The Automated Follow-Up Data Report, 1999-2000: College Enrollment for the 1997-98 Senior Cohort

Austin Independent School District

Executive Summary

AISD's mission statement reads, "The Austin Independent School District educates every child every day." One of the district's *belief statements* further states that, "The purpose of education is to prepare students for the future." Additionally, according to Texas Education Code, Section 4.001, the mission for Texas public education is:

To build the capacity of the Texas public education system to provide to all students a quality education that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation.

As a partial measure of the AISD and Texas public education missions, this report examines college enrollment of students working and/or attending public post-secondary institutions in Texas for the AISD 1997-98 senior cohort. College enrollment percentages of former students are presented as one indicator of AISD's success in preparing students for the future. (Employment outcomes and trends for the 1997-98 senior cohort, particularly those persons not enrolled in college, will be examined in the 1999-2000 School-To-Career Report.)

The district used automated follow-up data (electronic linkages of records from several state agencies) provided by the Texas State Occupational Information Coordinating Committee to determine college enrollment status. Records were linked by student social security numbers within the first year after students graduated from or exited AISD.

College enrollment is aggregated by gender, ethnicity, economically disadvantaged status, and high school campus. College majors of former AISD students are also reported. Additionally, public post-secondary institutions in Texas enrolling the greatest numbers of former AISD students from the 1997-98 senior cohort are identified.

KEY FINDINGS

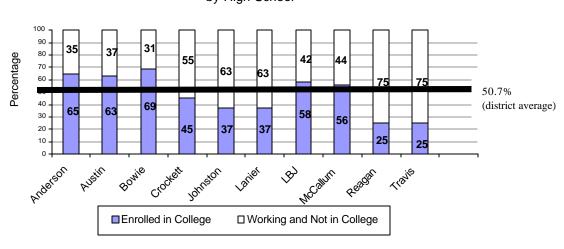
Review of the data included in this report shows the following:

- Of the 2,212 persons located from the AISD 1997-98 senior cohort, 50.7% are enrolled in college. This compares to a 52.9% AISD college enrollment for the 1996-97 cohort and a 54.7% college enrollment for the state's 1996-97 senior cohort.
- Fifty-four percent of located females and 47.2% of located males are enrolled in college. Additionally, each ethnic group except Asians has a greater percentage of females than males enrolled in college.
- As seen in the table below, college enrollment for Black students is 33.6%, which is below both the overall district percentage (50.7%) and the overall state percentage (54.7%). Additionally, college enrollment for Black students decreased by 10.4 percentage points from the previous year.

1997-98 Senior Cohort College Enrollment by Ethnicity

ETHNICITY	Enroll	ed in a Post	t-secondary Institution			
	AIS	D	Texas			
	#	%	#	%		
Asian or Pacific Islander	54	78.3	3,284	76.9		
Black	126	33.6	7,895	44.0		
Hispanic	270	38.7	18,640	45.0		
White	668	63.0	49,191	60.8		
Total	1,122	50.7	79,136	54.7		

- College enrollment for Hispanic students is 38.7%, which is below both the overall district (50.7%) and state (54.7%) percentages. However, the 38.7% rate is an increase from the previous year's rate of 36.2%.
- White and Asian/Pacific Islander students in the AISD cohort have college enrollment rates of 63.0% and 78.3%, respectively. These percentages are above both the overall district percentage (50.7%) and the state percentage (54.7%). Additionally, although the district's college enrollment rate decreased from the previous year, the rate for Asian students from AISD increased by 7.4 percentage points during the same period.
- AISD's economically disadvantaged students' college enrollment rate is 26.1% compared to a 57.0% college enrollment rate for non-economically disadvantaged persons. It reflects a decrease of 3.3 percentage points from the previous year's rate of 29.4%.
- Among Asian students from AISD, there is only a 4.6 percentage point difference between the college enrollment rates for non-economically disadvantaged (79.6%) and economically disadvantaged students (75.0%). Economic status was associated with a larger difference in college enrollment for all other ethnic groups.
- As presented in the following figure, five of AISD's high schools have college enrollment percentages that are above the district's overall percentage of 50.7%.



AISD 1997-98 Senior Cohort College Enrollment by High School

- Bowie High School has the highest overall college enrollment rate, as well as the highest college enrollment rates, for Black, Hispanic, and economically disadvantaged students.
- Of the AISD seniors located and enrolled in Texas public post-secondary institutions, 54.1% are enrolled in universities and 45.9% are enrolled in community or technical colleges. However, this trend was not the same across ethnic groups. For example, 58.5% of college-enrolled Hispanic students attend community or technical colleges.
- Austin Community College has the largest percentage of former AISD students (43.1%) who are attending public post-secondary institutions in Texas, followed by The University of Texas at Austin with 28.4%. Southwest Texas State University is third, enrolling 8.1% of the college-enrolled former AISD students.
- Twenty-eight percent of students are listed as majoring in *General Studies/Undeclared Major*, the most frequently reported major for former AISD students. *Liberal Arts and Sciences/Liberal Studies* is second with 8.4% of students pursuing this major, and 4.1% of the students are majoring in *Business*, *General*.

SUMMARY AND RECOMMENDATIONS

The data in this report indicate that, for the AISD 1997-98 senior cohort, subsequent college enrollment rates vary significantly by ethnicity, socioeconomic status, and by high school attended. White and Asian former students have college enrollment rates that are above overall district and state rates and also above the state's rates

for their respective ethnic groups. Blacks and Hispanics from the 1997-98 AISD senior cohort have college enrollment rates that are below overall district and state percentages and also below the state's rate for their respective ethnic groups. Also, AISD's economically disadvantaged students' college-enrollment percentage is less than half that of non-economically disadvantaged students. Further, 1997-98 senior cohort college enrollment rates for the district's high schools range from 25.2% to 69.1%.

The Texas K-12 public education accountability system has been successful in using disaggregated data as a tool to ensure academic success for all students, regardless of ethnicity and socioeconomic status. As evidenced by that accountability system, when schools, districts, and states collect, document, disseminate, and compare disaggregated accountability data, improvements can be made for all groups of students. Consequently, adding college enrollment percentages and other follow-up data to the array of accountability measures used at the school, district and state level could contribute to increasing college enrollment opportunities for all students, particularly the Black, Hispanic, and economically disadvantaged students who currently are underrepresented in higher education. As declared in AISD's belief statements, "Accountability is essential to achieving improvement."

