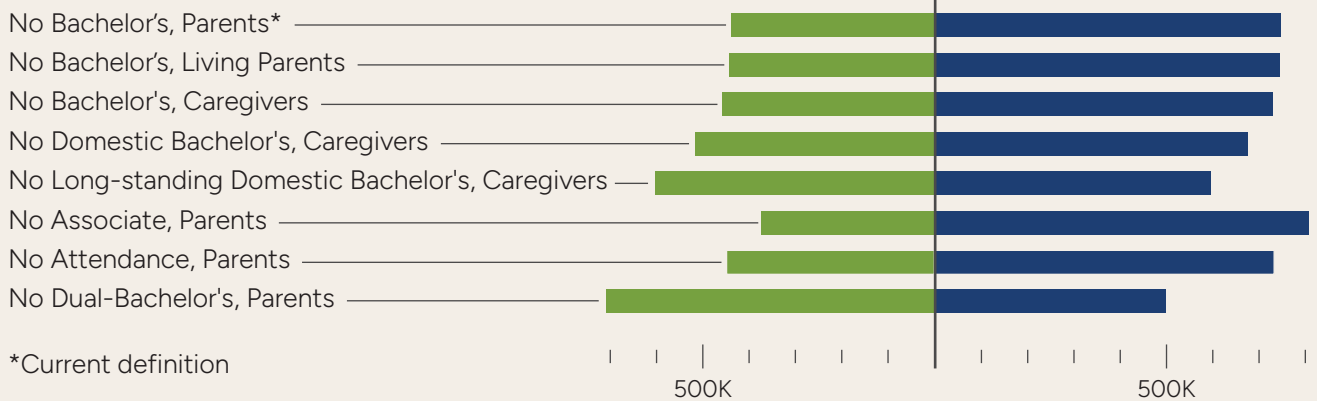# Differing definitions and their implications

How do different definitions of first-generation change who is considered a part of this population?

There are over **100** distinct definitions of first-generation status that can be constructed based on different parental characteristics and details. Each definition creates a different number of first-generation students with different levels of college-readiness and application behaviors.

Depending on the exact definition for first-generation status used, the number of first-generation applicants on the Common App in 2022 can vary from 304,338 to 709,850.

How does the number of first-gen applicants change with the definition used?

● First-generation
● Continuing-generation

No Bachelor's, Parents*
No Bachelor's, Living Parents
No Bachelor's, Caregivers
No Domestic Bachelor's, Caregivers
No Long-standing Domestic Bachelor's, Caregivers
No Associate, Parents
No Attendance, Parents
No Dual-Bachelor's, Parents

*Current definition

500K   500K

Student characteristics vary based on the chosen definition:

Living in a below-median income ZIP code: While 30% of all applicants are from below-median income ZIP codes, the percentage of continuing-gen students from those ZIP codes can range from 16% to 24%, and from 40% to 49% for first-gen students.

Fee-waiver eligibility: While 33% of all applicants are fee-waiver eligibile, it can vary for continuing-gen students, ranging from 8% to 20% — more than doubling. For first-gen students, it swings between 48% and 66%.

Underrepresented Minority applicants (URM): While 29% of all applicants are URM, the percentage of continuing-gen students who are URM can range from 16% to 24%, and from 45% to 58% for first-gen students.

commonapp.org/about/reports-and-insights

First-generation status in context, part two: Differing definitions and their implications

February 8, 2024

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Introduction

Last month, we released our [first research brief](#) of three taking a deep dive into first-generation status among students applying to college via Common App. Using data from over 9 million students across a decade of applications, we showed that seemingly minor decisions about whose degrees, and which degrees, are considered can have significant repercussions when determining a student's first-generation status. For example, many definitions of first-generation status (including Common App's) follow the [Higher Education Act definition](#) focusing on the bachelor's degree attainment of both parents – but what does that mean for the 12% of applicants in the 2022 season that reported having limited information about at least one parent? In this second brief, we take this nuanced line of thinking two steps further. To start, we compare multiple definitions for determining first-generation status to explore how each definition changes who is considered a part of this population. In other words, how might the definition used change how many first-generation students there are on the Common App? And how many students switch from first-generation to continuing-generation, and vice versa, based on how the definition is constructed?

Then, we look at the extent to which each definition changes what we observe about first- and continuing-generation students in terms of their college readiness, socioeconomic status, and application behaviors. In other words, how might these differing definitions actually change how we understand first-generation students and their needs? And what can we glean about the pros and cons of each definition as a result? Similar to our first brief on the subject, we do not make claims about a "right" definition, but rather hope to reveal trade-offs and differences that practitioners and policymakers should keep in mind when deploying any given definition.

We are excited to bring greater attention to first-generation students and look forward to facilitating conversations within and across organizations on this topic in the coming months. We will release the last brief in this series later this season, where we examine what more we can learn about students when looking at finer-grain details of parental education levels (e.g., highest degree obtained, or more precise degree combinations like BA and BA, or PhD and AA, or MBA and no other parent) rather just classifying students as continuing-gen and first-gen. As a recap, each research brief in this series is guided by the research questions as summarized below:

Brief 1:   **Trends in parental education and family structures over time**
How have key components for defining first-generation status, like household structure, parental degree attainment, and related family structure details, changed over time? For what share of applicants are these considerations potentially relevant for understanding their college accessibility needs?

Brief 2:   **Differing definitions of first-generation status and their implications**
(Present brief) How do various definitions of first-generation change who is considered part of this population? Further, how does the definition change our understanding of first-generation applicants' college readiness, socioeconomic status, and application behaviors on average?[1]

Brief 3:   **Exploring the complexities of detailed parental education**
(Forthcoming) What more can we learn about applicants' college readiness, socioeconomic status, and application behaviors when we look at more granular parental educational attainment groups (e.g., highest degree obtained, or precise combination of parental degrees obtained?) versus the binary classification of first- and continuing-generation?

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[1] We follow an approach similar to Toutkoushian, Stollberg, & Slaton, 2018, and Toutkoushian, May-Trifiletti, & Clayton, 2019, for this work.

Contents

Key findings

1. **Depending on the definition for first-generation status used, the number of domestic first-generation applicants on the Common App in 2022 can be as low as 304,338 and as high as 709,850.** In other words, using a different definition for this seemingly straightforward concept can more than double the size of the student population considered first-generation.

2. **Changes to the parental education threshold used for the definition** (e.g., Bachelor's versus Associate) **have the greatest impact on measured population size, but the collective impact of other changes can be just as large – or larger** (e.g., whether international degrees are considered). For example, focusing on a student's household caregivers instead of parents, and also excluding degrees obtained internationally or after a student's birth, can increase the number of first-generation students from 442,932 to 606,001 (an increase of 36.8%) – even while holding constant the threshold of a Bachelor's degree.

3. **These definitions can also greatly impact the average demographic characteristics of the students considered first-generation – and the same is true for continuing-generation students**. For example, less than half of first-generation students in one definition are eligible for a Common App fee waiver (our proxy for low-income status), while just over two-thirds are under another definition. Similarly, the proportion of continuing-generation students who are fee waiver eligible can range from as low as 8% to as high as 20% depending on the definition.

4. **The definition used can also change the extent to which first-generation status meaningfully distinguishes first-generation student behavior from continuing-generation student behavior**. For example, the difference in the average number of applications submitted by first-generation versus continuing-generation students can more than double – from 0.52 to 1.16 – depending on the definition used.

5. **Taken together, these findings illustrate how important it is to be deliberate and transparent about what decisions are being made when developing and implementing any specific definition for first-generation status.** There are over 100 distinct definitions of first-generation status that can be constructed just based on the variables we examine here, and each ultimately has distinct implications for who is considered first-generation (i.e., who receives targeted support) and what supports are going to be most relevant to maximizing their success in higher education.

    a. For example, this brief illuminates that students who only have one parent with a bachelor's degree could benefit from the additional support that may be afforded to students with first-generation status. Yet, these students are not considered first-generation according to the standard HEA definition.

Exploring multiple definitions for determining first-generation status

At the heart of this research series on first-generation status is the understanding that institutions and organizations can vary widely in terms of how they define first-generation students ([1](#), [2](#), [3](#), [4](#)). As we synthesized in the last brief, definitions often vary along two primary dimensions:

- **Whose degrees do we consider?** For example, do we focus exclusively on a student's listed parents? What if they no longer share a household? What if one is no longer living, or is no longer in contact with the student? What about older siblings, grandparents, or other adults with whom the student lives, now or in the past?

- **Which degrees do we consider?** For example, do we count baccalaureate degree attainment only, or are associate degrees also relevant? What if a degree was obtained outside the U.S.? What if the degree was obtained the year before the student begins their own college applications?

There are no universally correct answers to these questions, at least in part because they depend on the context and purpose behind identifying first-generation students to begin with. For example, program administrators who provide first-generation high school students with guidance around specific college application deadlines may think of first-generation status as mostly indicating what current adult supports a student has in applying to U.S.-based college. They may then reasonably choose to define first-generation status by looking at whether a student's currently living caregivers (regardless of parental relationship) attended a U.S.-based college at any point.

