

Unpacking applicant race and ethnicity, part 2: disparities in key indicators of applicant readiness and resources across detailed backgrounds

October 17, 2022

Authors

Data Analytics and Research

Brian Heseung Kim* Mark Freeman Trent Kajikawa Honeiah Karimi Preston Magouirk

* corresponding author

Press inquiries

Emma Steele

esteele@commonapp.org

Introduction

Improving access, equity, and integrity in the college admissions process is the mission of the Common App. Critical to understanding our progress in this mission is measuring how different students — especially those from diverse racial and ethnic backgrounds — access and navigate the complex college application process.

In the <u>first research brief of this series</u>, we use the uniquely detailed race and ethnicity data that applicants submit through the Common App (see Appendix Figure A12 for an illustration of this interface) to shed light on how industry-standard racial/ethnic categories can: **(a)** conceal the importantly distinct populations within these standard categories (e.g., within the Hispanic/Latinx group), and **(b)** conceal how the composition of distinct groups within each category of applicant race/ethnicity is constantly shifting in meaningful ways over time and across regions.

In this second brief on the same subject, we now illustrate a third major finding: that domestic applicants' individual resources (e.g., low-income status and household income estimates), college readiness (e.g. reported GPA and standardized test scores) and application behaviors (e.g., number of applications sent and selectivity of institutions applied to) can differ radically across the more detailed background groupings within each standard racial/ethnic category (e.g., domestic Hispanic/Latinx applicants with background in Spain or Mexico). In other words, there exists substantial variation in the lived experiences, strengths, and aspirations of applicants, and this is not captured at the level of standard categories. Equally important are the popular

perceptions and media narratives about applicants in each standard category, which are then primarily driven by their larger constituent groups — to the detriment of their smaller groups.

For example, we find that multiracial applicants identifying as Asian and White (the most prevalent combination among non-Hispanic/Latinx multiracial applicants) in the 2021–2022 season have one of the highest SAT score averages (1354) across all detailed background groups, while multiracial applicants identifying as Black or African American and Native Hawaiian or Other Pacific Islander (one of the least prevalent combinations) have one of the lowest (1093). Put another way, this score variation across detailed groupings of multiracial applicants (261 points) within the standard "Two or more races" category is nearly twice as large as the score differential between, for example, underrepresented minority (URM)¹ and non-URM applicant test score averages (138 points) on our platform. We observe many such differences within the standard racial categories of this magnitude throughout our analyses here.

These observations ultimately highlight some of the issues inherent in simplifying applicants' race/ethnicity into standard categories and emphasize the critical importance of incorporating greater context about applicants' identities whenever possible. Race and ethnicity are incredibly complex constructs, and to the extent that educational leaders across the country continue to strive towards greater diversity among their students, faculty, staff, and overall campus communities, we show here the importance of further refining how we conceptualize, measure, and pursue that diversity. As with our first brief, we hope these data and analyses spur valuable conversation and reflection among policymakers, practitioners, and the public, and look forward to engaging in these conversations going forward.

_ 1

¹ We use the term underrepresented minority (URM) in alignment with conventions employed by the <u>National Science Foundation</u>. 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.

² Such insights are also particularly timely given that the <u>U.S. Office of Management and Budget has</u> recently begun to solicit input for revisions to the collection of racial/ethnic data across agencies. Similarly, major media outlets such as <u>The Economist</u> and <u>NPR</u> have brought national attention on this issue of demographic disaggregation to look more closely at detailed background data in contexts like voting patterns, earnings, and education.

Contents

Key findings

Examining individual resources across detailed racial/ethnic backgrounds

Examining college readiness across detailed racial/ethnic backgrounds

Examining application behaviors across detailed racial/ethnic backgrounds

Conclusion

<u>Appendix</u>

Key findings

- 1. There exist large and meaningful differences within each standard racial/ethnic category for nearly all key indicators of individual resources, college readiness, and application behavior we examined for domestic applicants in the 2021–2022 season. In general, these differences within categories were largest for Asian, American Indian or Alaska Native, and multiracial (excluding Hispanic/Latinx) applicants.
- 2. Differences in key indicators within standard racial/ethnic categories were often as large as, or larger than, the difference between URM and non-URM applicant averages. By corollary, there are several detailed background groups within non-URM racial/ethnic categories (e.g., Asian applicants indicating background in Cambodia) who generally aligned more closely with URM applicant averages; likewise, there are several detailed background groups within URM racial/ethnic categories (e.g., Hispanic/Latinx applicants indicating background in Spain) who generally aligned more closely with non-URM applicant averages.
- 3. Asian applicants indicating backgrounds in India, China, Japan, and Korea tended to rank most favorably across measures. Asian applicants indicating backgrounds in Cambodia, Vietnam, the Philippines, and Other South and Southeast Asia tended to rank least favorably. For example, just 9% of applicants indicating background in Japan received a Common App fee waiver (indicating low-income status), while 60% of applicants indicating background in Other South Asia did.
- 4. Multiracial applicants identifying as Asian and White ranked most favorably across nearly every measure examined. Multiracial applicants who identified as some combination of historically underrepresented populations such as American Indian or Alaska Native and Black or African American tended to rank least favorably. For example, we find that multiracial applicants identifying as Asian and White have one of the highest SAT score averages across all groups at 1354, while multiracial applicants identifying as Black or African American and Native Hawaiian or Other Pacific Islander applicants have one of the lowest at 1093.
- 5. There was far less consistency in which tribal affiliations among American Indian or Alaska Native applicants tended to rank most or least favorably across measures as compared to detailed background differences in other standard categories. That said, differences within the American Indian or Alaska Native category were often the largest of any racial/ethnic category across several key measures like first-generation status and estimated household income. This phenomenon is likely closely related to the smaller applicant pool for this group (and thus potentially less representative averages).
- 6. Applicants choosing not to provide racial/ethnic information tended to look most similar to non-URM applicants. In some cases, such as with standardized test scores, applicants without any racial/ethnic information ranked substantially higher than the White and non-URM group averages.

Examining individual resources across detailed racial/ethnic backgrounds

Analyses from the first brief helped us better understand the composition of domestic³ applicants using the Common App, adding important nuance and context about the diversification of our applicant pool. One of the most important findings was that there are important differences in applicant growth over time within each standard racial/ethnic category,⁴ and we should not assume that growth in these standard racial/ethnic categories is experienced evenly across the detailed backgrounds⁵ within them.

We now apply this same thinking to key indicators of applicants' individual resources, college readiness, and other application behaviors. That is, we examine whether there are meaningful differences within each standard racial/ethnic category in terms of applicants' test score reporting rates, estimated household income, applications sent, selectivity of institutions applied to, and more, when looking at applicants' detailed backgrounds.

To begin with an illustrative example for applicants' individual resources, Figures 1a and 1b chart out the rate of Common App fee waiver receipt, a measure we often use to approximate low-income status among our applicants, across each detailed background group. (We encourage readers to use the zoom function of their browsers as needed to enhance the readability of figures throughout this brief.) 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 here (access password: tw8xwf2i).