Recommendations:

- 1. Address the low college enrollment rates of minority and economically disadvantaged students and investigate ways to ensure that all students have the opportunity to acquire the information, tools, and academic preparation they need to attend college, when a college degree is their goal.
- 2. Combine the automated follow-up data with local data, such as grade point average, graduation plan option, career and technology education participation, and level of participation in advanced placement course work, in order to learn as much as possible about controllable academic variables that influence and effect post-secondary participation rates.
- 3. Combine the automated follow-up data with local performance data, such as SAT and TAAS scores, to examine quality of preparedness as it relates to whether students attend college and whether they attend universities or community and technical colleges.
- 4. Take the lead among districts in the state to standardize the reporting and effective use of post-secondary participation and outcome data.
- 5. Continue to monitor college enrollment rates by gender and conduct research to understand and address disparities in college enrollment rates for young men and women.
- 6. Conduct best practices research to determine why schools such as Bowie and Anderson have relatively high minority and economically disadvantaged college enrollment rates compared to other high schools in the district.
- 7. Incorporate post-secondary education participation data into district and school improvement plans and focus resources and services appropriately.
- 8. Investigate the reasons why former students who met the academic requirements needed to attend college did not, in fact, attend college.
- 9. Ensure that all students who want to attend college understand the benefits of community college as an affordable stepping stone to university enrollment, and as an institution with a variety of beneficial two-year programs.
- 10. Enter into data-sharing agreements with private colleges and universities in Texas (such as Baylor University, Rice University, Southwestern University, and Huston-Tillotson College), and with the Integrated Postsecondary Education Data System nationally, to collect follow-up data on former AISD students enrolled at these and other institutions.
- 11. Increase efforts to ensure that PEIMS data contain valid SSNs for all students in order to increase the percentage of *located* students from future cohorts.

TABLE OF CONTENTS

Executive Summary	i
List of Figures and Tables	. v
Introduction	. 1
Data Notes and Limitations	. 1
Number of Persons Found and Not Found.	.2
Results	.4
District and Texas Comparison: College Enrollment by Ethnicity	.4
College Enrollment by Gender and Ethnicity	.5
College Enrollment Rates by High School	.5
1996-97 and 1997-98 College Enrollment by Ethnicity and by Campus	.8
College Enrollment by Ethnicity and by Socioeconomic Status	.8
University vs. Community College Enrollment	.9
Colleges With the Greatest Number of Former AISD Students Enrolled	10
Most Frequent Majors	11
Key Findings	12
Discussion	13
Ethnicity	13
Socioeconomic Status	14
Campus	14
Gender	14
Conclusion	15
Recommendations	15
Appendices	17
Appendix A: Number and Percentage of AISD Economically Disadvantaged Students in the 1997-98 Senior Cohort by Ethnicity and High School Attended	17
Appendix B: 1996-97 vs. 1997-98 College Enrollment Percentage by Ethnicity for Each High School	18
Reference List	22

LIST OF FIGURES AND TABLES

Figure 1: 1997-98 AISD Senior Cohort – Percentage Found, Not Found Due To Invalid SSN, and Not Found Due To Other Reasons	3
Figure 2: Percentage Enrolled in College by Ethnicity for the 1997-98 AISD and 1996-97 Texas Senior Cohorts	5
Figure 3: Percentage of AISD 1996-97 and 1997-98 Located Senior Cohort Enrolled in a Postsecondary	
Institution by High School	7
Figure 4: AISD 1997-98 Senior Cohort's College Enrollment by Economically Disadvantaged Status for Each Ethnic Group	8
Figure 5: AISD 1997-98 Senior Cohort's University vs. Community College Enrollment by Ethnicity for Students Enrolled in Postsecondary Institutions	9
Table 1: Percentage of <i>All Students</i> and <i>Located Students</i> by Disaggregated Group in the AISD 1996-97 Senior Cohort	4
Table 2: Percentage of <i>All Students</i> and <i>Located Students</i> by Campus in the AISD 1996-97 Senior Cohort	4
Table 3: Number and Percentage of AISD 1996-97 Senior Cohort Enrolled in College Compared by Gender and Ethnicity	5
Table 4: Number and Percentage of AISD 1997-98 Senior Cohort Enrolled in College by High School,	
Ethnicity, and Economically Disadvantaged Status	6
Table 5: Number and Percentage of College-Enrolled 1996-97 AISD Senior Cohort Students by Post-secondary Institutions with the Greatest AISD Enrollments	10
Table 6: Number and Percentage of College-enrolled AISD 1997-98 Senior Cohort Students by Area of Study	11

INTRODUCTION

AISD's mission statement reads, "The Austin Independent School District educates every student every day." One of the district's *belief statements* further states that, "The purpose of education is to prepare students for the future." Additionally, according to Texas Education Code Section 4.001, the mission for Texas public education is:

To build the capacity of the Texas Public education system to provide to all students a quality education that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation.

As a partial measure of the AISD and Texas public education missions, this report examines college enrollment for the AISD 1997-98 senior cohort. College enrollment is presented as one indicator of AISD's success. (Employment outcomes and trends for the 1997-98 senior cohort, particularly those persons not enrolled in college, will be examined in the 1999-2000 School-To-Career Report.)

College enrollment is presented for the AISD 1997-98 senior cohort during their first year after students exited from the district. (College enrollment and employment data for this cohort will also be available two years from now, three years after these students have exited high school. Therefore, it will be possible to determine the percentage of students who are still in college at that point, as well as the wages and types of employment for former AISD students who are attending school and/or employed in Texas.) College enrollment is aggregated by gender, ethnicity, socioeconomic status, and by high school campus. College majors of former AISD students are also determined. Additionally, public post-secondary institutions in Texas enrolling the greatest number of former AISD students from the 1997-98 senior cohort are identified.

The goal of this report is to describe AISD students' participation in higher education and lay the groundwork for future studies that will access the increased data availability anticipated in coming years. Some programs and departments such as School-To-Career and Career Counseling have goals that are more directly applicable to post-secondary planning, particularly because these programs operate largely at the high school level. However, the process of post-secondary preparation begins when students first enter K-12 education and continues throughout middle and high school. Therefore, post-secondary institution participation is one way to capture the cumulative effort of teachers, counselors, principals, curriculum specialists, program personnel, and all levels of administration and management.

Data Notes and Limitations

The Texas Education Agency provided statewide Public Education Information Management System (PEIMS) data to the Texas State Occupational Information Coordinating Committee (TSOICC) in May 1998 to determine employment information and college enrollment for 1997-98 senior students. TSOICC used the Automated Student and Adult Learner Follow-up System, which is a process that uses electronic record linkages to determine college enrollment in Texas public universities, types of employment, and quarterly wage for the 1997-98 senior cohort. PEIMS records were linked by social security numbers with the Texas Higher Education Coordinating Board's (THECB) master enrollment files and with the Texas Workforce Commission's (TWC) Unemployment Insurance (UI) wage records. TSOICC was provided PEIMS data for 3,314 AISD 1997-98 seniors (graduates and seniors exiting prior to completion of graduation requirements). TSOICC distributed the following information to AISD and districts throughout Texas:

• a brief comparative analysis of the district's follow-up data; and

• a diskette containing original data submitted to PEIMS and data provided by links with UI wage records and the THECB records.