Conversely, a program aimed at providing first-generation students approaching their college graduation with career networking support may want to use first-generation status as a way to understand what types of jobs and professional networks a student's parents may have modeled for them throughout their lives (which may then entail distinct norms around application dynamics like cover letters, interview processes, recruiting systems, etc.). They may then understandably choose to define first-generation status by looking at whether a student's parents (regardless of current relationship or household status) ever graduated with a baccalaureate degree, from any country, before the student was born.

With so many possible ways to define first-generation status, we seek to provide policy leaders, organizations, and member institutions a data-driven framework to understand the potential trade-offs and consequences of these differing definitions. To ground our discussion in this brief, we will focus on the widely used definition for first-generation students provided by the [1998 Higher Education Act Amendments](#) as a "benchmark" reference point for all other definitions we examine: "an individual both of whose parents did not complete a baccalaureate degree, or, in the case of any individual who regularly

resided with and received support from only one parent, an individual whose only such parent did not complete a baccalaureate degree."

Relating this back to the framework presented above, this definition (which Common App also uses in our work more broadly) focuses on a student's parents, specifically ("whose degrees…?"), and moreover focuses on explicit baccalaureate degree attainment rather than associate degree attainment or college attendance, regardless of timing or place of degree attainment ("which degrees…?").[2] In other words, in this definition, students who have **no bachelor's degree** or higher among their **parents** are considered first-generation; we will herein refer to this as the **"No Bachelor's, Parents"** definition for concision.

With this definition as the starting point, we now ask: what happens when you change each detail in this definition, piece by piece? How would the size of the first-generation student population change, and in what ways would that population look different on key indicators of college readiness, socioeconomics, and application behaviors, as a result? Below, we describe four variations of this definition, each one changing just a single detail (as informed by our last brief) from the preceding definition:

1. **No Bachelor's, Living Parents:** Unlike in the benchmark definition, we focus only on the degree attainment of a student's parents that are reported as still living instead of any listed parents.

    a. This definition helps us explore cases where a student has a parent who went to college, but that parent is no longer able to directly support them in the process.

2. **No Bachelor's, Caregivers:** Building off the Bachelor's, Living Parents definition, we now focus on a student's still-living caregivers listed as sharing a household with the student instead of specifically parents (e.g., inclusive of a step-parent).

    a. This definition helps us explore cases where a student has other caregivers in their household who have college experience.

3. **No Domestic Bachelor's, Caregivers:** In this definition, we additionally focus only on degrees obtained from U.S. institutions.

    a. This definition helps us explore cases where a caregiver has a college degree, but from a context that may be less relevant to supporting a student through the U.S. context.

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[2] This definition is in contrast to another common method of directly asking a student if they identify as first-generation, or if they will be the first in their family to attend/graduate college.

4. **No Long-standing Domestic Bachelor's, Caregivers:** In this definition, we additionally consider only degrees obtained prior to the student's birth.[3]

    a. This definition helps us explore cases where a caregiver may have obtained their degree too recently to have accrued some of the more socioeconomic benefits of a college degree (e.g., financial resources that one can bring to bear earlier in a student's educational journey).

While there are many more variations and combinations we could examine, we use this incremental approach to show that changes to even these smaller details together can have percolating and additive repercussions. In addition to the four definitions above, we also examine three more definitions similar to the benchmark definition (No Bachelor's, Parents), but changing the degree level requirement instead:

5. **No Associate, Parents:** In this definition, we focus on whether a student has **no associate degree or higher** among their parents.

    a. This definition helps us explore cases where the associate degree is more relevant, perhaps for two-year focused institutions.

6. **No Attendance, Parents:** In this definition, we focus on whether a student has **no college attendance experience or higher** among their parents.

    a. This definition helps us explore cases where any attendance at all is the relevant consideration, such as trying to determine a parent's familiarity with the college application and selection process, specifically.

7. **No Dual-Bachelor's, Parents:** In this definition, we focus on whether a student has parents who **both** do not have a bachelor's degree or higher.[4]

    a. As we will show in the next brief in this series, students who have only one parent with a bachelor's degree or higher are meaningfully less advantaged or prepared on a variety of college-relevant measures compared to students who have two parents with a bachelor's degree or higher (what we short-hand here as a "dual-bachelor's"). To the extent that we're using first-generation status as a way to understand a student's pre-existing support and resources, this definition acts as a bigger-tent approach for which students may benefit from college-going advising supports and similar resources.

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[3] This definition mirrors the example we provided in the first brief in Figure 8.

[4] We include this definition as a nod to the work of [Toutkoushian, Stollberg, & Slaton, 2018](), in which they explore the consequences of requiring both parents to have a certain degree level for a student to be considered continuing-generation (while also varying degree level across definitions).

Altogether, we use these definitions as just a handful of illustrative examples for the many different possible combinations of these attributes we observe (e.g., caregivers versus parents, and degree levels), as well as others that we cannot systematically analyze (e.g., including grandparents or siblings).

First-generation student population sizes across different definitions

As the first step in our investigation, Figure 1 shows the number of domestic first-year applicants on Common App who were considered first-generation under each definition, over time. Each line represents a different definition as described above, with the benchmark definition ("No Bachelor's, Parents") bolded. Finally, each line is moreover labeled with the percent growth in first-generation students between 2013 and 2022 using that specific definition. For example, we see that the number of first-generation students using the benchmark definition started at 232,756 in 2013 and rose to 442,932 by 2022, an increase of 90%. This is in contrast to, for example, the No Attendance, Parents definition, which started at 112,030 and rose to 304,338, an increase of 172%.

Note also that all data displayed in figures throughout this brief are also available in a spreadsheet format more amenable to researchers and screen reader software. (access password: 9T9YarEb).

Figure 1. Number of first-generation applicants over time by definition used
Among domestic first-year applicants from the 2013 through 2022 seasons
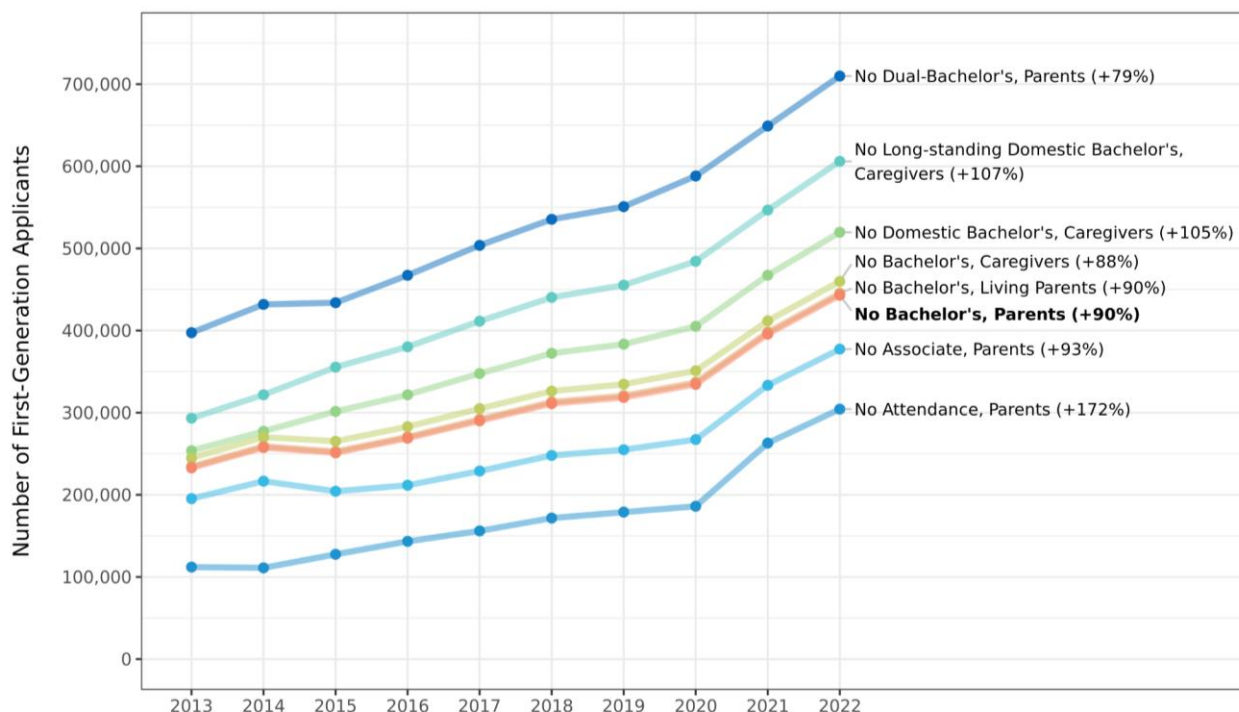
In general, the gaps in between each line illustrate the differences in the count of applicants who are considered first-generation depending on the definition used over time. Right away, we notice that the No Dual-Bachelor's, Parents definition counts the highest number of first-generation applicants at all points in time, which makes sense given that this definition for a first-generation student is so inclusive (i.e., you are still first-generation as long as only one of your parents has a bachelor's or higher). Conversely, the No Attendance, Parents definition counts the smallest number of first-generation applicants; in contrast to the prior example, this makes sense given that the definition for first-generation is so exclusive here (i.e., you are only first-generation if your parents have never attended any college whatsoever). And while our definitions hinging on smaller detail changes (e.g., No Bachelor's, Living Parents) look almost identical to the benchmark definition to start, they progressively add up to a more and more distinct trendline by the No Long-standing Domestic Bachelor's, Caregivers definition.