Each left-to-right row of points represents one standard racial/ethnic category (e.g., White), while each point within that row indicates the average rate of fee waiver receipt for a detailed background within that standard category (e.g., Europe or Middle East). Points are sized according to the share of the standard category that the given detailed background represents. We also plot (in blue) for each row the corresponding standard race/ethnicity category average as a reference point. Finally, we include at the bottom of each plot the averages for all applicants, for all URM applicants, for all non-URM applicants, and for all applicants submitting no racial/ethnic identity data. We split the data visualization across two separate panels for visual clarity.

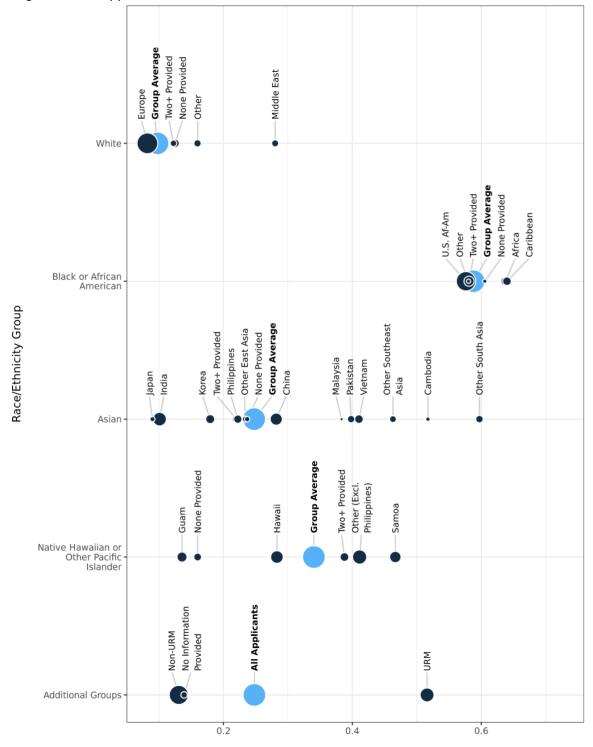
³ As with the last brief, we focus in this analysis on (1) applicants who were U.S. citizens, whether residing in the U.S. or abroad, and (2) applicants who were not U.S. citizens but still indicating residence in the U.S.

⁴ Throughout this brief, we use this phrase to refer to the industry-standard race and ethnicity categories as defined by the <u>U.S. Office of Management and Budget</u> and used by the U.S. Census Bureau (e.g., exclusively White, Black or African American, Hispanic/Latinx, Two or More Races, etc.).

⁵ Throughout this brief, we use this phrase to refer to the detailed background responses that applicants on the Common App submit for each industry-standard race and ethnicity category they indicate. See Appendix Figure A12 for an illustration of this interface.

Figure 1a. Rates of Common App fee waiver receipt by detailed applicant race/ethnicity backgrounds, Panel A

Among domestic applicants in the 2021-2022 season



Proportion Receiving a Common App Fee Waiver

Figure 1b. Rates of Common App fee waiver receipt by detailed applicant race/ethnicity backgrounds, Panel B

Among domestic applicants in the 2021-2022 season



Proportion Receiving a Common App Fee Waiver

Beginning with the White category at the top of Figure 1a, we see that most detailed backgrounds within this category are clustered around the group average at 10% of applicants receiving a Common App fee waiver, with the exception of applicants indicating a Middle East background at a much higher 28%. The same is largely true of the Black or African American category, where most detailed backgrounds within this category are quite similar to the group average of 59%. These two examples are in stark contrast to the range of variation evident across applicants of different backgrounds within the Asian category, where Japan sits at the low end for rates of fee waiver receipt at 9%, while "Other South Asia" (e.g., Sri Lanka, Nepal, Bangladesh) sits at the top-end around 60% — more than 6.5 times higher.

We observe similarly wide ranges for fee waiver receipt within the remaining standard racial/ethnic categories in Figure 1b. For example, Native Hawaiian or Other Pacific Islander applicants indicating backgrounds in Samoa (47%) have far higher rates of fee waiver receipt than applicants indicating backgrounds in Guam (14%). Likewise, American Indian or Alaska Native applicants enrolled in the SD Oglala Sioux tribe have the highest rates of fee waiver receipt across *all* detailed background groups (73%) while applicants enrolled in the OK Cherokee tribe have some of the lowest (13%) — by far the widest range within any of the standard racial/ethnic categories. We observe a similar trend for backgrounds within the Hispanic/Latinx group, with applicants indicating background in Spain having far lower rates of fee waiver receipt than applicants indicating background in Central America or Mexico.

Our unique data allow us to examine trends by racial identities within the categories of multiracial and Hispanic/Latinx applicants, as well. Perhaps expectedly, fee waiver receipt within the multiracial category (excluding Hispanic/Latinx applicants) follows broader race/ethnicity trends: applicants identifying as both White and Asian have some of the lowest rates of fee waiver receipt, while applicants identifying partially as part of a historically underrepresented population like American Indian or Alaska Native or Black or African American have some of the highest. This same general trend is also present when examining the racial identities of Hispanic/Latinx applicants.

When we compare these findings to the rates of fee waiver receipt for all applicants, for all URM applicants, for all non-URM applicants, and for all applicants submitting no racial/ethnic identity, we note three observations that are fairly consistent across all of the measures we examine throughout the remainder of this brief: (1) applicants who submitted no racial/ethnic identity either tend to have statistics similar to non-URM applicants or statistics even *more* favorable than non-URM applicants; (2) there exist detailed background groups within non-URM racial/ethnic categories (e.g., Asian applicants indicating background in Cambodia) that look more similar to the URM average than the non-URM average; and (3) there exist detailed background groups within URM racial/ethnic categories (e.g., Hispanic/Latinx applicants indicating background in Spain) that look more similar to the non-URM average than the URM average.

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

⁶ While it is possible to analyze the detailed background combinations for multiracial applicants as well, the complexity of these data make it difficult to interpret and visualize results in an approachable and meaningful way. We hope to revisit these analyses at a future time.

- Rates of first-generation status (Appendix Figures A1a and A1b)
- Average estimated household income (Appendix Figures A2a and A2b)⁷
- Average of community-level median household income (Appendix Figures A3a and A3b)⁸

We find that the broad trends we surfaced for fee waiver receipt generally hold true for these measures, as well.

Examining college readiness across detailed racial/ethnic backgrounds

We continue in our analysis by examining various indicators of college readiness (broadly defined) across applicants' detailed racial/ethnic backgrounds as well. To illustrate, we first explore trends in applicants' reported SAT/ACT scores (with ACT scores converted to their SAT score equivalent using provided concordance tables) in Figures 2a and 2b.⁹

⁷ For this analysis, we use an estimated household income measure for each applicant as matched to data provided by Experian.

⁸ For this analysis, we use ZIP-code-level Census data on median household income for each applicant's submitted home address.

⁹ As we note later in this section, we also report on differences in applicants' test score reporting rates in Appendix Figures A4a and A4b given the prevalence of test optional policies in the 2021–2022 season.