TSOICC aggregated the statewide results and produced the *Report Card on Texas Public Education* 1996-1997 Exit Cohort, which is part of the *Automated Student and Adult Learner Follow-Up System Final Report 1999*. The following report is based on further analysis of AISD district data from the PEIMS, UI wage, and THECB records.

When interpreting these data, the following limitations and qualifications should be considered:

- The TSOICC linkage process cannot currently locate persons who are enrolled in higher education at either in-state private institutions or out-of-state institutions.
- Persons enrolled in a private institution in Texas, such as Rice University, but who are also employed may be listed as *working*, *not enrolled in college*. Persons enrolled in a private institution and not employed may be listed as *not found*.
- The follow-up system cannot currently identify persons outside of Texas in non-federal employment. Persons employed outside of Texas in non-federal employment may be listed as not found.
- Persons located through linkages to military, federal civil service, postal service, and Texas
 Department of Criminal Justice records are included in state-level data but are not included in
 district-level data. These individuals may be listed as not found at the district level.
- Jobs involving self-employment are not identified by the Texas UI database. Persons who are employed in jobs not covered by Texas UI may be listed as *not found*.
- The AISD and state-reported percentages of located individuals enrolled in public post-secondary institutions in Texas represent a **minimum** percentage because employed students who are enrolled in private post-secondary institutions in Texas are counted as *working only*. For example, a student enrolled at Baylor University who is also employed would be located through Unemployment Insurance wage records but would not be located through the Texas Higher Education Coordinating Board's master enrollment file and would, therefore, be listed as *working only* in TSOICC data.

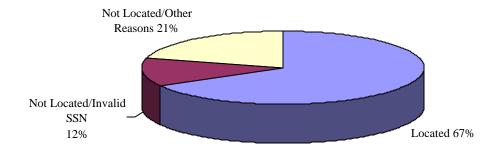
TSOICC is in the process of expanding its data source linkages and expects to remedy data limitations in the future.

Number of Persons Found and Not Found

Sixty-seven percent (N=2,212) of 3,314 former AISD students were located through linkages with the Automated Student and Adult Learner Follow-up System. In Figure 1, persons *not located* are disaggregated by *not located due to invalid social security number* (SSN) and *not located due to other reasons*. Overall, 33.3% (n=1,102) of the AISD cohort is *not located* and of this group 12.4% of the cohort is *not located due to invalid SSN*. Persons *not located due to invalid SSN* have PEIMS records that contain a temporary state-issued identification number rather than a valid SSN.

Twenty-one percent of the AISD cohort are *not located due to other reasons*. Persons *not located due to other reasons* include, but are not limited to: individuals employed are attending college outside of Texas; self-employed workers; unemployed students attending private post-secondary institutions; and persons in the military or civil service. Additionally, individuals residing in Texas and who are neither employed nor enrolled in a post-secondary institution are listed as *not located due to other reasons*.

Figure 1: 1997-98 AISD Senior Cohort – Percentage Located, *Not Located Due to Invalid SSN*, and *Not Located Due to Other Reasons*



The data and ensuing analyses are based on the 2,212 located students who make up 67% of the total 1997-98 senior cohort. (Also, data from the *Report Card on Texas Public Education, 1996-97 Exit Cohort* were used to derive a Texas post-secondary enrollment based on located persons so that district and state post-secondary enrollment percentages could be compared.)

Tables 1 and 2 present a breakdown by ethnicity, socioeconomic status and campus, comparing all students (the total 3,314 students) to located students (the 2,212 students located using automated follow-up). Although findings based on the 2,212 located students cannot be generalized to the entire group (mainly because located students do not include students enrolled in private post-secondary institutions or attending college outside of Texas), the similarities between the two groups are noteworthy. The tables show that all students and located students are represented in fairly equal proportions by ethnicity, gender, socioeconomic status, and high school attended. Therefore, it is reasonable to assume that findings based on located students are an effective, albeit conservative, indicator of post-secondary enrollment rates for all students in the cohort.

Table 1: Percentages of *All Students* and *Located Students* by Disaggregated Group in the AISD 1997-98 Senior Cohort

Disaggregated Group	Percentage of All Students in Cohort	Percentage of Located Students
Amer. Indian/Alaskan Native	0.3	0.4
Asian or Pacific Islander	3.1	3.1
Black	17.1	17.0
Hispanic	31.3	31.6
White	48.2	48.0
Female	51.7	52.8
Male	48.3	47.2
Economically Disadvantaged	22.2	19.9
Not Economically Disadvantaged	77.8	80.1

Campus	Percentage of All Students in Cohort	Percentage of Located Students
Anderson H.S.	9.7	9.9
Austin H.S.	14.9	14.3
Bowie H.S.	16.6	17.9
Crockett H.S.	11.7	12.9
Johnston H.S.	6.6	6.3
Lanier H.S.	6.9	7.5
LBJ H.S.	7.6	7.9
McCallum H.S.	7.5	7.2
Reagan H.S.	6.7	6.1
Travis H.S.	8.0	7.3
*Other	3.8	2.7

Table 2: Percentages of *All Students* and *Located Students* by Campus in the AISD 1997-98 Senior Cohort

*Note: The "Other" category includes the Huston-Tillotson and Robbins/Austin Community College GED programs, the Homebound program, Rosedale (Special Education Center) and Turman House (a delinquent youth institution).

RESULTS

District and State Comparison: College Enrollment by Ethnicity

Figure 2 compares college enrollment percentage by ethnicity for the 1997-98 AISD senior cohort to the most currently available state data, which is from the 1996-97 senior cohort. State-level college enrollment data for the Texas 1997-98 senior cohort will be available from TSOICC in spring 2000.

White and Asian or Pacific Islander students in the AISD 1997-98 cohort have college enrollment rates of 63.0% and 78.3%, respectively. These percentages are above both the overall district percentage (50.7%) and the overall state percentage (54.7%). Further, Figure 2 shows that 38.7% of AISD's Hispanic students are enrolled in college, which is below the overall district percentage (50.7%) and overall state percentage (54.7%). It also is below the state's college enrollment rate for Hispanic students (45.0%). However, the 1997-98 college-enrolled percentage for AISD's Hispanic students represents an increase of 2.5 percentage points from 1996-97, at 36.2% (Patrick, 1999, p. 8).

AISD's Black students have the lowest college enrollment percentage of the ethnic groups reported (33.6%), which is below the overall district and state percentages as well as the state's college enrollment rate for Black students (44.0%). Additionally, AISD's percentage of Black students enrolled in college decreased 10.4 percentage points. This decrease is a 23.6% change from the 1996-97 senior cohort rate of 44.0% (Patrick, 1999, p. 8). College enrollment percentages vary significantly by ethnicity for the 1997-98 senior cohort [significance determined by chi-square (4, N = 2,212) = 169.11, p < .001].

