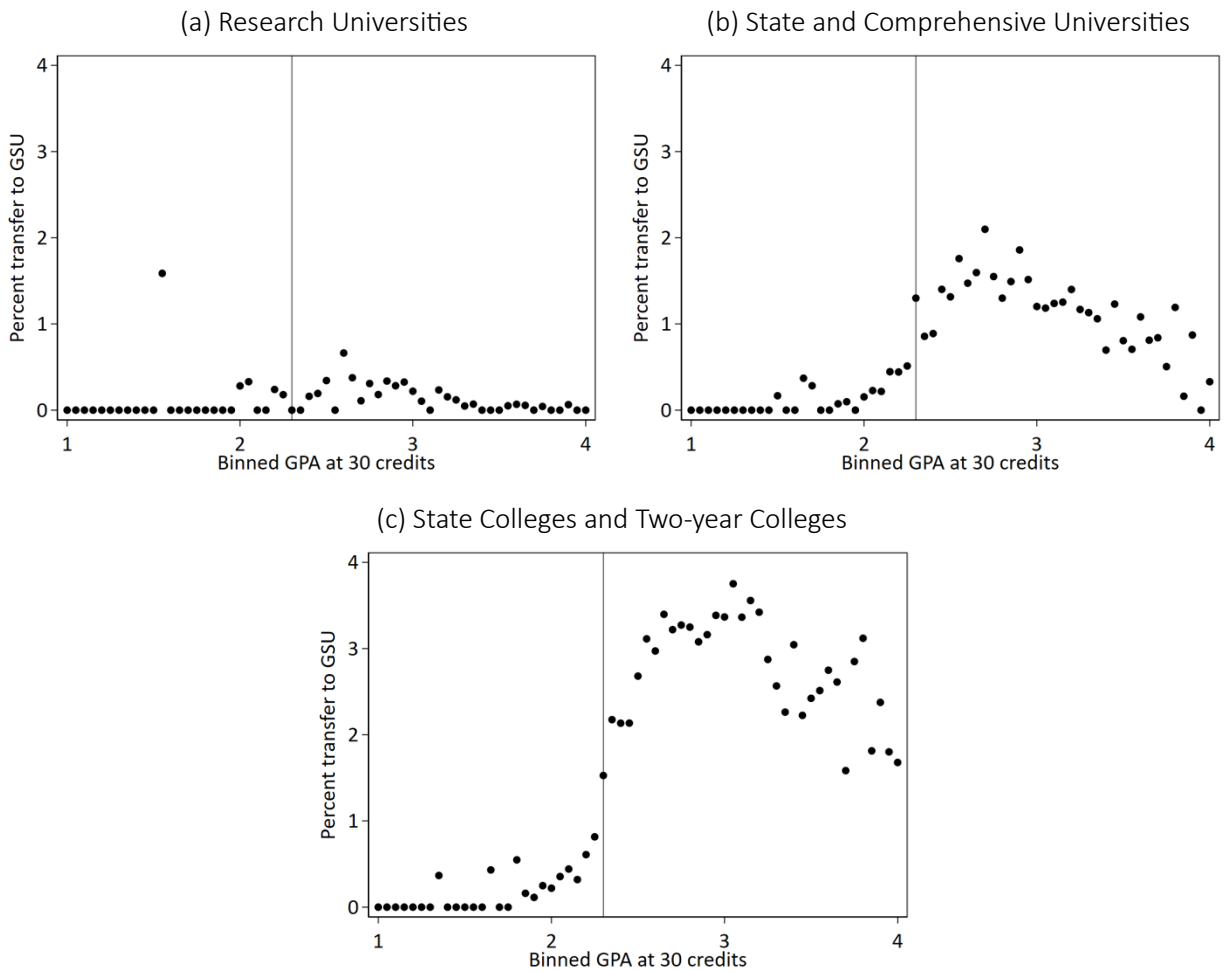
Figure 10. Differential Impact of UGA's Minimum Transfer GPA Requirements by Sending Institution Classification



Notes: This figure shows the differential impact of the University of Georgia's 3.2 minimum transfer GPA by institution type. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to the University of Georgia within one year of earning 30 credits. Each panel splits the sample by the type of institution students were enrolled in at 30 credits. Panel A includes students enrolled in research universities. Panel B includes students enrolled in state universities and comprehensive universities. Panel C includes students enrolled in state colleges and two-year colleges.

