09.62 Postsecondary Outcomes for 2009 Graduates:
Technical Documentation

AUSTIN INDEPENDENT SCHOOL DISTRICT
Department of Program Evaluation

National Student Clearinghouse. All 2009 postsecondary reporting (district and campus) used data provided by the National Student Clearinghouse (NSC) on June 8, 2010.

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 postsecondary institutions nationwide. 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 at Austin did not participate in NSC in previous years; however, UT Austin began sending enrollment records to NSC in March 2010.[1]

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:
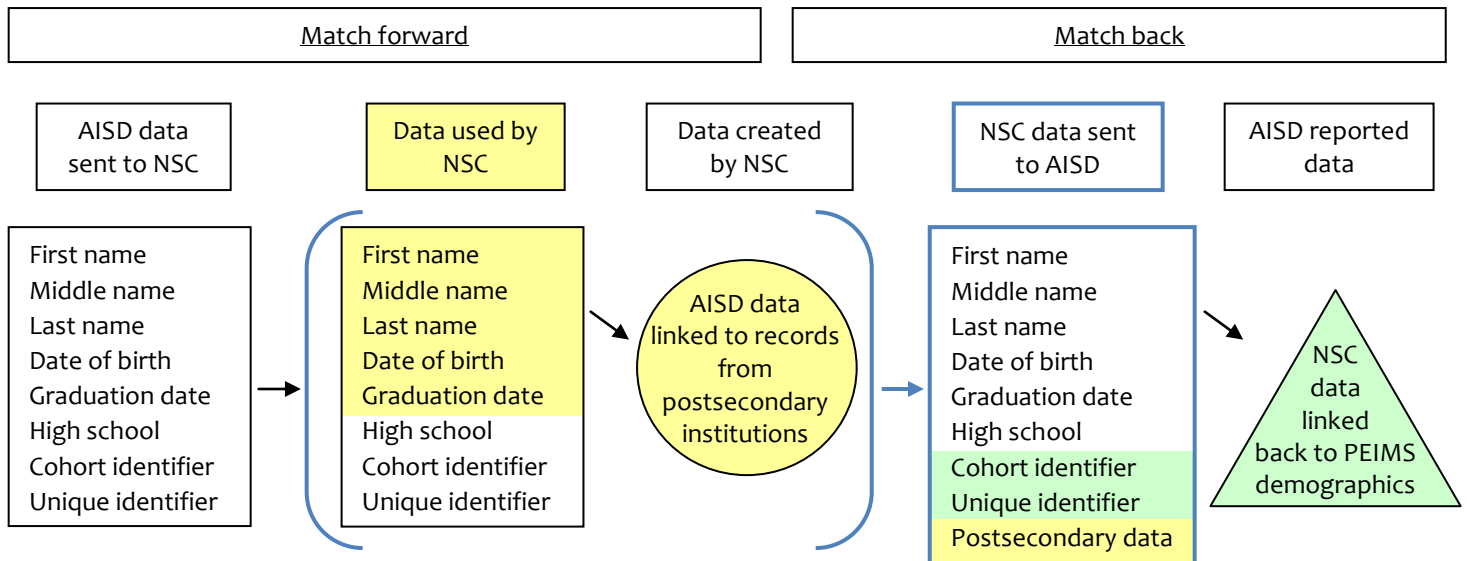
- The student attends a school that does not report enrollment information to NSC.
- The record was blocked either by the school or at the student's request. In this case, the student is counted in the aggregate report provided automatically by NSC, but his or her individual record is not included in 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 date. NSC only returns postsecondary records for which enrollment ended *after* the last day of high school attendance.
- The student is not enrolled in a postsecondary institution.
- 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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[1] Colleges can submit limited historical data when they initially join the NSC EnrollmentVerify service. Typically, these data are only for 1 to 2 semesters. Institutions that join DegreeVerify can submit historical data at any time.

two last names, and a hyphenated name.[2] 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

Match forward		Match back	
AISD data sent to NSC	Data used by NSC	Data created by NSC	NSC data sent to AISD	AISD reported data

First name
Middle name
Last name
Date of birth
Graduation date
High school
Cohort identifier
Unique identifier

First name
Middle name
Last name
Date of birth
Graduation date
High school
Cohort identifier
Unique identifier

AISD data linked to records from postsecondary institutions

First name
Middle name
Last name
Date of birth
Graduation date
High school
Cohort identifier
Unique identifier
Postsecondary data

NSC data linked back to PEIMS demographics

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 Public Education Information Management System (PEIMS; known internally as PEIMS 203 data tables). Historical records included cohorts 2003 through 2008. The current graduate file included students who graduated at any point during the 2008–2009 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. (Note: for the past few years, we have submitted both seniors and graduates from the current cohort to NSC [historical data always have been limited to graduates]).