This being said, the above plot only tracks the total number of first-generation applicants in each definition over time; it does not directly communicate how many students who were considered first-generation in one definition are now classified as continuing-generation in another, and vice versa. This is one way to get at the inclusivity or exclusivity of a given definition relative to other definitions, and moreover helps us identify exactly which students would be impacted by a switch of definitions.

First-generation status in context, part two
February 8, 2024

Table 1 focuses on the count of first-generation students in each definition in only the 2022 application season (i.e., the last point in each line in Figure 1). In each row, we compare the number of students classified as first-generation in the benchmark definition (No Bachelor's, Parents) against each other definition – showing explicitly how many first-gen students from the benchmark definition are no longer considered first-gen (students who "switch out") as well as how many continuing-gen students from the benchmark definition are now considered first-gen (students who "switch-in"). In the final column, we show the overall percent change in first generation students versus the benchmark definition.

Table 1. Comparison of first-generation applicant counts by definition used
Among domestic first-year applicants in the 2022 season (n = 1,188,251)

First-gen definition	Count of benchmark first-gen students	No longer first-gen	Newly first-gen	Final count of first-gen students	% change from benchmark
No Bachelor's, Parents	442,932	- 0	+ 0	= 442,932	+ 0.0%
No Bachelor's, Living Parents	442,932	- 0	+ 2,470	= 445,402	+ 0.6%
No Bachelor's, Caregivers	442,932	- 4,262	+ 21,158	= 459,828	+ 3.8%
No Domestic Bachelor's, Caregivers	442,932	- 4,097	+ 80,824	= 519,659	+ 17.3%
No Long-standing Domestic Bachelor's, Caregivers	442,932	- 2,171	+ 165,240	= 606,001	+ 36.8%
No Associate, Parents	442,932	- 65,578	+ 0	= 377,354	- 14.8%
No Attendance, Parents	442,932	- 138,594	+ 0	= 304,338	- 31.3%
No Dual-Bachelor's, Parents	442,932	- 0	+ 266,918	= 709,850	+ 60.3%

Looking at the No Bachelor's, Living Parents row as an example, we see that from the benchmark definition (where there were 442,932 first-gen students), 2,470 students previously classified as continuing-gen are now classified as first-gen, for a new total of 445,402 first-gen students. This is an extremely small change relative to the size of the population at +0.6%. Compare this against the No Long-standing Domestic Bachelor's, Caregivers row: 2,171 students who were first-gen in the benchmark definition are now continuing-gen, and 165,240 students who were continuing-gen are now first-gen, for a

total of 519,659 first-gen students. Put another way, using this definition instead of the benchmark increases the size of the first-gen population by 36.8%.

Similar to what we saw in Figure 1, this table reveals that the definitions creating the largest changes in the first-gen population are No Attendance, Parents (decreasing the population size by 31.3%) and No Dual-Bachelor's, Parents (increasing the population size by 60.3%). Five of the definitions presented here create a difference of at least 10% from the benchmark definition population size; thinking about this in more concrete terms, these differences would likely create substantial changes to any programs or initiatives catering towards first-gen students in terms of participation, funding, staffing, and other resourcing considerations.

That being said, population size is only one possible way in which these differing definitions could impact programs or initiatives catering towards first-gen students. The students who "switch out" of first-gen status may not necessarily look similar to existing continuing-gen students, and the students who "switch in" to first-gen status may not necessarily look similar to existing first-gen students. In other words, changing the definition for first-gen may also fundamentally change what the average needs and characteristics of this population are.

Examining individual and community resources across first-generation definitions

To explore this dynamic directly, we now move to examine the average characteristics of first-gen and continuing-gen students across a wide variety of key indicators relating to student college readiness, socioeconomic status, and college application behavior – for each definition of first-generation status we explored above. In other words, how different are first-gen students in one definition versus another in terms of the selectivity of colleges they apply to on average? Or their average reported GPA?

Beginning our examination with the broader category of students' individual and community resources (i.e., our proxies for socioeconomic status), Figure 2 displays the rates of applicant eligibility for a Common App fee waiver (one measure we use to approximate low income status) for first-gen and continuing-gen students in each definition. Those of you who read last year's brief on detailed applicant race/ethnicity should find these plots familiar.

Figure 2. Rates of fee waiver eligibility by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season
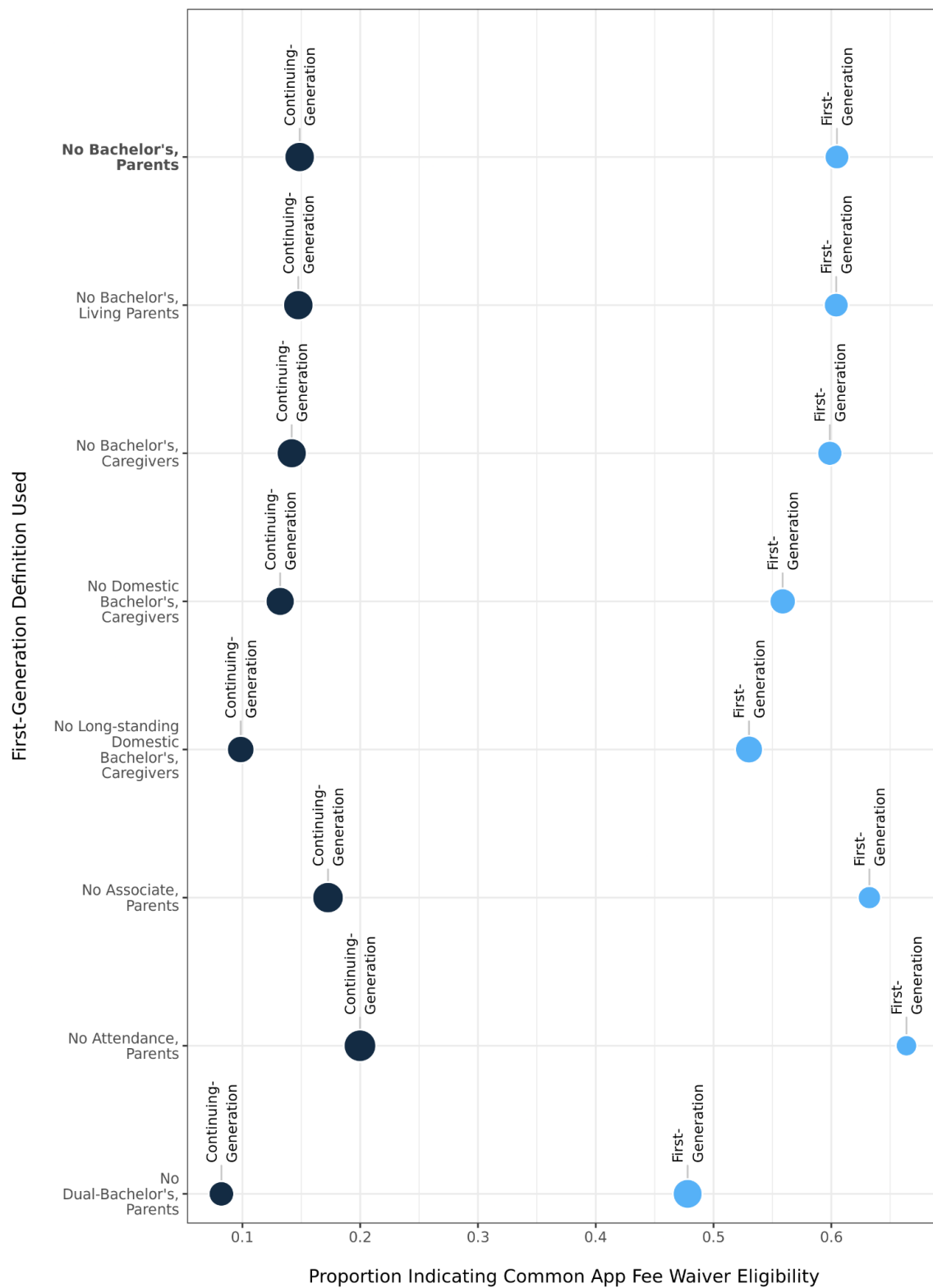
Each row along the y-axis represents a different first-generation definition, beginning with our benchmark definition (No Bachelor's, Parents). Within each row, we plot the proportion of continuing-generation and first-generation students who reported eligibility for a fee waiver along the x-axis. Points are sized according to the relative size of each group within the row.

Perhaps as expected given the relatively minor changes in population size for the "No Bachelor's, Living Parents" and "No Bachelor's, Caregivers" definitions as revealed in Table 1, fee waiver eligibility for both continuing-gen and first-gen students in these definitions look almost exactly the same relative to the benchmark definition. That being said, shifts begin in earnest starting with the "No Domestic Bachelor's, Caregivers" definition, where the proportion of continuing-generation students eligible for a fee waiver drops from about 15% to 13%, while the proportion of first-gen students eligible for a fee waiver drops from about 60% to 56%. The "No Attendance, Parents" and "No Dual-Bachelor's, Parents" definitions seem to create the largest changes to fee waiver eligibility for both groups – a trend we will see across nearly all indicators we examine in this brief.