Figure 11 shows the differential effects of Georgia State University's minimum GPA requirement by sending institution. The effects are again concentrated among students at state and two-year colleges, with transfer rates increasing by about one percentage point at the 2.3 GPA threshold. Transfer rates to Georgia State University from other research universities are near zero overall, and there is no visible jump in transfer rates at the threshold.

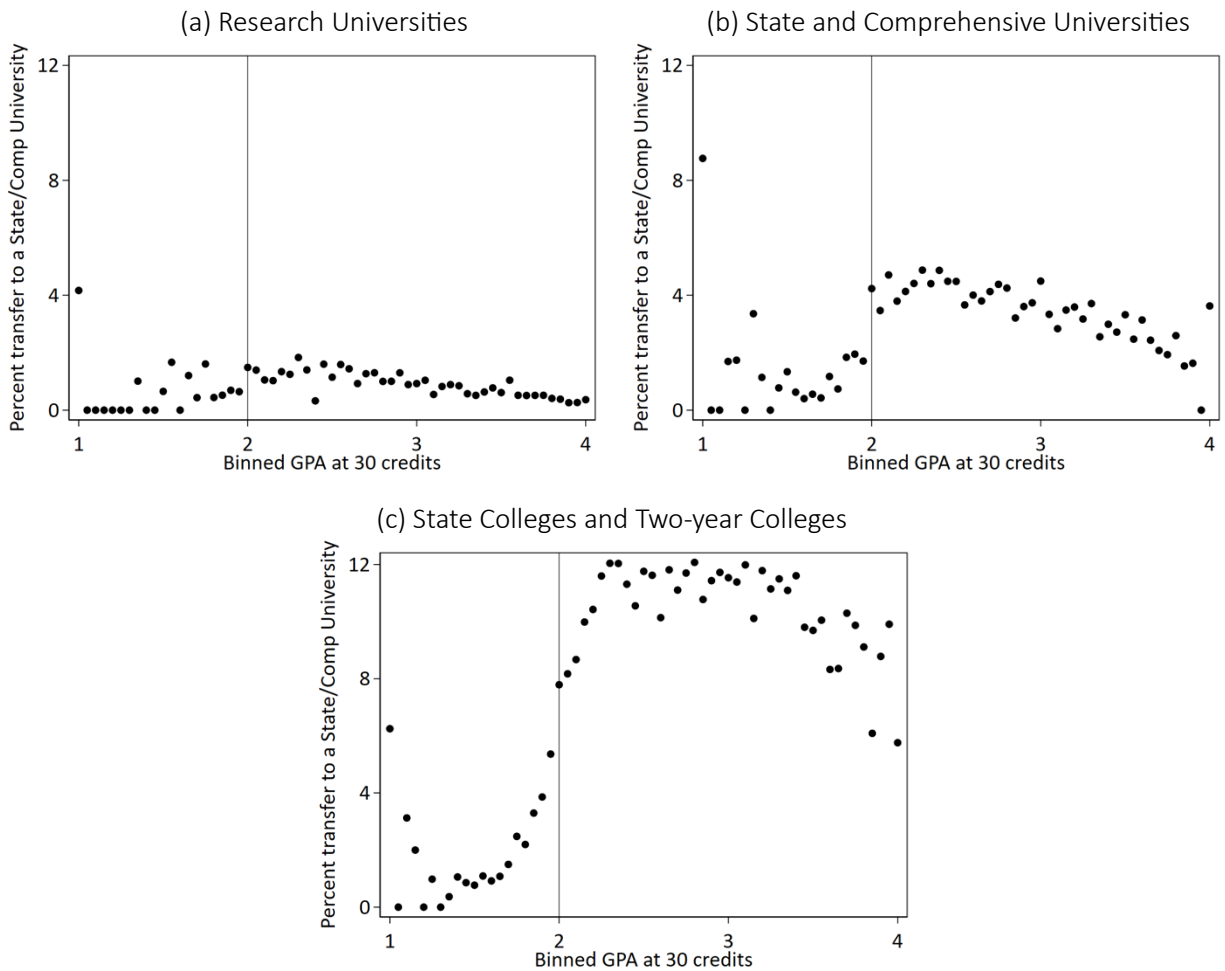
Figure 11. Differential Impact of Georgia State University's Minimum Transfer GPA Requirements by Sending Institution Classification



