AN ASSESSMENT OF THE IMPACTS OF CALIFORNIA STATE UNIVERSITY ENROLLMENT CUTS, FALL 2009-FALL 2010

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THESIS

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AN ASSESSMENT OF THE IMPACTS OF CALIFORNIA STATE UNIVERSITY ENROLLMENT CUTS, FALL 2009-FALL 2010

A Thesis

by

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Abstract

of

AN ASSESSMENT OF THE IMPACTS OF CALIFORNIA STATE UNIVERSITY ENROLLMENT CUTS, FALL 2009-FALL 2010

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I sought to discover if any student populations were disproportionally impacted by enrollment cuts put in place within the California State University to be completed within the 2010-2011 academic year. I produced this analysis using descriptive analysis, studying both system-wide and campus level impacts to student enrollment. Focusing on two student characteristics, race/ethnicity and class level, I hypothesized that Latino students and transfer students would be potentially the most vulnerable to enrollment cuts. I measured percent change in enrollment with enrollment data retrieved from the California State University website.

Overall, African American students were race/ethnicity most negatively impacted by enrollment cuts while first-time freshman were the most negatively impacted class level. Asian/Pacific Islander students realized the largest gains in enrollment during the period of enrollment cuts as well as transfer students.

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Mary Kirlin, D.P.A.

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Date

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I would first like to thank my family for always supporting me and instilling in me the importance of education. Without them or my mom's "GET BACK TO WORK" bbm's, I would not have made it this far.

To my sister, Brandie. If you can imagine it, you can do it. Imagine it and do it.

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Chapter 1

INTRODUCTION

In California, consecutive years of declining financial support from the state and over-enrollment led the California State University (CSU), the nation's largest public higher education system, to implement a historic 10% enrollment cut for its 2010-2011 academic year. This thesis will assess preliminary impacts of enrollment cuts with a descriptive analysis, studying system-wide and campus level impacts to enrollment, seeking an answer to the following question: **Were any student populations disproportionally impacted by enrollment cuts within the CSU?** The outcome of this analysis will provide an initial snapshot to CSU officials to how enrollment cuts affected educational opportunity at the CSU. I will focus on two student characteristics: race/ethnicity and class level (first-time freshman and transfer students), hypothesizing Latino and transfer students will be the student populations disproportionally impacted by enrollment cuts.

Increased Demand for Bachelor's Degrees in California

Due to a shortfall between the demand for and supply of college graduates (Johnson, 2011a), Public Policy Institute of California (PPIC) projects California will face a "skills gap" by 2025. By 2025, while 41% of Californians must possess college degrees to fulfill the state's occupational demands, only an estimated 35% of Californians will possess one (2011a). With a looming deficit of college graduates, this is not the time for California's public universities to be cutting their student enrollments.

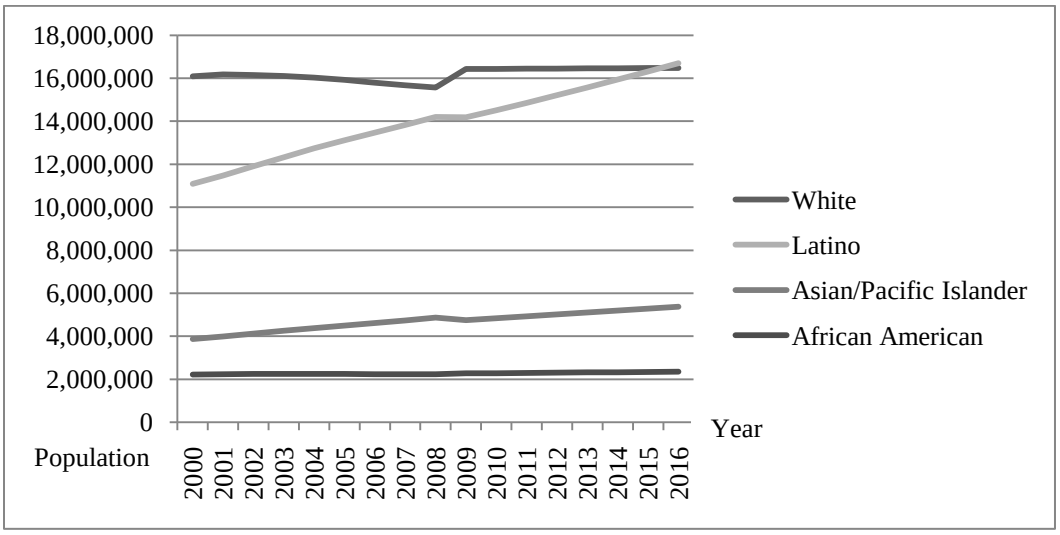
This gap of approximately one million college graduates may exist in California for two key reasons: lack of skilled workers to replace retiring baby-boomers and a surge in populations who tend to have lower college attendance and graduation rates (Hanak & Baldasarre, 2005). The latter, a surge in populations with lower educational attainment, is one of the cornerstones of this thesis and discussed further within this section.