Put another way, this plot reveals that the proportion of continuing-gen students eligible for a fee waiver can swing between 8% and 20% (i.e., more than doubling), while the proportion of first-gen students eligible for a fee waiver can swing between 48% and 66% (i.e. a slight minority of students to a strong majority) – based solely on the definition for first-gen/continuing-gen used.

For concision in the main narrative, we include in the appendix parallel visualizations for several other relevant measures of applicants' individual and community resources as follows:

- Share of applicants identifying as an underrepresented minority (URM)[5] race/ethnicity (Appendix Figure A1)[6]
- Share of applicants living in a ZIP-code with below-median household income (Appendix Figure A2)[7]
- Share of applicants living in a rural or small town community (Appendix Figure A3)

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[5] We use the term underrepresented minority (URM) in alignment with conventions employed by the National Science Foundation. In this report, applicants identifying as Black or African American, Latinx, Native American or Alaska Native, or Native Hawaiian or Other Pacific Islander are classified as URM applicants.

[6] For those interested in more research on detailed applicant race/ethnicity, please see our accompanying research briefs here and here.

[7] For this analysis, we use ZIP-code-level Census data on median household income for each applicant's submitted home address.

- Average share of adults in the applicant's ZIP-code with a BA or higher (Appendix Figure A4)

In general, we see the same overarching trends as with fee waiver eligibility. The only exception is in the share of applicants living in a rural or small town community, where differences between continuing-gen and first-gen students are quite a bit smaller for the "No Attendance, Parents" definition (2.5% versus 2.9%; compare this against the 1.8% and 3.1% for the "No Dual-Bachelor's, Parents" definition) than in other measures.

Examining college readiness across first-generation definitions

When examining indicators of college readiness across these different first-gen definitions, similar patterns emerge. Beginning with the example of how many passing AP test scores[8] students report on their applications in Figure 3, continuing-gen students report an average of 0.88 versus the first-gen average of 0.27 using the benchmark definition.

However, these numbers vary drastically depending on the definition used. For example, first-gen students under the "No Long-standing Domestic Bachelor's, Caregivers" definition report an average of 0.45 passing AP scores – an increase of almost 67% over the benchmark definition. Similarly, continuing-gen students report an average of 1.09 in the "No Dual-Bachelor's, Parents" definition, but 0.79 in the "No Attendance, Parents" definition – a difference of up to 0.30.

What's also of interest here are definitions where first-gen and continuing-gen students look more or less different from one another; in other words, definitions where the behaviors make it easier or harder to distinguish what separates continuing-gen students from first-gen students. For example, the difference between first-gen and continuing-gen students is smallest for the "No Domestic Bachelor's, Caregivers" definition at 0.41. While still certainly an appreciable difference, note that we just identified in the preceding paragraph how continuing-gen students' reporting can vary by as much as 0.30 just by changing the definition used. To put a fine point on it: differences between continuing-gen students and first-gen students within a definition can be comparable in magnitude to differences between continuing-gen students in one definition and continuing-gen students in another.

Note also that the differences between first-gen and continuing-gen students is largest for the "No Dual-Bachelor's, Parents" definition at 0.73 – about 78% larger than the first-gen and continuing-gen difference in the "No Domestic Bachelor's, Caregivers" definition. This suggests that this definition may have slightly higher differentiating power when it comes to AP preparedness, which could, for example, be useful for targeted efforts to increase advanced course-taking success among first-gen student populations.

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[8] We consider 3 or above to be a passing AP test score.

We share several additional measures of college readiness in the appendix as follows:

- Rates of SAT/ACT score reporting (Appendix Figure A5) [9]
- Average reported SAT/ACT score when reported (Appendix Figure A6)
- Average scaled GPA (Appendix Figure A7) [10]
- Average AP test score reported (Appendix Figure A8)

Differences by definition for average AP and SAT/ACT score were generally most pronounced, while differences by definition for test score reporting and scaled GPA were more mild.

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[9] For those interested in more research on test score reporting behaviors, please see our accompanying research brief here.

[10] Scaled GPA is an applicant's reported GPA divided by their reported GPA scale after excluding extreme outliers and other obviously erroneous values. We do not see detectable differences in trends when instead examining the scaled GPA measure as reported by school counselors.

First-generation status in context, part two

February 8, 2024

Figure 3. Average number of passing AP test scores reported by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

Examining application behaviors across first-generation definitions

Finally, we conduct this same style of analysis for student college application behaviors. Figure 4 displays the average number of applications submitted by first-gen and continuing-gen students across each definition. For the benchmark definition, we see that first-generation students applied to an average of 5.71 institutions, while continuing-generation students applied to an average of 6.59 institutions.

This is yet another example where differences within first-generation status but across definitions can be comparable to differences across first-generation status within definitions. To illustrate, note that the difference in the average number of applications sent by first-generation students versus continuing-generation students is only 0.52 applications with the "No Domestic Bachelor's, Caregivers" definition (5.97 and 6.49, respectively). But comparing the average number of applications sent by continuing-generation students in the "No Attendance, Parents" definition versus in the "No Dual-Bachelor's, Parents" definition, the difference is also 0.52 (6.43 and 6.95, respectively). Again, the choice of definition can change the contrast we perceive between continuing-gen and first-gen students and, moreover, can change what we perceive as defining characteristics for a given first-generation status.

In the appendix, we provide additional visualizations for each of the following measures:
- Average number of academic honors reported (Appendix Figure A9)
- Average number of extracurricular activities reported (Appendix Figure A10)[11]
- Average selectivity rate of institutions applied to (Appendix Figure A11)
- Share of applicants submitting a binding Early Decision application (Appendix Figure A12)[12]
- Share of applicants intending to pursue a master's degree or higher (Appendix Figure A13)

Variation by definition was less pronounced for academic honors and extracurriculars, while major differences are observed when examining selectivity rate of institutions applied to, Early Decision application behavior, and intention to pursue an advanced degree.

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[11] For those interested in more research on extracurricular activities, please see our accompanying research brief here.

[12] For those interested in more research on early application trends, please see our accompanying research briefs here and here.

First-generation status in context, part two
February 8, 2024

Figure 4. Average count of applications submitted by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season
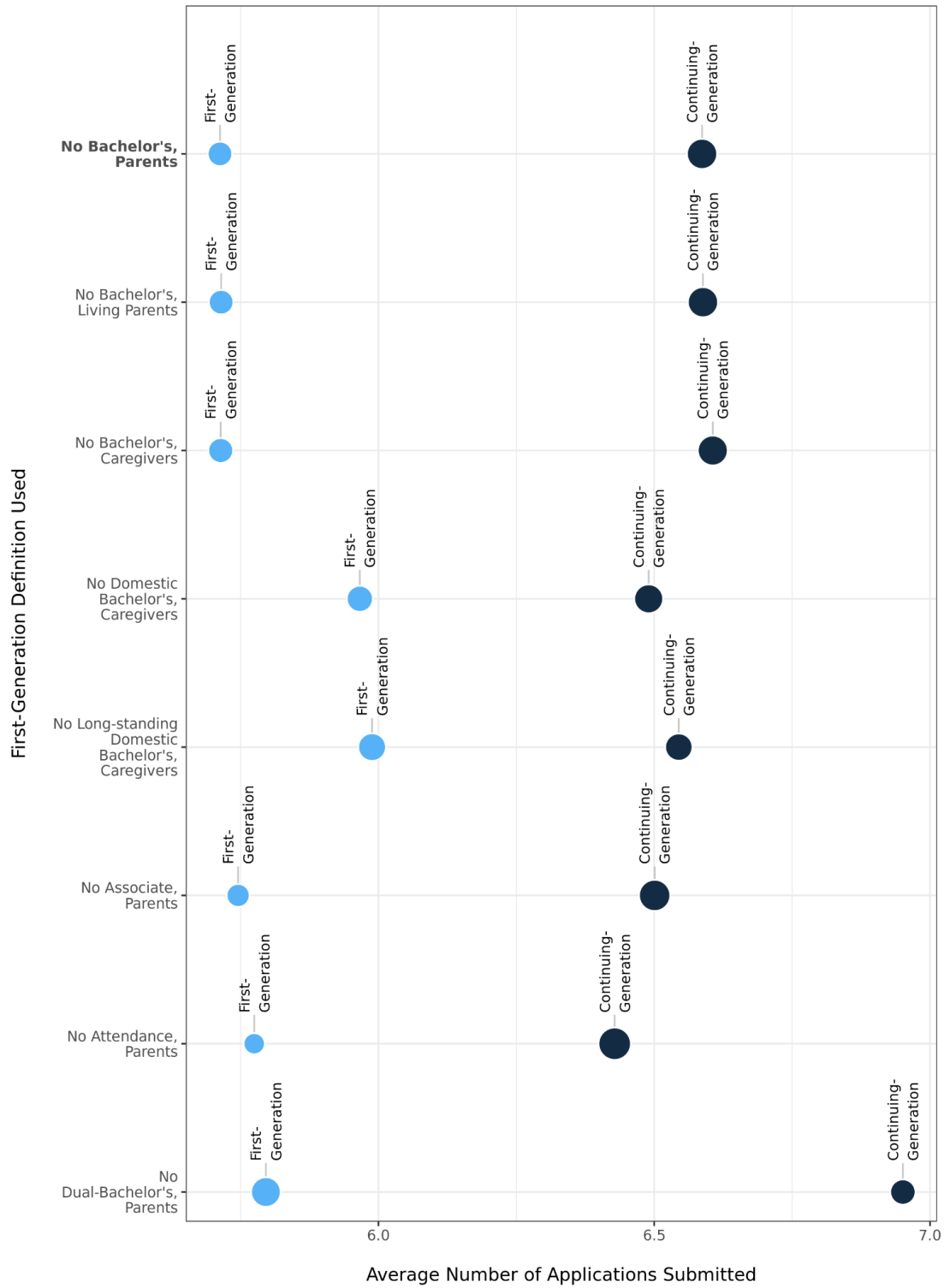
Conclusion