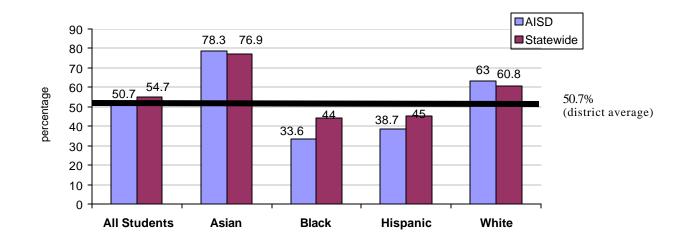


Figure 2: Percentage Enrolled in College by Ethnicity for the 1997-98 AISD and 1996-97 Texas Senior Cohorts

College Enrollment by Gender and Ethnicity

Table 3 compares college enrollment by gender and ethnicity. Fifty-four percent of located females and 47.2% of located males in the AISD 1997-98 senior cohort are enrolled in college. From all ethnic and gender subgroups, Asian males in the cohort most often enrolled in college (85.3%), whereas Black males enrolled least often (31.2%). Women from all ethnic groups enrolled in college more often than men, except among Asians. College enrollment percentages vary significantly by gender for the 1997-98 senior cohort [significance determined by chi-square (1, N = 2,212) = 9.70, p < .002].

Table 3: Number and Percentage of AISD 1996-97 Senior Cohort Enrolled in College Compared by Gender and Ethnicity

	ENROLLED IN COLLEGE									
GENDER	Asian N=69		Black N=375		Hispanic N=698		White N=1,061		Total N=2,212	
	#	# % # %		#	%	#	%	#	%	
Female (N=1,168)	25	71.4	77	35.3	152	42.0	374	68.0	*629	53.9
Male (N= 1,044)	29	85.3	49	31.2	118	35.1	294	57.5	*493	47.2
Total (N=2,212)	54	78.3	126	33.6	270	38.7	668	63.0	1,122	50.7

*Note: Gender sums include American Indian students who were not included in the table because of small numbers of these students in subcategories (fewer than 5) and the effort to preserve individual confidentiality.

College Enrollment by High School

The district's overall college enrollment percentage decreased from 52.9% (Patrick, 1999, p. 8) for the 1996-97 senior cohort to 50.7% for the 1997-98 senior cohort. As Figure 3 on page 7 illustrates, this decrease is reflected in a decreased college enrollment percentage for most of AISD's high schools. Anderson, Reagan, McCallum, and Travis have decreases of 9.3, 8.7, 6.5, and 6.2 percentage points, respectively. Austin and Bowie are the only two campuses whose seniors increased their college enrollment rates, with increases of 4.9 and 1.5 percentage points, respectively.

Moreover, Figure 3 shows that Bowie also has the largest percentage of college-enrolled students (69.1%) for the 1997-98 senior cohort. Anderson and Austin are second and third with college

enrollment rates of 64.7% and 62.7%, respectively. Reagan and Travis have the lowest overall college enrollments with rates of 25.2% and 25.3%, respectively. Further, for the previous year's senior cohort (1996-97), Anderson had the highest college-enrolled percentage (74.0 %). College enrollment rates for the 1997-98 senior cohort vary significantly by campus [significance determined by chi-square (9, N = 2,152 = 197.17, p < .001].

Table 4 presents a more detailed breakdown of college enrollment by campus, ethnicity, and economically disadvantaged status for the 1997-98 cohort. For example, at LBJ college enrollment is 90.0% for Asians, 40.3% for Blacks, 62.2% for Hispanics, 74.5% for Whites; and 27.0% for economically disadvantaged students. In addition to having the highest overall percentage of college-enrolled students for 1997-98, Bowie also has the highest college enrollment percentages for economically disadvantaged students (38.5%) and for both Black (66.7%) and Hispanic (63.8%) students. Anderson has the second highest overall college enrollment percentage (64.7%) and also has the second highest college-enrolled percentages for Blacks (55.5%) and Hispanics (62.9%).

Table 4: Number and Percentage of AISD 1997-98 Senior Cohort Enrolled in College by High School, Ethnicity, and Economically Disadvantaged Status

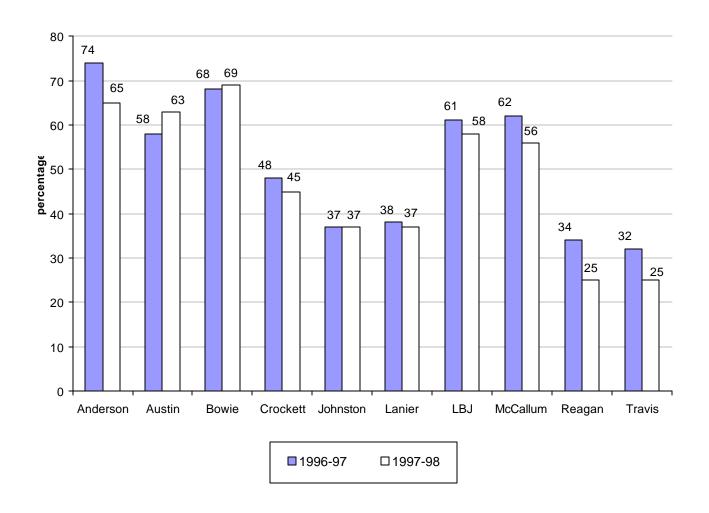
High School	Enrolled in College									
High School		Asian/Pac. Islander Black N=69 N=375		Hispanic N=698		White N=1,061		Econom. Disadvant. N=441		
	#	%	#	%	#	%	#	%	#	%
Anderson N=218	8	80.0	10	55.5	22	62.9	100	64.9	5	31.3
Austin N= 316	5	83.3	8	38.1	33	35.9	150	77.3	15	27.8
Bowie N=395	12	85.7	12	66.7	60	63.8	189	70.3	5	38.5
Crockett N=285	*	*	4	17.4	54	40.9	68	52.7	13	25.5
Johnston N=139	*	*	8	32.0	25	31.6	17	51.5	14	26.4
Lanier N= 167	12	80.0	14	34.1	16	30.8	20	34.5	22	33.8
LBJ N=175	9	90.0	31	40.3	23	62.2	38	74.5	10	27.0
McCallum N=160	*	*	7	30.4	11	42.3	67	63.2	8	32.0
Reagan N=135	1	20.0	25	29.4	5	15.2	3	25.0	10	23.8
Travis N=162	*	*	6	28.6	21	21.0	12	32.4	12	17.4
All Students N=2,212	**54	78.3	**126	33.6	**270	38.7	**668	63.0	**115	26.1

*Note: To preserve confidentiality of individuals, data were not included for subcategories with fewer than 5 individuals.