The rest of this chapter explores the evolving demographics of California and implications on California's educational future with special focus on why it is particularly important to support Latino's in their pursuit of higher education. Finally, this chapter concludes with a discussion of the ramifications of not meeting the state's demand for bachelor's degrees in 2025.

Minorities In California

Between 2000 and 2010, California's population increased by nearly 3.5 million people. A swell in the Latino population accounted for much of this increase. The 2010 Census reported in the last decade, the Latino population in California increased by a little over 3 million people from 10.97 million in 2000 to 14.01 million in 2010. Additionally, the White population decreased by almost a million from 15.82 million in 2000 from 14.96 million in 2010 (State of California, Department of Finance, 2000; State of California, Department of Finance, 2011). This explosion of Latino's in California will likely continue into the next decade with the Latino population, surpassing the White population by 2016 (see Figure 1).

Figure 1
California Population 2000-2016*, by Race/Ethnicity



Source: State of California, Department of Finance (2010b) & State of California, Department of Finance (2007)

*2000-2008 are actual, 2009-2016 are estimates

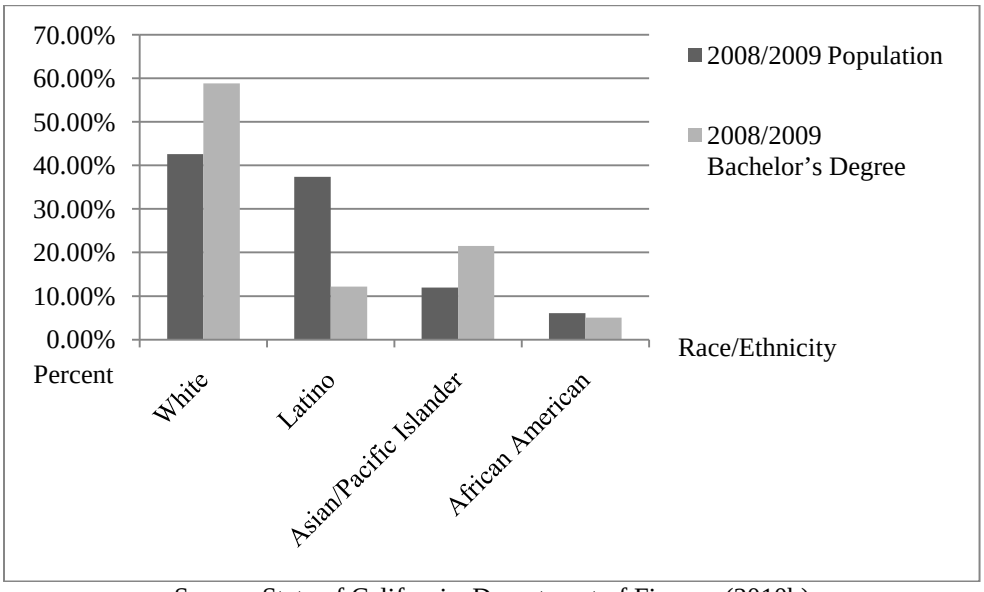
Educational Attainment

Despite increased minority representation within California's population (see Figure 1), significant differences in educational attainment by race/ethnicity exist. Traditionally, the "fastest-growing" racial/ethnic groups have the lowest level of educational attainment (Ruy, 2009) and this is true in California. Of California's major racial/ethnic groups, Latino's have the lowest level of educational attainment: an average 10.7 years of school, equivalent to a "not a high school graduate" (State of California, Department of Finance, 2010a). Therefore, it should be not be surprising that Latino's also lag behind at the college graduate level of educational attainment.

A 10% disparity exists between the Latino college enrollment and the Latino

population within the state. This means that in California, Latino college enrollment falls behind the Latino population at a rate of 10% (Wells, 2008) falling behind African-Americans and Asian/Pacific Islanders. Further, Latino's have the least amount of college graduates (12%) compared to their state population (37%). As for other minorities, Asian/Pacific Islanders and African Americans surpass or are on target, respectively (see Figure 2).

