The Education Gap in the Gateway Cities Region

Presented by

The Gateway Cities Partnership, Inc.

For

Positioning for the Future:
Workforce Preparation in the Gateway Cities Region

May 10, 2002

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PREFACE

In 2001, the Gateway Cities Partnership published its first report: GATEWAY CITIES REGION—A PROFILE AT THE START OF THE 21st CENTURY. The report benchmarked a number of critical economic performance data sets for the region. One of the most critical data sets addressed educational attainment and student performance at the high school level. This year, that data has been updated and expanded to provide a better illustration of the state of education in the region.

This report is not intended to be a qualitative assessment of the school districts, high schools, community colleges or universities in the region; there are simply too many factors to be considered along with the Academic Performance Index (API) scores, attrition rates, and graduation rates. It does, however, provide a useful tool for assessing the magnitude of the challenge facing educational institutions in the region and what it means for the economy of the region. The community can also infer from this report how well students are prepared for the workplace upon completion of high school.

Readers must ask themselves how the community can respond to the information contained in the report. The data is graphic; too many of our students are ill prepared for either the academic or work world. These students are unable to compete in the local, let alone the global market. Nor will they spur economic growth or help reverse the problems of poverty in the region.

Per capita income, a real indicator of economic development and prosperity, closely tracks educational levels. In four cities, 66% or more adults over age 25 have less than a high school education, and the per capita income is a little over a third of the state average. These are the same cities where the attrition rate for the high schools stands at 53%. Unless these obstacles can be overcome, it is highly unlikely that there will be any significant improvement in the economic condition or sustainability of these communities in the foreseeable future.

It is clear that education and economic development are inextricably linked. It is equally clear that education is the cornerstone of community development. Each community must look at this information and ask itself how they can work with the educators and, perhaps most importantly, parents to make education the number one priority for the Gateway Cities Region.

Richard Hollingsworth
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ACKNOWLEDGEMENTS

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We would also like to thank members of the Gateway Cities Partnership, representatives from Gateway Cities Region High Schools, Community Colleges, and California State University Long Beach for providing us with information and generous assistance required for successful completion of this report.

EXECUTIVE SUMMARY

This report seeks to identify education gaps in the Gateway Cities Region (Region). If the Region is to maintain economic prosperity and improve its competitive advantage, the education system must prepare the workforce for the challenges of the 21st century. The Gateway Cities Region offers considerable job opportunities; however, workers in the region tend to lack the skills needed to fill these jobs. The problem is not a shortage of workers overall, but a shortage of workers with adequate skills and educational attainment. With abundant labor force, the potential exists for bridging this gap between required skills and worker qualifications in the Region.

Higher educational attainment generally corresponds to higher income level. Median earnings of a college graduate with a bachelor's degree will be more than twice those of a person with no high school diploma. However, if the Region's students continue failing high school at the alarmingly high rate we have identified, neither the region nor these students will ever reach their full potential. The addition of undereducated, unprepared, and unskilled labor into the workforce does not bode well for the region. It is imperative that the Region finds ways to ensure that students cross the divide between high schools and post-secondary institutions.

This report focuses on the building blocks of the education system – high schools and community colleges. We assess educational attainment trends and highlight opportunities for improvement at the high school and community college level.

The study identified the following key findings:

High Schools

- Gateway Cities Region high school enrollment accounts for one-fifth of all enrollment in Los Angeles County. High school enrollment in the Region increased at a faster pace than Los Angeles County but at a slower rate than the state. The majority of high school students in the Region are of Hispanic origin, accounting for 61% of all students enrolled in high school.

- General performance level of the high schools has declined compared to previous year. Based on Academic Performance Index (API) scores, out of the 180 high schools in the county, the Gateway Cities Region has just 3 schools within the top 50. **The majority of high schools do not even fall within the top half of the rankings.** Nine schools within the Region have been categorized as under-performing over the last few years.

- A predominantly Hispanic student population and a diverse immigrant base contributes to a large population of English Learners (EL); students who have been determined to lack the clearly defined English language skills of listening comprehension, speaking, reading, and writing necessary to succeed in the school's regular instructional programs. The percentage share of EL students enrolled in the Gateway Cities Region exceeds both county and state figures.

- Both the *One-Year Dropout Rate* and the *4-Year Derived Rates* in the Gateway Cities Region are lower than those for the county and the state. However, rates vary considerably when considered at the school district level and in terms of ethnicity. The *One-Year Dropout Rate* for Hispanics was 6 times that of Whites and Asians. A disproportionately

high drop out rate combined with a large Hispanic base, results in a high number of student dropouts in the cities overall.

- The attrition rate in the Gateway Cities Region is higher than that of California. The high attrition rate of many school districts in the Region is cause for serious concern. For example, Compton and Los Angeles school districts have 53 percent attrition rates, more than double the state average. Such high attrition rates contribute to the region's overall lack of educational attainment and skills base, eventually affecting the economic vitality of the area.

- 11 out of 100 students enrolled in 12th grade dropped out or failed before completing their high school education in the Gateway Cities Region. In addition, an average of 72 out of 100 12th grade high school students, do not meet University of California (UC)/California State University (CSU) eligibility criteria in the region. The education gap is real - eligibility rates for UC/CSU in the Region are lower than county or state averages. Between racial/ethnic groups, Hispanics and Blacks have far lower eligibility levels compared to Asians and Whites. Again, proportionately fewer Hispanics are likely to pursue higher education.

- In the Gateway Cities Region, 42% of the total high school graduates pursued higher education in community colleges or UC/CSU schools. 24% of the graduates pursue a community college education in the Region, compared to 31% across the state. Less than one in five graduating senior attends a UC/CSU school.

Community Colleges and California State University (CSU)

- Student enrollment in the Gateway Cities Region community colleges increased at a phenomenal pace, more than three times the state average from Fall 1997 to Fall 2001. The majority of the students, as in high schools, are of Hispanic origin.

- It appears that the demand for Associate degrees is increasing in the Gateway Cities Region and there is a convergence between the percentage share of students obtaining these degrees in the Region and California. Similarly, the gap between the Gateway Cities Region's share of students pursuing Certificates and the state's share has narrowed. Interdisciplinary Study seems to be the preferred choice of Associate degree in the Gateway Cities Region and in the state.

- In Fall 2000, 53% of incoming freshmen in California State University Long Beach (CSULB) were unprepared to read and write at the college level, compared to 46 % statewide. In mathematics, 52% of the regularly admitted freshmen were unprepared, compared to 45% statewide.

- The number of students failing placement tests in CSULB is alarming. In 2001, 78.6 % of all students taking the Entry-Level Mathematics Test failed and 68% of all students taking the English Placement Test failed.

- CSU Dominguez Hills and CSU Los Angeles are two campuses with highest proportion of unprepared students; more than 90% of regularly admitted freshmen need remediation. CSULB ranks 13 out of 22.

- The transfer rate for community colleges system-wide is 34.2%. Community colleges in the Gateway Region perform poorly with respect to transfer rates. Compton and Rio Hondo fall very short of the expected transfer rate for the 1995-2001 cohort and are among the "persistently low-transfer colleges". A "persistently low-transfer college" is a community college that for three years yields a significantly lower transfer rate than expected. Ranking the college with the lowest transfer rate at a one (1) and the college with the highest transfer rate at 108, the Gateway Cities Region colleges rank in the following order: Rio Hondo (11), Compton (23), L.A. Trade Tech (26), Long Beach (40), Cerritos (41), and East L.A. (43).

- Transfer rates may not accurately reflect the performance of community colleges since their value to the community also resides in their effectiveness at providing high quality technical and vocational training.

Education Pays

- To a large extent, education of an individual determines the wage that he or she is able to earn. The more educated a person is, the higher the probability of earning a higher salary. A professional degree holder earns 3.75 times more than a person with some high school and no diploma. In fact, there is a "diploma premium" attached to each advanced educational level. The additional earnings associated with a professional degree represent a nearly 73% increase over the average earnings for those with a bachelor's degree and a 178% premium over the earnings of high school graduates. The Gateway Cities Region exhibits lower median household income and per capita income than both the county and the state. This may be a reflection of the underlying skills level of its population.

- According to a California Employment Development Department forecast, eight out of the top 15 occupations with greatest absolute job growth in Los Angeles County require short-term on-the-job training. The occupations that require short-term on-the-job training are not among the highest paying jobs. Jobs in information technology are not only the fastest growing occupations but also among the highest paid. A key difference between low and higher paying jobs is the education and training level - an educated workforce is prosperous and has a positive multiplier effect. Higher incomes translate into higher disposable incomes, resulting in the creation of a dynamic, vibrant, and sustainable communities. The training, therefore, should be focused towards preparing the workforce of the future to meet requirements of the new job market, one that is dominated by information and technology.

1. INTRODUCTION

The USC Center for Economic Development (Center) is pleased to present *The Education Gap in the Gateway Cities Region*, a report prepared for the Gateway Cities Partnership, Inc. The primary purpose of this report is to provide background information supporting the conference*, Positioning for the Future: Workforce Preparation in the Gateway Cities Region* to be held on May 10, 2002, in Long Beach. The report aims to stimulate discussion among policy makers and conference participants leading to the development of a comprehensive workforce development strategy for the Gateway Cities Region.

Working in tandem, findings from the report and the conference are designed to:

a. Assess challenges facing the Gateway Cities Region in creating a workforce of the future;
b. Identify education gaps;
c. Raise public awareness with respect to the region's problems and opportunities;
d. Bring together a diverse constituency of stakeholders including elected leaders (from federal, state, and local level), planners, developers, community-based organizations, public officials, and private practitioners; and
e. Serve as a catalyst for renewed investment and workforce development in the region.

2. BACKGROUND

Located on the southeastern border of Los Angeles County, the Gateway Cities Region consists of the 27 cities of Artesia, Avalon, Bell, Bellflower, Bell Gardens, Cerritos, Commerce, Compton, Cudahy, Downey, Hawaiian Gardens, Huntington Park, La Habra Heights, Lakewood, La Mirada, Long Beach, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Vernon, Whittier, and nearby unincorporated areas of Los Angeles County.

If the Gateway Cities Region is to maintain economic prosperity and improve its competitive advantage, the education system must prepare the workforce for challenges of the 21st century. *Gateway Cities: A Profile at the Start of the 21st Century,* a report prepared last year by the Center, demonstrated that high rates of unemployment, low labor force participation, and low income are strongly correlated with low educational attainment among Gateway Cities Region residents. According to the 1990 Census, more than one-third of the population (25 years and above) in the Region had less than a high school education. Recent statistics of graduation rates and college enrollment patterns in the region also show a disturbing trend. Attrition rates in the Region's high schools are among the highest in Los Angeles County. Regularly admitted freshmen in California State University campuses in and around the Region show an alarmingly high rate of unpreparedness and thus a need for remediation. It is worth noting that two of the best high schools in California are in the Gateway Cities Region, namely Whitney High School and California Academy of Mathematics and Science. Statistics indicate that an area directly benefits from a highly educated workforce, as the level of income a person earns is directly related to the amount of education he or she has achieved. It is evident that the Gateway Cities Region's future and economic prosperity is directly linked to the education and earning potential of its citizens.

The report examines four key subjects.

- Chapter 3 provides an analysis of trends at the high school level with respect to enrollment, ethnicity, drop out rates, attrition, API scores, graduation rates, and UC/CSU eligibility.
- Chapter 4 highlights issues at the community college level related to preparedness, remediation, transfer rates, and curriculum trends.
- Chapter 5 compares earnings potential to corresponding educational attainment levels. An overview of industry and occupation trend including new job openings is identified in this section.
- Chapter 6 provides an insight into the real and perceived education gaps from different perspectives, including industry and educational institutions. This qualitative analysis has been conducted through interviews with the senior administrators of community colleges, employers, and industry partners.

3. HIGH SCHOOLS (GRADE 9 TO GRADE 12)

3.1 HIGH SCHOOL PROFILE

3.1.1 SCHOOL DISTRICTS

The Gateway Cities Region covers twelve school districts. These districts form the basic data set for the study of 37 high schools (Table 1). Long Beach Unified School District is the largest in the Region both in terms of number of high schools (9) and enrollment. Whittier Union High follows with 5 and ABC Unified District with 4 high schools. Compton, Los Angeles, Montebello, and Norwalk-La Mirada districts each have three schools in the Region. Downey and Bellflower have two schools each while El Rancho, Lynwood, and Paramount have one high school each in the Gateway Cities Region. The varying number of schools per district, enrollment patterns, underlying population base, and other related socio-economic characteristics affect the performance of each high school and respective school district. We examine data at the district level and the Gateway Cities Regional level, and compare them with Los Angeles County and California to identify trends and gaps.

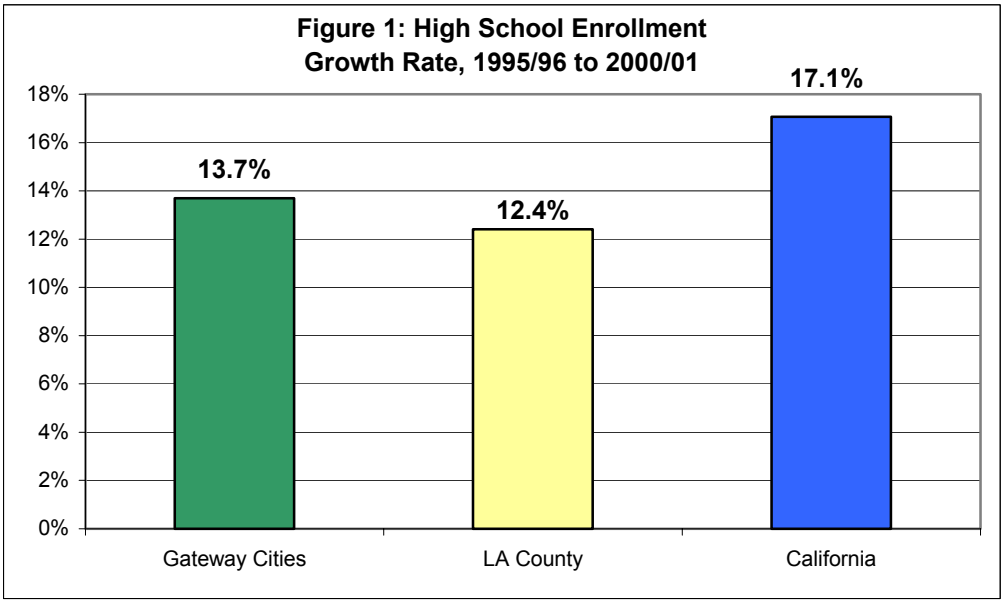
Table 1: School Districts and High Schools in Gateway Region

	DISTRICT	HIGH SCHOOLS*	No.
1	**Long Beach Unified**	Jordan, Lakewood, Millikan, Polytechnic, Wilson, Avalon, Savannah Academy, Cabrillo, California Academy	9
2	**Whittier Union High**	California, La Serna, Pioneer, Santa Fe, Whittier	5
3	**ABC Unified**	Artesia, Cerritos, Gahr, Whitney	4
4	**Montebello Unified**	Bell Gardens, Montebello, Schurr	3
5	**Norwalk-La Mirada Unified**	Glenn, La Mirada, Norwalk	3
6	**Los Angeles Unified**	Bell, Huntington Park, Southgate	3
7	**Compton Unified**	Centennial, Compton, Dominguez	3
8	**Bellflower Unified**	Bellflower, Mayfair	2
9	**Downey Unified**	Downey, Warren	2
10	**El Rancho Unified**	El Rancho	1
11	**Lynwood Unified**	Lynwood	1
12	**Paramount Unified**	Paramount	1
	TOTAL		**37**

The selection of high schools is consistent with the data set identified in the report, *Gateway Cities: A Profile at the Start of 21st Century*, 2001.