Notes: This figure shows the differential impact of Georgia State University's 2.3 minimum transfer GPA by institution type. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to Georgia State University within one year of earning 30 credits. Each panel splits the sample by the type of institution students were enrolled in at 30 credits. Panel A includes students enrolled in research universities. Panel B includes students enrolled in state universities and comprehensive universities. Panel C includes students enrolled in state colleges and two-year colleges.

Lastly, Figure 12 illustrates how the GPA requirements to transfer to state and comprehensive universities differ by institution type. Similar to the other institutions examined previously, transfers to these universities are most common among students from the state and two-year colleges. The effect of the 2.0 minimum GPA requirement, however, is roughly similar between these students and those at other state and comprehensive universities, with about a two-and-a-half-percentage-point increase in the probability of transfer within one year at the threshold for both groups.

Figure 12. Differential Impacts of Minimum GPA Requirements for State/Comprehensive Universities by Sending Institution Classification



Notes: This figure shows the differential impact of the 2.0 minimum GPA requirement to transfer to a state or comprehensive university by institution type. In each panel, the horizontal axis is students' GPA at the end of term in which they earn 30 credits, placed in bins with widths of 0.05 GPA points, and the vertical axis is the percentage of students in each GPA bin that transfer to a state or comprehensive university within one year of earning 30 credits. Each panel splits the sample by the type of institution students were enrolled in at 30 credits. Panel A includes students enrolled in research universities. Panel B includes students enrolled in state universities and comprehensive universities. Panel C includes students enrolled in state colleges and two-year colleges.

CONCLUSION AND POLICY CONSIDERATIONS

The USG sets minimum GPA requirements to be eligible to transfer to its universities. The minimum transfer GPA criteria exists for multiple reasons, including to increase the chances for student success at the receiving institution, to support a rational allocation of students across the system in the presence of capacity constraints, and to limit excessive churn within the system. In this report, we analyze the average characteristics of transfer students generally, transfer rates among students whose 30-credit-hour GPAs are near these requirements, and differences in the relationships between GPA and transfers among USG students with alternative characteristics.

Among students who are plausibly subject to the minimum transfer admissions requirements, 22 percent transfer between USG institutions at least once. The majority of these transfers (66 percent) can be characterized as "upward" transfers, and we find that USG's state colleges are the most common sending institutions. This suggests that state colleges often successfully serve as pathways to USG's universities.

We find that the minimum transfer GPA requirements at USG institutions do influence transfer patterns within the system, except for Georgia Tech's requirement. These effects are particularly evident within one year (i.e., freshman to sophomore) and less so within longer windows. The jumps in transfer rates within one year of earning 30 credits at the GPA thresholds are larger than for ever-transfer rates. This suggests that the minimum GPA requirements influence transfer timing by inducing students who are initially below a particular transfer GPA threshold to improve their GPA over time and transfer in a later term. We also show that these effects are meaningful in determining overall transfer patterns within USG.

The jumps in transfer rates at the minimum GPA thresholds for state and comprehensive universities, Georgia State University, and the University of Georgia suggest that there is excess demand for attendance at these institutions. Lowering the minimum transfer GPA requirements or allowing exemptions for students close to the threshold could increase the number of transfer students at many of these institutions if they are not already facing capacity constraints. Moreover, because the minimum GPA requirements seem to influence transfer timing, it could be beneficial to provide supports for students with goals of transferring to reach the minimum GPA requirements as early as possible.

Finally, we illustrate, that in many cases, the minimum transfer GPA requirements have differential impacts by students' race/ethnicity, family income, and institution type. Although our data cannot determine the reasons for the differential impacts, the patterns we see are generally consistent with the summary statistics of transfer students. Some potential partial explanations for these differential impacts of the GPA requirements by student groups include the cost of attendance at different institutions, the characteristics of the locations where institutions are located, and the availability of desired academic programs.