Figure 2a. Average SAT/ACT equivalent score reported by detailed applicant race/ethnicity backgrounds, Panel A

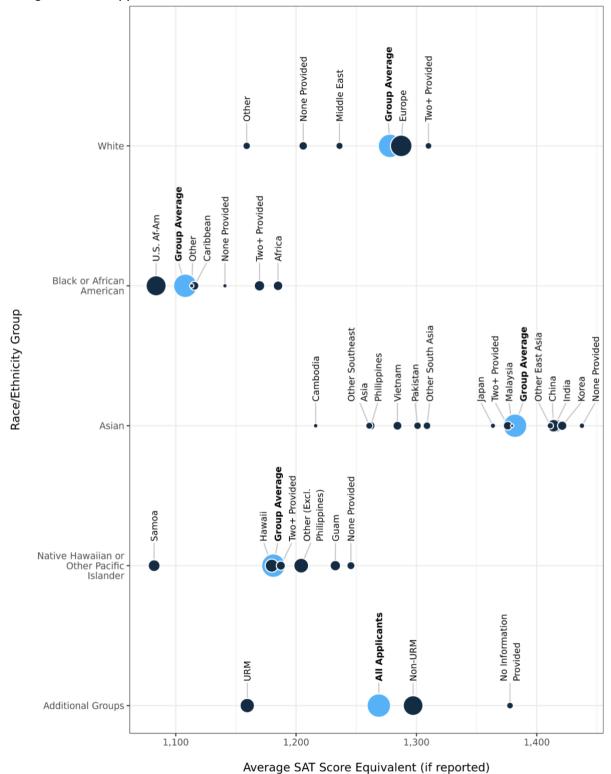
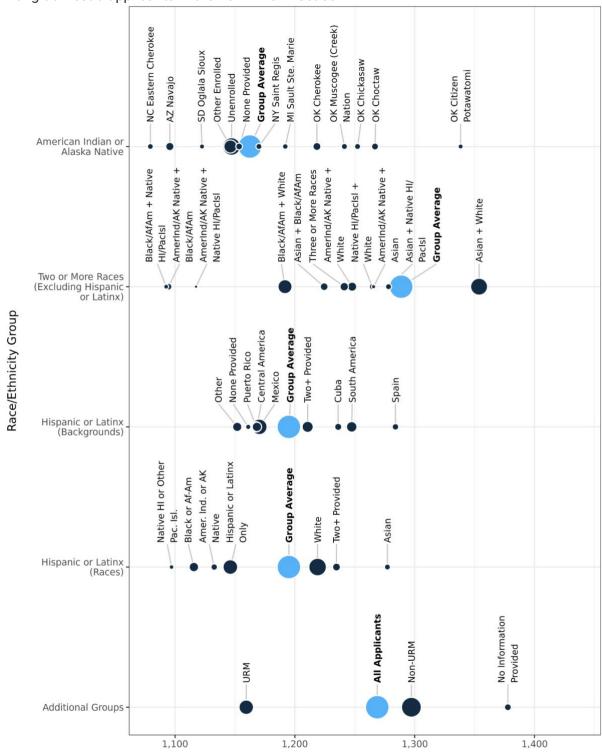


Figure 2b. Average SAT/ACT equivalent score reported by detailed applicant race/ethnicity backgrounds, Panel B

Among domestic applicants in the 2021–2022 season



Average SAT Score Equivalent (if reported)

Several of the same trends we remarked on for Common App fee waiver receipt exist here. We note particularly wide variation within the standard race/ethnicity categories of Asian, American Indian or Alaska Native, and multiracial applicants. For example, Asian and White multiracial applicants have one of the highest average standardized test scores across all groups (1354), while Black or African American and Native Hawaiian or Other Pacific Islander applicants have one of the lowest (1093). According to the College Board score report guide for 2022, these are the equivalent of scoring at roughly the 90th and 58th percentile among SAT test-takers, respectively. Put another way, this score differential within the multiracial applicant group (261 points) is nearly twice as large as the score differential between URM and non-URM applicants (138 points). Similarly, we also note that applicants who provide no racial/ethnic information score substantially higher than almost all other groups with an average of 1378 — meaningfully higher than even the non-URM applicant average of 1297.

As with the individual resources measures, we share several additional measures of college readiness in the appendix as follows:

- Rates of SAT/ACT score reporting (Appendix Figures A4a and A4b)
- Average Scaled GPA (Appendix Figures A5a and A5b)¹⁰
- Average number of passing AP test scores reported (Appendix Figures A6a and A6b)¹¹
- Average AP test score reported (Appendix Figures A7a and A7b)

Summarizing these analyses, we find that variation along other measures of college readiness within each standard race/ethnicity group tends to be only slightly smaller than the SAT/ACT scores we present above. Such results are likely a reflection both of the disparities in individual resources we remark on in the prior section, and of other disparities in the educational pipeline more generally (e.g., access to advanced course-taking, school resources, etc.).

Examining application behaviors across detailed racial/ethnic backgrounds

Finally, we conclude this research brief by reviewing how applicants' application behaviors vary within standard racial/ethnic groups along a variety of measures. For illustration, we analyze the average number of applications submitted per applicant by each detailed background group in Figures 3a and 3b. Note also that we plan to release a more detailed research brief looking explicitly at trends and dynamics related to applications submitted per applicant later this Fall.

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

¹¹ We consider 3 or above to be a passing AP test score.

Figure 3a. Average number of applications sent by detailed applicant race/ethnicity backgrounds, Panel A

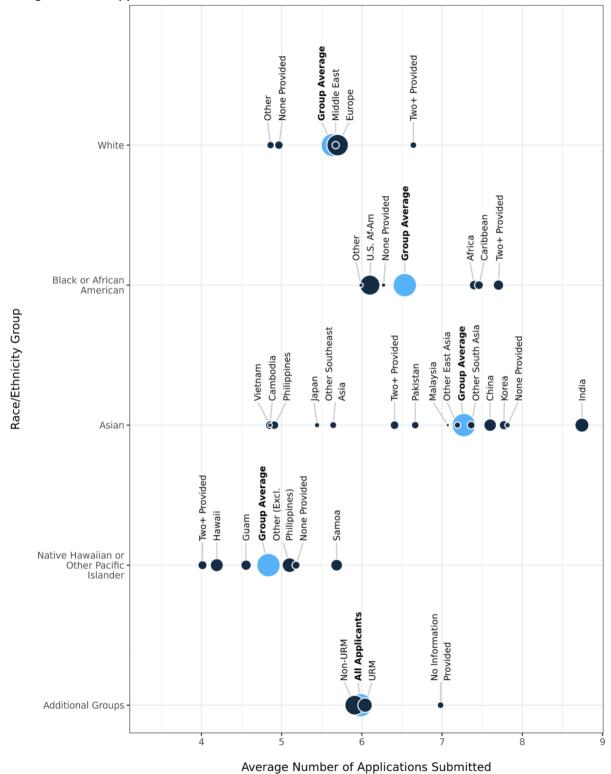
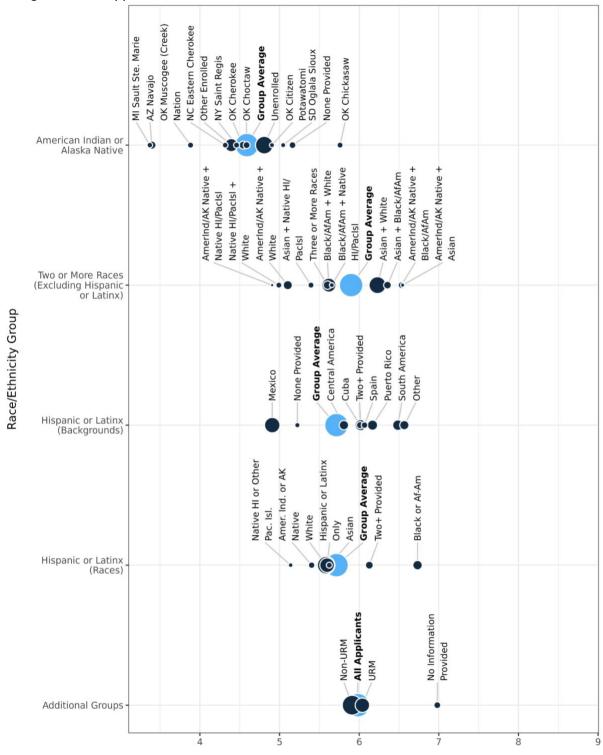


