

# Postsecondary Outcomes for 2010 Graduates: Technical Documentation



**National Student Clearinghouse.** All 2010 postsecondary reporting (i.e., at the [district-](#) and [campus-](#) level) used data provided by the [National Student Clearinghouse](#) (NSC) on June 14, 2011.

The NSC is a nonprofit organization that has provided postsecondary degree and enrollment verification for more than 15 years. Austin Independent School District (AISD) uses both of these services; degrees earned are included in the enrollment data. These data include 93% of nationwide enrollment.<sup>1</sup> A list of participating colleges is on the [NSC website](#), under Resource Center.

NSC data are updated daily. These data include a unique record for every occurrence of enrollment per semester, quarter, or year. The unit of enrollment time varies by institution and depends on program or degree offerings. The University of Texas (UT) at Austin did not participate in NSC in previous years; however, UT Austin began sending enrollment records to NSC in March 2010.<sup>2</sup>

For the most part, records returned as “not found” represent students who did not enroll in a postsecondary institution. However, there are caveats to this matching process. NSC provided a list of reasons a student record might not be matched in its database *even though* the student is enrolled in a postsecondary institution:

- The student attends a school that does not report enrollment information to NSC.<sup>3</sup>
- The record was blocked either by the school or at the student’s request. In this case, the student is counted in the aggregate report provided automatically by NSC, but his or her individual record is not included in the *Detail Report*.
- The student's record is in AISD’s database but not within the search date (i.e., high school graduation date). If a requestor sends a file that includes a non-graduate, the last day that student attended high school may not fall within the search (i.e., the period of time, or range, between the last date of attendance and the day the file is run by NSC). NSC only returns postsecondary records for which enrollment ended *after* the last day of high school attendance.
- A match could not be found with the information provided (e.g., no date of birth, incomplete or inaccurate name).
  - Records missing date of birth likely will be unmatched.
  - Records missing the last day of attendance cannot be processed.
  - Examples of an incomplete or inaccurate name include an apostrophe in the name,

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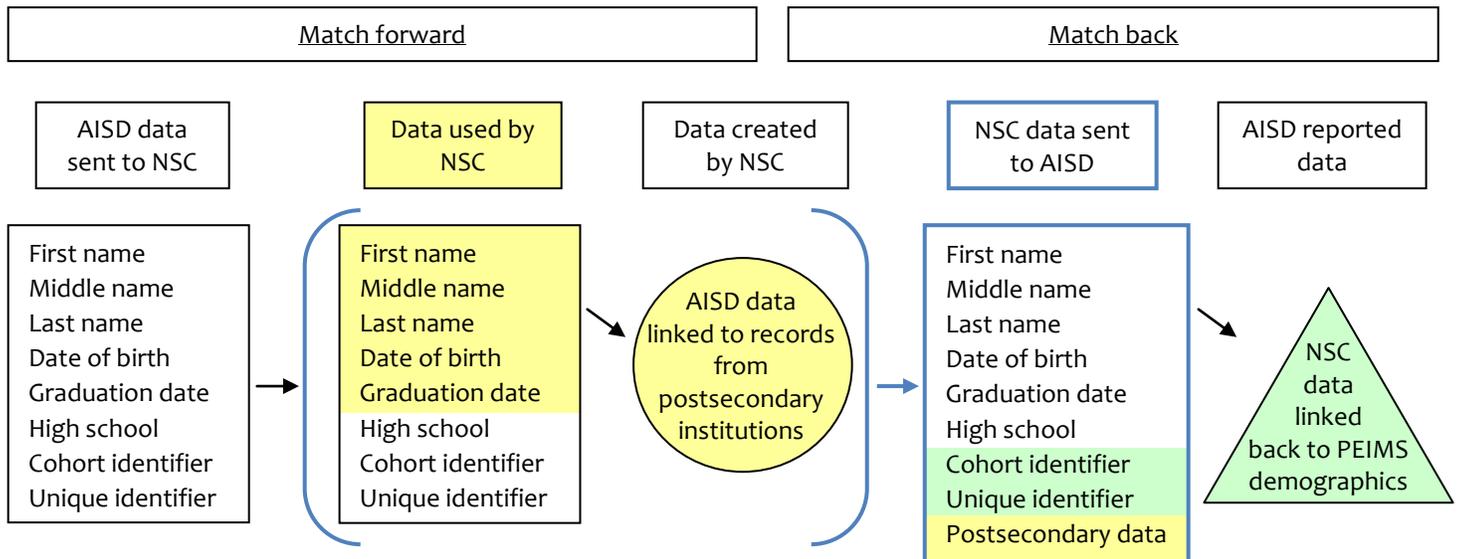
<sup>1</sup> For national and regional coverage rates, see p.58 of the [NSC 2011 Signature Report](#).