Figure 2
California Population and Bachelor's Degree by Race/Ethnicity (By Percent), 2008/2009*



Source: State of California, Department of Finance (2010b)

*This data represents the average of two consecutive years of data: 2008 & 2009

In addition, the college-going cohort of 18-24 year olds is one of the fastest-growing age groups in California, expected to grow by 27% or nearly a million people by 2014 (Brady, Hout, Stiles, et. al., 2005). Of this growth, minorities will dominate a majority: two-thirds Latino's, nearly 10% Asian/Pacific Islanders and up to 17% African

Americans (2005). With California in need of college graduates and a growing minority college-age cohort, the educational attainment of Latino's needs to be addressed urgently.

Impact

A college education yields both economic and non-economic benefits to the graduate and the state. Economic benefits include income, health insurance, job satisfaction and other occupation-related perceived benefits (Perna, 2005). In 2009, Californian's with a Bachelor's degree made a median income of $51,938 a year compared to $26,950 a year for a high school graduate (California Post-Secondary Education Commission, 2009). Further, in the current recession, Californians with a college degree have had lower unemployment rates than those with lower levels of education (Johnson, 2011a). Additionally, a college education is financially beneficial to the state through increased tax revenue and productivity. Non-economic benefits of a college education include a positive correlation to health-related behaviors, leisure activities and civic engagement (Perna, 2005). Yet despite such attractive benefits, those most likely to benefit from a college education continue to be the least likely to obtain one (Brand & Xie, 2010).

As discussed at the beginning of this section, by 2025, California's workforce will face a predicted shortfall of one million college graduates. Therefore, if California is not able to meet this workforce demand, it will not receive such benefits of an educated workforce but instead face a range of negative economic consequences. Without a skilled workforce, California will not be able to fill its employment opportunities properly. With

occupational vacancies in highly skilled industries, California could face a decrease in productivity (Johnson, 2011a), potentially threatening the competitiveness of its economy. With an increased supply of workers competing for a limited number of lower-skilled jobs, Californians may earn lower incomes, leading to a potential increase in dependence on social services and decrease in income tax revenue (2011a).

Flow of Thesis

The rest of this thesis will unfold as outlined here. Chapter 2 will review the origins of California State University (CSU) enrollment cuts and their implementation. I will then explain why Latino's and transfer students could be the student population disproportionally affected by enrollment cuts. Chapter 3 will focus on the methodology, describing both data collection and data analysis. Chapter 4 will present the findings and finally, Chapter 5 will tie the findings back to the research question by discussing the implications of enrollment cuts, the status of the CSU and options for future research.

Chapter 2

BACKGROUND

The Introduction explained the need for college graduates in California; particularly, Latino college graduates. This chapter will present a complete picture of what led the California State University (CSU) system to implement enrollment cuts as well as why Latino's and transfer students could be the student populations disproportionately impacted by enrollment cuts.

Background

Public higher education in California is composed of three branches: California Community College (CCC) system, California State University (CSU) system, and University of California (UC) system. Community colleges are 2-year colleges that provide basic skills education and general education classes to prepare students for transfer to a 4-year college while the CSU and UC are 4-year degree granting institutions. More than four out of five California college students are enrolled in one of the three systems (Johnson, 2011a). Each year in California, CSU and UC campuses bestow nearly 75% of bachelor's degrees (2011a). Moving forward, I will focus on the CSU system and assess the impacts of their enrollment cuts for the 2010-2011 academic year.

The California State University System

The California State University (CSU) system was established in 1972 and has since grown into a network of 23 campuses ranging from Humboldt to San Diego (For a map of the 23 CSU campuses, see Appendix A). In 2008-2009, the CSU enrolled over

430,000 students and graduated 93,000 with degrees from nearly 400 different Bachelor's, Master's and Joint Doctorate programs. A 25-member Board of Trustees (BOT) leads the CSU and appoints the Chancellor to serve as the system's Chief Executive Officer (CEO). Similarly, at a CSU campus, the BOT appoints a campus President to serve as its CEO. Together, the Board of Trustees, the Chancellor and campus Presidents develop and implement policy ranging in topics from academic to fiscal.

