

Descriptor PLUS

Educationally Relevant Geodemographic Tagging

Descriptor PLUS provides institutions with valuable data from the College Board that can be used to target students, shape communications, and improve the return-on-investment of their overall recruitment efforts. This information, presented through geodemographic clusters, is extremely valuable throughout the recruitment cycle but, particularly, when very little information has been collected from or about prospects.

The Descriptor PLUS high school and neighborhood clusters are composed of complex data factors built on academic, socioeconomic, and student-interest attributes collected annually by the College Board and supplemented by socioeconomic and demographic data collected through the U.S. Census. These clusters describe the population of college-bound students from two perspectives: where they live (neighborhood clusters) and where they learn (high school clusters).

Neighborhood and high school clusters help institutions understand the types of students they are currently attracting, and identify the types of students they would like to attract in the future. The cluster information can be attached to current prospect data files to allow for segmentation and targeting on the basis of relevant college-choice characteristics and likely behaviors—from the very beginning of the recruitment cycle. Institutions are able to focus their efforts on those students who will not only help make their class from a quantitative perspective, but also help realize specific qualitative enrollment goals developed in support of the institution's mission.

An Introduction to Geodemography

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. When they are living in a community, people emulate their neighbors; adopt similar social values, tastes, and expectations; and share similar patterns of consumer behavior toward products, services, media, and promotions.

The primary appeal of geodemography is that with just a little information, one can begin to craft an image about a particular set of individuals based on the values, tastes, expectations, and behaviors associated with their geographic community. This is done by mapping geographic regions, typically at a nine-digit zip code level, against data from the U.S. Census and other consumer databases that track consumer characteristics, attitudes, and behaviors. The result is a series of geodemographic “clusters” that represent types of individuals based on a unique set of characteristics, attitudes, and behaviors.

At a broad, proactive level, geodemographic clustering facilitates the targeting of sets of individuals that can best be served by specific products and services and, more importantly, can be more effectively communicated with—particularly as they are building new relationships with them.

Although it's proven itself in the commercial marketplace, this type of consumer-focused geodemography has some obvious flaws when applied to the college-choice process. For example:

- Traditional geodemographic systems have little to do with the phenomenon of college choice.
- Traditional geodemographic systems base their clustering on data for the entire adult population rather than the subset of only two million traditional-age college-bound students.
- Traditional geodemographic systems produce clusters related specifically to home address but may miss other spatial constructs that are important for understanding college-bound students and the factors that impact their choice of colleges.

Educationally Relevant Geodemography

To fully capture the relevant characteristics and behaviors of college-bound students (and their families) while simultaneously addressing the uniqueness of the college-choice process, the College Board offers an educationally relevant geodemographic tagging service called Descriptor PLUS. Descriptor PLUS avoids the use of standard consumer-focused neighborhoods that are thinly populated with college-bound students. Instead, it creates and builds on a new set of geodemographic communities composed entirely of college-bound students—referred to as *educational neighborhoods*.

These educational neighborhoods begin with socioeconomic data, like traditional geodemographic neighborhoods, but also include significant academic and curricular interest data to provide value in an enrollment management context. The combination of these data elements leads to a set of interacting descriptive factors that allow the College Board to define a set of *educationally relevant* geodemographic neighborhood clusters. These clusters represent unique and relevant characteristics of prototypic college-bound students and their behaviors related to college choice.

But because college choices are guided not only by the characteristics of the student in the context of his or her neighborhood, but also by the characteristics of the student in the context of his or her high school, Descriptor PLUS offers a second view of college-bound students—from the perspective of their high schools—when constructing its final clustering model.

The high school perspective captures the relevant phenomena affiliated with the learning environment using the same statistical techniques and methods used to construct educational neighborhoods. This naturally leads to the development of a set of high school clusters that offer a complementary view to the neighborhood clusters. As with neighborhood clusters, high school clusters are defined by interacting descriptive factors that begin with academic/curricular indicators, historical patterns of college choice, and student interests, and are then complemented by additional socioeconomic and mobility variables.

Attributes, Factors, and Clusters

The development of Descriptor PLUS begins with the most-detailed pieces of information available to the College Board about college-bound students: their actual responses to a series of detailed, academically relevant questions that are asked when they register for various assessments (PSAT/NMSQT®, SAT®, SAT Subject Tests™, AP®). This information is unique to each individual and addresses a range of characteristics and tendencies that are directly related to the college-choice process. It forms the core set of data attributes affiliated with each student record in the Descriptor PLUS database. The records are grouped in two ways:

- **High Schools:** The values for the student-level attributes are aggregated and averaged across each of the 27,000+ identifiable high schools in the United States.
- **Educational Neighborhoods:** The same process is used to group students at the neighborhood level using a combination of physical contiguity *and* educational similarity. The result of the neighborhood grouping is a database with unique behavioral profiles for approximately 180,000+ educational neighborhoods that cover the United States.

The high school and neighborhood groupings are then enhanced with additional attributes, including results of College Board institutional surveys and extrapolated data from the U.S. Census regarding educational aspirations and socioeconomic status. In total, more than 150 attributes, or individual pieces of information, now exist for each high school and educational neighborhood in the Descriptor PLUS database.

From this point the data available within the Descriptor PLUS database is refined into something more manageable and more “actionable.” A smaller set of descriptive factors that—when viewed holistically—represent most of the unique information used to group students at the high school and neighborhood levels is identified through a process called factor analysis. The result is a set of 28 unique high school factors and 36 unique educational neighborhood factors that can each be weighted to capture the essential information contained in the much larger set of individual attributes associated with each of the two groupings.