<sup>2</sup> Colleges can submit limited historical data when they initially join the NSC EnrollmentVerify service. Typically, these data are only for one or two semesters. Institutions that join DegreeVerify can submit historical data at any time.

<sup>3</sup> In 2009, approximately 100 colleges in Texas did not report to NSC. More than half of these institutions were private for-profit schools that offered programs that were at least 2 years but less than 4 years.

two last names, and a hyphenated name.<sup>4</sup> Although one of these inaccuracies may not cause a failed match, any combination of these inaccuracies increases the likelihood of a false negative. Colleges do not typically report any kind of punctuation in students' names.

Figure 1. Relationship Between AISD Student Data and [National Student Clearinghouse \(NSC\) Data](#) for Postsecondary Analysis<sup>5</sup>



#### Data Submission to NSC – Match Forward

**Data sources.** AISD student records were pulled from current and historical graduate records submitted to the Texas Education Agency's (TEA) Public Education Information Management System (PEIMS; known internally as PEIMS 203 data tables). Historical records included cohorts 2002 through 2009. The current graduate file included students who graduated at any point during the 2009–2010 academic year. The most recent graduate cohort data table often is not posted at the time of the spring NSC data pull. When graduate data are not available, these are requested from and certified by the PEIMS data manager in Management Information Services.

Data also were pulled from the student information system (known internally as the ASTU table). This data table often included duplicate student records because of student mobility. Records with the most recent "last day of attendance" were retained for submission to NSC.<sup>6</sup> Data were then linked to the graduate's file.

<sup>4</sup> We became aware of this limitation when at least one student was not matched because the name we submitted did not match the name his or her postsecondary institution reported. We are working with NSC to develop methods to prevent such matching errors.

<sup>5</sup> The data elements sent to NSC will change for the Class of 2011. NSC has [expanded its StudentTracker](#) product to report outcomes using an array of new student characteristics, such as student demographics and assessment outcomes.

<sup>6</sup> All data sources were checked for duplicate records.

Figure 2. Recommended Data Map for Submission to National Student Clearinghouse (NSC)