**Note: All student numbers and totals may not sum to column totals because students from Huston-Tillotson and Robbins/Austin
Community College GED programs, the Homebound program, Rosedale and Turman House are included in totals.

The college-enrolled rate of 26.1% for economically disadvantaged students (Table 5) represents a 3.3 percentage point decrease from the previous year's rate of 29.4%. In Appendix A, the percentage of economically disadvantaged students in each ethnic group is presented for each of the high schools to provide further context for understanding college enrollment percentages. For example, 50.0% of Travis's Hispanic students are economically disadvantaged compared to 6.4% of the Hispanic students from Bowie.

Figure 3: Percentage of AISD 1996-97 and 1997-98 Located Senior Cohorts Enrolled in a Post-secondary Institution by High School



1996-97 and 1997-98 College Enrollment by Ethnicity and by Campus

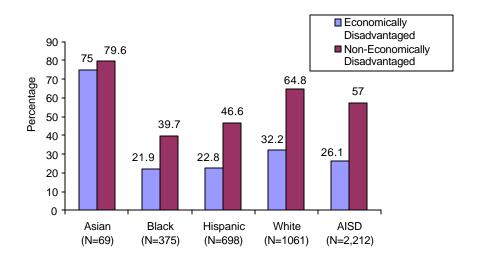
Appendix B shows, by ethnicity, the percentage of seniors from 1996-97 and 1997-98 who enrolled in college. (Some figures do not have data for Asian students because of small numbers in subgroups.) A comparison of the percentages for the two cohorts, by high school, shows the following:

- College enrollment rates among Black former students decreased at all high schools.
- Four schools have increases in college enrollment for Hispanic students. In fact, in one year's time, LBJ's percentage of Hispanic students subsequently enrolling in college doubled from 31.0% to 62.2%. Crockett's seniors evidenced the next largest increase for Hispanics (7.6 percentage points).
- Even though eight of the district's ten high schools show decreased college-enrolled percentages for White students, the overall decrease was negligible (63.9% in 1996-97 versus 63.0% in 1997-98.)
- Of the five high schools with reported data for Asian students, four of these schools show increased college-enrolled percentages for Asians.
- Six of the district's ten high schools have decreased college-enrolled percentages for economically disadvantaged students.

College Enrollment by Ethnicity and by Socioeconomic Status

Figure 4 examines college enrollment by economically disadvantaged status for each ethnic group. There is only a 4.6 percentage point difference in college enrollment for non-economically disadvantaged and economically disadvantaged Asian students. On the other hand, for White students twice as many non-economically disadvantaged students as economically disadvantaged students are enrolled in college. Similarly, college-enrolled percentages for economically disadvantaged Black and Hispanic students are about half the rates of their non-economically disadvantaged counterparts. College enrollment by socioeconomic status varies significantly [significance determined by chi-square (1, N = 2,212) = 133.86, p < .001] for the 1997-98 AISD senior cohort.

Figure 4: AISD 1997-98 Senior Cohort's College Enrollment by Economically Disadvantaged Status for Each Ethnic Group



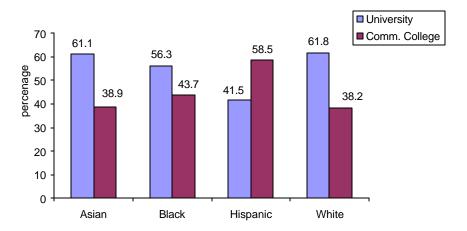
University vs. Community College Enrollment

According to figures from the Texas State Occupational Information Coordinating Committee, 53.9% of located Texas seniors from the 1997-98 senior cohort attending post-secondary institutions are enrolled in community colleges and 46.1% are enrolled in universities. AISD's university and community college enrollment percentages are almost the reverse of the state's percentages. For AISD 56.2% of college-enrolled former students are enrolled in universities and 43.8% are enrolled in community colleges or technical schools.

Figure 5 shows that a greater percentage of White, Black, and Asian students are enrolled in universities than in community college. Conversely, 17.0% more Hispanic students are attending community college than universities.

Because community colleges can be affordable stepping stones to the university, some students who are currently enrolled in community college may well continue on to attend four-year institutions. Follow-up data for this cohort will be available in three years to determine whether community college students went on to attend a Texas public four-year institution.

Figure 5: AISD 1997-98 Senior Cohort's University vs. Community College Enrollment by Ethnicity for Students Enrolled in Post-secondary Institutions



Colleges With Greatest Numbers of Former AISD Students Enrolled

Table 6 lists all public Texas post-secondary institutions enrolling five or more former AISD students from the 1997-98 senior cohort. Austin Community College has the largest percentage of AISD enrollees (43.1%), followed by The University of Texas at Austin with 28.4%. Southwest Texas State University is third with an 8.1% enrollment, followed by Texas A&M University at College Station with a 5.1% enrollment. Thirty-one other institutions not represented on Table 6 have enrollments of one to four AISD students and account, collectively, for 5.0% (45 students) of the 1997-98 AISD senior cohort enrolled in public post-secondary institutions.

The Report Card on Texas Public Education, 1996-1997 Exit Cohort lists the eight public post-secondary institutions with the highest enrollments (by percentage of attendance) for students enrolled in public post-secondary institutions in Texas for the 1996-97 senior Texas cohort. A total of 79,136 students from the Texas cohort are enrolled in Texas public post-secondary institutions with respective percentages of enrollees as follows: University of Texas at Austin (6.6%); Texas A&M University (5.6%); Texas Tech University (3.7%); University of Houston (2.7%); Southwest Texas State University (2.5%); Stephen F. Austin University (2.5%); Blinn College (2.3%); and University of North Texas (2.1%).

Table 5: Number and Percentage of College-Enrolled 1996-97 AISD Senior Cohort Students by Post-secondary Institutions with the Greatest AISD Enrollments

Post-secondary Institution	# Enrolled	% of College- Enrolled Students
Austin Community College	387	43.1
University of Texas at Austin	255	28.4
Southwest Texas St. Univ.	73	8.1
Texas A&M Univ. At College Station	46	5.1
Prairie View A&M University	15	1.7
Texas Tech	15	1.7
Blinn College	13	1.4
University. of Texas at San Antonio	13	1.4
Stephen F. Austin State Univ.	9	1.0
Sam Houston St. University	7	0.8
Texas A&M College of Vet. Medicine	5	0.6
Texas St Tech. College – Waco	5	0.6
University of Houston	5	0.6
University of Texas at Arlington	5	0.6

Most Frequent Majors

Table 7 presents the most frequent majors for located AISD students from the 1997-98 senior cohort. Majors selected by ten or more students are listed. Twenty-eight percent of the students are listed as majoring in *General Studies*, the most frequently identified major. *Liberal Arts and Sciences/Liberal Studies* is second with 8.4% of students pursuing this major, and 4.1% of the students are majoring in *Business*, *General*. *Psychology*, *General* and *Biology*, *General* round out the top five majors reported with 3.3% and 2.7%, respectively. The top five majors for AISD's former students are very similar to that of the state's 1996-97 senior cohort, with the exception of *Nursing (RN)*, the fourth most frequent major for the Texas cohort, and *Business Administration and Management*, which is fifth on the state's list.