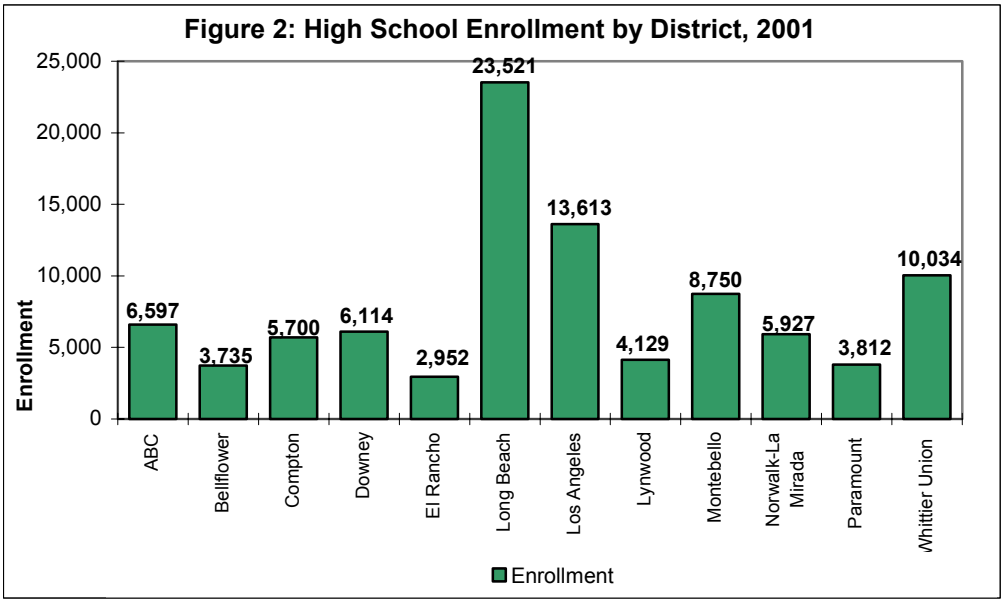
3.1.2 ENROLLMENT PATTERN

According to the US Bureau of Census, the Gateway Cities Region population grew from 1,584,973 to 1,720,659 between 1990 and 2000 at an annual growth rate of 0.86%. Enrollment in the Region's high schools grew from 83,456 to 94,884 during the period 1995-96 to 2000-01 at an average annual growth rate of 2.3%, approximately three times the population growth rate. Enrollment in the Region's high schools increased at a faster pace than Los Angeles County, but at a slower rate than the state (Figure 1). The Region's high school enrollment accounts for one-fifth of all high school students in Los Angeles County.



Source: California Department of Education

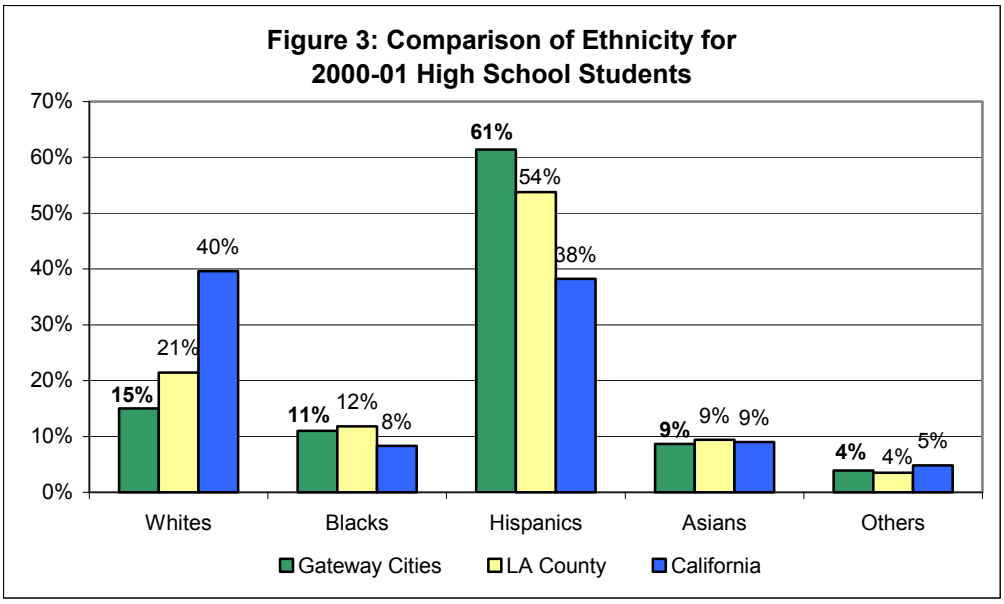
The enrollment levels vary throughout the Gateway Region depending on the district and the number of schools within each district (Figure 2). The Long Beach Unified School District has the highest aggregate student enrollment, followed by the school districts of Los Angeles, Whittier, and Montebello.



Source: California Department of Education

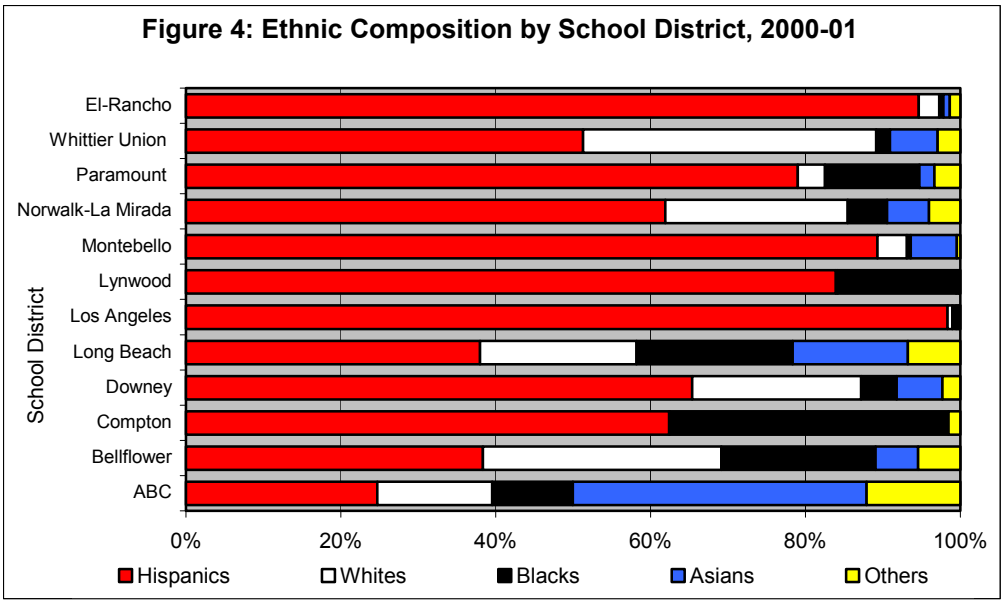
3.1.3 ETHNICITY

The majority of high school students in the Gateway Cities Region are of Hispanic origin. Hispanic students number 59,400, accounting for 61% of all students enrolled in high school. They are followed by Whites at 15% (14,523 students) and Blacks at 11%(10,659 students). The Asian student population totals 9% (8,365 students) of the students entering the Region's high schools and the remaining 4% of enrollment is accounted for by Filipinos, Pacific Islanders, American Indians, and people belonging to multiple races. Ethnic composition of the Region's high schools varies significantly compared to the composition of schools in the county and state (Figure 3). Proportionately, the Gateway Cities Region have less than half the number of White students compared to the state and 1.6 times the number of Hispanics. As shall be elaborated later in the report, the ethnic composition is significant in how it relates to students' performance as quantified by certain indicators.



Source: California Department of Education

Ethnic composition within each school district varies significantly. El Rancho and Los Angeles districts have a Hispanic student population in excess of 90%. While Whittier, Bellflower, Downey, and Norwalk have varying levels of Hispanic population, they each have a White population in excess of 20% of total students. Compton has the largest Black population of all districts at 30%, followed by Bellflower, Long Beach, and Lynwood. The ABC Unified School District is the only district with a non-Hispanic ethnic group as a majority; the Asian population totals about 38% of total enrolled students in ABC Unified high schools (Figure 4).



Source: California Department of Education

3.2 PERFORMANCE

3.2.1 ACADEMIC PERFORMANCE INDEX (API)

The API forms the base for comparative performance levels of schools. It is calculated as a composite score based on various indicators. The API index is a weighted average based on the Stanford-9 standardized test given in spring 2001 to students in grades 2 through 11. It is measured through national percentile rankings and performance levels on a scale of 200 to 1000. API growth targets are established every year and a school's performance is judged relative to those targets. These targets are important as they are used as qualifiers for the Governor's performance awards and planning grants through the Immediate Intervention/Under Performing Schools program (II/USP). The API has a notable limit in that it is simply a snapshot of the scores of students at one point in time. It does not measure student progress in learning an individual subject. One-fourth of all schools within the Gateway Cities Region have been categorized as under-performing over the last few years. Compton and Los Angeles districts are the most affected with two out of three schools designated as under performing.

3.2.2 COUNTY HIGH SCHOOL RANKINGS

API scores clearly indicate that the general performance level of high schools has deteriorated compared to the previous year. API scores for 2000-01 suggest that most schools in the Region have dropped in countywide rankings from 1999-00 (Table 2). While some of them may have improved their API scores from 1999-00, the improvement was not sufficient to improve their rankings countywide. Although, the Region has the first (Whitney) and second ranked (California Academy) schools in Los Angeles County, the majority of high schools do not fall within the top half of the rankings. Out of the 180 high schools in the County, only 3 schools are within the top 50. These rankings, when compared to 1999-00 reflect even more poorly on the education system. Only nine schools improved their ranking from last year and among those, only four managed a jump of more than five ranks. Three out of the five schools in the Whittier School District improved their rankings and the district has no under-performing schools.

Table 2: Gateway Cities Region High School Profile and Performance, 2000-01

HIGH SCHOOLS	School District	00/01 Los Angeles County HS Ranking	99/00 Los Angeles County HS Ranking	2001 Academic Performance Index (API)	2000 Academic Performance Index (API)	00/01 Students/Teacher Ratio	2000 Percent of Students Attending Community College	2000 Percent UC/CSU Eligible Graduates	2001 Dropout Rate	2001Attrition Rate	2000 Students/Computer	Under Performing Schools
Whitney	ABC	**1**	1	**968**	969	23	10%	56%	0.60%	24%	8	No
California Academy	Long Beach	**2**	2	**917**	912	25	1.0%	41%	1.92%	31%	8	No
Cerritos	ABC	**18**	17	**774**	771	22	18%	56%	0.60%	24%	8	No
Polytechnic	Long Beach	**56**	49	**655**	661	23	15%	41%	1.92%	31%	6	No
La Serna	Whittier	**58**	67	**647**	652	21	27%	46%	1.95%	37%	6	No
Avalon	Long Beach	**60**	69	**646**	626	16	12%	41%	1.92%	31%	7	No
Mayfair	Bellflower	**62**	53	**641**	631	25	14%	27%	0.65%	34%	13	No
Woodrow Wilson	Long Beach	**70**	79	**626**	623	20	11%	41%	1.92%	31%	n/a	No
Warren	Downey	**71**	61	**624**	613	23	35%	29%	8.72%	32%	8	No
Richard Gahr	ABC	**72**	68	**620**	614	21	30%	56%	0.60%	24%	19	No
Downey	Downey	**73**	77	**619**	612	23	29%	29%	8.72%	32%	15	No
La Mirada	Norwalk-La M.	**75**	42	**616**	627	22	33%	23%	3.30%	27%	7	No
California	Whittier	**79**	66	**611**	602	21	52%	46%	1.95%	37%	8	No
Lakewood	Long Beach	**82**	72	**605**	601	23	16%	41%	1.92%	31%	7	No
Millikan	Long Beach	**85**	76	**598**	595	24	13%	41%	1.92%	31%	9	No
Santa Fe	Whittier	**96**	99	**573**	562	21	31%	46%	1.95%	37%	5	No
Schurr	Montebello	**100**	103	**569**	535	26	34%	31%	3.46%	43%	13	Yes, 00-01
Whittier	Whittier	**111**	107	**553**	536	21	27%	46%	1.95%	37%	9	No
Bellflower	Bellflower	**119**	103	**530**	529	22	29%	27%	0.65%	34%	14	No
El Rancho	El Rancho	**120**	123	**527**	524	19	23%	28%	1.19%	n/a	9	Yes, 01-02
Artesia	ABC	**121**	108	**524**	524	19	33%	56%	0.60%	24%	7	No
Pioneer	Whittier	**123**	129	**520**	542	20	25%	46%	1.95%	37%	8	No
South Gate	Los Angeles	**126**	117	**517**	492	22	33%	27%	6.77%	53%	9	No
Norwalk	Norwalk-La M.	**130**	126	**508**	504	21	34%	23%	3.30%	27%	6	No
Montebello	Montebello	**134**	134	**504**	493	23	40%	31%	3.46%	43%	11	No
Savannah	Long Beach	**138**	138	**468**	524	22.3	n/a	41%	1.92%	31%	1	Yes, 01-02
John Glenn	Norwalk-La M.	**138**	134	**494**	495	21	22%	23%	3.30%	27%	5	No
Jordan	Long Beach	**147**	133	**485**	484	24	9%	41%	1.92%	31%	11	No
Lynwood	Lynwood	**149**	151	**483**	467	23	21%	48%	6.74%	33%	14	Yes, 01-02
Bell	Los Angeles	**150**	126	**480**	483	23	24%	27%	6.78%	53%	6	Yes, 01-02
Bell Gardens	Montebello	**153**	137	**476**	460	24	35%	31%	3.46%	43%	5	No
Huntington Park	Los Angeles	**154**	148	**473**	456	23	32%	27%	6.78%	53%	10	Yes, 00-01
Paramount	Paramount	**155**	141	**470**	456	21	24%	11%	0.93%	31%	11	No
Cabrillo	Long Beach	**169**	160	**415**	434	19	n/a	40%	1.92%	31%	6	Yes, 01-02
Compton	Compton	**-**	164	**n/a**	409	23	11%	22%	0.91%	54%	13	Yes, 99-01
Centennial	Compton	**-**	167	**n/a**	416	19	28%	22%	0.91%	54%	28	Yes, 99-00
Dominguez	Compton	**-**	169	**n/a**	418	20	13%	22%	0.91%	54%	20	No
Gateway Cities	37 High Schools						21.4%	35.4%	2.54%	32%		
L.A. County	180 High Schools					22	28.0%	38.0%	3.50%	30%	7	
California	890 High Schools					21	31.0%	35.6%	2.80%	22%	6	

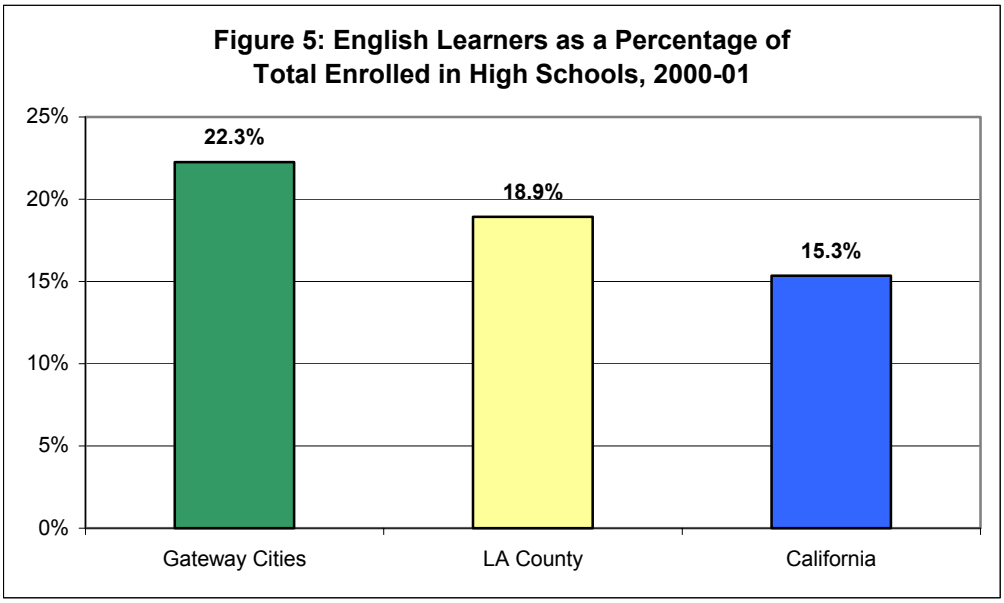
Source: California Department of Education, http://www.schoolwisepress.com

3.2.3 ENGLISH LANGUAGE PROFICIENCY

The state measures English Language Proficiency through several parameters, including the number of English Learners (EL), Fluent English Proficient (FEP) students, and the number of students redesignated from EL to FEP.

EL (formerly known as Limited-English-Proficient or LEP) are students for whom there is a report of a primary language other than English on the state-approved *Home Language Survey* and who, on the basis of the state approved oral language (grades K-12) assessment procedures including literacy (grades 3-12 only), have been determined to lack the clearly defined English language skills of listening comprehension, speaking, reading, and writing necessary to succeed in the school's regular instructional programs.