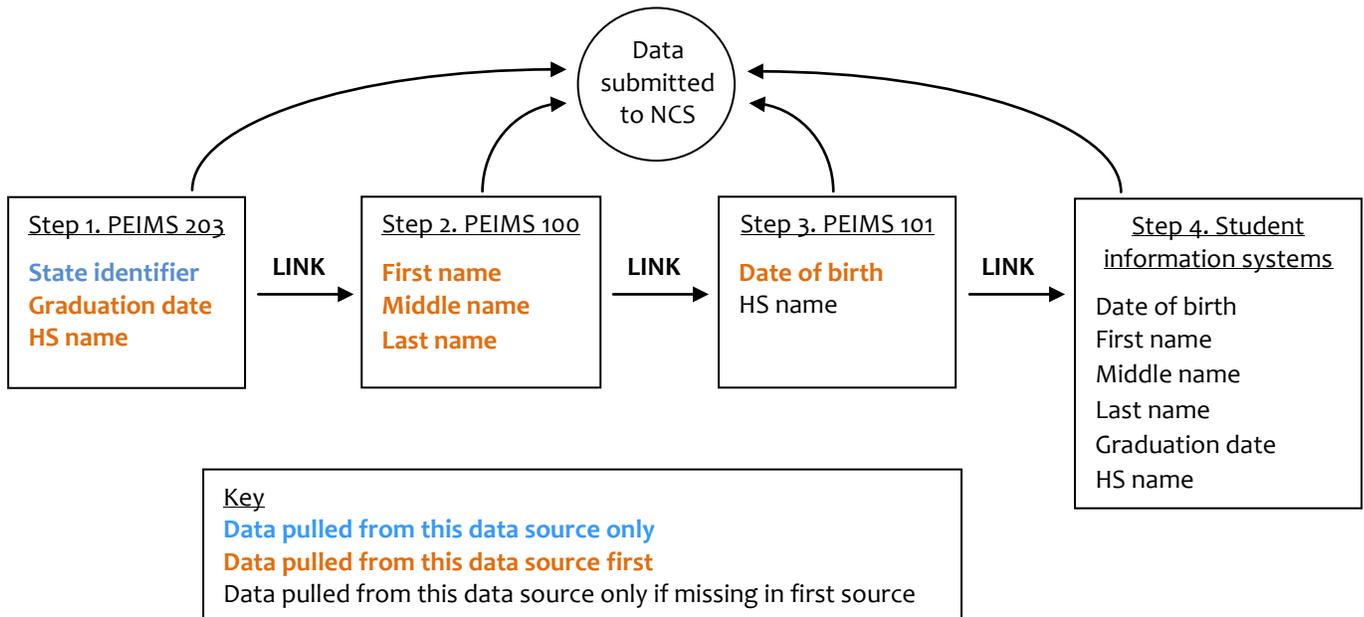


Table 1. Timing of Relevant PEIMS Submissions to Texas Education Agency

Submission	PEIMS record			
	100	101	203	400
October	X	X	X	
January	X	X		X
June	X	X		

**Data modifications.** The campus formerly known as Johnston High School (2002–2003 through 2007–2008) was repurposed as Eastside Memorial High School in 2008–2009 in accordance with state policy for underperforming schools. This campus was then redesigned in 2009–2010 into two campuses: Green Tech and Global Tech High Schools on the Eastside Memorial campus. Eastside seniors for 2010 graduated from Green Tech high school. NSC uses [ACT codes](#) to identify high school campuses. The 2008–2009 transition did not result in a change of the ACT code for this campus location; however, the 2009–2010 transition did.<sup>7</sup> Green Tech and Eastside Memorial schools were considered the same for reporting to produce consistent trend data. This method was deemed appropriate because student composition at this campus did not change when the school was repurposed.

All graduate records were submitted to NSC regardless of missing data. Any records that could not be processed were deleted by NSC and were missing in the returned file. These records were

<sup>7</sup> When the school incorporated school-wide programmatic changes and transitioned to a science, technology, engineering, and math school (STEM) in 2009–2010, a new ACT code was assigned to Green Tech (and to Global Tech, though Global did not have any seniors and thus no graduates).

identified in the match back as “unprocessed.” (Note, only two records were missing data for a critical match variable; they were missing ACT code.)

*Data sharing.* Data were shared with NSC using the articulated process (i.e., secure file transfer protocol). Data files created in SAS were exported to Excel for sharing. (Note, if data files are “sent to” Excel from SAS instead of exported, each cell contains trailing blanks that render the file unusable by NSC.). Data sharing with NSC is not subject to opt-out omissions. NSC does not use these data for research. They only use the data for standard reporting back to the district; these reports are not publicly available.

#### Data Returned from NSC – Match Back

*Data cleaning.* Data returned to AISD from NSC first were linked to the original data file submitted to NSC. Records for enrollment in Summer 2010 only were considered “unmatched” to align reporting with best practices.<sup>8</sup> Summer enrollment was defined as enrollment that began on or after June 1, 2010 and ended on or before September 30, 2010. The following records were considered “not matched,” regardless of postsecondary enrollment:

- Records for which enrollment was withdrawn<sup>5</sup>
- Records for which the student was on a leave of absence<sup>5</sup>
- Records for which the student was deceased<sup>5</sup>
- Records for which enrollment began before June 1, 2010 (These records represented dual enrollment because they preceded the graduation date; dual enrollment was not an event of interest in the postsecondary annual reports.)
- Records for which enrollment began after May 1, 2011 (These records represented the second year of enrollment for the Class of 2010; these data were beyond the scope of the postsecondary annual reports because they fell beyond the 2010–2011 academic year.)