Table 6: Number and Percentage of College-enrolled AISD 1997-98 Senior Cohort Students by Area of Study

Major	# Enrolled	% of College- Enrolled Students
General Studies	313	27.9
Liberal Studies	94	8.4
Business, General	46	4.1
Psychology, General	37	3.3
Biology, General	30	2.7
Electrical, Electronics, & Communication Engineering	27	2.4
Undeclared Major	27	2.4
Computer & Information Science	26	2.3
Biological & Physical Sciences	25	2.2
Mechanical Engineering	16	1.4
Interdisciplinary Studies, General	16	1.4
Business Administration	15	1.3
Law Enforcement/Police Science	14	1.2
Chemical Engineering	12	1.1
Nursing	12	1.1
Business Admin & Management	12	1.1
Communications, General	11	1.0
Music, General	11	1.0
Radio & TV Broadcasting	10	0.9
Engineering, General	10	0.9
Criminal Justice Studies	10	0.9
Political Science & Government, General	10	0.9

KEY FINDINGS

A review of the data included in this report shows the following:

- Of the 2,212 former AISD students located, 50.7% are enrolled in post-secondary institutions in Texas. This compares to a 54.7% college enrollment rate for located persons in the Texas 1996-97 senior cohort and a 52.9% AISD college enrollment rate the previous year.
- Fifty-four percent of located females and 47.2% of located males are enrolled in post-secondary institutions. Additionally, each ethnic group except Asians has a greater percentage of females than males enrolled in post-secondary institutions.
- White and Asian/Pacific Islander students in the AISD cohort have college enrollment rates of 63.0% and 78.3%, respectively. These percentages are above the overall district percentage (50.7%) and the state percentage (54.7%). Additionally, although the district's college

enrollment percentage decreased from the previous year, the Asian college-enrolled percentage increased by 7.4 percentage points during the same period.

- AISD's Hispanic students have a college enrollment rate of 38.7%, which is below the rate for the district overall (50.7%) and state overall (54.7%). However, the 38.7% rate is 2.5 percentage points higher than the rate observed in the previous year.
- AISD's Black students have a college enrollment rate of 33.6%, which is also below the district overall percentage (50.7%) and the state overall percentage (54.7%). Additionally, college enrollment for Black students decreased by 10.4 percentage points from the previous year.
- AISD's economically disadvantaged students' college enrollment rate of 26.1% compares to a 57.0% college enrollment rate for their non-economically disadvantaged counterpart, and represents a 3.3 percentage point decrease from the previous year's rate of 29.4%.
- Among Asians, there is only a 4.6 percentage point difference between college enrollment rates for economically disadvantaged (75.0%) and non-economically disadvantaged students (79.6%). Economic status was associated with larger differences in college enrollment for all other ethnic groups.
- Bowie's former students have the highest overall college enrollment rate, as well as the highest college enrollment rates for Black, Hispanic, and economically disadvantaged students.
- Of the located AISD seniors who are enrolled in post-secondary institutions, 54.1% are enrolled in universities and 45.9% are enrolled in community or technical colleges. However, this trend was not the same across ethnic groups. In fact, among college-enrolled Hispanic students, 17.0% more students are attending community colleges than are attending universities.
- Austin Community College has the largest percentage of college-enrolled former AISD students (43.1%), followed by The University of Texas at Austin (28.4%). Southwest Texas State University is third with an 8.1% enrollment of AISD alumnae, followed by Texas A&M University at College Station with a 5.1% enrollment.
- Twenty-eight percent of students are listed as majoring in *General Studies*, which is the most frequently reported major for former AISD students. *Liberal Arts and Sciences/Liberal Studies* is second with 8.4% of students pursuing this major, and 4.1% of the students are majoring in *Business*, *General*. *Psychology*, *General* and *Biology*, *General* round out the top five majors, selected by 3.3% and 2.7% of former AISD students, respectively.

DISCUSSION

The issue of college enrollment is important and relevant because of the individual and societal benefits generally associated with attaining a college education. In *The Texas Economy: There Is Nothing So Certain as Change*, Froeschle states, "There is little if any debate that college graduates, in general, have much higher median earnings than those with less education and that the premium paid to those with a college diploma increased throughout the 1980s." (1996, p. 2) More recently, the *Digest of Education Statistics* described the results of studies addressing the value of an education in their annual report:

Adults with higher levels of education were more likely to participate in the labor force than those with less education. About 79 percent of adults, 25 years old and over, with a bachelor's degree participated in the labor force in 1997 compared with 66 percent of persons who were high school graduates. In contrast, 39 percent of those 25 and older, who were not high school

graduates were in the labor force . . . Persons with lower levels of educational attainment were more likely to be unemployed than those who had higher levels of educational attainment. (1999, p. 36)

Ethnicity

Of concern are the disproportionately low college enrollment percentages for economically disadvantaged, Hispanic and Black students, and the 10.4 percentage point decrease in the college enrollment rate for Black students from the 1996-97 cohort to the 1997-98 senior cohort. There are statistically significant differences between college enrollment rates for students by ethnicity for the AISD 1997-98 senior cohort.

The state's 1997-98 senior cohort data by ethnicity are not yet available. However, when these data are available it can then be determined whether the state's data also show a decrease in Black students' college enrollment rates from 1996-97 to 1997-98. At that point it can be determined if the focus for an explanation for the decrease should be at the state level (i.e., implications of the Hopwood case), the district, or at both levels. For example, in an article discussing new efforts to diversify college enrollment in the post-Hopwood era, Brooks of the Austin American Statesman writes, "The number of black freshmen enrolling at UT and A&M, for example, decreased more than 20 percent this year." (Brooks, 1997). Of note, the 1997 seniors were the first group for which the Hopwood ruling took full effect, which means that the Hopwood case could have affected both cohorts (1997 seniors and 1998 seniors) to some extent.

The rate of enrollment for AISD's Black students is, however, below the statewide 1996-97 percentage of 44.0%. Schools in AISD whose Black students enrolled in college at a rate higher than the statewide 1996-97 rate of 44.0% for Black students are Bowie (66.7%) and Anderson (55.5%). As shown in Appendix A, Bowie and Anderson also have the two lowest overall percentages of economically disadvantaged students. Therefore, in AISD for the 1997-98 senior cohort, Black students have most frequently enrolled in college when they had attended AISD schools with the lowest overall percentages of economically disadvantaged students. Appendix A shows that Bowie and Anderson have the two lowest percentages of economically disadvantaged Black students, as well.