Figure 3b. Average number of applications sent by detailed applicant race/ethnicity backgrounds, Panel B

Among domestic applicants in the 2021-2022 season



Average Number of Applications Submitted

Perhaps unsurprisingly, the narrative of these results remain generally consistent with our examinations of individual resources and college readiness. What is unique about this specific measure of applications per applicant is that the URM and non-URM group averages are nearly identical at about 6 applications per applicant, and the averages for many standard race/ethnicity groups overall also hover around 6 (e.g., Hispanic or Latinx, multiracial, White, and Black or African American applicants). This relative consistency across standard categories puts into even starker relief some of the largest within-category differences. For example, Asian applicants indicating a background in India are submitting about twice as many applications as Asian applicants indicating a background in Vietnam, Cambodia, or the Philippines. Similarly, American Indian or Alaska Native applicants indicating enrollment in the OK Chickasaw tribe are submitting nearly 70% more applications than those indicating enrollment in the AZ Navajo tribe.

In the appendix, we provide additional visualizations for each of the following measures:

- Average number of academic honors reported (Appendix Figures A8a and A8b)
- Average number of extracurricular activities reported (Appendix Figures A9a and A9b)*
- Average selectivity rate of institutions applied to (Appendix Figures A10a and A10b)
- Share of applicants submitting a binding Early Decision application (Appendix Figures A11a and A11b)*

Conclusion

Taking the findings of this brief together with the first brief, it becomes clear how trying to conceptualize the "average" student in each industry-standard racial/ethnic category is far less informative than we might previously have assumed. This is true both because the composition of these standard categories is constantly changing over time, and also because the flattening of applicants into such broad groupings ultimately erases the rich diversity of lived experiences and circumstances of the distinct populations within them.

These insights, then, all point to the importance of examining applicants' identities beyond the industry-standard race/ethnicity categories — for example, to better understand the changing landscape of college accessibility in the country, to better contextualize applicants' circumstances in admissions, and to better target efforts related to diversity and student supports. While these standard categories serve as a critical "common data language" to help us monitor changing populations across contexts in education, we also see here how using that lens alone can simplify in ways that are potentially highly consequential. In other words, we ultimately argue that more nuanced data, not less, is crucial for better understanding the landscape of higher education applications and beyond.

We invite readers to explore the rich data we provide here in more detail. We hope these briefs serve as valuable references to drive critical reflection around the construction of students' racial/ethnic identities in higher education for policymakers, practitioners, and the public going forward.

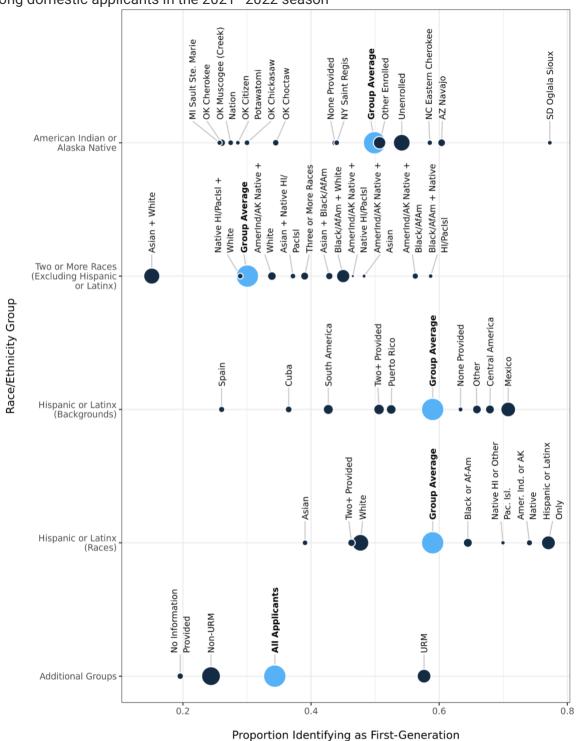
^{*} we intend to release additional research briefs on these subjects later this season

Appendix

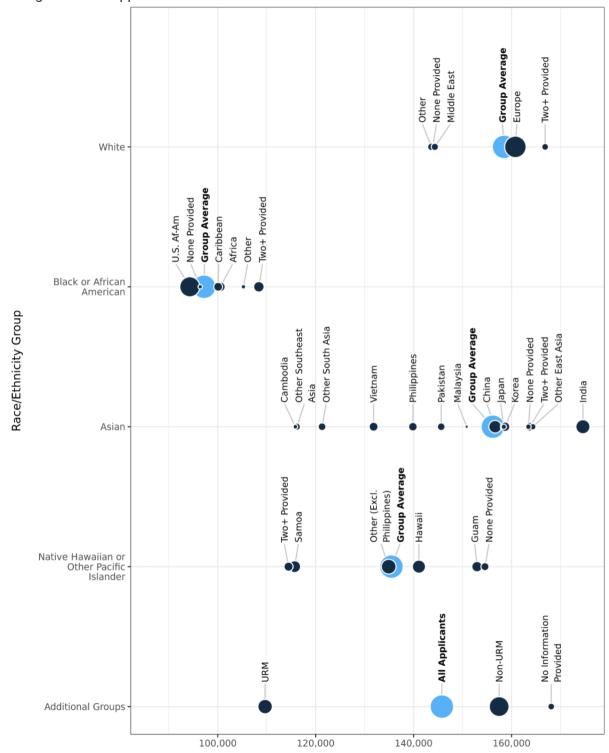
Appendix Figure A1a. Rates of first-generation status by detailed applicant race/ethnicity backgrounds, Panel A



Appendix Figure A1b. Rates of first-generation status by detailed applicant race/ethnicity backgrounds, Panel B