Data from PEIMS attendance were pulled to be consistent with previous years. This data file (known internally as PEIMS 400) contained attendance records and was used to capture records for 12th-grade students who were not found in the graduate file. This data table included a record for each student for each 6-week period. The most recently reported record was retained for the NSC submission. These records were included to address program evaluation and other research purposes. However, the deflated enrollment rates generated by NSC rendered the inclusion of these

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[2] 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.

records imprudent. Future submissions should not contain records for non-graduates.

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.[3] Data were then linked to the graduate and senior files.

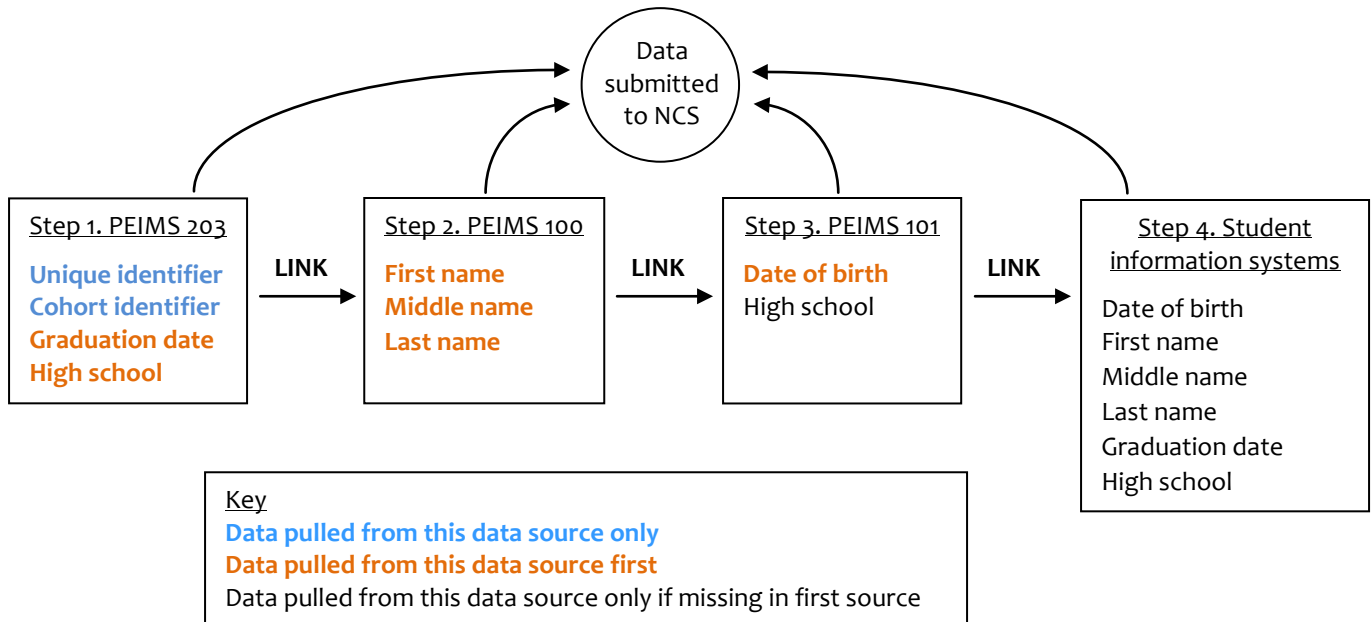Figure 2. Recommended Data Map for Submission to National Student Clearinghouse

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. 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.[4] These schools were considered the same for the NSC submission, to produce consistent trend data. This method was deemed appropriate because student composition at this campus did not change when the school was repurposed.

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[3] All data sources were checked for duplicate records.
[4] 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 the campus.

Student records missing data for the variable "last day of attendance" were omitted from the submission to NSC because records missing this data point could not be processed. Records missing a high school ACT code also were omitted. Omissions of any kind are not recommended for future data submissions. All student records in the graduate file should be sent to NSC. Any records that cannot be processed will be deleted by NSC and missing from the returned file. These records can then be identified in the match back as "unprocessed."