Length of enrollment and start/end dates varied across postsecondary institutions (e.g., semesters versus quarters). We used NSC practices, when known, to align our reporting with its automatically generated aggregate reports. The footnotes on these reports defined the following variables:

- Fall semester: "The fall semester immediately following graduation is defined as any term that begins before October 1st of the graduation year and ends after October 1st of the graduation year."
  - We defined fall enrollment as enrollment that began on or between June 1, 2010 and September 30, 2010 and ended on or between October 1, 2010 and February 28, 2011.
  - Our postsecondary reports also included data on spring enrollment. We defined spring enrollment as enrollment on or after October 1, 2010. A parameter for an end date was not provided because doing so would have excluded enrollment when the end date extended beyond the reporting year (2010).

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<sup>8</sup> Program-specific reports may use data in which “summer only,” “withdrawn,” “deceased,” and “leave of absence” enrollment are classified as “enrolled.” Reports that use postsecondary data clarify the definition of “enrolled” in the methods section.

- We also defined year enrollment as enrollment that began on or between June 1, 2010 and September 30, 2010 and ended on or after March 1, 2011. Adding this parameter captured data for several students who were enrolled in institutions that do not use a semester or quarter structure.
- First year of college attendance: "The first year after high school includes any collegiate term that ends after August 15 of the graduation year and before August 14 of the following year."

*Deduplication decision rules.* These data then were parsed down to a single record per student, using the following sequenced selections:

- (1) fall over spring semester,
- (2) 4-year over 2-year institution, < 2yr was considered 2 yr
- (3) full time over part time,
- (4) latest enrollment begin date, and
- (5) latest enrollment end date.

### Reporting Protocols

*Student demographics.* Cleaned data from NSC were linked to demographic data from district student information systems. Demographic data included sex, race/ethnicity, socioeconomic status in senior year (defined by free/reduced lunch status), ever free/reduced lunch 8<sup>th</sup> through 12<sup>th</sup> grade, limited English proficiency status, special education status, and ever an immigrant. Any missing demographic data were populated using data from PEIMS records (100, 101, and 110).

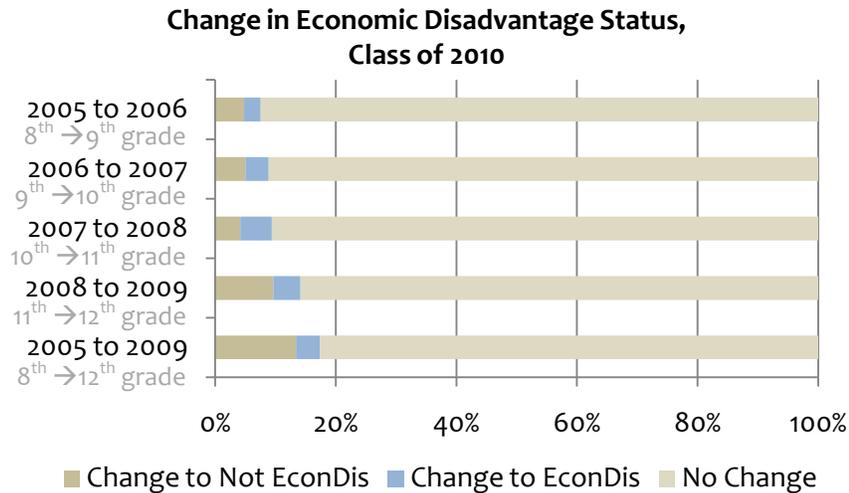
Two new indicators were added this year. Data suggested a bias against students' self-reporting as economically disadvantaged between junior and senior years, so an indicator that captures the status of economically disadvantaged at any time between the 8<sup>th</sup> and 12<sup>th</sup> grades was added.<sup>9</sup> The

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<sup>9</sup> Families opt in to the [National School Lunch and Breakfast Programs](#) (NSLP) annually by completing the [Family Application for Free and Reduced-Price Meals](#). Children in qualifying families remain in the program for the duration of the school year after their application is approved. Students automatically qualify for the meals benefit program if their family is receiving [Temporary Assistance for Needy Families](#) (TANF), or is participating in the [Supplemental Nutrition Assistance Program \(SNAP\)](#) formerly known as the federal Food Stamp Program). TANF is provided by the U.S. Department of Health and Human Services, Office of Family Assistance and managed by the [Texas Health and Human Services Commission](#) (HHSC). SNAP is provided by the U.S. Department of Agriculture, Food and Nutrition Service and also is managed by [HHSC](#). HHSC submits an updated list of TANF and SNAP recipients to Texas school districts every month.