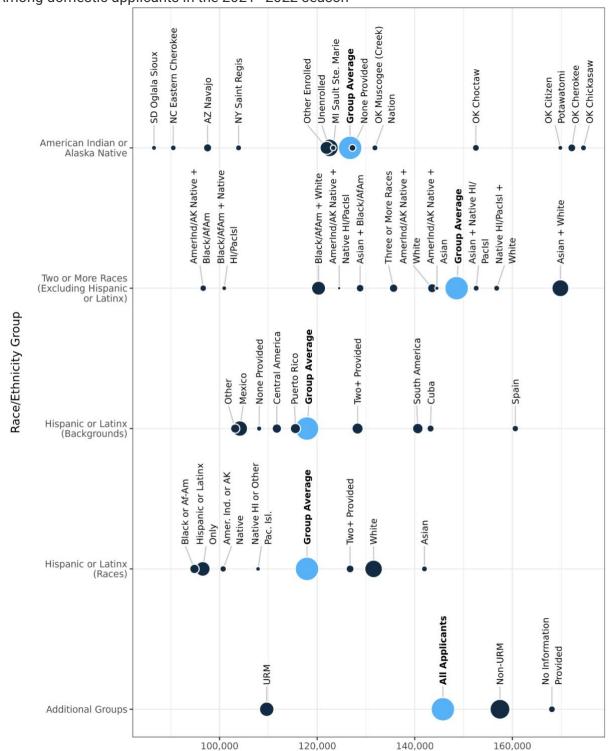


Appendix Figure A2a. Average estimated household income by detailed applicant race/ethnicity backgrounds, Panel A



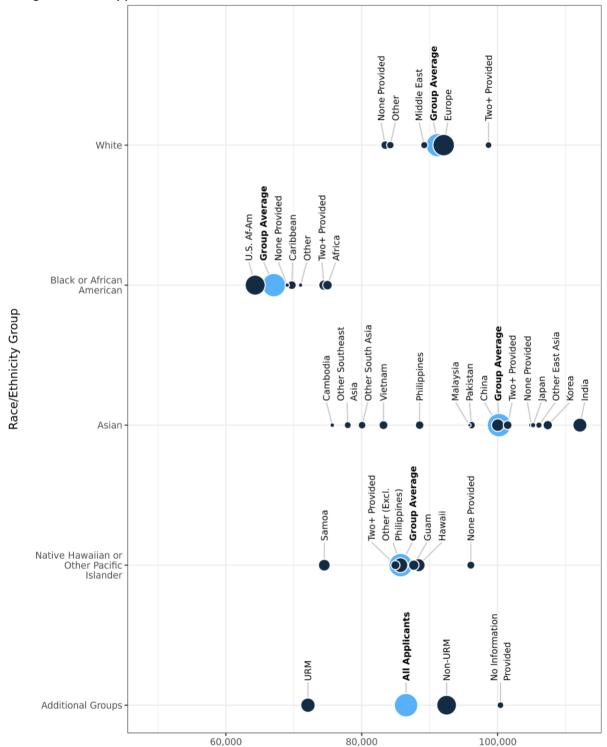
Average of Estimated Household Income in Dollars

Appendix Figure A2b. Average estimated household income by detailed applicant race/ethnicity backgrounds, Panel B



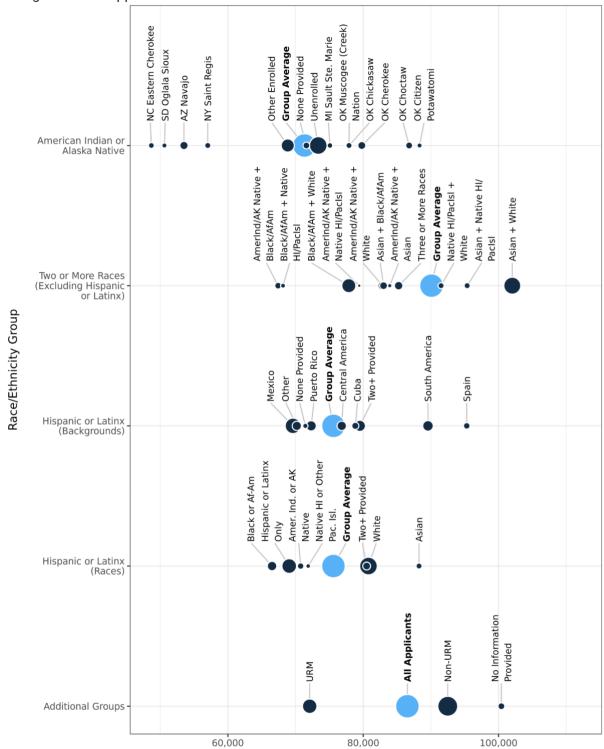
Average of Estimated Household Income in Dollars

Appendix Figure A3a. Average community-level median household income by detailed applicant race/ethnicity backgrounds, Panel A



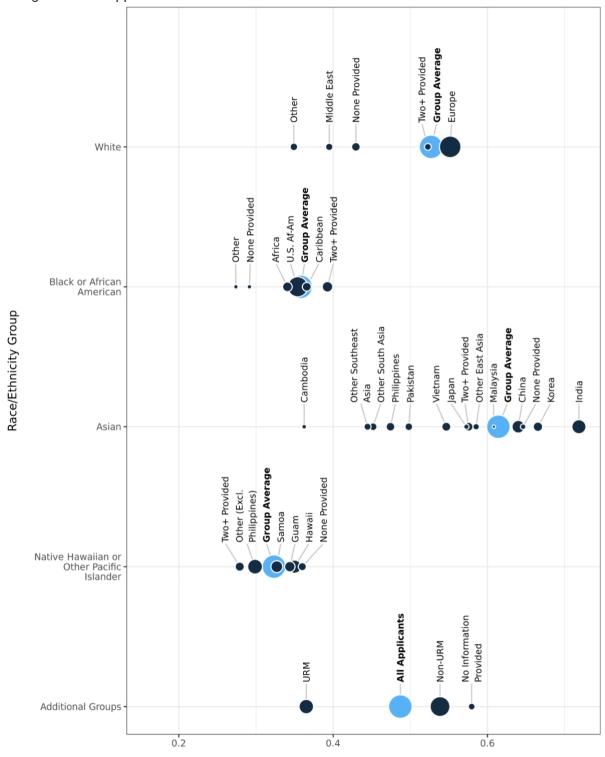
Average of ZIP-level Median Household Income in Dollars

Appendix Figure A3b. Average community-level median household income by detailed applicant race/ethnicity backgrounds, Panel B

