## Geodemographics of Student List Purchases by Public Universities: A First Look

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## 1 Executive Summary

Colleges and universities identify prospective students by purchasing "student lists" from College Board, ACT, and other vendors. Student lists contain the contact information of prospects who satisfy "search filter" criteria (e.g., test score range, high school GPA, zip code) specified by the college or university, who can then be recruited via mail, email, or targeted social media.

Research by Howell, Hurwitz, Mabel, & Smith (2021) suggests that student lists have surprisingly large effects on college access outcomes for millions of students each year. The authors compared SAT test-takers who opted into the College Board Student Search Service — allowing accredited institutions to "licence" their contact information — to those who opted out, controlling for variables like SAT score, parental education, and high school. Based on this research, College Board states that "students who connect with colleges through Student Search are 25% more likely to enroll in 4-year colleges . . . [and] 31% more likely to graduate in 4 years than similar students who weren't identified through Student Search" (College Board, 2022). Furthermore, "these enrollment and completion benefits associated with Search are as large or larger for Black, Hispanic, and first-generation students" (College Board, 2021)

Whereas Howell, Hurwitz, Mabel, & Smith (2021) examine the outcomes of test-takers who opt in versus out Search, our research examines the search filters that universities specified in student list purchases and the characteristics of purchased prospects. Our central thesis is that student list products are structurally racist and classist.

Structural racism is "a form of systematic racial bias embedded in the 'normal' functions of laws and social relations" (Tiako, South, & Ray, 2021, p. 1143), whereby processes

viewed as normal or neutral systematically advantage dominant groups and disadvantage dominated groups. Organizations and organizational processes are fundamental mechanisms of structural racism (Ray, 2019). University recruiting behavior exemplifies this claim. On one hand, "predatory" for-profit colleges practice reverse-redlining (Cottom, 2017). On the other, selective universities systematically target affluent, predominantly white schools and communities in off-campus recruiting visits (Jaquette, Han, & Castaneda, forthcoming; Salazar, 2022). We began the student list project with a focus on investigating the presence of structural racism in the list-buying behaviors of universities. Over time, we we came to the conclusion that the student list products themselves are structurally racist. In turn, these products structure the recruiting behavior of colleges and universities.

The student list project. We collected data by issuing public records requests to all public universities in CA, IL, MN, and TX. Data collection focused on the three largest student list vendors. For each student list purchased for the purpose of undergraduate recruiting from 2016 through 2020, we requested two related pieces of data: (1) the order summary, which specifies search criteria for the student list purchase; and (2) the de-identified prospect-level list produced from the search criteria. We address three research questions:

- 1. Which filter criteria (e.g., high school graduating class, SAT score range) were selected in student lists purchased by universities in our sample?
- 2. What are the characteristics of prospects included in student lists purchased by universities in our sample?
- 3. What is the relationship between student list filter criteria and the characteristics of purchased prospects?

This report analyzes student lists purchased from College Board by XX public universities, including X public research universities and Y ma/doctoral universities. We obtained XXX student list orders, which is the analysis sample for RQ1. We obtained de-identified student list data about XXXX prospects, which is the analysis sample for RQ2. We received both the order summary data and the de-identified student list data for XX orders associated with XX prospects, resulting in the analysis sample for RQ3.

RQ1. The search filters utilized by universities in our sample can be categorized into four bins: academic (e.g., high school GPA); geographic (e.g., state, zip code); demographic (e.g., gender); and student preferences. At minimum, most orders specified high school graduating class, one or more academic achievement filters and one or more geographic filters. Compared to ma/doctoral universities, the research universities in our sample were more likely to: set higher thresholds on academic achievement criteria; utilize demographic filters; and utilize

a range of geographic filter (e.g., "Segment," "Geomarket," metropolitan area) to target out-of-state students.

RQ2. We examined the characteristics of purchased prospects on the dimensions of ethnicity/race, household income, and geographic "locale" (e.g., urban, suburban, rural). Public research universities in our sample purchased more out-of-state prospects than in-state prospects. Compared to in-state prospects, out-of-state prospects were more affluent, more likely to identify as white or Asian, and more likely to live in suburban areas. Ma/doctoral universities in our sample primarily purchased in-state prospects and these in-state prospects were slightly less affluent than those purchased by research universities.