AISD uses qualification for the school meals program as an indicator for families' low-income status (i.e., economic disadvantage) because it is based on income and family size. The U.S. Department of Agriculture provides [income guidelines](#) to qualify students for free/reduced-priced meals each year. Qualifications are based on the percentage of income at or below the federal poverty level. For the [2009–2010 school year](#) (for example), that percentage had to be 130% to qualify for free meals, and 185% to qualify for reduced-price meals. TANF and SNAP are [means-tested programs](#); they are not based on the federal poverty level. Income requirements for TANF and SNAP are described in the [Texas Works Handbook](#).

number of 2010 graduates who were “ever” economically disadvantaged (2,227) was 23% larger than the number of 2010 graduates economically disadvantaged in their senior year (1,816).



Also added was an indicator that captures whether a student was ever classified as an immigrant in the district, using student information system tables (known internally as STXS and STXL) or in PEIMS records (table 110). STXS and PEIMS 110 contain indicators for immigrant status. STXL was used to capture data for students who did not attend a school in the United States for more than 3 full academic years (in accordance with the No Child Left Behind definition of immigrant). To say a student was an immigrant at some point during his or her tenure in AISD does not mean the student was undocumented. However, an immigrant indicator is the best proxy for documentation status in available data sources. It is included here because campus staff have expressed a need to learn about the postsecondary circumstances of undocumented students.

**Scholastic outcomes.** Academic data were drawn from multiple sources. Standardized test results were pulled from three sets of data. Eighth-grade Texas Assessment of Knowledge and Skills (TAKS) scores were taken from tables provided by our TAKS vendor, [Pearson](#). The report indicates whether a student passed 8<sup>th</sup> grade TAKS; thus, data were limited to graduates who were in AISD for this standardized test. SAT data were found in tables provided by the [College Board](#). ACT data were found in tables provided by [ACT, Inc.](#) The report indicates whether students took either of these exams.<sup>10</sup> To learn more about ACT and SAT results for the district, visit reports [#10.69](#) and [#10.78](#), respectively. Data for these outcomes were limited to valid records (i.e., records in which data were not missing).

The 4-point scale grade point average (GPA) was pulled from student information systems (from the table known internally as ASTU). All graduates were ranked into quartiles, based on their unweighted 4-point GPA using the “rank” procedure in SAS statistical software. The procedure used all graduates as the denominator and ranks students, such that 25% of all records fell into a single

<sup>10</sup> Not all students take both the SAT and the ACT. These tests are designed to [assess different skills sets](#). Some students choose one test over the other to maximize their test scores.

quartile. This quartile rank was used throughout the report, even if the reporting denominator changed (as it did in the aspiration gap figure). Ranks were calculated for the district and for each campus (for the campus-specific reports).

Attendance during senior year was taken from PEIMS records (table 400). “Good attendance” was defined as being present for at least 90% of eligible days at the designated campus, which follows attendance requirements for earning credit set forth by [TEA](#).

**Additional student data.** Other student characteristics were drawn from student self-report data in the High School Exit Survey. These characteristics were completing at least four college applications (items 36–38), level of interaction with an adult on campus (item 11), and level of parent involvement in school activities (item 43). Student-level data on Free Application for Federal Student Aid (FAFSA) application submissions were provided through a pilot program run by the U.S. Department of Education (USDE). One of the limitations of using student self-reported data is that it only captures what is occurring at that moment in time. The number of applications submitted, for example, could have increased after the student took the High School Exit Survey.