More than one-fifth of all students enrolled in the Gateway Cities Region high schools are classified as EL (Figure 5). This rate is much higher than both the county and the state. Factors contributing to the high share of EL in the Region include a predominantly Hispanic population and a diverse immigrant base.

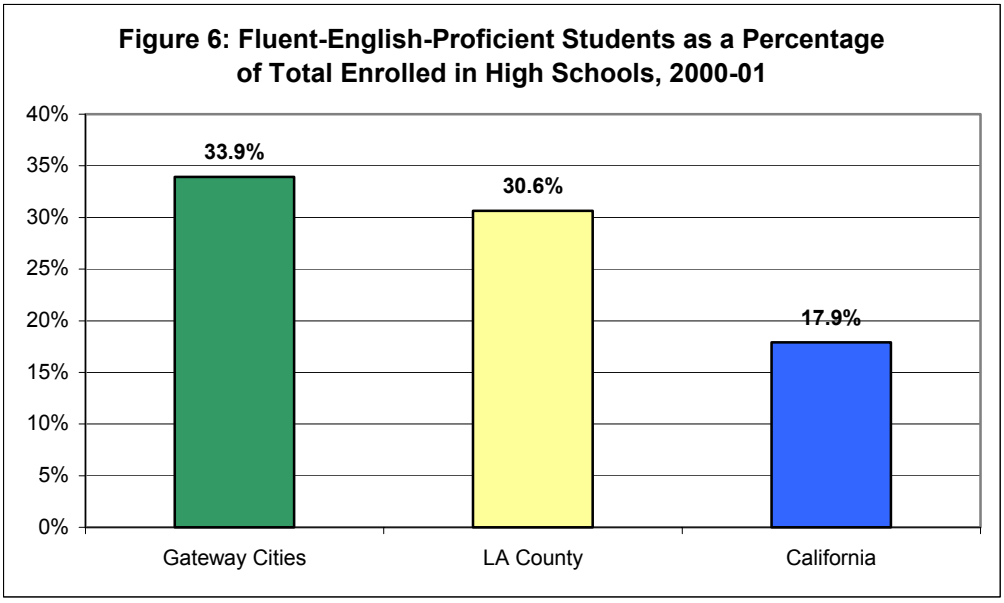


Source: California Department of Education

FEP are students whose primary language is other than English and who have met the district criteria for determining proficiency in English (i.e., those students who were identified as FEP on initial identification and students redesignated from Limited-English-Proficient (LEP) or English learner (EL) to FEP). The EL Students are redesignated to FEP according to multiple criteria, standards and procedures adopted by the district, and demonstrate that students being redesignated have English language proficiency comparable to that of average native English speakers.

Figure 6 compares FEP students for the Gateway Cities Region benchmarked against Los Angeles County and the state. It shows that the proportion of the Region's FEP students is nearly double the state average. The divergence between EL and FEP may suggest complexity of the problem in the Region; on one hand there is a large high school population that is deficient in English proficiency, while simultaneously there is a student population that is Fluent English Proficient.

This may imply that the rate at which EL students are being redesignated to FEP is much faster for the Region than the state.



Source: California Department of Education

3.2.4 DROPOUTS

Definition

According to the California Department of Education, a high school dropout is a person who meets the following criteria:[1]

- was formerly enrolled in grades 7, 8, 9, 10, 11, or 12;
- has left school for 45 consecutive school days and has not enrolled in another public or private educational institution or school program;
- has not re-enrolled in the school;
- has not received a high school diploma or its equivalent;
- was under twenty-one years of age; and
- was formerly enrolled in a school or program leading to a high school diploma or its equivalent

The definition includes students who have moved out of the district, out of state, or out of the United States and are not known to be in an educational program leading toward a high school diploma or its equivalent. Districts are responsible for determining the status of their "no-show" students (students who completed a grade, but did not begin attending the next grade the following year) for reporting of dropouts.
Two formulas provide a measure of high school drop out rates:

- One-Year Rate Formula: The One-Year Rate is the percent of dropouts during a single year, calculated from actual data submitted.

$$\text{One-Year Dropout Rate} = \frac{\text{Grade 9-12 Dropouts}}{\text{Grade 9-12 Enrollment}} * 100$$

[1] From: http://www.cde.ca.gov/demographics/glossary/index.html, accessed on April 21, 2002.

Also called an "annual" or "event" rate, this measure is used by the National Center for Education Statistics to compare dropouts between states and school districts.

- 4-Year Derived Rate Formula: This is an estimate of the percent of students who would drop out in a four year period based on data collected for a single year.

  4-Year Derived Rate = (1-((1-(dropouts grade 9/enrollment grade 9))*(1-(dropouts grade10/enrollment grade 10))*(1-(dropouts grade 11/enrollment grade 11))*(1-(dropouts grade 12/enrollment grade 12)))) * 100

The 4-Year Derived Rate is only an estimate (i.e. it is not an actual four-year rate) since the California Department of Education is unable to accurately track individual student data over time (as students transfer from one school to another).

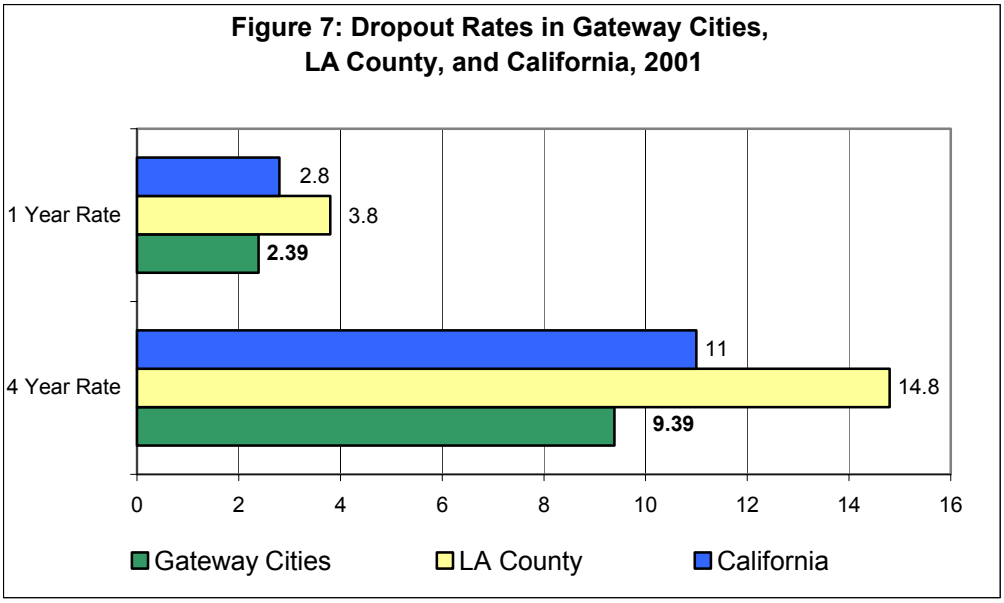
Dropout Rates in the Gateway Cities

The Gateway Cities Region fares better than Los Angeles County and California in terms of dropout rates. Both One-Year Dropout Rate and 4-Year Derived Rates in the Region are lower than those in the county and the state (Figure 7).

The One-Year Dropout Rate for California was 2.8 percent in 2001. While Los Angeles County's dropout rate (3.5 percent) was higher than the state level, the Region's dropout rate (2.4 percent) was lower.

A comparison of the 4-Year Derived Rates shows similar results. While Los Angeles County's rate (14.8 percent) was higher than that of California (11.0 percent), the rate for Gateway Cities Region was much lower at 9.4 percent. However, even though the dropout rates are low in the Region, the rates differed widely when the rates are considered at the School District level and in terms of ethnicity.

Figure 7: Dropout Rates in Gateway Cities, LA County, and California, 2001

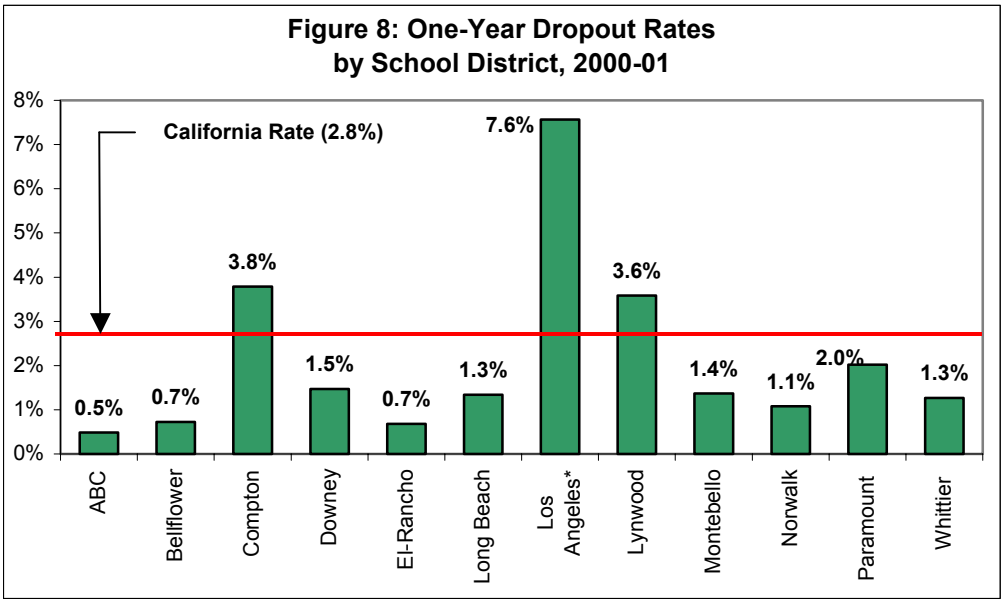


Source: California Department of Education

Dropout Rates by School Districts

The One-Year Dropout Rates vary widely between the School Districts in the Gateway Cities Region (Figure 8). Of the twelve School Districts in the Region, the One-Year Dropout Rates of nine School Districts were lower than that of California in 2001. These were: ABC, Bellflower, Downey, El Rancho, Long Beach, Montebello Norwalk-La Mirada, Paramount, and Whittier. Of these, ABC, Bellflower, and El Rancho School Districts had very low One-Year Dropout rates (around 0.6 percent).

Three School Districts in the Gateway Cities Region had higher One-Year Dropout Rates than that of California in 2001. These were: Compton (7.6%), Los Angeles (3.8%), and Lynwood (3.6%) School Districts.



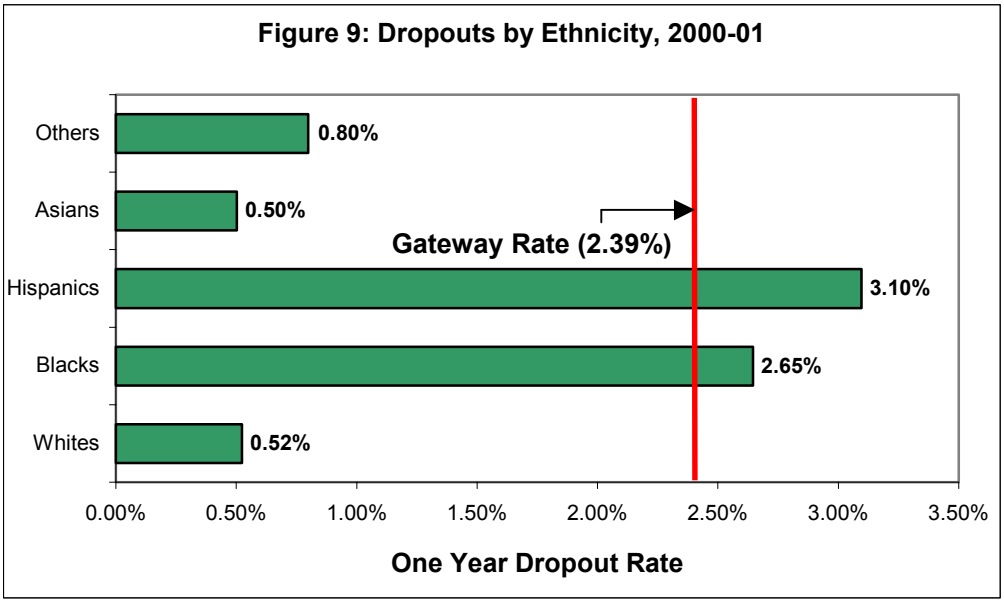
Source: California Department of Education

Dropout Rates by Ethnicity

The One-Year Dropout Rates varied widely between racial/ethnic groups in 2001 (Figure 9). Asians had the lowest dropout rate (0.5 percent), followed by "Others" which includes American Indians, Alaskan Natives, and Filipinos (0.8 percent). The dropout rate of Whites was marginally higher (0.52 percent) than Asians and was much lower than the California rate. The dropout rates of Hispanic and Black students (3.1 percent and 2.65 percent) were higher than that of California.

Hispanics, as mentioned before, account for 61% of total student population. They also exhibit a high dropout rate, approximately six times Whites or Asians. A disproportionately high Hispanic dropout rate, combined with a majority Hispanic student population has serious implications for the Region. First, why are Hispanics dropping out of school at such an alarmingly high rate? Second, assuming that these drop outs do not return to pursue higher education, is the Region creating a labor force that is under educated, under-prepared, and low wage earners? Evidence shows that household income in the Region is lower than county and state levels. The Claritas estimate of 2000 per capita income exemplifies this disparity; per capita income in the Region is

$17,380, 27% and 34% below Los Angeles County and California levels respectively.[2] This is an issue of major concern. Later in this report, we present evidence of how higher education attainment levels correspond to higher earnings.



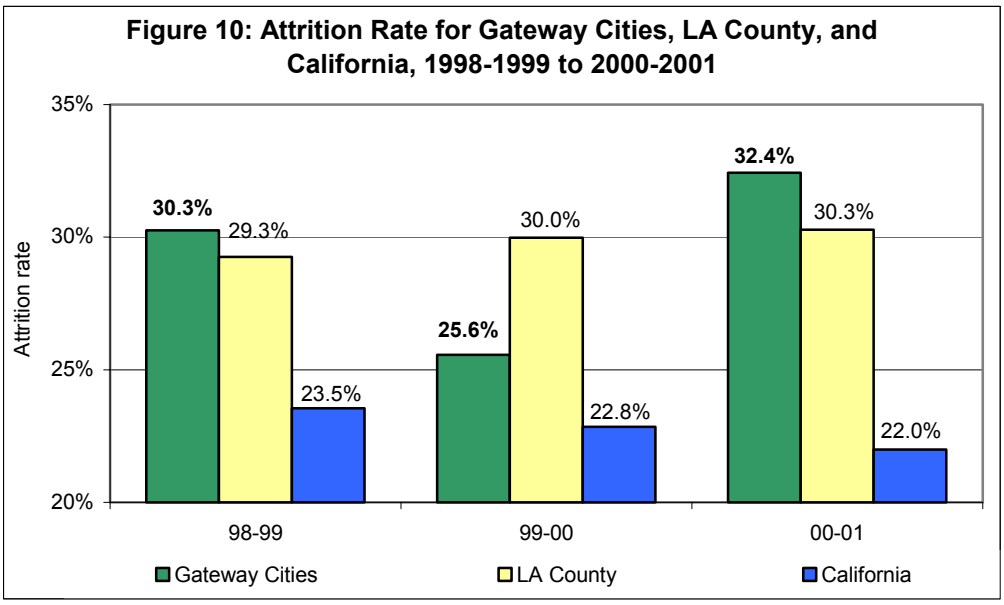
Source: California Department of Education

3.2.5 ATTRITION RATE

Attrition in Gateway Cities Region

Attrition rates measure the actual number of students who enrolled in the 9th grade but did not complete the 12th grade. **Although dropout rates offer good insight into a community's education profile, attrition rates provide a more realistic measure.** The attrition rate in the Gateway Cities Region is higher than that of California (Figure 10). California's attrition rate decreased marginally from 23.5 percent in 1998-1999 to 22 percent in 2000-2001. Although attrition rates in the Region dipped from 30.3 percent in 1998-1999 to 25.6 percent in 1999-2000, it rose to 32.4 percent in 2000-2001. The attrition rates for the Region were higher than that of Los Angeles County for both 1998-1999 and 2000-2001.