Hispanic students' rate of college enrollment increased 2.5 percentage points from the 1996-97 cohort to the 1997-98 cohort. However, the 38.7% rate for Hispanic students is below both district and state overall percentages and also below the state's college enrollment rate of 45.0% for Hispanic students. Schools whose Hispanic students enrolled in college at rates higher than the state's 45.0% rate are Bowie (63.8%), Anderson (62.9%), and LBJ (62.2%). As previously mentioned, Bowie and Anderson enroll the fewest economically disadvantaged students of all high schools in the district. Therefore, in AISD for the 1997-98 senior cohort, Hispanic students also most frequently enrolled in college when they had attended AISD schools with the lowest overall percentages of economically disadvantaged students.

AISD's White and Asian students enroll in college at the relatively high rates of 63.0% and 78.3%, respectively. These rates are above both district and state overall percentages and also above the college-enrolled percentages of their state-level counterparts, which are 60.8% for White students and 76.9% for Asian students (Table 3). Additionally, AISD's Asian students' rate of college enrollment increased by 7.4 percentage points, from 70.9% in 1996-97 to 78.3% in 1997-98.

Socioeconomic Status

Socioeconomic status as a predictor of college enrollment is significant in AISD students' college enrollment rates. Students classified as economically disadvantaged are in college at a rate of 26.1%, compared to a rate of 57.0% (Figure 4) for non-economically disadvantaged students. In addition, Hispanic and White economically disadvantaged students enroll in college at rates that are less than half that of their non-economically disadvantaged counterparts. Black economically disadvantaged students enroll in college at a rate that is nearly half that of their non-economically disadvantaged counterparts, as well. Notably, there is only a 4.6 percentage point difference in college enrollment rates for non-economically disadvantaged and economically disadvantaged Asian students (75.0% and 79.6%, respectively; please see Figure 4).

Campus

College enrollment rates vary significantly by high school for the 1997-98 AISD senior cohort. Bowie, Anderson, and Austin High School alumnae enroll in college at the respective rates of 69.1%, 64.1% and 62.7%, compared to rates of 25.2% for Reagan and 25.3% for Travis High School alumnae. There is a difference of 43.9 percentage points in the college-enrolled rate between the two schools with the highest and lowest rates.

Both Black and Hispanic students have the highest college enrollment rates at the two schools with the highest overall college enrollment rates, Bowie and Anderson. (Of note, Bowie's 1996-97 senior cohort Black students' college enrollment rate was 76.5%, which was higher than any of the other ethnic groups at that school.) Bowie's economically disadvantaged students also have the highest college enrollment rate of any of the high schools.

White, Hispanic, and Asian students' college enrollment rates are lowest at Reagan, the school with the lowest overall college enrollment rate. Moreover, economically disadvantaged students' college enrollment rate is lowest at Travis, the school with the highest percentage of economically disadvantaged students (Appendix A) and the second lowest overall college enrollment rate. Therefore, although ethnicity and socioeconomic status are significant indicators for college enrollment for the AISD 1998-99 senior cohort, the high school attended also appears to be a factor.

Gender

Fifty-four percent of located females and 47.2% of located males from the 1997-98 cohort are enrolled in Texas public post-secondary institutions. The 54.0% rate for females is virtually the same as the 1996-97 rate of 54.5%. However, the 47.2% rate for males is a 3.8 percentage point decrease from the 1996-97 rate of 51.0%. This trend of gender differences in college enrollment rates as well as the decrease in college-enrollment rates for males from one year to the next, is representative of similar trends for national data comparing college enrollment by gender. Mortenson, a researcher at the Center for the Study of Opportunity in Higher Education, is quoted in *Education Week*, saying, "Women are now graduating from high school, enrolling in college, and earning bachelor's degrees in greater numbers than their once-dominant male counterparts". (Viadero, 1999, p. 10) Also, in the August issue of *The College Board Review*, Mortenson writes, "If the trend since 1970 continues the last male to be awarded a bachelor's degree will receive it in the spring of 2067". (Viadero, 1999, p. 10) Further, as seen in Table 4, each of the ethnic groups at AISD except Asians have higher college enrollment rates for females than males.

Conclusion

The data in this report indicate that for the AISD 1997-98 senior cohort, subsequent college enrollment rates vary significantly by ethnicity, socioeconomic status, and by high school attended. (To a lesser extent, college enrollment rates also vary by gender.) White and Asian former students have college enrollment rates that are greater than district and state rates for all students, and above the state's rates for White and Asian former students. Blacks and Hispanics from the AISD 1997-98 senior cohort have college enrollment rates that are lower than district and state rates for all students, and also below the state's rates for their respective ethnic groups. In addition, AISD's economically disadvantaged students are enrolled in college at a rate that is lower than half that of non-economically disadvantaged students. Further, the district's high schools' college enrollment rates for the 1997-98 senior cohort range from 25.2% to 69.1%.

The Texas K-12 public education accountability system has been successful in using disaggregated data as a tool to ensure academic success for all students, regardless of ethnicity and socioeconomic status. As evidenced by that accountability system, when schools, districts, and states collect, document, disseminate, and compare disaggregated accountability data, improvements can be made for all groups of students. Consequently, adding college enrollment percentages and other follow-up data to the array of accountability measures used at the school, district and state level could contribute to increasing college enrollment opportunities for all students, particularly the Black, Hispanic, and economically disadvantaged students who currently are underrepresented in higher education. As declared in AISD's belief statements, "Accountability is essential to achieving improvement."

RECOMMENDATIONS

- Address the low college enrollment rates of minority and economically disadvantaged students
 and investigate ways to ensure that all students have the opportunity to acquire the information,
 tools, and academic preparation they need to attend college, when a college degree is their goal.
- 2. Combine the automated follow-up data with local data, such as grade point average, graduation plan option, Career and Technology Education participation and level of participation in advanced placement course work, in order to learn as much as possible about controllable academic variables that influence and effect post-secondary participation rates.
- 3. Combine the automated follow-up data with local performance data, such as SAT and TAAS scores, to examine quality of preparedness as it relates to whether students attend college and whether they attend universities or community and technical colleges.
- 4. Take the lead among districts in the state to standardize the reporting and effective use of post-secondary participation and outcome data.
- 5. Continue to monitor college enrollment rates by gender and conduct research to understand and address disparities in college enrollment rates for young men and women.
- Conduct best practices research to determine why schools such as Bowie and Anderson have relatively high minority and economically disadvantaged college enrollment rates compared to other high schools in the district.
- 7. Incorporate post-secondary education participation data into district and school improvement plans and focus resources and services appropriately.
- 8. Investigate the reasons why former students who met the academic requirements needed to attend college did not, in fact, attend college.