**Aspiration gap.** Data also were linked to student responses to the High School Exit Survey. This allowed a comparison between student intention to attend college (item 8), application to college (items 36–38), acceptance to college (items 39–41), and actual enrollment (NSC data). Data used to describe the aspiration gap were limited to students who took the High School Exit Survey and who graduated; enrollment data were not included. All enrollment data points were based on NSC data to provide consistent reporting across figures.

#### Family Educational Rights and Privacy Act (FERPA)

**NSC matching algorithm.** The U.S. Department of Education's Family Policy Compliance Office (FPCO) has certified that NSC practices are [compliant with FERPA](#). Districts share state identification numbers (e.g., social security numbers provided to the district) with NSC, but NSC no longer uses these identifiers for matching purposes (this practice changed in Fall 2008 to comply with FERPA). Current matching logic uses student name, date of birth, and graduation date (last day of attendance).<sup>11</sup> State identifiers are retained in NSC data returned to districts to allow matching back to district records.

**Data suppression protocol.** In our annual postsecondary reports, results were not reported when fewer than five students were in a group, in accordance with FERPA guidelines. In addition, data points greater than 95% were suppressed to mask results that could identify students by omission or by complete inclusion (this issue is often called suppressing “good news”).

**Non-AISD reports on postsecondary enrollment.** At least two annual external report sources provide data on postsecondary enrollment for AISD students. First, NSC automatically generates aggregate reports for the district and for campuses, using the matched data it creates. These reports are returned to the district account along with the student-level data. These reports generally are not

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<sup>11</sup> The actual match logic used by NSC is proprietary and not publicly available. NSC currently is working on a reference document for end users.

shared because they are limited to fall-only enrollment, and thus do not provide a complete picture of AISD students' matriculation into postsecondary education.

Although it is not an annual report, another national report, or set of reports, is available to district and campus staff. NSC and AISD currently are participating in a pilot program (i.e., Advance) designed to provide a series of auto-generated and custom reports. These reports are limited to students with minimum, regular, and distinguished diplomas and exclude students in the Individualized Education Program (IEP), which largely consists of special education students.

Second, the Ray Marshall Center at the UT Austin, LBJ School of Public Affairs, prepares an annual report as part of the [Student Futures Project](#). The Ray Marshall Center each year has a data-sharing agreement and research partnership with AISD. As part of this partnership, the Department of Research and Evaluation (DRE) sends the Center PEIMS graduate records. The Ray Marshall Center links these files to postsecondary data obtained directly from NSC. AISD results may differ from results reported by the Ray Marshall Center because the Center reports on initial enrollment (fall) only. AISD reports include fall and spring enrollment.

**Recommendations for future work.** The district does not have data on postsecondary enrollment in developmental courses. Developmental courses prepare students for college-level work, but do not contribute to their degree program(s). The Texas Higher Education coordinating board has data on these courses for students enrolled in Texas institutions. We recommend asking this board to conduct an analysis of AISD students to answer the question "What proportions of our students are enrolled in developmental courses at 2- and 4-year colleges in Texas?"

**About the Department of Research and Evaluation.** DRE was established in 1972 to support program decision and strategic planning in the district. The department is housed in the Office of Accountability and is charged with evaluating federal, state, and locally funded programs in AISD. DRE staff integrate best and innovative evaluation practices with educational and institutional knowledge. DRE staff work with program staff throughout the district to design and conduct formative and summative program evaluations. DRE’s methods for evaluating programs vary depending on the research question, program design, and reporting requirements. The evaluations report objectively about program implementation and outcomes, and serve to inform program staff, decision makers, and planners in the district. [DRE reports can be accessed online.](#)

**About the author.** Ginger Gossman completed a Ph.D. in demography at the UT Austin in 2006. Her academic interests include maternal and child health, secondary education, infectious disease, and obesity research. She has presented her research findings at regional and national conferences and has been a member of the American Evaluation Association since 2007. Ginger joined the DRE team in September 2008.

**Funding sources.** Funding for this report was provided by district local funds. NSC data were obtained at no cost to AISD through a year-long grant from TEA.

**District strategic plan.** This report speaks to goal 3, measurable outcome 8. **Goal 3:** All students will graduate college and career ready. **Measurable Outcome 8:** Postsecondary enrollment.

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