A lingering question is how transfers affect student success outcomes. While this report demonstrates that USG's GPA requirements influence which students transfer and when students transfer to some institutions, the current analyses cannot credibly assess how these students fare after they transfer. Thus, policy implications of this report are focused on how the GPA requirements act to increase or decrease transfer student enrollment. How student transfers are related to success outcomes is an important and open question.

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ACKNOWLEDGMENTS

The author thanks Angela Bell, Rachana Bhatt, Barbara Brown, Leslie Hodges, Jonathan Hull, David Ribar, Jonathan Smith, Thomas Goldring, Maggie Reeves, and Tyler Rogers for helpful feedback, edits, and suggestions that made this report better. The author is responsible for all errors, omissions, and opinions.

APPENDIX TABLES

Table A1. Regression Discontinuity Estimates of the Effect of Minimum Transfer GPA Requirements

	University of Georgia	Georgia Tech	Georgia State University	State or Comp. Universities
Ever transfer	0.017*** (0.003)	-0.001 (0.001)	0.005** (0.003)	0.013*** (0.004)
Transfer within 1 year	0.023*** (0.002)	0.000 (0.000)	0.005*** (0.001)	0.022*** (0.004)
Number of students	106,191	100,496	68,884	50,655

Notes. This table shows regression discontinuity estimates of the effect of the minimum transfer GPA requirements on transfers to the respective institution(s). The coefficients represent estimates of the discontinuous increase in the probability of transfer at the relevant GPA threshold, each from different regressions. The regression specification allows for a linear function of GPA with separate slopes above and below the relevant threshold. The regressions include entry cohort fixed effects, control for student demographics, and only include observations that are within a 0.4 GPA point bandwidth around each threshold. Standard errors are clustered at the running variable and are reported in parentheses (* p<0.1, ** p<0.05, *** p<0.01).

Table A2. Regression Discontinuity Estimates of the Differential Effects of Minimum Transfer GPA Requirements

	University of Georgia	Georgia State University	State or Comp. Universities
<i>Panel A: By race/ethnicity</i>			
URM students	0.010*** (0.002) [30,569]	0.004 (0.002) [29,374]	0.025*** (0.007) [24,058]
Non-URM students	0.028*** (0.003) [75,622]	0.005*** (0.002) [39,510]	0.020*** (0.005) [26,597]
<i>Panel B: By family income</i>			
Lower-income students	0.014*** (0.002) [48,081]	0.004** (0.002) [36,819]	0.023*** (0.006) [28,549]
Higher-income students	0.031*** (0.003) [49,533]	0.006*** (0.002) [25,412]	0.031*** (0.006) [17,195]
<i>Panel C: By institution type</i>			
Research universities	0.009*** (0.003) [20,002]	-0.002 (0.001) [7,551]	0.004 (0.004) [7,104]
State & comp. universities	0.024*** (0.002) [52,719]	0.004* (0.002) [34,069]	0.023*** (0.008) [23,661]
State & two-year colleges	0.031*** (0.004) [33,470]	0.007*** (0.003) [27,264]	0.025*** (0.007) [19,890]

Notes. This table shows regression discontinuity estimates of the effect of the minimum transfer GPA requirements on transfers to the respective institution(s). The coefficients represent estimates of the discontinuous increase in the probability of transfer at the relevant GPA threshold, each from different regressions. Panel A splits the sample by whether the student belongs to an underrepresented minority (URM), defined as either Black, Hispanic, or Native American. Panel B splits the sample by whether the student is from a higher or lower income family, defined as being above or below an AGI of \$60,000. Panel C splits the sample by the type of institution students attending at 30 credits. The regression specification allows for a linear function of GPA with separate slopes above and below the relevant threshold. The regressions include entry cohort fixed effects, control for student demographics, and only include observations that are within a 0.4 GPA point bandwidth around each threshold. Standard errors are clustered at the running variable and are reported in parentheses (* p<0.1, ** p<0.05, *** p<0.01).