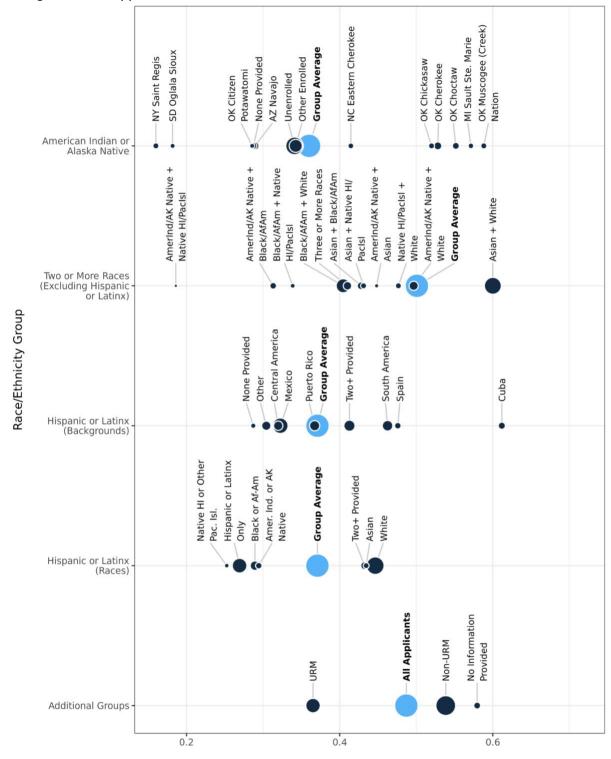


Average of ZIP-level Median Household Income in Dollars

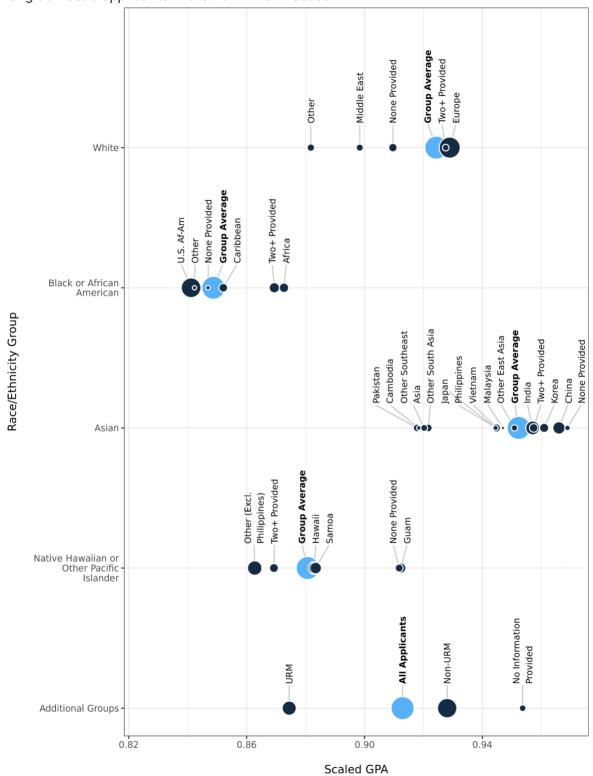
Appendix Figure A4a. Rates of SAT/ACT score reporting by detailed applicant race/ethnicity backgrounds, Panel A



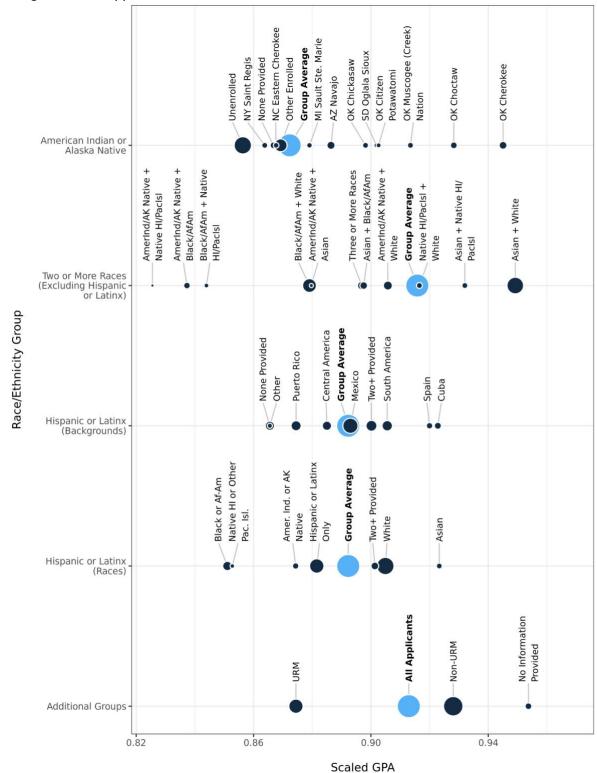
Appendix Figure A4b. Rates of SAT/ACT score reporting by detailed applicant race/ethnicity backgrounds, Panel B



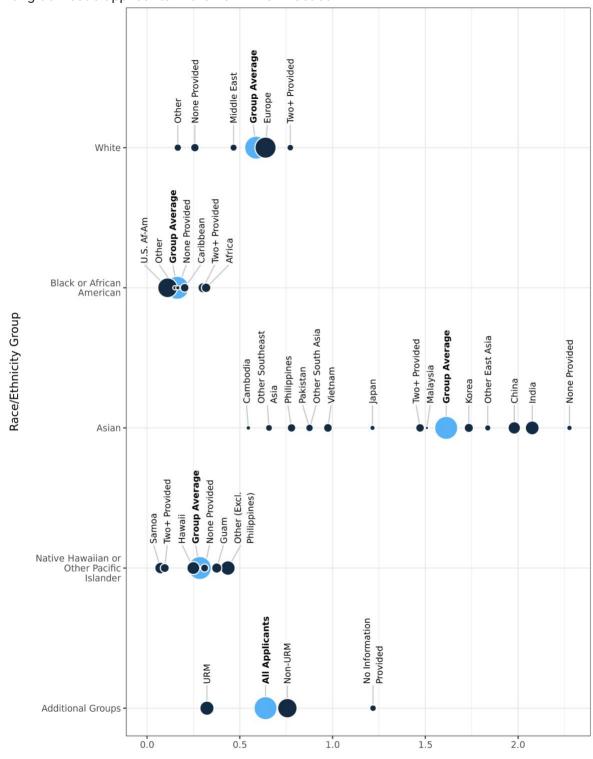
Appendix Figure A5a. Average scaled GPA by detailed applicant race/ethnicity backgrounds, Panel A



Appendix Figure A5b. Average scaled GPA by detailed applicant race/ethnicity backgrounds, Panel B