RQ3. The most important analyses in the report investigate the relationship between search filter criteria and the characteristics of purchased prospects. In contrast to RQ1 and RQ2, RQ3 faces fewer external validity concerns in that a particular combination of search criteria yields the same set of prospects regardless of which university placed the order. Analyses for RQ3 focus on four "deep dives" of commonly observed or thematically important search filter patterns: geodemographic segment; zip code; women in STEM; and targeting URM students.

Geodemographic segment. The College Board Segment Analysis Service (herein Segment) is an add-on set of filters that enables universities to filter prospects by the "type" of neighborhood they live in and the "type" of high school they attend. Geodemography is branch of market research that estimates the behavior of consumers based on where they live. The College Board (2011) white paper on Segment illustrates that geodemography is based on problematic assumptions about segregation:

The basic tenet of geodemography is that people with similar cultural backgrounds, means, and perspectives naturally gravitate toward one another or form relatively homogeneous communities; in other words, birds of a feather flock together.

Segment categorizes each census tract into 33 educational neighborhood clusters (EN:51-EN:83) and categorizes each high school into 29 high school clusters (HS:51-HS:79) based on socioeconomic, demographic, and education characteristics, including historical college-going behavior. A Segment customer may, for example, purchase prospects who scored within some range on the SAT and who attend a high school in cluster HS:63. Unfortunately, Segment neighborhood and high school clusters are highly correlated with race and income.

<sup>&</sup>lt;sup>1</sup>One caveat to this statement is that most student list products enable universities to exclude prospects that were included in a previous order.

We analyzed eight orders by a public research universities that utilized the same set of Segment filters and specified very similar academic criteria across orders. These Segment orders – which yielded XXX purchased prospects – resulted in problematic socioeconomic and racial patterns. For example, 9,126 prospects were purchased from the Philadelphia metropolitan area. These prospects lived in zip codes where the average household income was \$136,000, much higher than the metro average of \$84,000. The racial composition of purchased prospects was 70% white, 17% Asian, X% Black, and 5% Latinx. By contrast, the racial composition of public high schools in the Philadelphia metro was 44% white, 5% Asian, 35% Black, and 13% Latinx. We observed similar socioeconomic and racial disparities in the New York, Los Angeles, and Washington DC metro areas.

Zip code. College Board student list products allow universities to filter prospects by zip code. Zip codes are highly correlated with race and class. Prior research finds that off-campus recruiting visits by selective universities focus on affluent, predominantly white communities. We conduct a hypothetical analysis that examines the racial composition of prospects if a university filtered on affluent zip codes. We begin with four student lists target students in California using four different score ranges. Next we focus on prospects purchased from Los Angeles. Finally, we separate prospects living in a zip code in the top income decile – our hypothethical zip code filter – to prospects living in a zip code in the bottom nine income deciles.

Results show that filtering for affluent zip-codes leads to substantial declines in the racial diversity of prospects and this is true across several score ranges (low, medium, high). For example, for prospects with "medium" PSAT scores of 1190-1260, prospects living in a top income decile zip code were 48% white, 21% Asian, and 14% Latinx. By contrast, prospects living in the bottom 9 deciles were 27% white, 34% Asian, and 25% Latinx. Thus, the hypothetical decision to filter on affluent zip codes results in a higher share of white prospects being recruited.

Women in STEM and targeting URM. Our final two deep-dives analyse student list purchases that target women in STEM and underrepresented Students of Color, respectively. Orders that targeted women in STEM based on AP scores (4+) or based on the combination of SAT scores (1300+) and intended major yielded lists predominantly composed of affluent, white and Asian prospects. Orders that filtered for underrepresented students of color with relatively high SAT scores (1200 to 1380) tended to target prospects living in wealthy communities. Depending on local patterns of school segregation, these purchases disproportionately excluded Students of Color attending predominantly non-white high schools.

Discussion.

Given residential segregation is a product of systemic racism, products that target potential customers depending on where they live will recreate systemic racial inequality in opportunity.

products that utilize geography to determine which prospective customers to target determine which

utilize geography as an input to identify potential customers

## 2 References

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