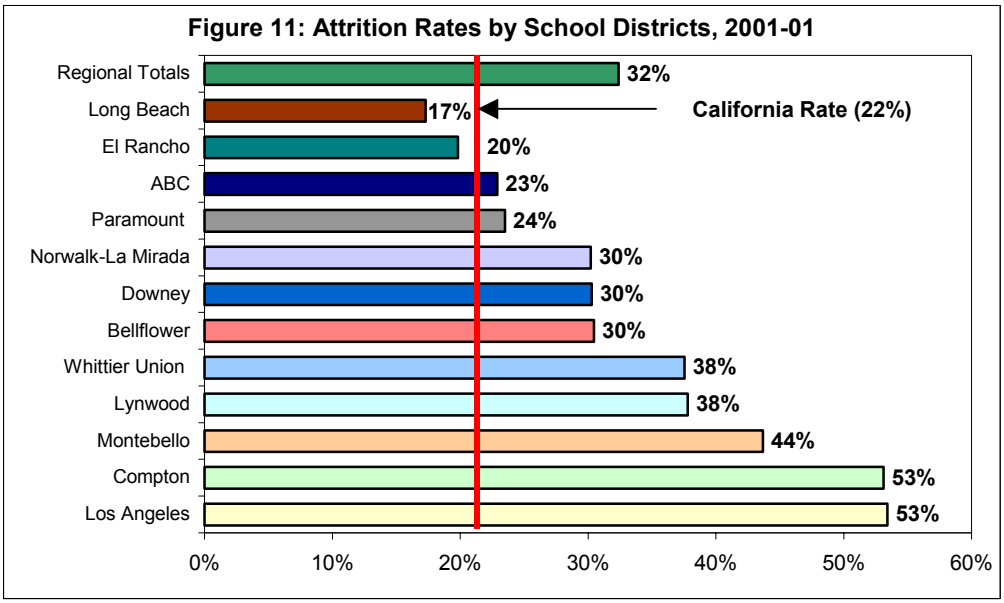
[2] From *Gateway Cities: A Profile at the Start of the 21st Century*, 2001.



Source: California Department of Education

Attrition by School District

With the exception of two School Districts, all School Districts in the Gateway Cities Region have higher attrition rates than California (Figure 11). The attrition rates of Long Beach and El Rancho, which are below the state level, are 17 percent and 20 percent respectively. Compton and Los Angeles School Districts have the highest attrition rate of 53 percent. The high attrition rate of many school districts in the Gateway Cities Region is cause for particular concern.

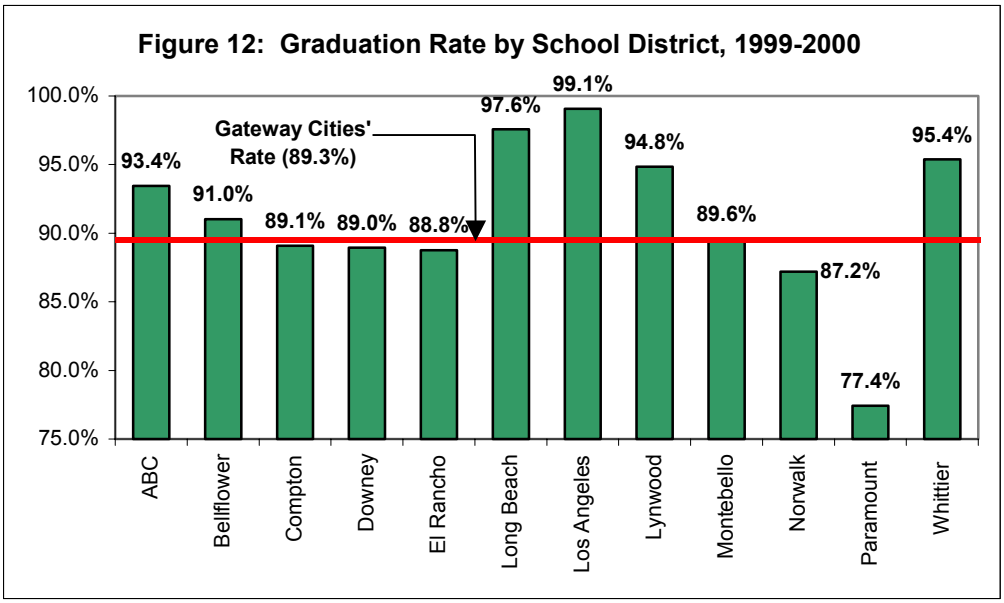


Source: California Department of Education

3.3 EDUCATIONAL ATTAINMENT

3.3.1 HIGH SCHOOL GRADUATION

The Gateway Cities Region high schools have an average graduation rate of 89.3%, similar to the Los Angeles County and state rates of 89%. This implies that 11 out of 100 students enrolled in 12th grade dropped out or failed before completing their high school education.



Source: California Department of Education

3.3.2 UNIVERSITY OF CALIFORNIA (UC)/CALIFORNIA STATE UNIVERSITY (CSU) ELIGIBILITY

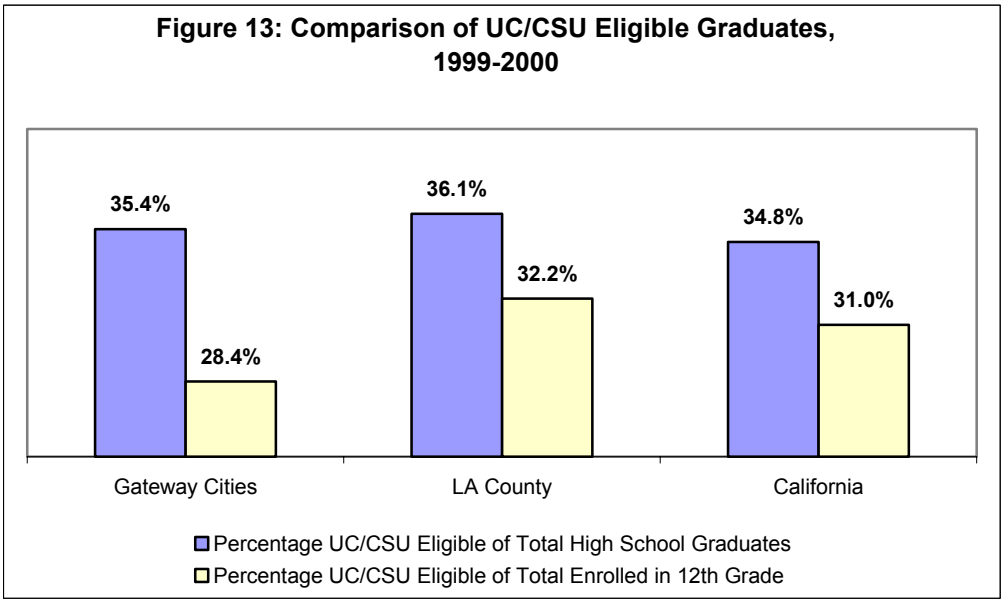
A prominent measure of educational preparedness and competency of students graduating from high schools is their eligibility for admission to the UC/CSU system. Graduation refers to twelfth-grade students who receive a diploma in a given school year, or the following summer. The eligibility factor is a useful measure for comparison of schools.

The UC/CSU eligibility standards require completion of all courses required for UC and/or CSU entrance with a grade of "C" or better. In 1997-98, the course requirements for the UC system included: two years of social science, four years of English, three years of mathematics, two years of lab science, two years of a foreign language, one year of visual or performing arts, and two years of college prep elective courses. The CSU system has set similar standards: completion of one year of U.S. history and government, four years of English, three years of math, one year of lab science, two years of a foreign language, one year of visual and performing arts, and three years of college prep electives. These standards are the minimum requirements for the two university systems.

UC/CSU Eligibility in the Gateway Cities Region

Just over 35% of the graduates, attrition notwithstanding, from the Gateway Cities Region high schools have completed course requirements for admission to the UC/CSU system. The share of UC/CSU eligible graduates (as a percentage of total high school graduates) is higher for the

Region than for California but lower when compared to Los Angeles County. The noteworthy figure, however, is the percentage of those actually enrolled in the 12th grade and eligible for UC/CSU admissions. Of the total students enrolled in 12th grade, only 28.4% were eligible for UC/CSU admission, lower than state (31.0%) and county (32.2%) averages. **On average, 72 out of 100 12th grade high school students do not meet UC/CSU eligibility criteria in the Gateway Cities Region.**

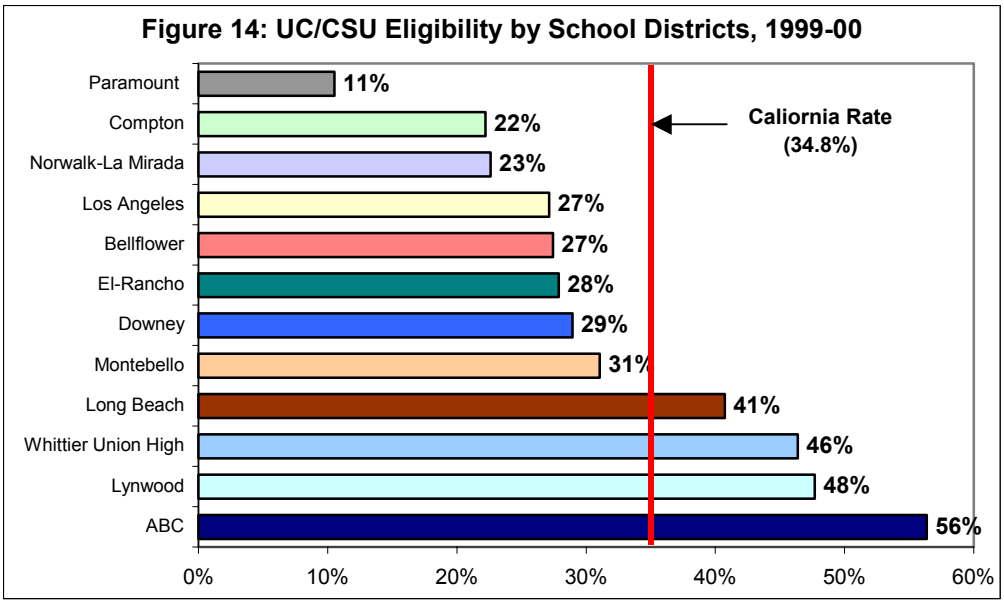


Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html

UC/CSU Eligibility by School Districts

The UC/CSU eligibility varies widely between school districts in the Gateway Cities Region (Figure 14). Of the twelve school districts in the Region, the UC/CSU eligibility rate of four school districts was higher than that of California in 2001. These were ABC, Lynwood, Whittier, and Long Beach.

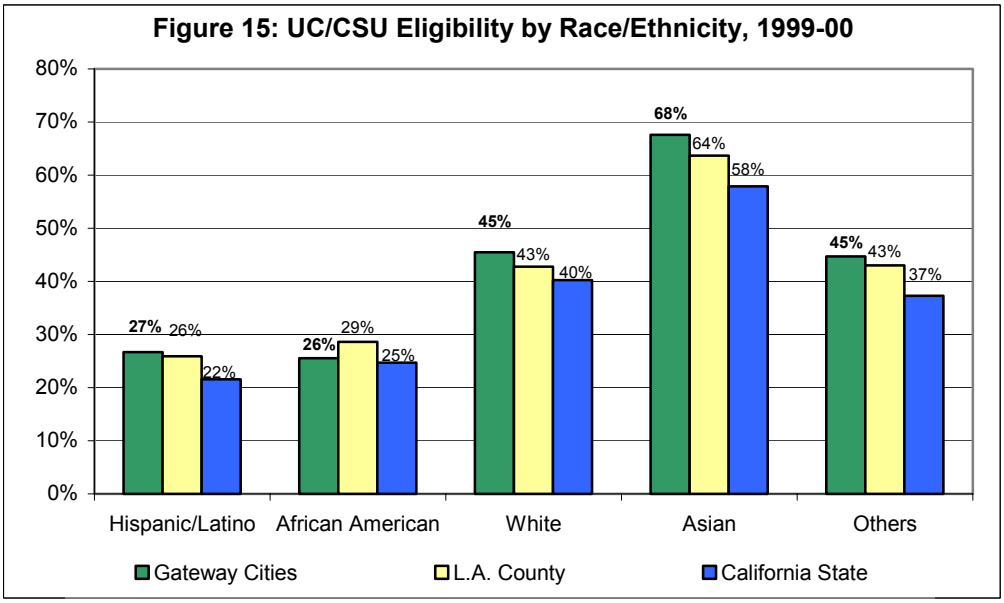
Eight school districts in the Gateway Cities Region had lower UC/CSU eligibility rates than that of California in 2001. These were Paramount, Compton, Norwalk, Los Angeles, Bellflower, El Rancho, Downey and Montebello. Paramount, Compton, and Norwalk districts had the lowest UC/CSU eligibility rate (11%, 22%, and 23% respectively) in the Region.



Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html

UC/CSU Eligibility by Ethnicity

In 2000, UC/CSU eligibility for Los Angeles County was higher than that of California for each race/ethnic group (Figure 15). The eligibility of students in the Gateway Cities Region was even higher than that of Los Angeles County across all racial and ethnic groups except African Americans. Among racial/ethnic groups, Asians in the Region have the highest UC/CSU eligibility (68 percent). They are followed by Whites (45 percent). Hispanics and Blacks have lower eligibility levels, both hovering a little above 25 percent. Again, proportionately fewer Hispanics are likely to pursue higher education.



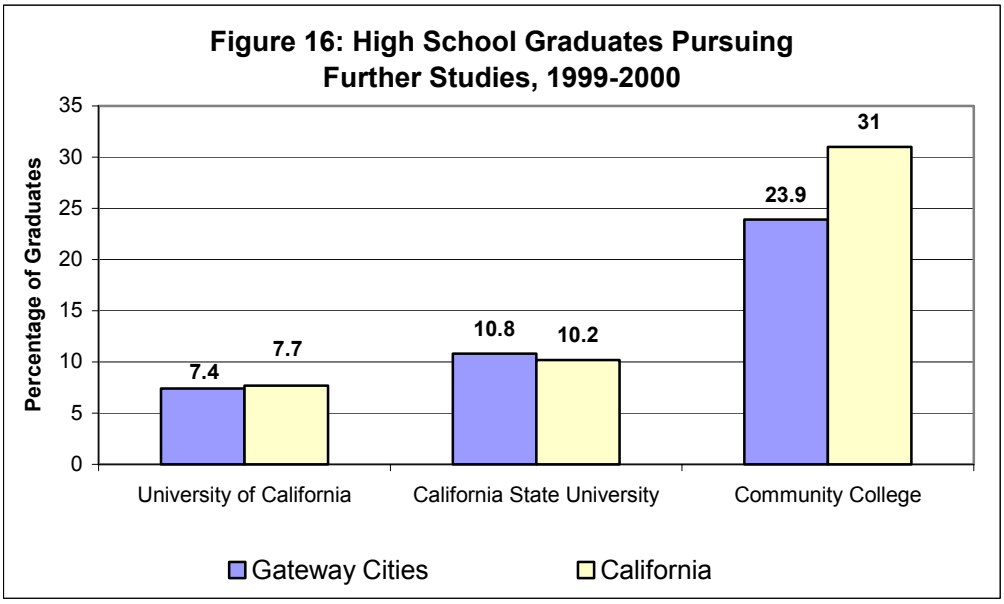
Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html

Gender

Female students are more likely to achieve UC/CSU requirements in the Gateway Cities Region. While the gender gap does exist, it is less pronounced when compared to California. Females comprise 52.8% of total eligible graduates in the Region while this figure stands at 56.1% for state.