DATA APPENDIX

Files. All the measures in our analyses are constructed from administrative records in the University System of Georgia student program enrollment, demographic, financial aid summary, financial aid fund, and degrees files from fall 2007 through spring 2019. The financial aid summary file records information for students on an annual basis; all the other files record information on a term-by-term basis.

Longitudinal identifiers. Records for students are linked over time using a person identifier that is constructed by the Georgia Policy Labs (GPL). The GPL identifier is formed by matching personal identifying information for the students—including their names, dates of birth, social security numbers, USG identifying number, and campus identifier—using the USG records and other records that are available to GPL. Because this identifier is different from the USG and campus identifiers, longitudinal linkages will be slightly different in our analyses than in analyses prepared by the USG. Researchers only ever access and utilize de-identified data.

Race and ethnicity. We form indicators of whether the student identified in their first enrollment term as White, Black, Hispanic, or Asian. We also form a composite indicator that includes other racial or ethnic identities, not providing racial or ethnic information, and whether they are from an underrepresented racial/ethnic minority (URM) defined as Black, Hispanic, or Native American. Non-URM is defined as any other race, including White, Asian, "more than one race," or other race.

Gender. We form indicators of whether the student identified in their first enrollment term that they were male or female.

AGI and financial dependency. Using the financial aid summary file, we form measures of the student's or family's adjusted gross income and of whether the student reported being financially independent of their parent for financial aid purposes. Note that these measures are usually only reported if the student completed a Free Application for Federal Student Aid form and submitted it to a USG institution. For both measures, we use the values that were recorded in their first enrollment term. We adjust reported AGI for inflation using annual averages of the CPI-U.

Minimum transfer GPA requirements. USG's minimum transfer admissions policies can be found [here](#). To identify whether institutions had transfer GPA requirements higher than USG's requirements, we search through institutions' reporting of the Common Data Set. These reports are typically archived separately on each institution's website. The University of Georgia's archive of Common Data Set reports can be found [here](#). Georgia Tech's archive of Common Data Set reports can be found [here](#).

Credits. We construct several variables based on the term in which students earn credits. We use the cumulative institutional credit hours earned, which represents the hours institutions use to calculate the institutional GPA. This excludes institutional credits, such as from learning support courses and transfer credits. We observe the term each student completes at least 30 cumulative credits.

GPA. To place students above or below each transfer admissions threshold, we use students' institutional cumulative GPA in the term in which they earned 30 credits. This is the final term before students become subject to USG's minimum transfer admission requirements. The institutional cumulative GPA variable is

computed by institutions by dividing the total number of college-level credit hours attempted at the institution into the total number of college-level quality points earned at the institution.

Transfer indicators. We construct indicators for whether students transferred to particular institutions. We use the "TR" code in the admit type variable which indicates students as "Transfer, Regular" admits. We then make different versions of these transfer indicators based on the timing of transfer relative to the term students earn 30 credits.

Institution and institution type. We construct indicators for the institution type where the student enrolled. We use the contemporaneous institution identifier during the term in which students earned 30 credits and in the first term at students' transfer institution. Then, we use the USG's categorization of institutions as research universities, comprehensive universities, state universities, state colleges, or two-year colleges.

Degree attainment. We construct indicators for whether each student ever completed an associate or bachelor's degree at a USG institution during the sample period.

ABOUT THE AUTHOR

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ABOUT THE GEORGIA POLICY LABS

The Georgia Policy Labs (GPL) is a collaboration between Georgia State University and a variety of government agencies to promote evidence-based policy development and implementation. Housed in the Andrew Young School of Policy Studies, GPL works to create an environment where policymakers have the information and tools available to improve the effectiveness of existing government policies and programs, try out new ideas for addressing pressing issues, and decide what new initiatives to scale. The goal is to help government entities more effectively use scarce resources and make a positive difference in people's lives. GPL has three components: The Metro Atlanta Policy Lab for Education works to improve K-12 educational outcomes; the Career & Technical Education Policy Exchange focuses on high-school-based career and technical education in multiple U.S. states; and the Child & Family Policy Lab examines how Georgia's state agencies support the whole child and the whole family. In addition to conducting evidence-based policy research, GPL serves as a teaching and learning resource for state officials and policymakers, students, and other constituents. See more at gpl.gsu.edu.