Throughout this brief, what we hope to make clear is that the precise definition used to operationalize who is and isn't a first-generation student can have dramatic implications for the size of this student population, as well as for our understanding of the average needs and characteristics of the students when identified. While changing the education level threshold (e.g., No Associate versus No Bachelor's) has by far the greatest potential impact, we also reveal that the aggregation of several smaller changes (e.g., whether we consider more recent degrees, or degrees obtained internationally) can also have meaningful influence on their own. And though we don't display it directly in this brief, it is also the case that combining education level changes with these smaller changes can further amplify these trends.

We want to emphasize again that there is no one perfect definition for all purposes; rather, we argue that the definition used must be selected judiciously and thoughtfully, in the context of its intended use and its potential ramifications whenever possible. As we suggested in the prior brief, policymakers and program/institutional leaders should be asking themselves: who are we trying to identify, and why? These briefs are intended to help spur and inform that conversation with meaningful data trends from our longitudinal and national perspective.

This point is underscored by the fact that the definitions we explored above are far from exhaustive. Indeed, with the many variables to consider, it is possible to construct over 100 distinct definitions for first-generation status.[13] Thus, clarity about what decisions are being made with these definitions – and why – is critical to ensuring both that we serve the students who need it most, and that we can identify the best ways to serve them.

In the third and final installment of this research brief series (to be released later this season), we explore what more can be learned about students when we don't rely on a binary measure for first-generation status and instead "unpack" first-generation status into nuanced parental education levels and combinations. For example, consider Student A: they live with both parents who each obtained their PhD (a combination of PhD+PhD). Student B lives with one parent who obtained a Bachelor's degree (a combination of BA+N/A). While both of these students are often considered continuing-generation, we show that they nonetheless have substantially different circumstances, resources, preparedness, and

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[13] Using just the variables identified in the first brief, we count: four education level thresholds to select, at least four reasonable stances on international degrees (e.g., no international degrees, international degrees from English-speaking countries are okay, international degrees from nations with comparable higher education systems are okay, etc.), two stances on incorporating deceased status, two stances on incorporating adults other than parents, and at least three reasonable stances on degree recency (e.g., no degrees less than five years old, no degrees obtained after a student's birth, etc.). That allows for 192 distinct permutations across all of these decisions.

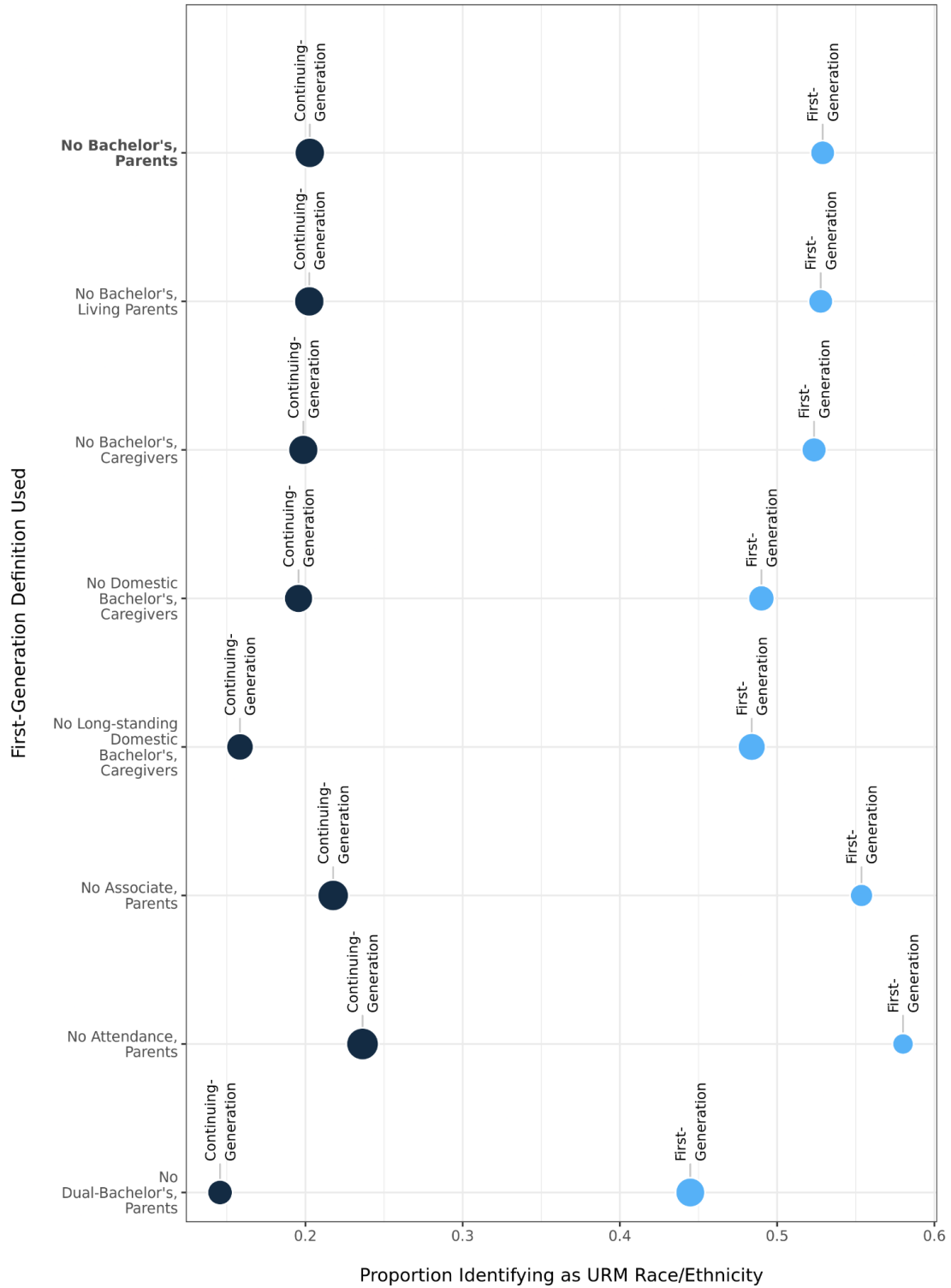First-generation status in context, part two

February 8, 2024

college application behaviors. Similarly, Student C has two parents with associate degrees (a combination of AA+AA), while Student D has two parents who never attended college at all (a combination of None+None). Though both often considered first-generation students, they again are quite distinct from one another along a wide variety of indicators. In the third research brief, we explore these dynamics within first-generation status categories using our comprehensive data warehouse and shed light on the complexities of this issue even further.

Appendix

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Appendix

Appendix Figure A1. Share of applicants identifying as an underrepresented minority (URM) race/ethnicity by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