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 will contain trailing blanks that render the file unusable by NSC.)

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 2009 only were considered "unmatched" to align reporting with best practices.[5] Summer enrollment was defined as enrollment that began on or after June 1, 2009 and ended on or before September 30, 2009. The following records were considered "not matched," regardless of postsecondary enrollment:

- Records for which enrollment was withdrawn[5]
- Records for which the student was on a leave of absence[5]
- Records for which the student was deceased[5]
- Records for which enrollment began before June 1, 2009. 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, 2010. These records represented the second year of enrollment for the Class of 2009. These data were beyond the scope of the postsecondary annual reports because they fell beyond the 2009–2010 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, 2009 and September 30, 2009 and ended on or between October 1, 2009 and February 28, 2010.
  - Our postsecondary reports also include data on spring enrollment. We defined spring

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[5] Program-specific reports may use data in which "summer only," "withdrawn," "deceased," or "leave of absence" enrollment is classified as "enrolled." Reports that use postsecondary data clarify the definition of "enrolled" in the methods section.

enrollment as enrollment on or after October 1, 2009. 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).

- 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."

These data were then 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,

(3) full time over part time,

(4) latest enrollment begin date, and

(5) latest enrollment end date.

Demographic characteristics. Cleaned data from NSC were linked to student demographic data from the PEIMS files known internally as 101 and 110. Any missing demographic data in PEIMS were populated using data from the student information system.

Aspiration gap. Next, data were linked to student responses to the High School Exit Survey (e.g., see the 2009 report). This allowed a comparison between student intention to attend college, application to college, acceptance to college, and actual enrollment.

Family Educational Rights and Privacy Act (FERPA). The U.S. Department of Education's Family Policy Compliance Office (FPCO) has certified that NSC practices are compliant with FERPA. Districts share social security numbers and/or state identification numbers with NSC, but NSC no longer uses these unique 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).[6] Unique identifiers are retained in NSC data returned to districts to allow matching back to district records. In our annual postsecondary reports, results were not reported when fewer than five students were in a group, in accordance with FERPA guidelines.

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 they create. For the past few years, the Department of Program Evaluation (DPE) has sent NSC records for graduates and for seniors. Thus, the denominator for the NSC reports contains both seniors and graduates. This inclusion deflates enrollment rates.

Second, the Ray Marshall Center at the University of Texas at Austin, LBJ School of Public Affairs, prepares an annual report as part of the Student Futures Project. The Ray Marshall Center each year

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[6] The actual match logic used by NSC is proprietary and not publicly available. NSC currently is working on a reference document for end users.

has a data-sharing agreement with AISD. As part of this agreement, DPE 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 student records shared with external researchers may be missing data regarding economic disadvantage. The National School Lunch Act (NSLA) establishes requirements and limitations regarding the release of information about children certified for free and reduced price meals provided under the National School Lunch Program (p. 315, paragraph (f) in hyperlink). Data on free and reduced price lunch obtained via the NSLP is suppressed in shared data. Data on free and reduced price lunch obtained directly from parents is shared.

Note that, as of the 2009–2010 academic year, not all student records could be shared with external researchers. According to the AISD board of trustees' regulations, parents have an opportunity every academic year to have their child opt out of participating in external research. Records of students who have opted out are omitted from shared data. **This does not affect the data shared for the 2009 graduate cohort.**

Recommendations for future work. Future data submissions to NSC should be limited to graduates only. This will help align district the NSC auto-generated aggregate reports with district reporting practices.

The district does not have data on postsecondary enrollment in developmental courses. Developmental courses are courses that 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?"

A pilot program run by the U.S. Department of Education (USDE) was underway at the time this report was prepared. This pilot provided participants (e.g., AISD) with Free Application for Federal Student Aid (FAFSA) data at the student level. Ideally, future postsecondary work would incorporate these data to the extent that permission has been granted by USDE. At this time, the extent of said permissions is unknown.

About the Department of Program Evaluation. The Department of Program Evaluation (DPE) 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. DPE staff integrate best and innovative evaluation practices with educational and institutional knowledge. DPE staff work with program staff throughout the district to design and conduct formative and summative program evaluations. DPE'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. DPE reports can be accessed online.

About the Author. Ginger Gossman completed a Ph.D. in demography at the University of Texas at 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 Program Evaluation team in September 2008.

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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.