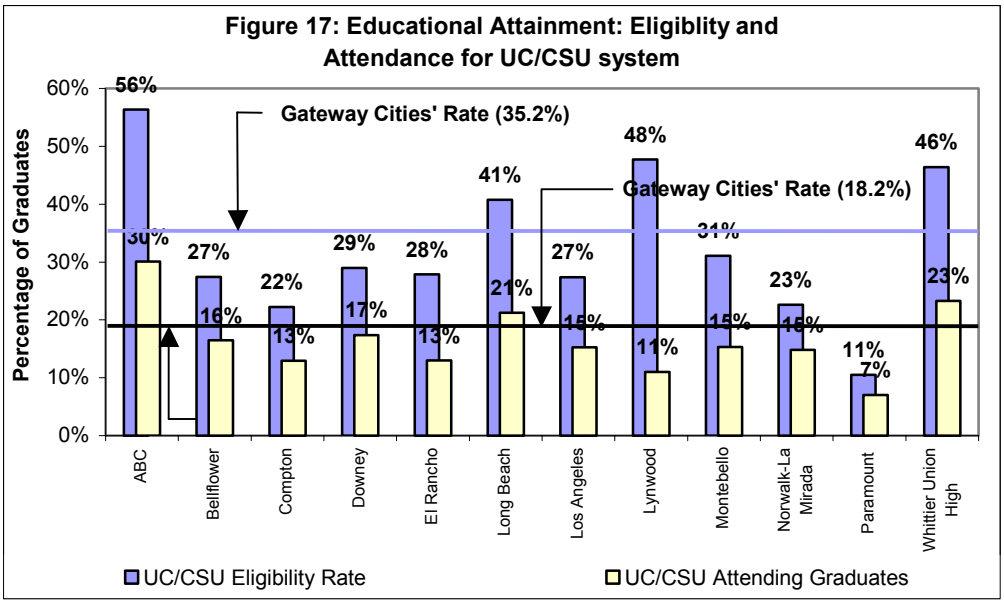
3.3.3 STUDENTS IN POST-SECONDARY EDUCATION

Statewide, about 7.7% of all high school graduates attended UC schools, 10.2% attended CSU schools and another 31% attended community colleges in 1999-00 (Figure 16). This suggests that about 50% of graduates statewide pursued further studies in UC/CSU or community colleges. In the Gateway Cities Region, however, only 42% of the total high school graduates pursued higher education in community colleges or UC/CSU schools. 18% of the graduating seniors in the Gateway Cities Region attended a UC/CSU school, a figure that conforms to the state number.



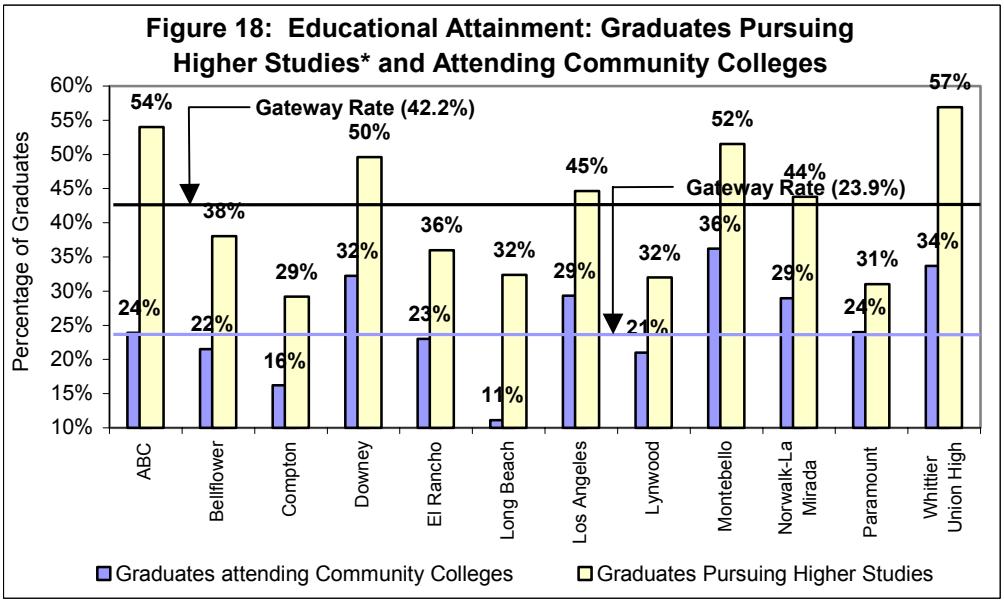
Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html

It is important to note the number of students in the education system that pursue higher education and join the UC/CSU system. Figure 17 shows a gap between students who are eligible for UC/CSU admission and those who actually attend the UC/CSU system. Only three school districts have higher rates of actual UC/CSU enrollment than the Region's average. These are ABC with the highest rate of 30% of graduates attending UC/CSU schools, and Long Beach and Whittier with 21 and 23% respectively.



Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html

In California, more high school graduates pursuing further studies attend community colleges than UC/CSU schools. However, this rate is much lower in the Gateway Cities Region (24%) than for the state (Figure 16). Also, the share of graduates pursuing post-secondary education is higher for California at roughly 50% compared to the Region's average of 42%. Four school districts (Whittier, ABC, Montebello and Downey) have higher rates of graduates pursuing post-secondary education than the state (Figure 18). The rate of students attending community colleges is higher than the state in three school districts of the Region. These are Montebello (36%), Whittier (34%) and Downey (24%).



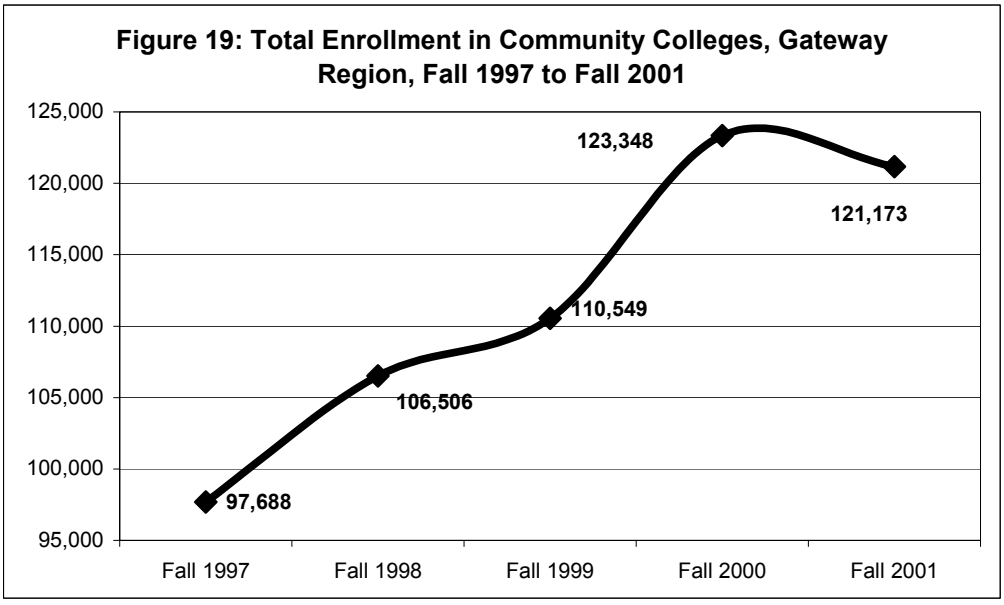
Source: California Department of Education, http://www.schoolwisepress.com/ compare/19/19_h_index.html
*Higher Studies refers to students attending UC or CSU or Community College system.

4. COMMUNITY COLLEGES

4.1 PROFILE

The community college system in California is the largest network of higher education in the world. The system enrolled a total of 1,555,059 students among 108 community colleges (107 reporting entities) in the fall of 2001. Six community colleges operate within or near the Gateway Cities Region; together they enrolled a total of 121,173 in the fall of 2001.[3] The community colleges located within the Region are Cerritos, Compton, Long Beach City, and Rio Hondo. East LA community college is located in neighboring Montebello, but has a satellite campus in South Gate, and LA Trade-Tech is in the City of Los Angeles. The latter two campuses are included in the study due to their proximity to the Gateway Region. We anticipate students from the Region to attend one of these colleges due to accessibility or desirability.

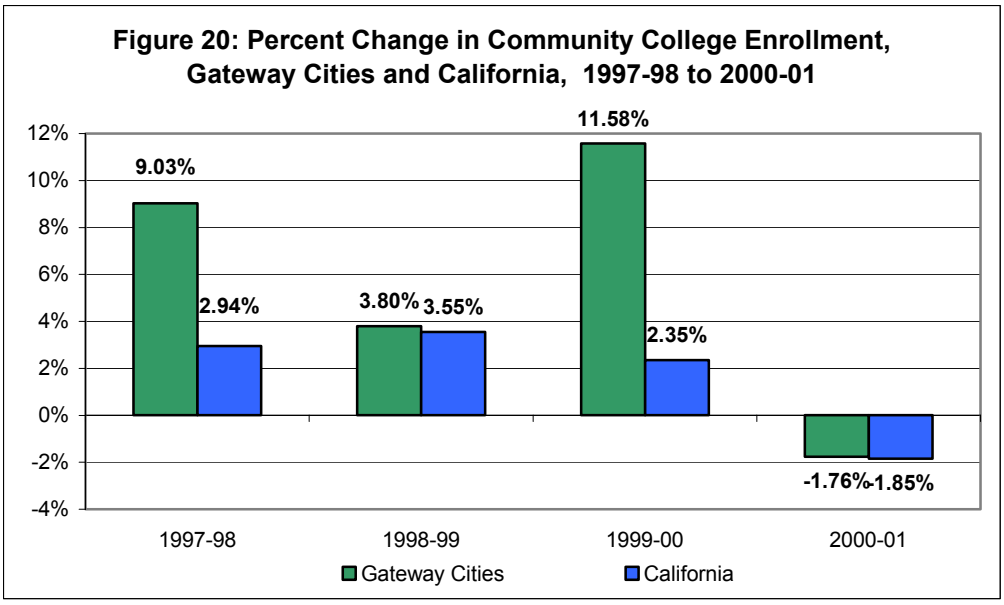
This section presents a student profile of community colleges in the Region with respect to enrollment, ethnicity, and degrees awarded. The trends in the Region are compared with that of California, where applicable.



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Total student enrollment in the six community colleges in the Gateway Cities Region grew from 97,688 in Fall 1997 to 121,173 in Fall 2001, representing an increase of 24% (Figure 19). During the same period, enrollment in California grew from 1,452,102 to 1,555,059, an increase of 7%. Clearly, student enrollment in the Region increased at a phenomenal pace, more than three times the state during this period.

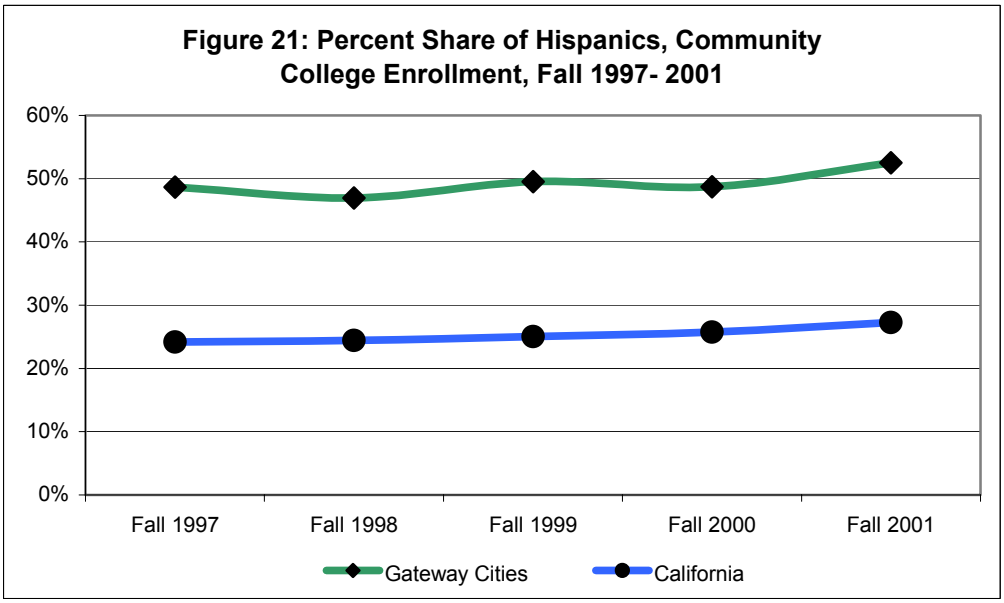
[3] Student Demographics, California Community Colleges, Chancellor's Office, 2002 accessed from http://misweb.cccco.edu/mis/onlinestat/studdemo_coll.cfm on April 24, 2002.



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

The Gateway Cities Region shows a positive trend with a steady increase in total enrollment from Fall 1997 to Fall 2000, although, Fall 2001 saw a decrease in total student enrollment. Even though total enrollment declined, the percentage rate of annual change in student enrollment in the Gateway Region has been much faster than California (Figure 20).

Much like high schools, the ethnic composition of the community college student population in the Gateway Cities is quite different from the state in general. The majority of the students in the Region are of Hispanic origin. Hispanic students number 63,628, accounting for 53% of all students enrolled in Fall 2001. They are followed by Whites (14%), Blacks (10%), Asians (10%), and Others (13%). The proportion of Hispanic students in the Region is approximately double the state average (Figure 21).



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Whites in the Region accounted for only 14 % of the total student enrollment in Fall 2001, while the state average was 40%. Other racial groups in the region follow the pattern of student enrollment as the state.

4.2 DEGREE TRENDS

Under the California Master Plan for Higher Education (1960), the community college system is required to provide academic and vocational instruction to students' first two years of undergraduate education. The community college system fulfills this mission by offering the Associate of Arts (A.A.) degree, Associate of Science (A.S.) degree, and Certificates of Achievement (Certificate).

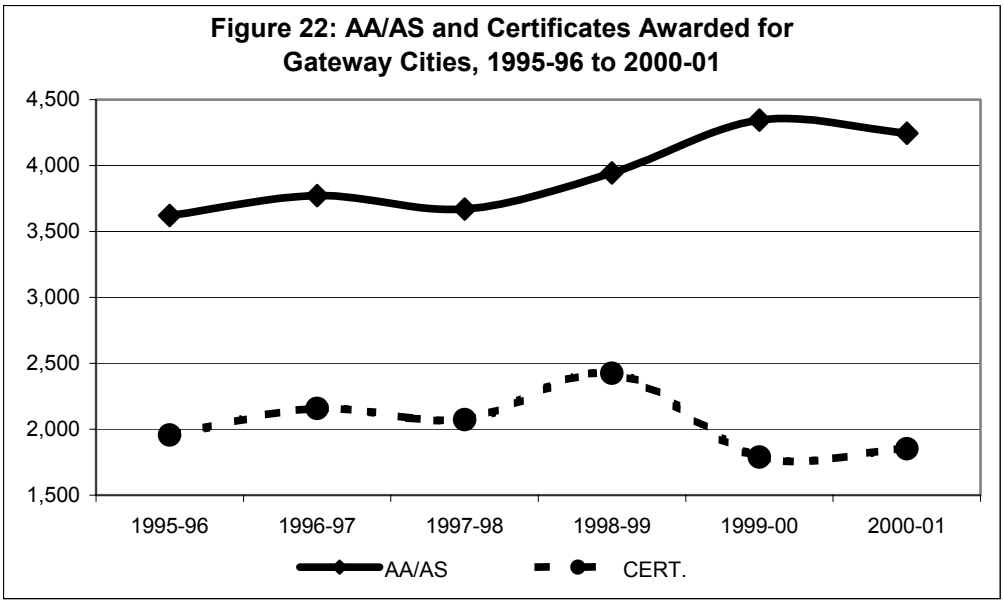
The A.A. and A.S. degrees fulfill the community college's general education requirements and transfer requirements if either the CSU/UC articulation agreements are met or the Intersegmental General Education Transfer Curriculum (I.G.E.T.C.) approves the courses taken. The A.A. and A.S. are awarded to students that complete 60 units and maintain a minimum 2.0 GPA (i.e., a C average).

The Certificate is awarded to students who complete a curriculum designed for a specific occupational goal. Students obtain a Certificate if they complete the course requirements for the chosen program, and if they maintain a minimum of 2.0 GPA. The unit requirements of certificates vary between 18 and 60+ units.

We have reviewed trends of A.A. and A.S. degrees and Certificates earned by students in Gateway Cities Region and California, to compare the share of degrees earned. This will assess how the Region's student population compares statewide. To facilitate comparison, we have combined the number of A.A. and A.S. degrees to represent one Associate (A.A./A.S.) degree category. Similarly, we have combined the number of Certificates earned to represent one Certificate category.