First-generation status in context, part two

February 8, 2024

Appendix Figure A2. Share of applicants living in a ZIP-code with below-median household income by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season
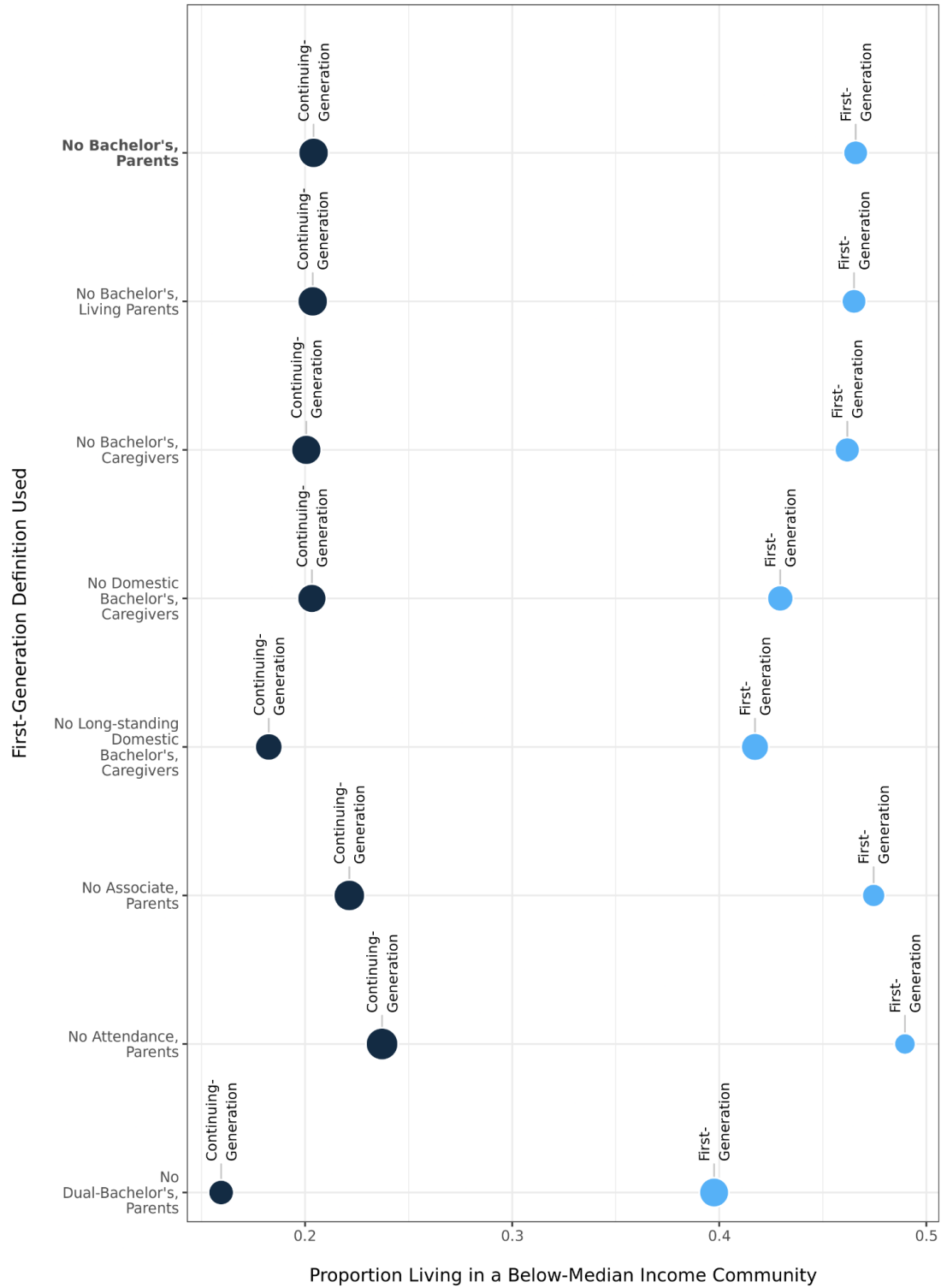
Appendix Figure A3. Share of applicants living in a rural or small town community by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

Appendix Figure A4. Average share of adults in the applicant's ZIP-code with a BA or higher by first-generation status, across definitions
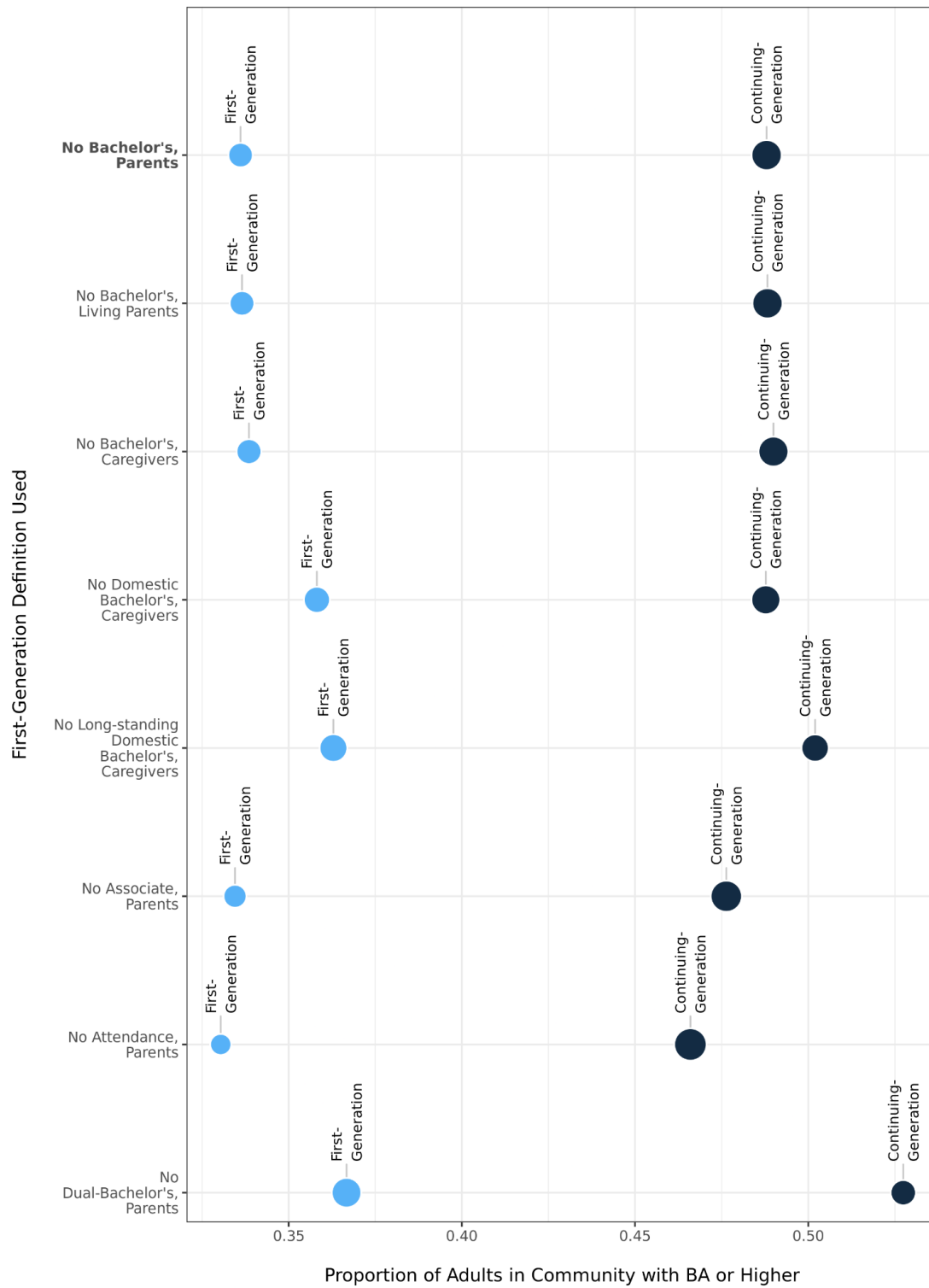
Among domestic first-year applicants in the 2022 season

Appendix Figure A5. Rates of SAT/ACT score reporting by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season
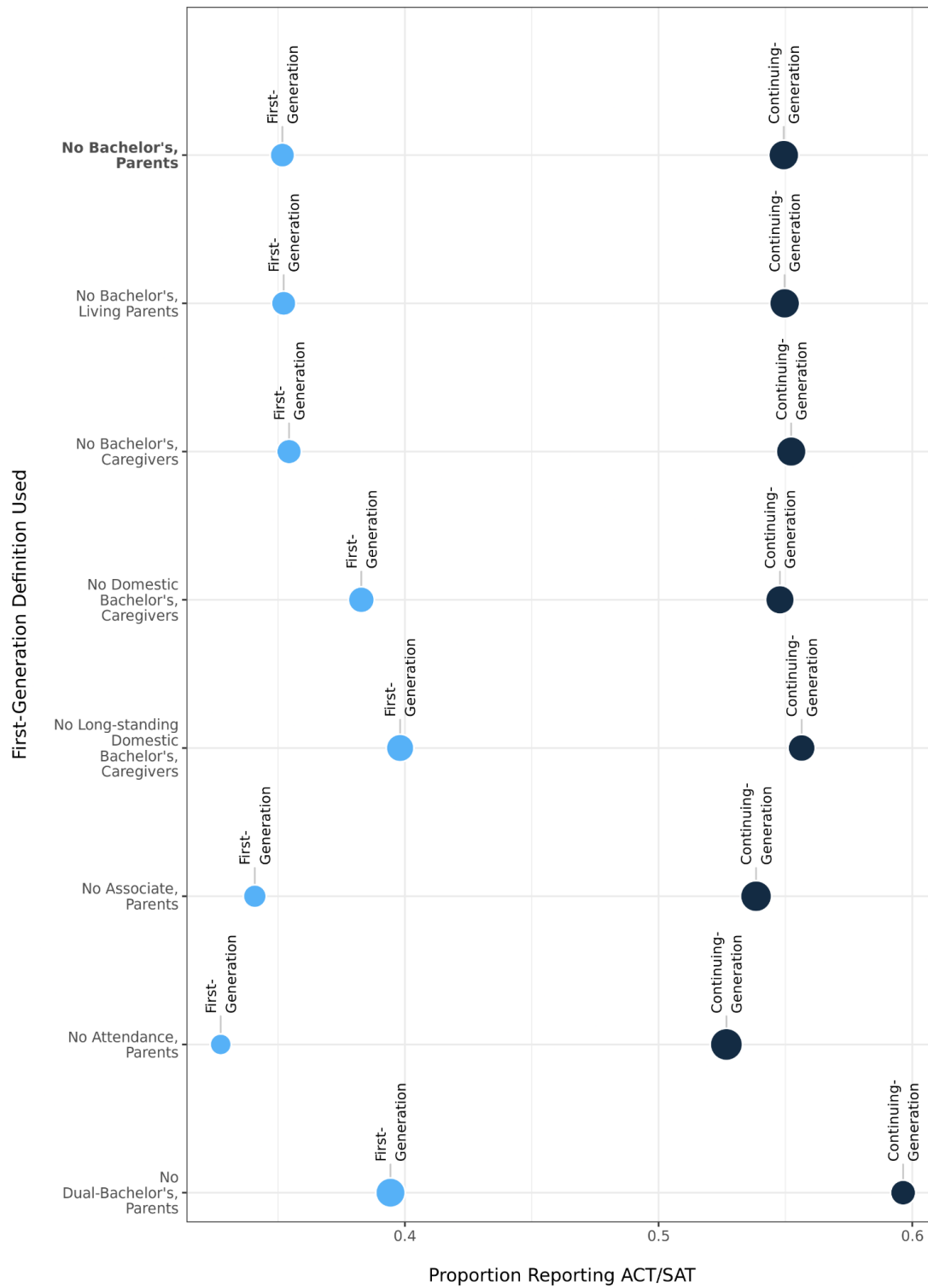
First-generation status in context, part two