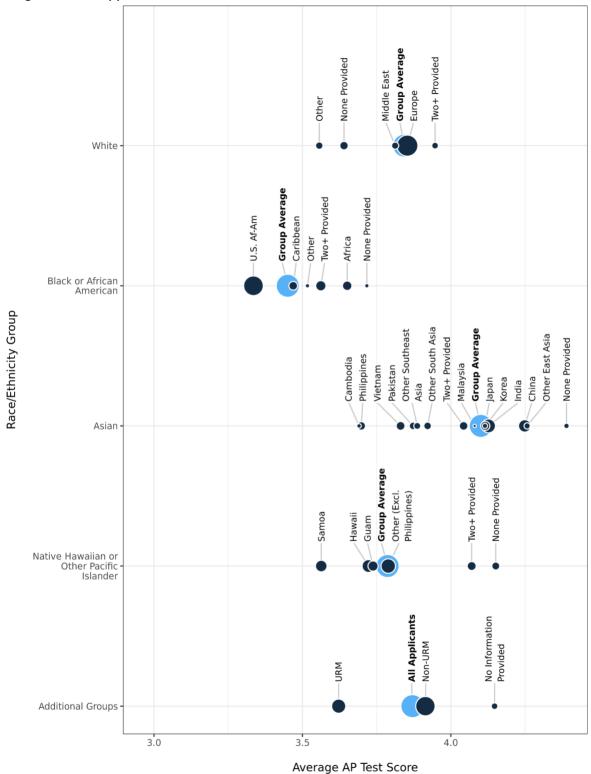
Appendix Figure A6a. Average number of passing AP test scores reported by detailed applicant race/ethnicity backgrounds, Panel A



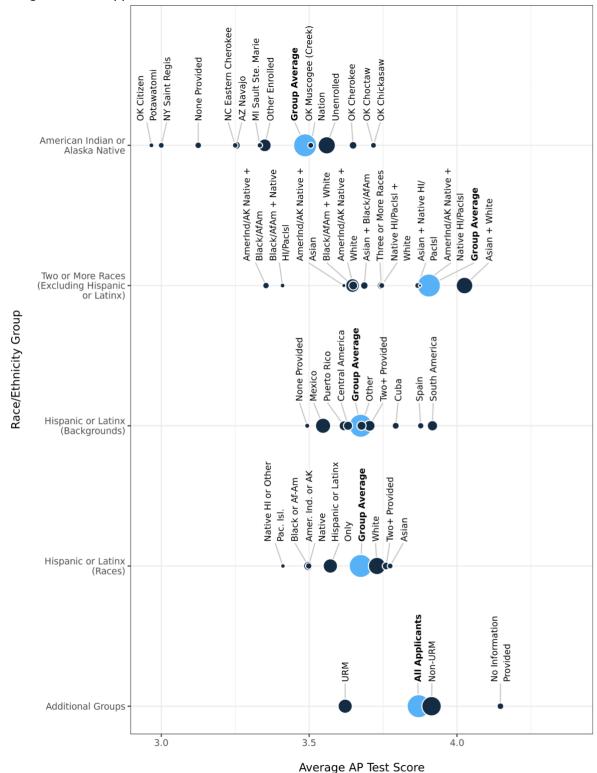
Appendix Figure A6b. Average number of passing AP test scores reported by detailed applicant race/ethnicity backgrounds, Panel B



Appendix Figure A7a. Average reported AP test score by detailed applicant race/ethnicity backgrounds, Panel A



Appendix Figure A7b. Average reported AP test score by detailed applicant race/ethnicity backgrounds, Panel B



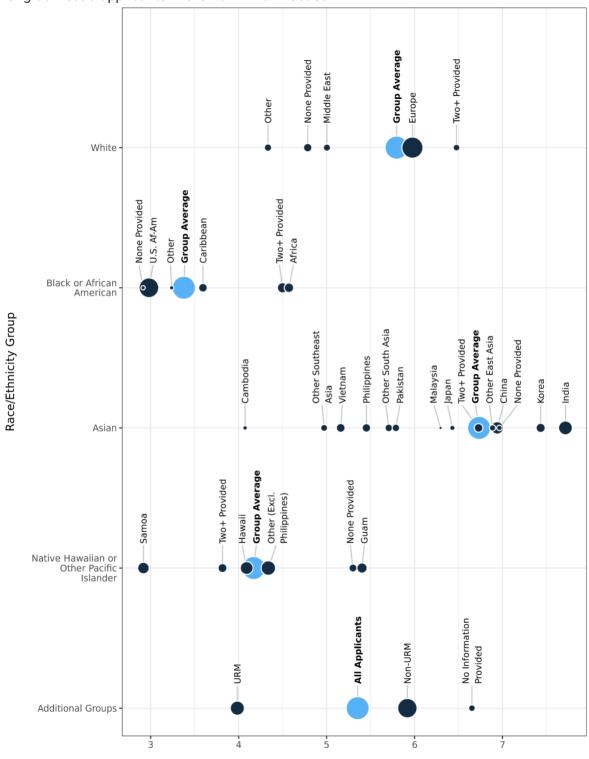
Appendix Figure A8a. Average number of academic honors reported by detailed applicant race/ethnicity backgrounds, Panel A



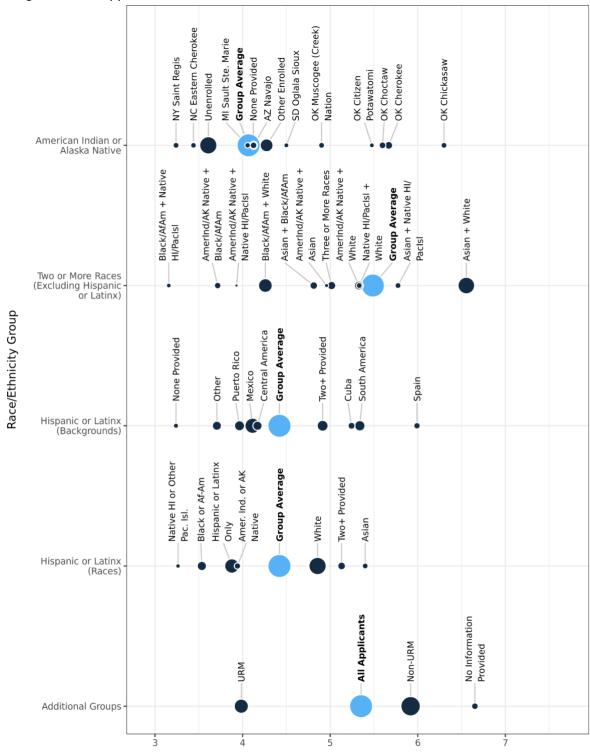
Appendix Figure A8b. Average number of academic honors reported by detailed applicant race/ethnicity backgrounds, Panel B



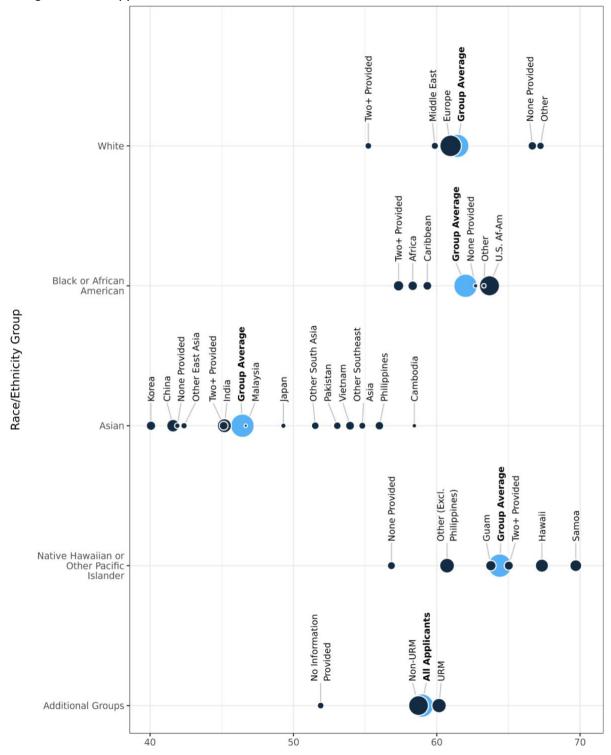
Appendix Figure A9a. Average number of extracurricular activities reported by detailed applicant race/ethnicity backgrounds, Panel A