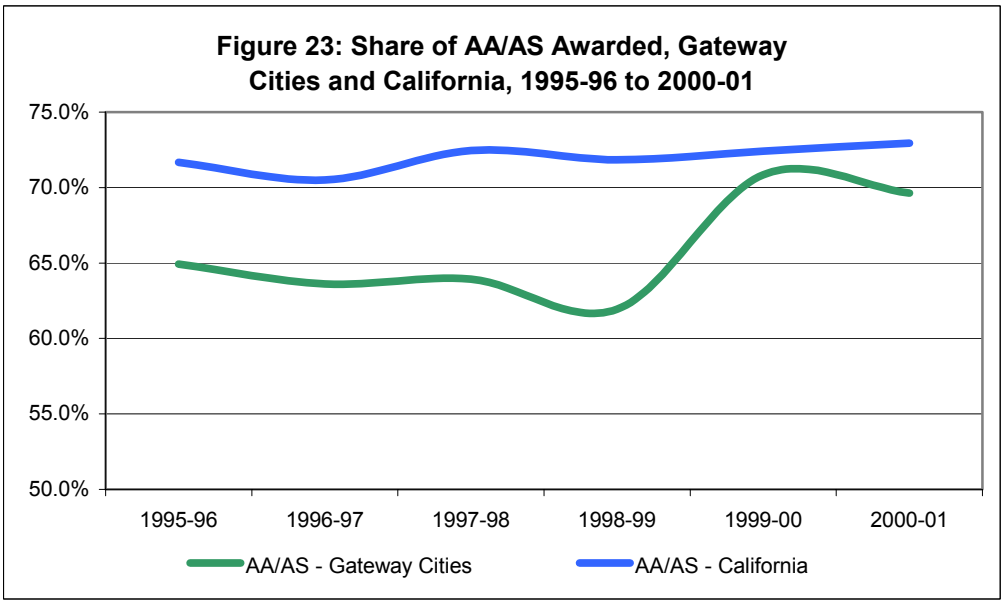
In the Gateway Cities Region, the number of A.A./A.S. degrees awarded increased from 3,622 in 1995-96 to 4,245 in 2000-01 representing an increase of 17.2% (Figure 22). Comparatively, the number of A.A./A.S. degrees awarded in the state increased by 14.2% during the same period. The total number of Certificates awarded declined by 5.4% in the Region, from 1,957 in 1995-96 to 1,851 in 2000-01. During the same period, the total number of Certificates awarded increased by 7.1% statewide.

Interdisciplinary Study seems to be the preferred choice of A.A. degree in the Gateway Cities Region and at the state level. For a list of top three A.A./A.S. degrees and Certificates awarded by community colleges in the Region, please refer Appendix A.



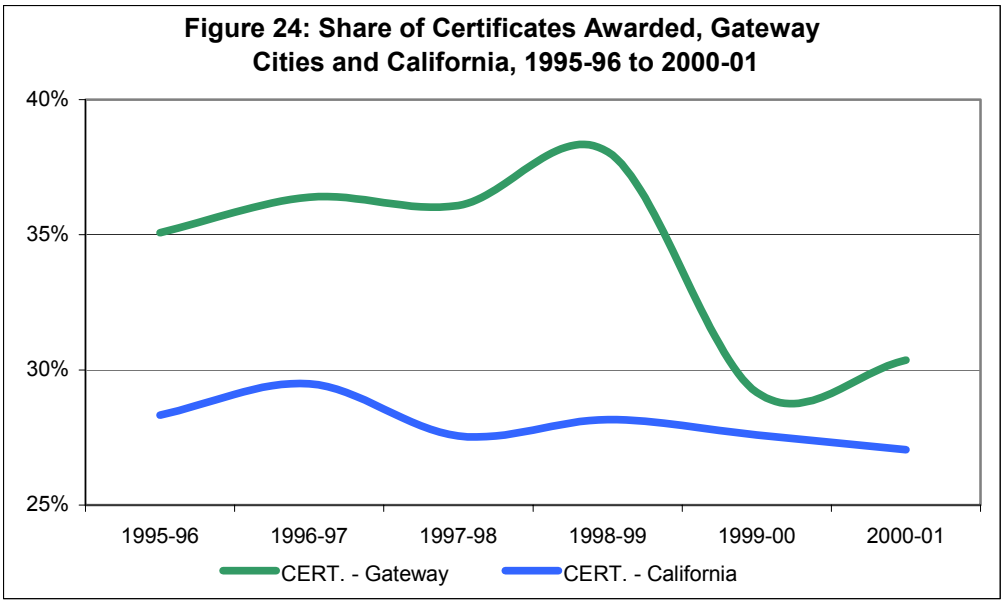
Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Of the total degrees awarded in the Gateway Cities Region, the share of A.A./A.S. degrees increased gradually from 64.9% in 1995-96 to 69.6% in 2000-01. During the same period, shares of A.A./A.S. degrees awarded at the state level have remained fairly stable (Figure 23). It appears that the demand for A.A./A.S. degrees is increasing in the Region and there is a convergence between the share of students obtaining A.A./A.S. degrees in the Region and California.



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Between 1995-96 and 1998-99, a larger percentage of students in the Gateway Cities Region obtained Certificates as compared to the state. However, the gap between the Region's share of students pursuing Certificates and the state's share has narrowed since. Overall, the share of Certificates awarded in the Region fell from 35.1% in 1995-96 to 30.4% in 2000-01. The share of Certificates at the state level has remained fairly stable, around 28% (Figure 24).



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

4.3 PERFORMANCE INDICATORS

Evaluating performance measures at the college level is a difficult task. There are no measures like those used in high school (API scores or dropout rates) for gauging the relative success of colleges. Further, a college student is not necessarily expected to complete his or her education in the required time frame. Hence, we analyze the preparedness level of students entering higher education. We evaluate preparedness rates at the CSU level and transfer rates at the community college level. We also examine how the student population is preparing itself to enter the workforce. By reviewing the trends of popular majors among students, we are able to identify skills of the emerging workforce.

4.3.1 MEASURING PREPAREDNESS

The California Code of Regulations (CCR) recognizes the importance of student preparedness upon entering the CSU system. Title 5 Section 40402.1 of the CCR requires that students "possess basic competence in the English Language and mathematical computation to a degree reasonably expected of entering college students." The CCR are regulations that have been formally adopted by state agencies, reviewed and approved by the Office of Administrative Law, and filed with the Secretary of State.[4]

The Legislative Analysts Office (LAO), a nonpartisan organization serving the State Legislature, conducted a study on measuring preparedness at the community colleges, UCs and CSUs.[5] The LAO report determined preparedness based on the standards set by the three systems (Table 3).

[4] From California Code of Regulations, http://ccr.oal.ca.gov, accessed on April 26, 2002.
[5] *Improving Academic Preparation for Higher Education: LAO Findings and Recommendations*, An LAO Report, February 8, 2001.

Table 3. Standards for Demonstrating College Preparedness

Reading and Writing	*Math*
CCC	
None	None
CSU	
❑ Score 550 on SAT I verbal test; 680 on SAT II writing test; 25 on ACT verbal test; or 3 on AP writing test; or ❑ Pass CSU's English Placement Test (EPT); or ❑ Pass precollegiate course(s).	❑ Score 560 on SAT math test; 560 on SAT II math test; 24 on ACT math test; or 3 on AP math test; or ❑ Pass CSU's Entry-Level Mathematics Test (ELM); or ❑ Pass pre-collegiate course(s).
UC	
❑ Score 680 on SAT II writing test, or score 3 on AP English test; or ❑ Pass UC's "Subject A" writing examination; or ❑ Complete prescribed "Subject A" writing class.	None

The LAO assessed preparedness in reading and writing using the following UC/CSU standards: Scholastic Aptitude Test (SAT), American College Testing Assessment (ACT), Advanced Placement exam, placement tests, or by passing a required course. In math, only CSU has set a standard, which is a minimum score of 560 on SAT, or SAT II, 24 on the ACT, or 3 on AP math test. These requirements are expected to be fulfilled in high school. Beyond high school, the CSU requires the student to take Entry-Level Mathematics Test (ELM) or pass a pre-collegiate course. Community colleges do not have preset standards for preparedness; hence, we analyze the local CSU level.

4.3.2 Preparedness At CSU

We evaluate preparedness levels at California State University Long Beach (CSULB), the only CSU located within the Gateways Cities Region. As mentioned before, CSU requires all first-time freshmen to have the ability to read, write, and perform basic math. To be concise, we will refer to reading and writing as college level writing.

- The first measure of students in demonstrating their preparedness for CSU is to score above the minimum level on the SAT or ACT. According to the LAO, approximately one third of admitted freshmen achieve proficiency in this manner. These national tests are generally taken in students' junior and senior years in high school.
- Students who do not score sufficiently high on the SAT or ACT are required to perform satisfactorily on placement tests administered by CSU. A student must pass the English Placement Test (EPT) and the Entry Level Mathematics Test (EMT) offered by CSU.
- Finally, if a student does not score sufficiently high on the national tests or placement exams, she or he must enroll in a pre-collegiate course. These courses are offered by

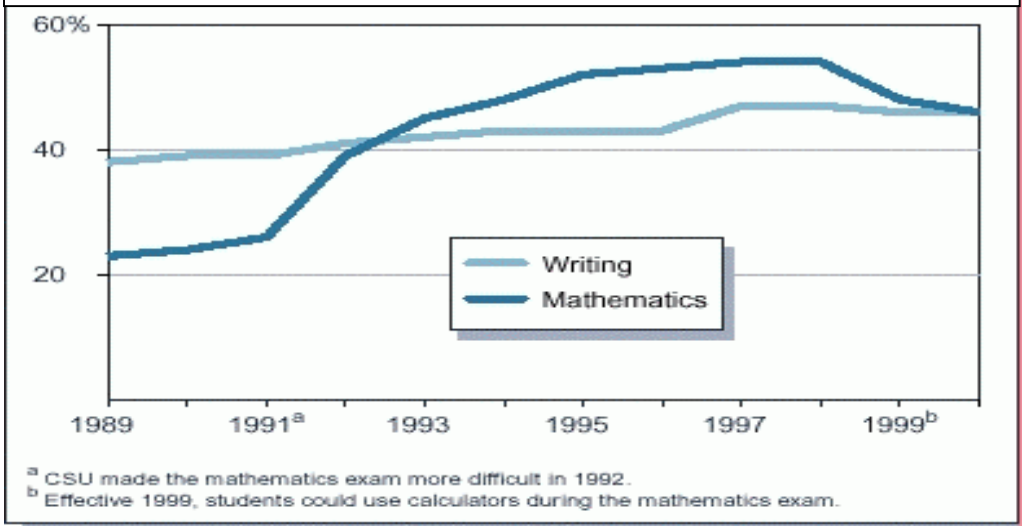
universities and are usually incorporated into a student's curriculum in his/her first year of college. The passing threshold of the course can be a credit grade or a D- and above. [6]

Although preparedness can be demonstrated in various ways, different standards are set for each college system in California. What may indicate unpreparedness at the UC level may be considered prepared for the CSU. Similarly, what may indicate unpreparedness for CSU might be considered preparedness at the community college level.

Statewide, nearly half of regularly admitted freshmen to CSU arrive unprepared in college level writing and mathematics.[7] Figure 25 shows the trend for both writing and mathematics for regularly admitted freshmen since 1989. Unpreparedness in college level writing increased from 38% in Fall 1989 to 46% in Fall 2000. Similarly, the unpreparedness rate in mathematics for regularly admitted freshmen increased from 23% in Fall 1989 to 45% in Fall 2000. The unpreparedness rate in mathematics reached a high of 54% in 1998 and declined since then (CSU started to allow the usage of calculators for taking tests since 1999).

Figure 25: CSU Unpreparedness Rates Have Risen

Percent of Regularly Admitted Freshmen Needing Remediation

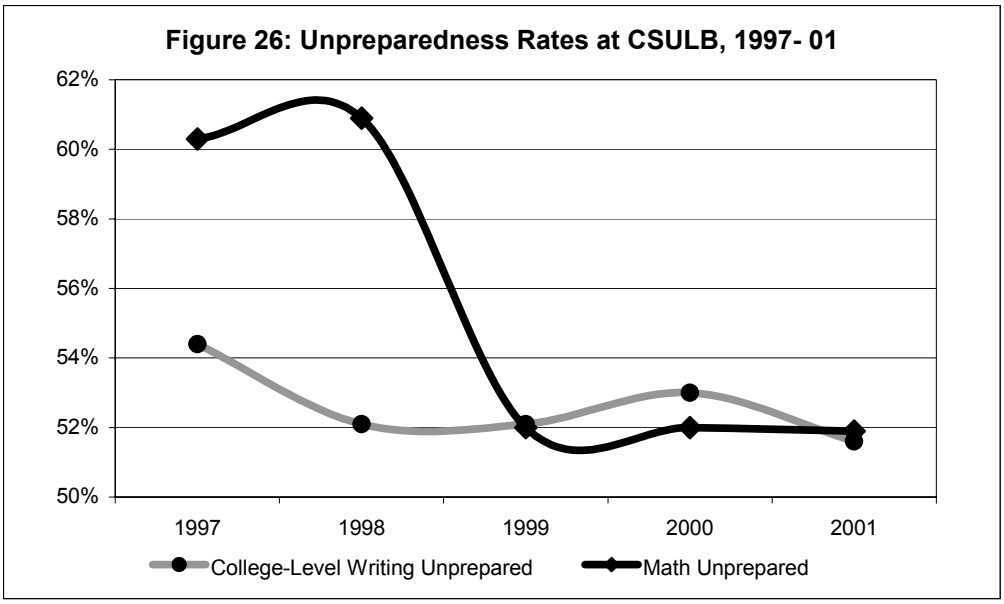


Source: Improving Academic Preparation for Higher Education: LAO Findings and Recommendations, An LAO Report, February 8, 2001

With respect to unpreparedness, CSULB is confronted with greater challenges compared to the state. In Fall 2000, 53% of incoming freshmen in CSULB were unprepared to read and write at the college level, compared to 46 % statewide. In mathematics, 52% of the regularly admitted freshmen were unprepared, compared to 45% statewide.[8]

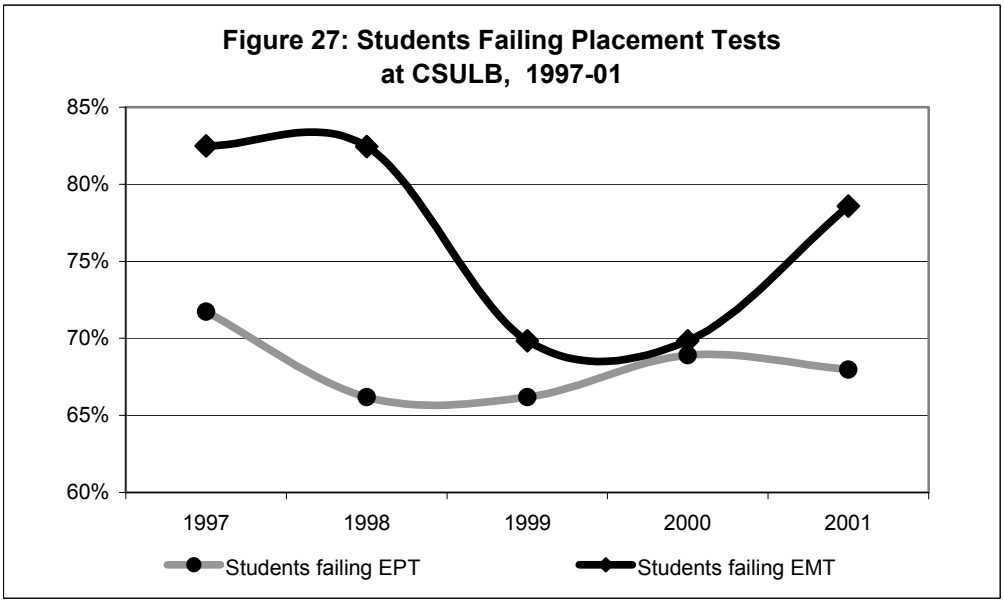
The unpreparedness rate for mathematics in CSULB declined from 60.9% in 1998 to 52.0% in 2000. Again, the decline in unpreparedness rate can be attributed to the use of calculators. However, the unpreparedness rate for college level writing has marginally increased from 52.1% in 1998 to 53.0 % in 2000 (Figure 26).

[6] Ibid, p. 3.
[7] Ibid, p. 4
[8] Readiness for College Level Math and English from www.csulb.edu, 2002.



Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

The number of students failing placement tests in CSULB is striking. In 2001, 2,341 students or 78.6 % of all students taking the Entry-Level Mathematics Test failed. In the same year, 2,325 students or 68% of all students taking the English Placement Test failed (Figure 27). These numbers suggest the seriousness of the problem; students are unprepared to write and do mathematics at the college level, let alone participate in a global economy. Statewide, the LAO found that more than two-thirds of admitted freshmen failed at least one entry-level placement tests of CSU. Approximately one-third of regularly admitted freshmen failed both placement tests.[9]

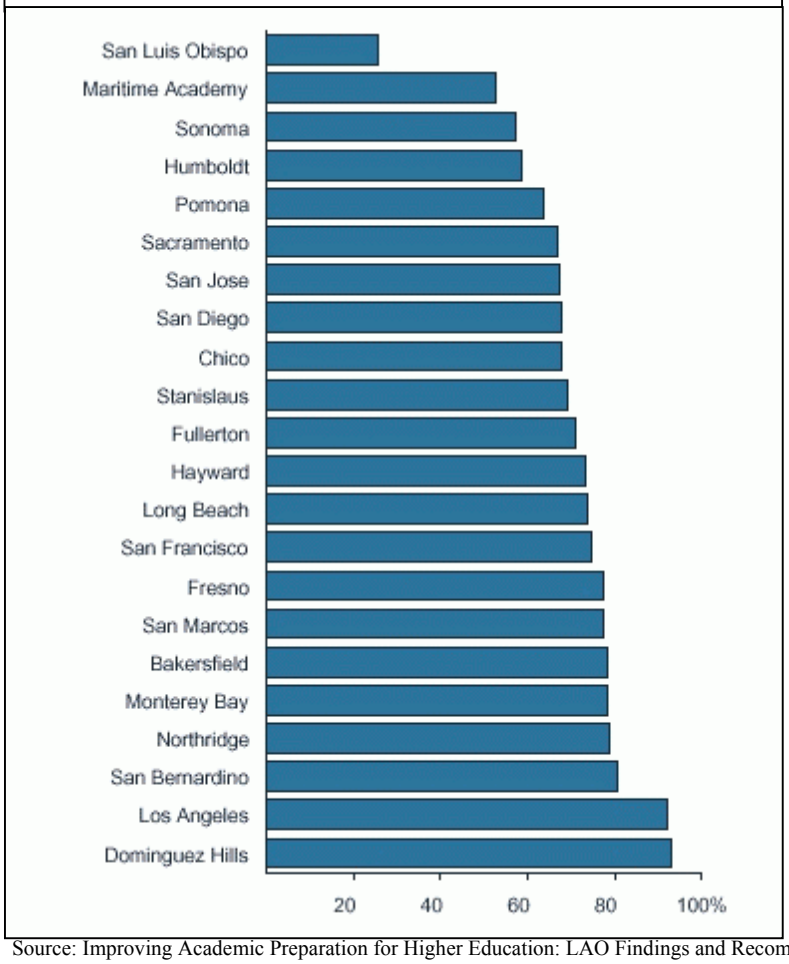


Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

[9] LAO Report, p. 5.

Students who fail to demonstrate proficiency in writing and/or mathematics require remediation by the university. To achieve remediation, the student is required to pass the necessary pre-collegiate courses. Figure 28 provides a comparison of the 21 CSU campuses statewide. CSU Dominguez Hills and CSU Los Angeles are two of the campuses statewide with the highest proportions of unprepared students, more than 90 % are unprepared for college level work. The CSU with the best rate is San Luis Obispo, at 25%. CSULB ranks 13 (out of 22).

Figure 28: Some CSU Campuses Have Very High Remediation Rates (Percentage of Regularly Admitted Freshmen Needing Remediation), Fall 1998



Source: Improving Academic Preparation for Higher Education: LAO Findings and Recommendations, An LAO Report, February 8, 2001

It is important to again emphasize the importance of student preparedness. In reviewing interviews conducted by the LAO with college administrators and faculty we find that preparation for college level work is a key determinant for success in college.

4.4 THE COMMUNITY COLLEGE SYSTEM

The community college system serves as a second chance and an education equalizer for many who did not do well in high school. Hence, community colleges do not require SAT scores or AP exams; their only requirement is for students to be 18 years or older and possess a high school diploma or state equivalent GED.

4.4.1 Transfer Rate

We will focus on transfer rates as a performance measure for community colleges. According to The National Center for Public Policy and Higher Education, "Student transfer from two-year community colleges to four-year public institutions is a core component of the California Master Plan. The promise of transfer—the accessibility of the baccalaureate degree to students who enroll in the community colleges—is what makes selective freshman admissions to the university and the state university compatible with the state's egalitarian civic culture. The importance of transfer and the seriousness with which it was taken by the framers of the Master Plan is reflected in its provision that the university and state university must maintain a ratio of 60% upper-division to 40% lower division students. This provision would ensure that most students in pursuit of the baccalaureate degree obtain a lower-division education in one segment (community colleges) and then transfer for their upper-division courses to one of the four-year segments."

The transfer rate refers to the annual count of transfers divided by the cohort of students with an intent to transfer. "The new transfer rate methodology defines a cohort of students with intent to transfer as students who began their collegiate careers as first-time students in a fall term, who, within a period of six years:

- Attempted transfer-level Math or English (regardless of the outcome) and
- Completed at least twelve units in the CCC system."[10] (Transfer Capacity and Readiness in the California Community Colleges, 2002, California Community Colleges Chancellor's Office).

A relatively small number of the community colleges account for the bulk of transfer students. In 1999–2000, approximately 65% of transfers to CSUs came from 39 of the 107 community colleges; 64% of community college transfers to the UCs came from 23 of the colleges (CPEC 2000c). Many colleges produce very few transfer students. Students' opportunities to transfer are uneven, depending on the community college they attend. At most of California's community colleges, the students' likelihood of transfer—and therefore of attaining a bachelor's degree—is low.

According to the National Center for Public Policy and Higher Education, "[the] data reveals that California higher education appears to be underperforming in the system's key process for coordinating between segmental functions, and significantly, in an area crucial to higher education opportunity. The reasons for this underperformance are the subject of ongoing debate. Problems

[10] Students transferring to either CSU or UC enter at the junior level, with a minimum of fifty-six transferable units for a CSU, sixty units (90 quarter units) for UC, and a 2.0 minimum GPA (C average) completed at their respective community college. Generally, a student has to complete the following course requirements to transfer:

- Two courses in English composition, and;
- One course in mathematical concepts and quantitative reasoning, and;
- Four courses chosen from at least two of the following areas: arts and humanities, social and behavioral sciences, and physical and biological sciences (University of California Office of the President, www.ucop.edu/pathways).

Students also have an option of completing the Intersegmental General Education Transfer Curriculum (I.G.E.T.C.), which specifies a series of courses that prospective transfer students need to complete to satisfy the lower division requirements at CSU and UC. Developed to simplify the transfer process, each community college has an articulation agreement with CSU and UC campuses that specifies the courses that may be applied to I.G.E.T.C. If the community colleges are indeed the educational equalizers as we hope them to be, then we may expect them to perform well in transferring students into four year institutions, whether CSU or UC.

frequently cited include: deficiencies in curricula and instruction offered by some community colleges; poor counseling, articulation or financial aid policies; some community colleges' lack of proximity to four-year campuses; and deficiencies of public schooling."[11]

4.4.2 Evaluation Methodology

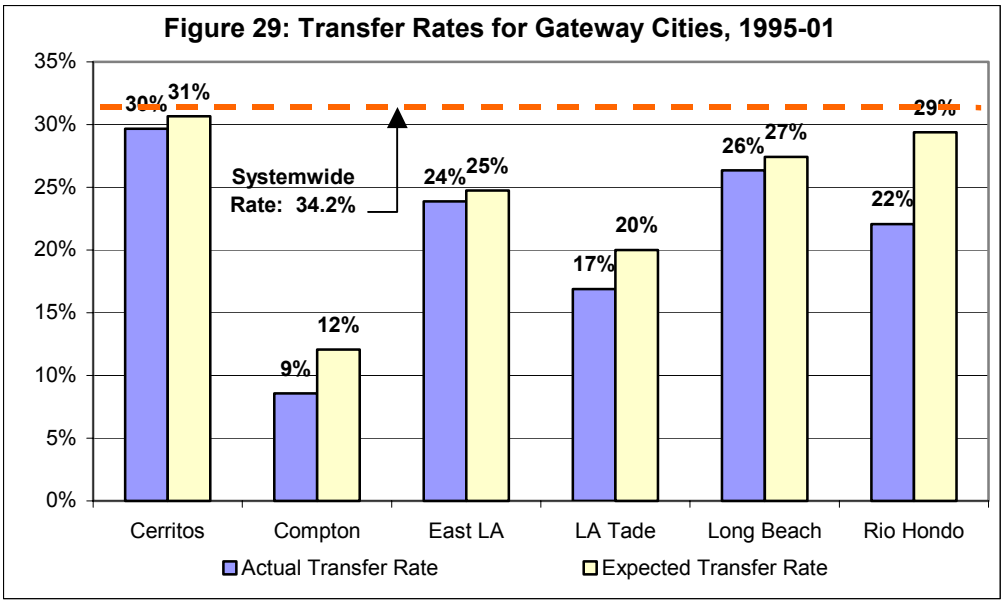
The Budget Act of 2001 requires that the California Community Colleges Chancellor's Office review the capacity and readiness of each community college district in order to meet the needs of student's desire to transfer. In the absence of common definitions of readiness or capacity, any study will be subjective if we rely on raw data.[12] For example, comparing the transfer rates among community colleges will fall short of understanding the true potential of the colleges because it ignores the community college district's environment and other elements (exogenous variables) that may contribute to the transfer function.

The Chancellor's Office Research Unit has performed a regression analysis on the transfer data and has concluded there are five primary factors not within the control of the colleges that will positively or negatively affect their transfer rate[13]:

- Academic preparedness level of incoming freshmen (measured for graduates of California high schools);
- Proximity of the community college to the nearest California State University campus;
- Proportion of the cohort of first-time students who were age twenty-five or less;
- County per capita income; and
- County unemployment rate.

Figure 29 compares the community college's actual transfer rates to the Chancellor's Office expected transfer rates for the 1995-01 cohort. The Chancellor's Office chose cohorts of students tracked for 6 years to account for errors in student self-reporting or community college's inconsistent enrollment data.

[11] From The National Center for Public Policy and Higher Education, www.highereducation.org; accessed on April 26, 2002.
[12] Transfer Capacity and Readiness in the California Community Colleges, California Community Colleges Chancellor's Office 2002.
[13] Ibid, p. 28



Source: Transfer Capacity and Readiness in the California Community Colleges, California Community Colleges Chancellor's Office 2002.

Accounting for the exogenous variables mentioned above, how do community colleges in Gateway Cities Region perform? From Figure 29 we infer that Compton and Rio Hondo fall very short of the expected transfer rate for the 1995-2001 cohort. Compton's actual transfer rate is 8.56 % compared to an expected rate of 12.07 %; Rio Hondo's actual transfer rate is 22.07 % compared to an expected rate of 29.39 %. It is apparent that some community colleges have lower expected transfer rates then others. The inconsistency in the expected transfer rate is a direct consequence of how the exogenous variables affect the transfer rate function. For example, a community college is not expected to transfer a high proportion of students if the students are in an economically depressed area that has high level of unemployment or low per capita income.

Systemwide, the transfer rate is 34.2 %.[14] From Figure 29 we observe that all of the six community colleges are performing well below the systemwide transfer rate. Although the Chancellor's Office expected transfer rate takes into account other variables that affect the transfer rate function, concerted efforts need to be made to encourage the six schools located within the Gateway Cities Region to perform at a minimum systemwide level.

The Chancellor's Office ranks the community colleges from lowest to highest actual transfer rates. A "persistently low-transfer college" is a community college that for three years yields a significantly lower transfer rate than expected. Ranking the college with the lowest transfer rate at a one (1) and the college with the largest transfer rate at 108, the Gateway Cities Region colleges rank in the following order: Rio Hondo (11), Compton (23), L.A. Trade Tech (26), Long Beach (40), Cerritos (41), and East L.A. (43). Transfer rates may not accurately reflect the performance of community colleges since its value to the community also resides in its effectiveness at providing high quality technical and vocational training.

Accounting for exogenous variables, community colleges in the Gateway Cities Region are not meeting their transfer rate expectations.

[14] Ibid, p. ii

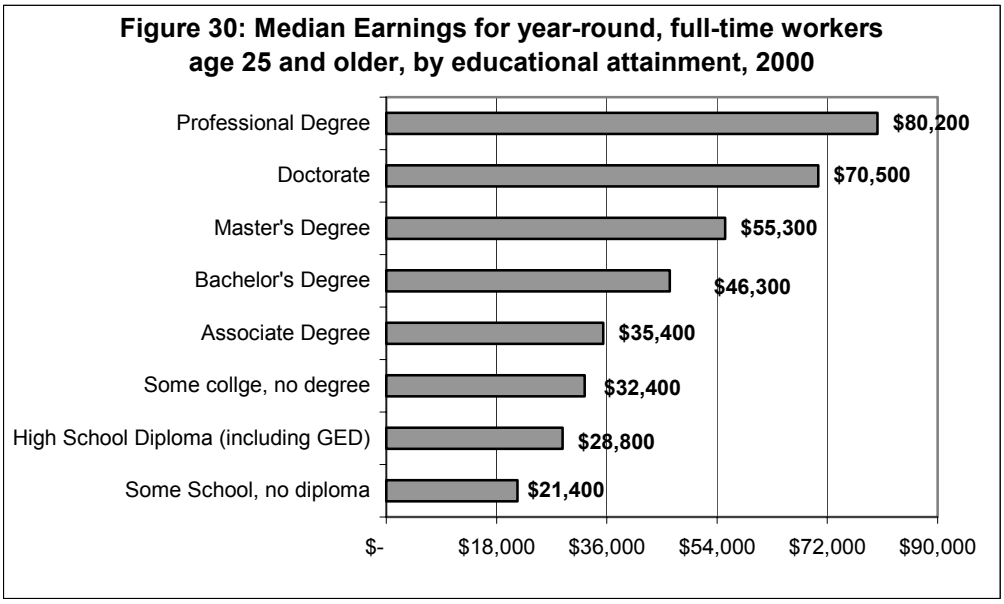
5. EDUCATION PAYS

5.1 OVERVIEW

The following section provides an overview of earnings and educational attainment, and trends in occupation and wages. Data for earnings and educational attainment is at the national level and data for occupation and wages are for Los Angeles County.

To a large extent, the education level of an individual determines the wage that he or she is able to earn. The more educated a person is, the higher is the probability of earning a higher salary. According to the Bureau of Labor Statistics (2000), median earnings for year-round, full time worker age 25 and older, professional degree holder was $80,200 compared to $21,400 for a person with some high school, but no diploma. The professional degree holder earns 3.75 times a person with some high school and no diploma. A "diploma premium" is attached to each advanced educational level. Employees with bachelor's degrees earned $46,300—61% more than high school graduates. Employees with masters' degrees earned 19% more than bachelors' degree holders and workers with Ph.D.'s earned 27% more than those with masters' degrees. Workers with professional degrees such as medicine or law had the highest median earnings at $80,200 a level 14% above the median earnings of workers with Ph.D.s' (Figure 30).

Figure 30: Median Earnings for year-round, full-time workers age 25 and older, by educational attainment, 2000



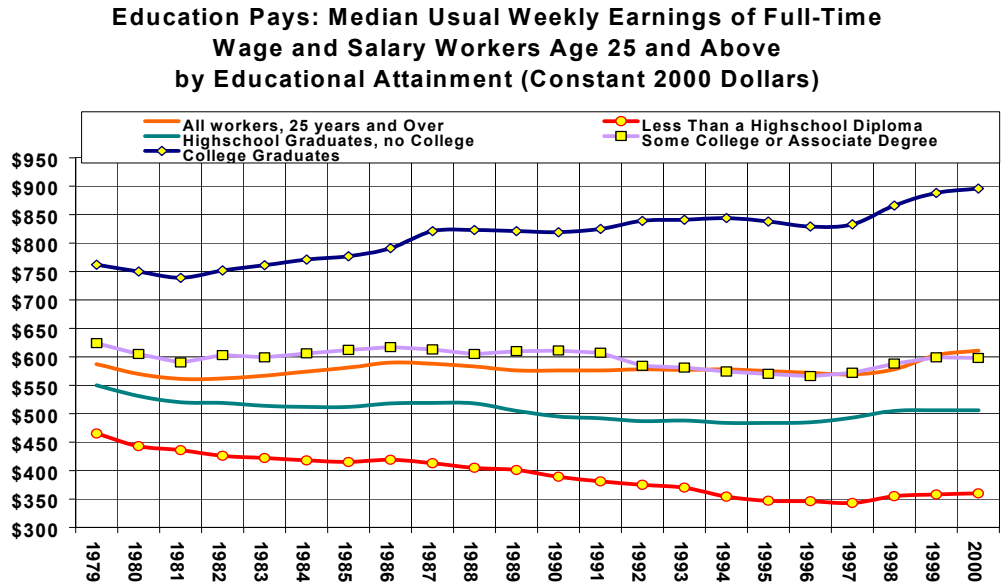
Source: Bureau of Labor Statistics, 2002

The additional earnings associated with a professional degree represented nearly 73% increase over the average earnings for those with a bachelor's degree and a 178% premium over the earnings of high school graduates.