February 8, 2024

Appendix Figure A6. Average reported SAT/ACT score when reported by first-generation status, across definitions
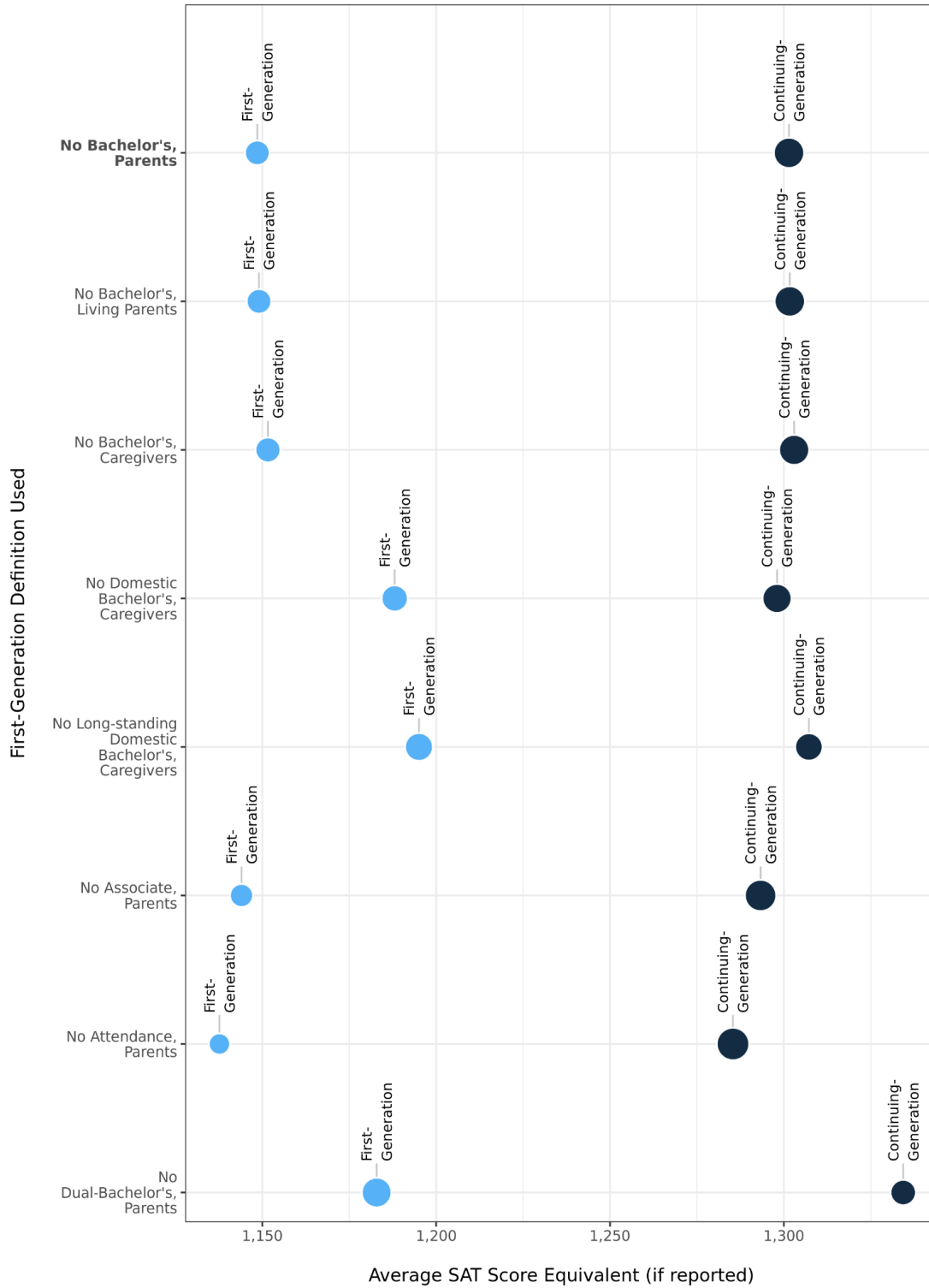
Among domestic first-year applicants in the 2022 season

Appendix Figure A7. Average scaled GPA by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

Appendix Figure A8. Average AP test score reported by first-generation status, across definitions

First-generation status in context, part two

February 8, 2024

Among domestic first-year applicants in the 2022 season

First-generation status in context, part two

February 8, 2024

Appendix Figure A9. Average number of academic honors reported by first-generation status, across definitions
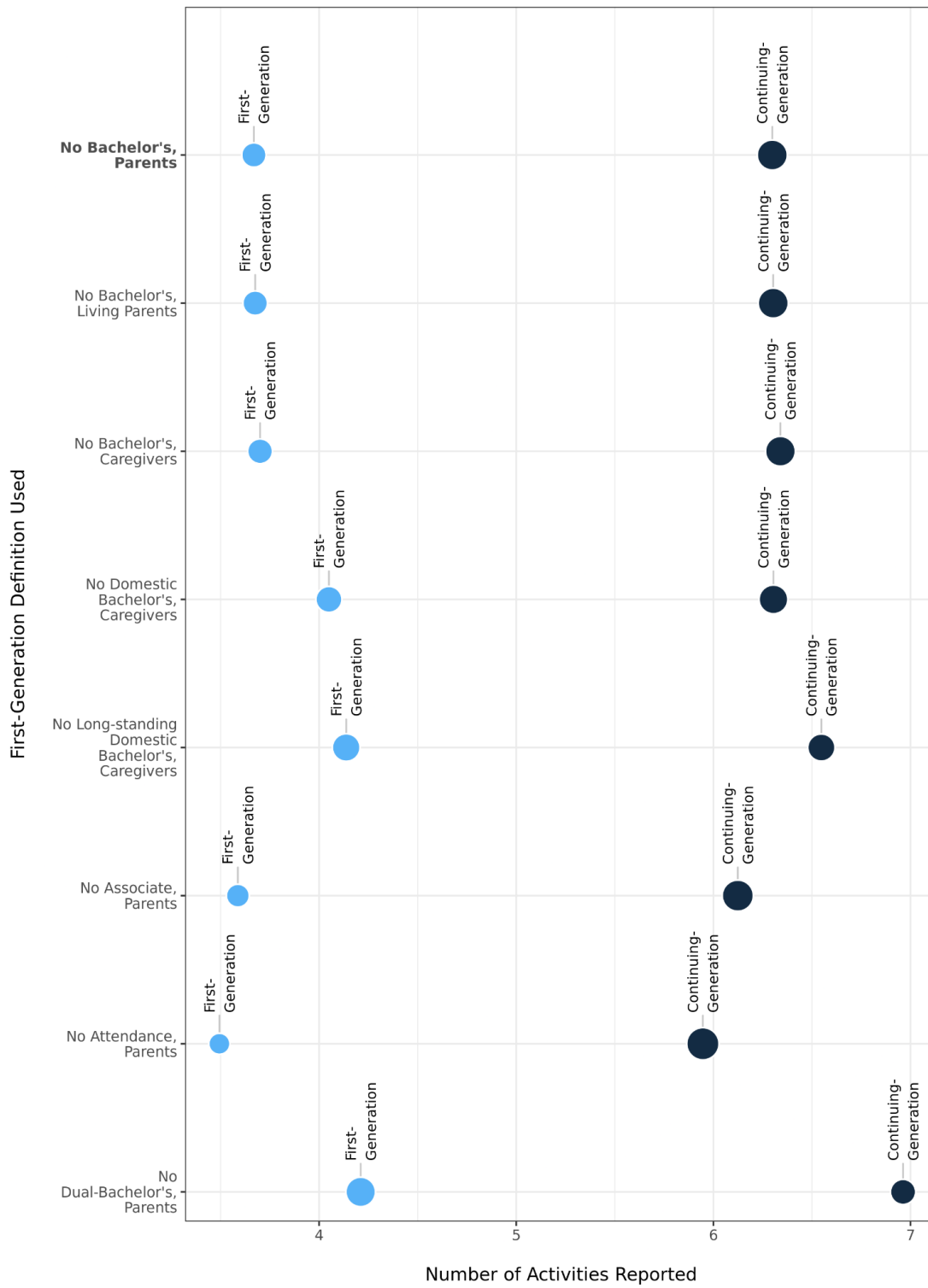
Among domestic first-year applicants in the 2022 season