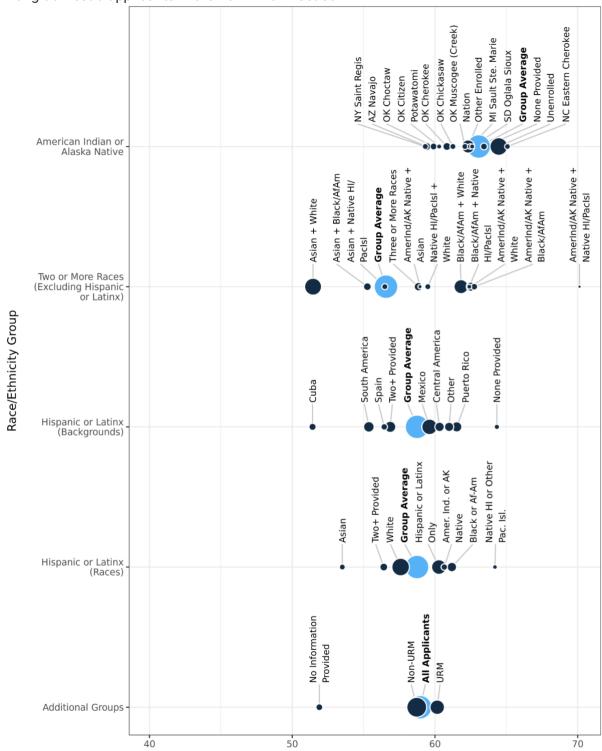
Appendix Figure A9b. Average number of extracurricular activities reported by detailed applicant race/ethnicity backgrounds, Panel B



Appendix Figure A10a. Average selectivity rate of institutions applied to by detailed applicant race/ethnicity backgrounds, Panel A

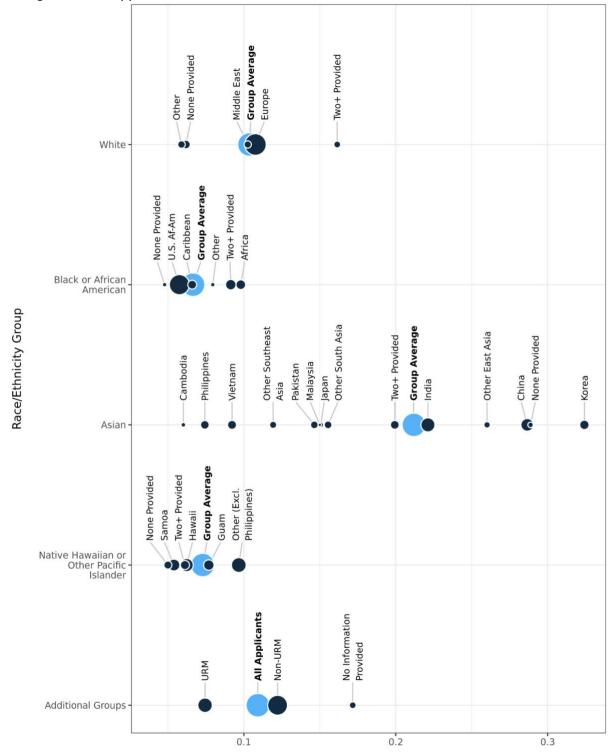


Appendix Figure A10b. Average selectivity rate of institutions applied to by detailed applicant race/ethnicity backgrounds, Panel B



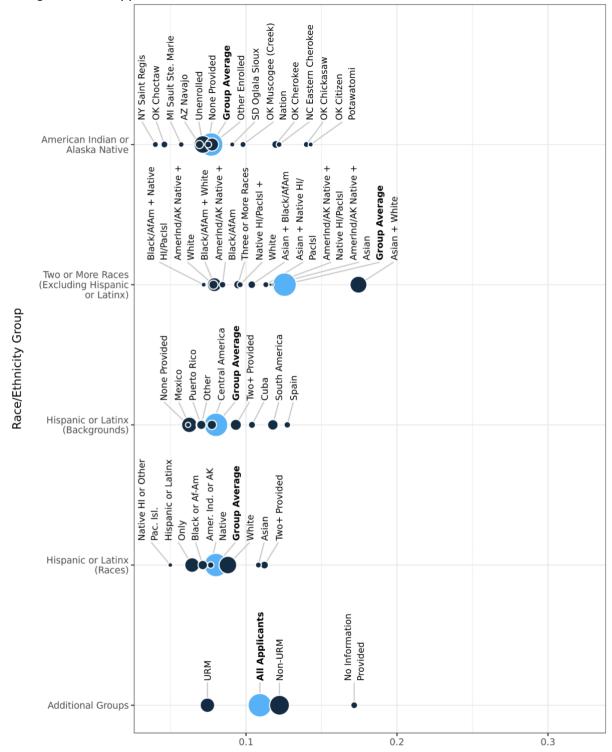
Average Admissions Rate of Institutions Applied To

Appendix Figure A11a. Share of applicants submitting an Early Decision application by detailed applicant race/ethnicity backgrounds, Panel A



Proportion Submitting an Early Decision Application

Appendix Figure A11b. Share of applicants submitting an Early Decision application by detailed applicant race/ethnicity backgrounds, Panel B



Proportion Submitting an Early Decision Application

Appendix Figure A12. Illustration of Common App Detailed Background Question Interface

Are you Hispanic or Latino/a/x? Yes	Regardless of your answer to the prior question, please indicate how you identify yourself. (You may select one or more)
○ No	American Indian or Alaska Native
Clear answer	Asian
Clear answer	✓ Black or African American
Which best describes your Hispanic or Latino/a/x	Native Hawaiian or Other Pacific Islander
background? (You may select one or more)	White
Central America	
✓ Cuba	Which best describes your Black or African American background? (You may select one or more)
Mexico	U.S. / African American
Puerto Rico	Africa
South America	Caribbean
Spain	Other
Other	

Notes: Questions in the left panel appear before questions in the right panel in the applicant interface. The detailed background questions only appear after a corresponding selection is made for the preceding race/ethnicity question. For example, "Which best describes your Hispanic or Latino/a/x background" question only appears if applicants select "Yes" to the prior "Are you Hispanic or Latino/a/x?" question. Similarly, "What best describes your Black or African American background?" only appears if applicants select "Black or African American" to the preceding "...please indicate how you identify yourself" question. Finally, students may select multiple races in the "...please indicate how you identify yourself" question, and so a corresponding background question will appear for each selection made (e.g., a background question for Asian if it is selected, in addition to a background question for White if it is selected.