A review of historical trends of earnings with respect to educational attainment shows that the median usual weekly earnings of full time wage and salary worker age 25 and above for college graduates, with bachelor's degree or higher, increases at a greater rate than those with less education. Earnings for individuals with less than a high school diploma fell considerably (in 2000 constant dollars) from $460 a week in 1979 to $355 in 2000, a decline of 23%; where as

earnings of college graduates increased by 18% from $760 in 1979 to about $900 in 2000 (SCAG Presentation on Education and Workforce Investment: Implications for Long-Term Planning).[15]

Figure 31: Median Full time Weekly Wage by Educational Attainment



Source: SCAG Presentation on Education and Workforce Investment: Implications for Long-term Planning

5.2 TRENDS IN OCCUPATION AND WAGES

The California Employment Development Department (EDD) prepares forecasts on occupations in California and Los Angeles County for 1999 to 2006. There are two types of forecasts: one lists occupations with the greatest absolute job growth and the other lists occupations with the fastest growth (percent change). Job forecast data is not available for sub-county areas; hence, we have used Los Angeles County as a proxy for future job growth in the Gateway Cities Region.

According to EDD forecast, eight out of the top 15 occupations with greatest absolute job growth (Appendix B) in Los Angeles County would require short-term, on the job training. The top three occupations with the greatest absolute job growth are retail salespersons, guards and watch guards, and top executives general managers. Of the top three, two require short-term on the job training and one requires work experience plus a bachelor's degree or higher. The occupations that require short-term, on the job training are not among the highest paying jobs.

The absolute change in retail salespersons and guards and watch guards is over 15,000 each. People with some basic education level can be absorbed by these occupations, but they are not well paying jobs. While the mean hourly wage for a watch guard in the Los Angeles-Long Beach Metropolitan Statistical Area (MSA) is $8.71 and for a retail salesperson is $10.45, the top executive general managers entry-level hourly wage is $38.13, which is more than four times the mean wage of the other top two occupations with the estimated fastest growth.[16] This poses a fundamental question. Given the nature of our economy and projected increase in jobs, what are we training our workforce for? Are we training our workforce for a job market where the top two

[15] Accessed from http://www.scag.ca.gov/livable/issues/issues.htm#Education on April 23, 2002.
[16] Occupational Employment Statistics Survey, 2001.

fastest growing jobs earn a little over the state minimum wage level? Is the Region's education system producing under-educated and under-trained students who will take a disproportionate share of low-paying jobs? In this information-based economy, are we gearing up our workforce to be janitors, truck drivers, waiters and waitresses instead of system analysts, computer support specialists or secondary school teachers? A key difference between high and low wage jobs is education and training level. An educated workforce is prosperous and has a positive multiplier effect for its community. Higher incomes translate into higher disposable incomes and the recycling of money results in the creation of a dynamic, vibrant, and a sustainable community.

According to California Employment Development Department forecast, the top five fastest growing (in terms of percentage change) occupations in Los Angeles-Long Beach MSA are electronic pagination system workers, electronic data processing system analysts, computer support specialists, TV and motion picture camera operators, and post-secondary computer science teachers (Appendix C). Six of the top 15 fastest growing jobs require a bachelor's degree and higher. The jobs in informational technology are not only the fastest growing occupations but also among the highest paid. For instance, the mean hourly wage for electronic data processing systems analysts is $27.34 and for computer support specialists is $34.29. As mentioned before, an individual with a bachelor's degree earns more than an individual with some college or an associate's degree. Training, therefore, should be focused towards preparing the workforce of the future to meet requirement of the new job market, one that is dominated by information and technology.

6. INTERVIEWS

The following is a summary of interviews conducted with community members, industry partners, and senior administrators of local community colleges. The sample size of interviewees is small; however, insight, from a number of different perspectives, is provided into the real and perceived educational gaps. Further interviews would, no doubt, have elicited a myriad of additional issues and innovative programs. Interviews were conducted with the following members of the Gateway Cities Region:

- Ms. Norma Garcia
  Community Representative, Parent Center

- Dr. Jane Harmon
  President, Cerritos Community College

- Mr. Jeff Kellogg
  Newmark of California

- Mr. Keith McCarthy
  Mayor, City of Downey

- Ms. Patty Senecal
  Vice President, Transport Express

- Dr. Mary Sieu
  Asst. Superintendent, ABC Unified School District

- Mr. Ullis Williams
  President, Compton Community College

6.1 SUMMARY OF INTERVIEWS

A number of broad themes emerged from our discussions and are summarized below:

- The underlying cause of low educational attainment, a major hindrance to workforce development, is a lack of parental involvement. When parents are involved in their children's education, children perform better than their counterparts who do not have parental guidance.

- Some parents view a high school education as acceptable for most practical things. They see no need or are not aware of the importance of higher education. This perception should be addressed.

- A lack of qualified teachers is cited as one of the reasons why students do not perform well. Under-qualified teachers, trained for elementary school, teach at the middle school level. As a result, the teachers may be unable to clearly explain concepts, leading to a waning of student interest in the subject matter.

- A high number of students from the Gateway Cities Region are non-college bound. They are compelled to drop out and work for economic reasons. Economic reasons, rather than racial/ethnic backgrounds contribute to a high dropout/attrition rate.

- Higher education is an absolute necessity. The US system is very flexible and designed to let people find their own way. However, the UC/CSU admission process is very complex. There are so many options available, that without proper parental guidance and counseling from school, it is very easy for a student to get lost.

- Educators feel that knowledge of the subject matter is enough to get students' a good job. Employers disagree. Employers find characteristics like flexibility, teamwork, communication, critical thinking, and other interpersonal skills are often more important. These attributes are not developed or taught as part of a high school curriculum.

- Partnerships and innovations are critical to improve student outcomes. For example, Cerritos College is finalizing a partnership with the ABC Unified for K to K16 colleges. They plan to work with parents, teachers, and students to explore the various career opportunities and understand what academic and other skills are necessary to be successful.

- One of the top priorities for the ABC School District has been to merge the academic education and career path of students. ABC has been making efforts to strengthen student applications' to colleges by providing them with specific skills. The regional occupation plan is one such step in this direction. Through this program, high school students in their senior years can explore more education and career pathways during an internship or apprenticeship.

- The lack of consistency in the reading program was a major problem identified by the ABC School District. Significant progress has been made by adopting a Singular Reading Program that provides training to teachers and standardizes evaluation methods of students.

- The Gateway Cities Region has a high tech employer base. However, the current workforce does not meet employer requirements. Even in construction related jobs, such as Alameda Corridor development, many trained workers turned down the opportunity because of their unwillingness to travel long distances. This, in part may be due to lack of vehicle or resources or general attitude of workers.

- Los Angeles and Long Beach are the largest ports in North America. They are the engines of economic growth for the Gateway Cities Region. This Region's proximity to the ports and their traditional manufacturing base creates opportunities for new business development and job creation in the areas of imports/exports, wholesale trade, and transportation. Employers find the existing labor pool lacking in skills related to these jobs, as there are no training programs at the high school level targeted towards training youth in such industries.

- A large number of employees, particularly Hispanic women with children, are not motivated to pursue higher education. Due to their family situation, most of these women tend to continue work at low wages and are not particularly inclined to enhance their skills. The only opportunity for upward career mobility is to join another firm after gaining

significant experience in the field. Even then, without the required academic qualifications and skills mix, the increase in income is just marginal.

- We have an educational system that is dysfunctional and needs to be revamped. The educational standards adopted by California high schools are below the entry-level UC/CSU requirements; hence, a large number of students are unprepared and have to repeat courses at the college level. This gap between the California high school standards and the UC/CSU requirements needs to be reassessed and reshaped by modifying the existing standards or setting new ones leading to an efficient functional system.

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Appendix A

Top Three Associates' (A.A. & A.S.) Degrees and Certificates Awarded, 2000-2001
Share of the Total Degrees Awarded, Gateway Cities Region

CC	Preferred A.A./A.S.	Percentage	Preferred Certificates	Percentage
Cerritos				
	Interdisciplinary Studies	48.1%	Engineering and Related Industrial Technology	29.2%
	Business and Management	13.5%	Business and Management	21.5%
	Health	13.2%	Consumer Education and Home Economics	16.9%
	Total Share Awarded	74.8%	Total Share Awarded	67.6%
Compton				
	Interdisciplinary Studies	100.0%	Consumer Education and Home Economics	36.3%
			Health	31.3%
			Interdisciplinary Studies	13.8%
	Total Share Awarded	100.0%	Total Share Awarded	81.4%
East LA				
	Interdisciplinary Studies	80.5%	Health	43.0%
	Health	8.1%	Business and Management	23.8%
	Business and Management	3.7%	Public Affairs and Services	12.6%
	Total Share Awarded	92.3%	Total Share Awarded	79.4%
LA Trade				
	Interdisciplinary Studies	46.5%	Engineering and Related Industrial Technology	44.9%
	Engineering and Related Industrial Technology	17.5%	Consumer Education and Home Economics	33.4%
	Consumer Education and Home Economics	10.1%	Commercial Services	7.8%
	Total Share Awarded	74.1%	Total Share Awarded	86.1%
Long Beach				
	Interdisciplinary Studies	49.0%	Health	37.9%
	Health	15.1%	Business and Management	17.2%
	Business and Management	11.0%	Engineering and Related Industrial Technology	13.0%
	Total Share Awarded	75.1%	Total Share Awarded	68.1%
Rio Hondo				
	Interdisciplinary Studies	40.4%	Consumer Education and Home Economics	37.7%
	Public Affairs and Services	16.5%	Public Affairs and Services	29.3%
	Business and Management	12.4%	Engineering and Related Industrial Technology	14.7%
	Total Share Awarded	69.3%	Total Share Awarded	81.7%

Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Appendix A (continued)

Top Three Associates' Degrees and Certificates Awarded, 2000-2001
Share of the Total Degrees Awarded for the State of California

California	Preferred A.A./A.S.	Percentage	Preferred Certificates	Percentage
	Interdisciplinary Studies	61.2%	Engineering and Related Industrial Technology	17.7%
	Business and Management	8.0%	Public Affairs and Services	15.6%
	Health	7.0%	Health	15.2%
	Total Share Awarded	76.2%	Total Share Awarded	48.5%

Source: California Community Colleges Chancellor's Office, Student Demographics, 2002

Appendix B

Occupations With the Greatest Absolute Job Growth in Los Angeles County, 1999-2006

Occupation	Annual Averages 1999 (2)	2006	Absolute Change	Percent Change	Education/Experience (BLS Training Level)
Salespersons, Retail	110,170	126,120	15,950	14.5	Short-Term On-The-Job Training (11)*
Guards And Watch Guards	49,430	64,610	15,180	30.7	Short-Term On-The-Job Training (11)
General Managers, Top Executives	108,770	122,320	13,550	12.5	Work Exp., Plus A Bachelor's Or Higher (4)
General Office Clerks	103,090	115,890	12,800	12.4	Short-Term On-The-Job Training (11)
Cashiers	82,820	94,550	11,730	14.2	Short-Term On-The-Job Training (11)
Teacher Aides, Paraprofessional	28,720	38,740	10,020	34.9	Associate Degree (6)
Janitors, Cleaners, Except Maids	55,070	64,660	9,590	17.4	Short-Term On-The-Job Training (11)
Teachers, Secondary School	35,650	45,160	9,510	26.7	Bachelor's Degree (5)
Teachers, Elementary School	50,870	60,220	9,350	18.4	Bachelor's Degree (5)
Truck Drivers, Light	40,670	48,260	7,590	18.7	Short-Term On-The-Job Training (11)
Systems Analysts, Elec. Data Processing	12,560	19,750	7,190	57.2	Bachelor's Degree (5)
Receptionists, Information Clerks	49,740	56,150	6,410	12.9	Short-Term On-The-Job Training (11)
Computer Support Specialists	11,800	17,990	6,190	52.5	Bachelor's Degree (5)
Truck Drivers, Heavy	27,290	32,860	5,570	20.4	Short-Term On-The-Job Training (11)
Waiters & Waitresses	50,770	56,100	5,330	10.5	Short-Term On-The-Job Training (11)

Source: California Employment Development Department, Labor Market Information, 2002; Accessed from http://www.calmis.cahwnet.gov/FILE/OCCPROJ/laF&G.htm

* Refer Appendix D for BLS Training Level Definitions

Appendix C

Occupations With the Fastest Growth in Los Angeles County, 1999-2006

Occupation	Annual Averages 1999 (2)	2006	Absolute Change	Percent Change	Education/Experience (BLS Training Level)
Electronic Pagination System Workers	910	1,510	600	65.9	Long-Term On-The-Job Training (9)*
Systems Analysts, Elec. Data Processing	12,560	19,750	7,190	57.2	Bachelor's Degree (5)
Computer Support Specialists	11,800	17,990	6,190	52.5	Bachelor's Degree (5)
Camera Operators, TV & Motion Picture	510	770	260	51.0	Moderate-Term On-The-Job Training (10)
Computer Science Teachers, Postsecondary	2,230	3,290	1,060	47.5	Doctoral Degree (2)
Stevedores, Ex Equipment Operators	4,430	6,450	2,020	45.6	Short-Term On-The-Job Training (11)
Pest Controllers & Assistants	1,980	2,820	840	42.4	Moderate-Term On-The-Job Training (10)
Health Diagnostics Teachers, Postsecondary	550	780	230	41.8	Doctoral Degree (2)
Central Office & PBX Installers	300	420	120	40.0	Post-Secondary Vocational Education (7)
Telephone, Cable TV Installers	6,380	8,900	2,520	39.5	Long-Term On-The-Job Training (9)
Crane & Tower Operators	800	1,110	310	38.8	Moderate-Term On-The-Job Training (10)
Demonstrators & Promoters	10,290	14,200	3,910	38.0	Moderate-Term On-The-Job Training (10)
Computer Engineers	8,460	11,660	3,200	37.8	Bachelor's Degree (5)
Sheet Metal Duct Installers	1,330	1,830	500	37.6	Moderate-Term On-The-Job Training (10)
Communications Teachers, Postsecondary	350	480	130	37.1	Doctoral Degree (2)

Source: California Employment Development Department, Labor Market Information, 2002; Accessed from http://www.calmis.cahwnet.gov/FILE/OCCPROJ/laF&G.htm

* Refer Appendix D for BLS Training Level Definitions

Appendix D

Bureau of Labor Statistics Training Level Definitions

In this classification system the education and training required reflects the manner in which most workers become proficient in that occupation and the preferences of most employers.

1. **First professional degree.** Occupations that require at least two years of full-time academic study beyond a bachelor's degree (for example, law, medicine, dentistry and clergy).

2. **Doctoral degree.** Occupations that require at least three years of full-time academic study beyond a bachelor's degree culminating in a doctoral degree.

3. **Master's degree.** Occupations that require the completion of a master's degree program which is usually one to two years beyond a bachelor's degree.

4. **Bachelor's or higher and some work experience**. Occupations that generally require work experience in an occupation requiring a bachelor's or higher degree. Most occupations in this category are managerial occupations that require work experience in a related non-managerial occupation.

5. **Bachelor's degree**. Occupations that require the completion of at least 4 but not more than 5 years of full-time academic study beyond high school resulting in a Bachelor' degree.

6. **Associate degree.** Occupations that require the completion of at least 2 years of full-time academic study beyond high school.

7. **Post-secondary vocational education.** Occupations that require completion of vocational school training.

8. **Work experience**. Occupations that require skills obtained through work experience in a related occupation.

9. **Long-term on-the-job-training**. Occupations that require more than 12 months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the skills needed for average job performance.

10. **Moderate-term on-the-job-training**. Occupations in which workers can develop average job performance after 1 to 12 months of combined on-the-job experience and informal training.

11. **Short-term on-the-job-training**. Occupations in which workers can develop skills needed after a short demonstration or up to one month of on-the-job experience and instruction.