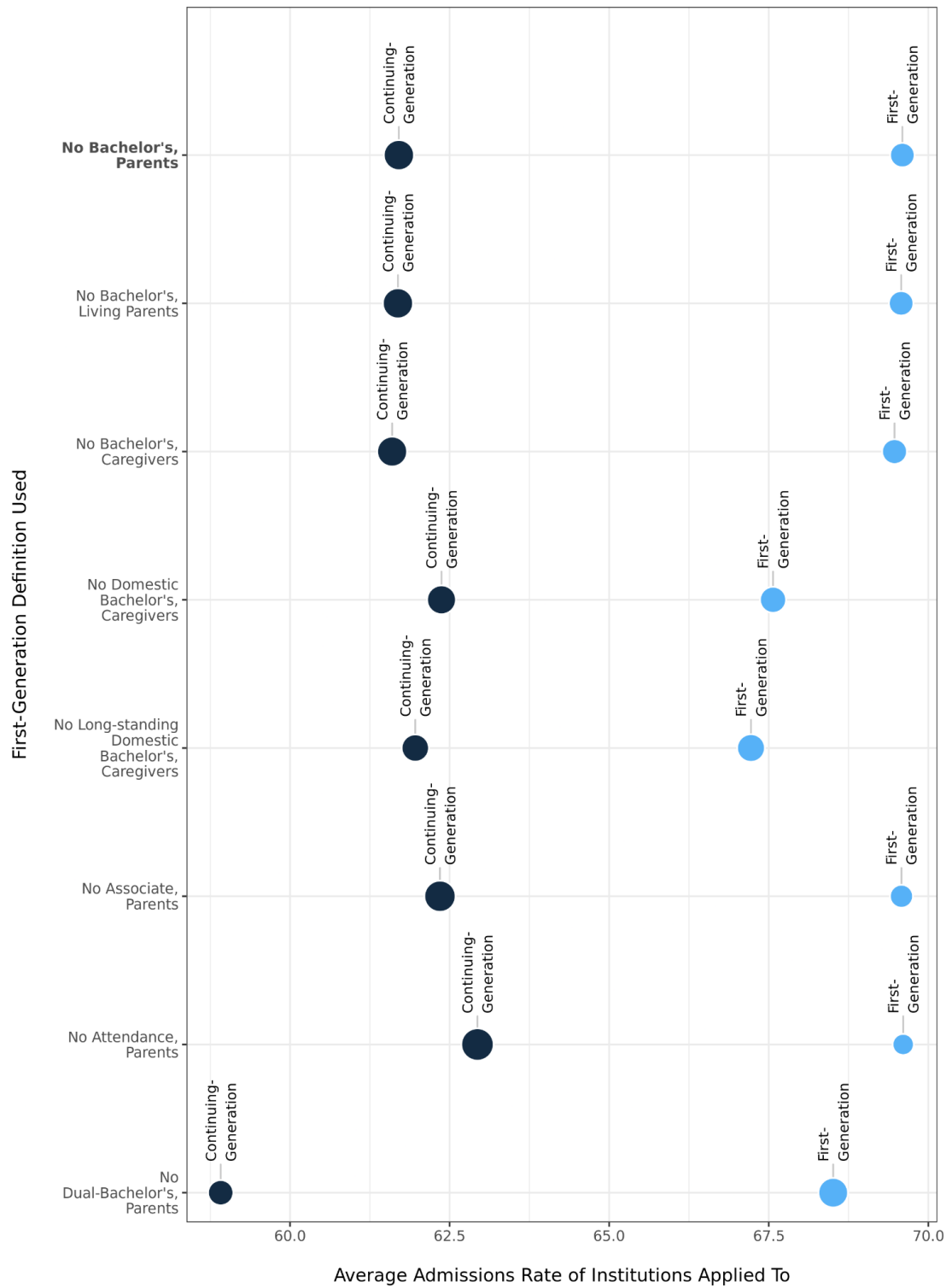First-generation status in context, part two

February 8, 2024

Appendix Figure A10. Average number of extracurricular activities reported by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

Appendix Figure A11. Average selectivity rate of institutions applied to by first-generation status, across definitions
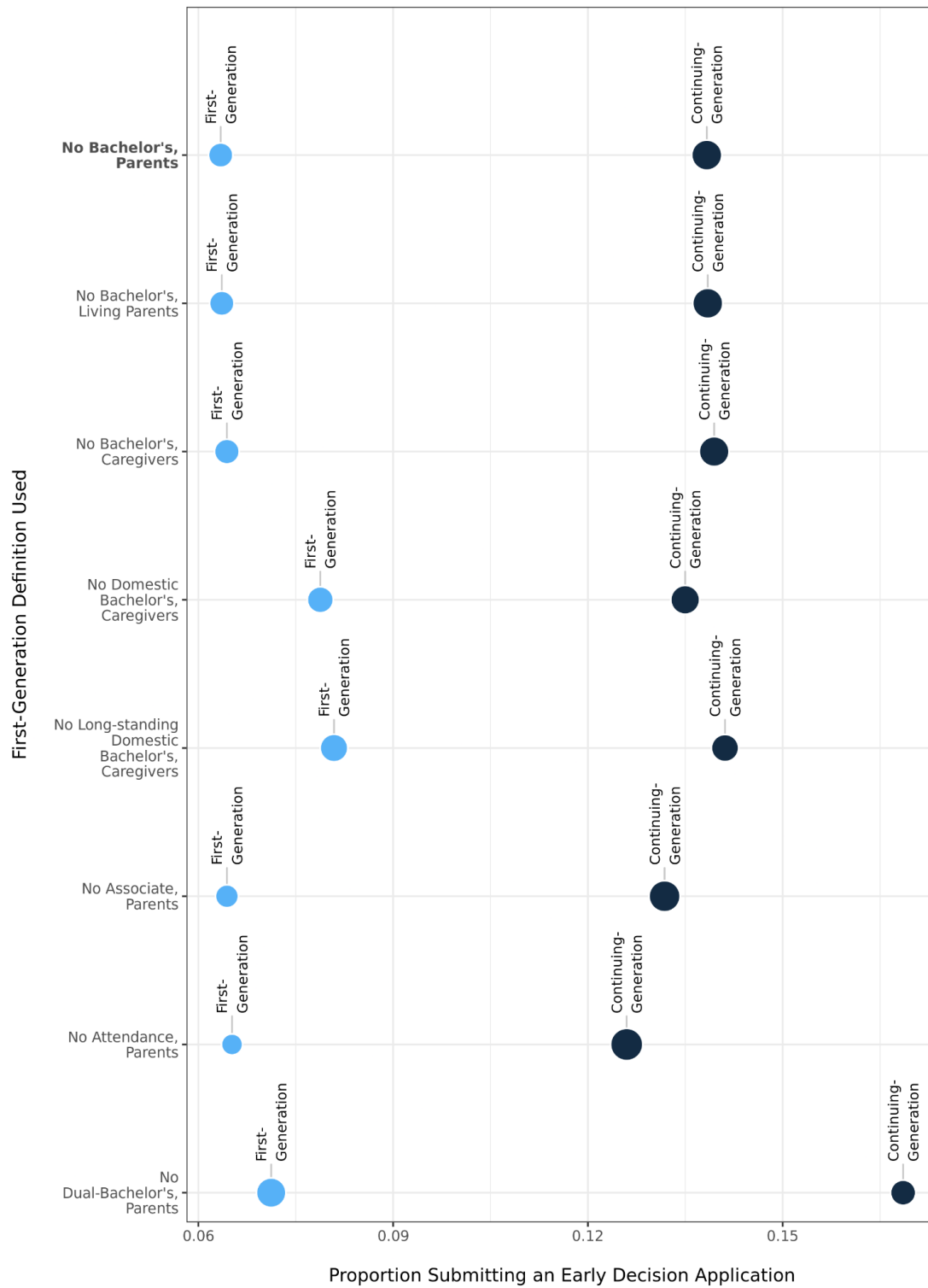
Among domestic first-year applicants in the 2022 season

Appendix Figure A12. Share of applicants submitting a binding Early Decision application by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season

Appendix Figure A13. Share of applicants intending to pursue a master's degree or higher by first-generation status, across definitions

Among domestic first-year applicants in the 2022 season