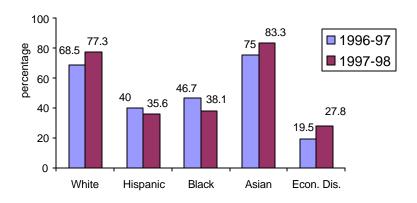
- 9. Ensure that all students who want to attend college understand the benefits of community college as an affordable stepping stone to university enrollment, and as an institution with a variety of beneficial two-year programs.
- 10. Enter into data-sharing agreements with private colleges and universities in Texas (such as Baylor University, Rice University, Southwestern University, and Huston-Tillotson College), and with the Integrated Post-secondary Education Data System nationally, to collect follow-up data on former AISD students enrolled at these and other institutions.
- 11. Increase efforts to ensure that PEIMS data contain valid SSNs for all students in order to increase the percentage of *located* students from future cohorts.

APPENDIX A: NUMBER AND PERCENTAGE OF AISD ECONOMICALLY DISADVANTAGED STUDENTS IN THE 1997-98 SENIOR COHORT BY ETHNICITY AND HIGH SCHOOL ATTENDED

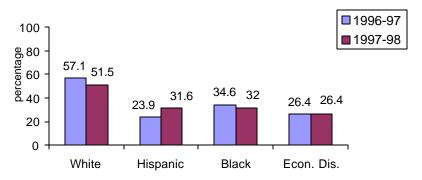
School	Ethnicity	# Located	# Econ- disadvant.	% Econdisadvant.	School	Ethnicity	# Located	# Econ- disadvant.	% Econdisadvant.
Austin	Asian	6	2	33.3	Johnston	Asian	N/A	N/A	N/A
	Black	21	10	47.6		Black	25	8	32.0
	Hispanic	92	35	38.0		Hispanic	79	40	50.6
	White	194	7	7.4		White	33	3	9.1
	All	316	54	17.1		All	139	53	38.1
Lanier	Asian	15	10	66.7	McCallum	Asian	N/A	N/A	N/A
	Black	41	19	46.0		Black	23	8	34.8
	Hispanic	52	25	48.1		Hispanic	26	8	30.8
	White	58	11	19.0		White	106	7	6.6
	All	167	65	38.9		All	160	25	15.6
Reagan	Asian	N/A	N/A	N/A	Travis	Asian	N/A	N/A	N/A
	Black	85	27	31.8		Black	21	11	52.4
	Hispanic	33	10	30.3		Hispanic	100	50	50.0
	White	12	2	16.7		White	37	7	18.9
	All	135	42	31.1		All	162	69	42.6
Crockett	Asian	N/A	N/A	N/A	Anderson	Asian	10	0	0
	Black	23	7	30.4		Black	18	5	27.8
	Hispanic	132	33	25.0		Hispanic	35	9	25.7
	White	129	10	7.8		White	154	2	1.3
	All	285	51	17.9		All	218	16	7.3
LBJ	Asian	10	1	10.0	Bowie	Asian	14	0	0
	Black	77	28	36.4		Black	18	1	5.6
	Hispanic	37	7	18.9		Hispanic	94	6	6.4
	White	51	1	2.0		White	269	6	2.2
	All	175	37	21.1		All	382	14	3.7

APPENDIX B: 1996-97 VS. 1997-98 COLLEGE ENROLLMENT PERCENTAGE BY ETHNICITY FOR EACH HIGH SCHOOL

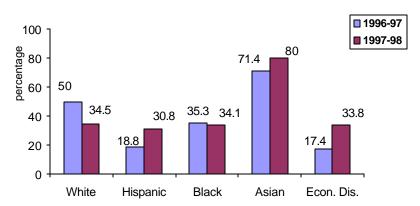
Austin High School



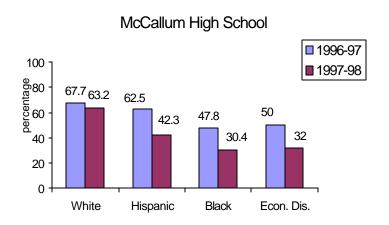
Johnston High School

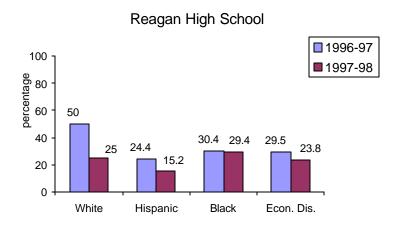


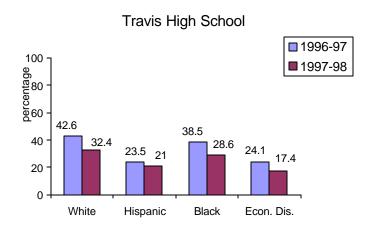
Lanier High School



APPENDIX B: 1996-97 VS. 1997-98 COLLEGE ENROLLMENT PERCENTAGE BY ETHNICITY FOR EACH HIGH SCHOOL, CONTINUED

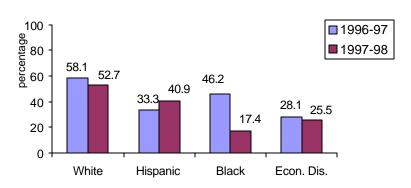




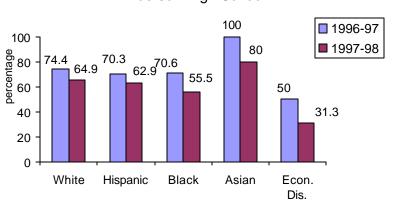


APPENDIX B: 1996-97 vs. 1997-98 COLLEGE ENROLLMENT PERCENTAGE BY ETHNICITY FOR EACH HIGH SCHOOL, CONTINUED

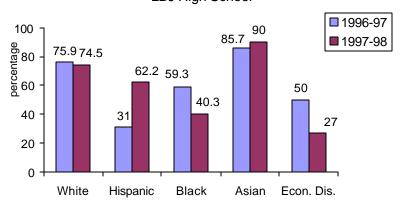
Crockett High School



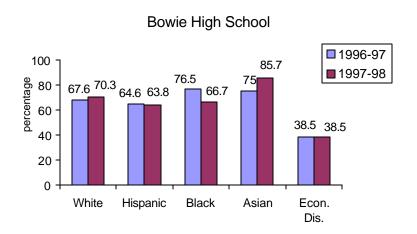
Anderson High School



LBJ High School



APPENDIX B: 1996-97 VS. 1997-98 COLLEGE ENROLLMENT PERCENTAGE BY ETHNICITY FOR EACH HIGH SCHOOL, CONTINUED



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