However, successful market segmentation and communication strategies rely on the use of a manageable number of prototypic high schools and a manageable number of prototypic neighborhoods that describe college-choice behaviors. To arrive at this manageable number, cluster analysis is used to group the 27,000+ high schools and 180,000+ neighborhoods into 30 unique high school types and 30 unique neighborhood types referred to as clusters.

Ultimately, each student with a home address can be mapped to one of the neighborhood clusters and the student's high school can be mapped to one of the high school clusters, providing detailed insights into his/her likely characteristics and college-bound behaviors.

Using Descriptor PLUS Information

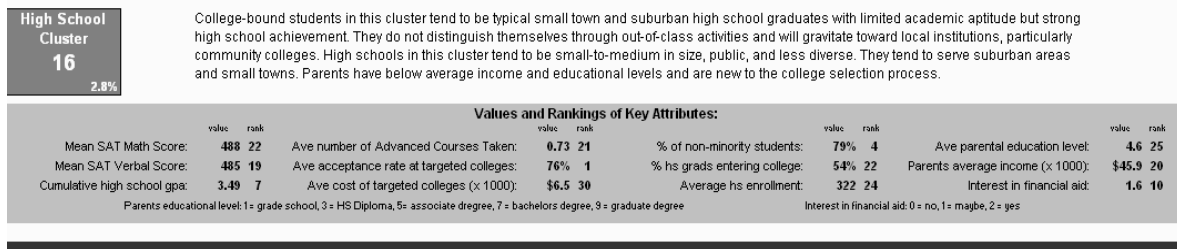
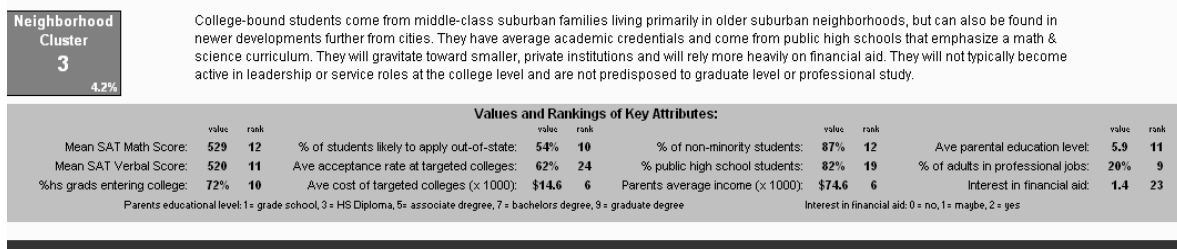
Descriptor PLUS is unique in its ability to deliver information that describes student behavior on the basis of academic, socioeconomic, and student-interest attributes collected by the College Board and supplemented with data collected through the U.S. Census. This type of descriptive information can be very valuable at the beginning of the recruitment process when nothing is known about a prospective student other than his or her name, address, and high school.

Neighborhood cluster affiliations and high school cluster affiliations help enrollment managers understand the types of students that are currently attracted to their institution, and identify those students that the institution would like to recruit in the future. By attaching clusters to student records as they move from prospective- to enrolled-student status, enrollment managers can more effectively assess which types of students persist through the various stages of the recruitment process—and even understand more about students who persist at an institution once they enroll.

The descriptive information about each neighborhood and high school cluster allows enrollment managers to segment and target their communication to prospective students on the basis of educationally relevant characteristics and likely college-choice behaviors. This saves an admissions office staff time and money by allowing them to focus their efforts on those students who will not only help make the class, but also help the institution realize specific enrollment goals within the context of its mission.

To allow enrollment managers to interpret and apply Descriptor PLUS geodemographic modeling in an efficient, easy-to-use manner, the College Board has created two manageable sets of geodemographic clusters identified simply by numbers, rather than arbitrary descriptive titles, which can be applied to prospect records in an institutional database. There are 30 unique neighborhood clusters that reflect peculiar living environments (educational neighborhood) and 30 high school clusters that reflect peculiar learning environment (high school). Each of these clusters is numbered in no particular order from 1 to 30 and defined through a cluster profile.

There are three sections to each cluster profile: the text description of students represented by the cluster, a set of values for key attributes used to define the cluster, and the percentage of college-bound students represented by the cluster (provided just below and to the right of the cluster number). The figure below provides an example of one of the neighborhood cluster profiles and one of the high school cluster profiles available in Descriptor PLUS.



It is important to remember that the cluster profile represents the average student in the cluster. Some students in the cluster will have attribute values that are above the values that define the cluster, while other students in the cluster will have attributes below the values that define the cluster. Therefore, it is possible that talented students can emerge from average clusters—and vice versa. Also, while the descriptive information in the Descriptor PLUS clusters is very valuable, especially early in the process when very little is known about a student, the actual behavior of the student as he or she moves through the recruitment and admissions process is much more relevant.

The College Board: Connecting Students to College Success

The College Board is a not-for-profit membership association whose mission is to connect students to college success and opportunity. Founded in 1900, the association is composed of more than 5,200 schools, colleges, universities, and other educational organizations. Each year, the College Board serves seven million students and their parents, 23,000 high schools, and 3,500 colleges through major programs and services in college admissions, guidance, assessment, financial aid, enrollment, and teaching and learning. Among its best-known programs are the SAT[®], the PSAT/NMSQT[®], and the Advanced Placement Program[®] (AP[®]). The College Board is committed to the principles of excellence and equity, and that commitment is embodied in all of its programs, services, activities, and concerns.

Contact Us:

The College Board

11911 Freedom Drive

Suite 300

Reston, VA 20190-5602

Phone: 800 626-9795

Fax: 703 464-8407

E-mail: enrollmentsolutions@collegeboard.org