The recession, in conjunction with its desire to meet the increased demand, put the CSU in a precarious financial situation, forcing it to take extreme measures to resolve. In November 2008, the CSU announced it would cut student enrollment to stabilize the system's fiscal status. From there, each campus developed their own enrollment management plan to cut enrollment, given specific guidelines developed by the CSU. The next two sub-sections will describe what led the CSU to enrollment cuts: its budget and over-enrollment.

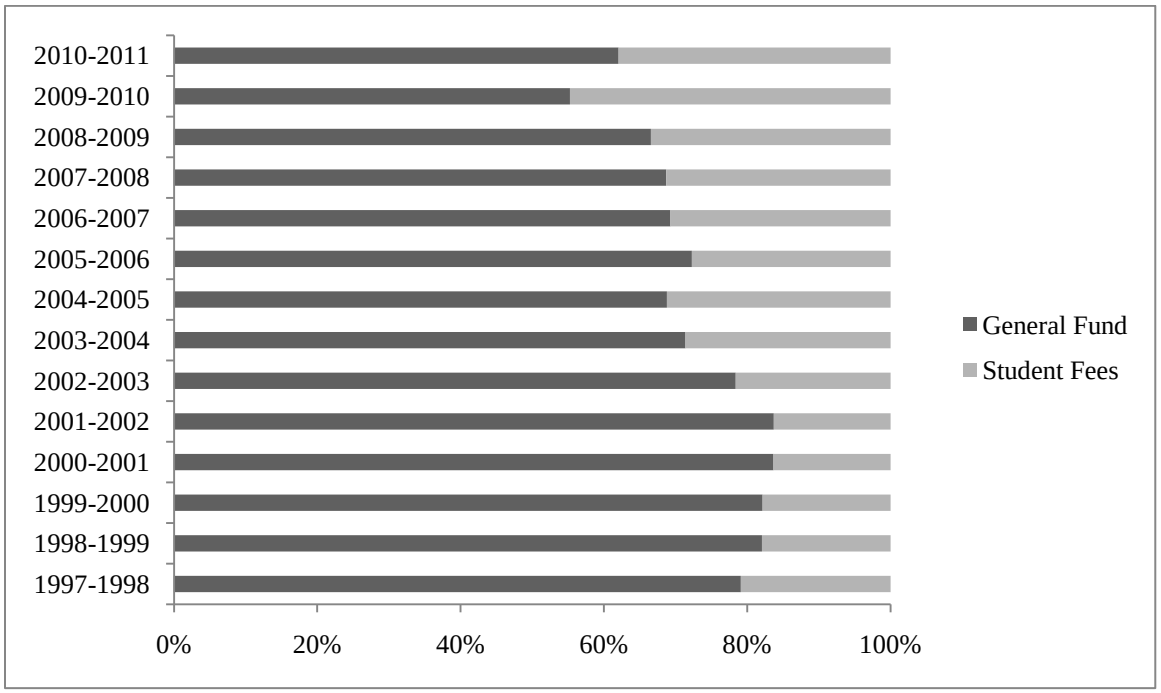
CSU Budget

Decreased state funding for public higher education is a nationwide trend. Within the last twenty years, state funding to public higher education has decreased 30-50% throughout the nation (Moyer, 2010). Further, since the beginning of the recession, 43 states have decreased their fiscal support of public higher education (Johnson, Oliff & Williams, 2010), reducing staff and faculty positions, financial aid programs and executing tuition increases up to 30% to support the 2010-2011 academic year (2010).

The CSU's budget has two main sources of revenue: a yearly appropriation from the state's General Fund and the State University Fee, charged to each enrolled CSU student based on their residency and enrollment status. Traditionally, the General Fund appropriation funded the majority of the CSU's budget with the State University Fee serving as a minor revenue source.

Recently, California's fiscal challenges transformed the State University Fee into a larger and more stable revenue source for the CSU. In 1997-98, the state's General Fund allocation made up nearly 80% of the CSU's budget and with only 20% from student fee revenue. Now, nearly 15 years later, the state's General Fund allocation has decreased by 20% while student fee revenue has increased by 20%, leading to a revenue stream of 60% General Fund and 40% student fees (see Figure 3).

Figure 3
California State University Revenue: General Fund v. Student Fees, 1997-1998 to 2010-2011



Source: CSU Budget Office, 1997, CSU Budget Office, 1998, CSU Budget Office, 1999, CSU Budget Office 2000, CSU Budget Office, 2010a, California Post-Secondary Education Commission, 2008a, and California State University, 2010d

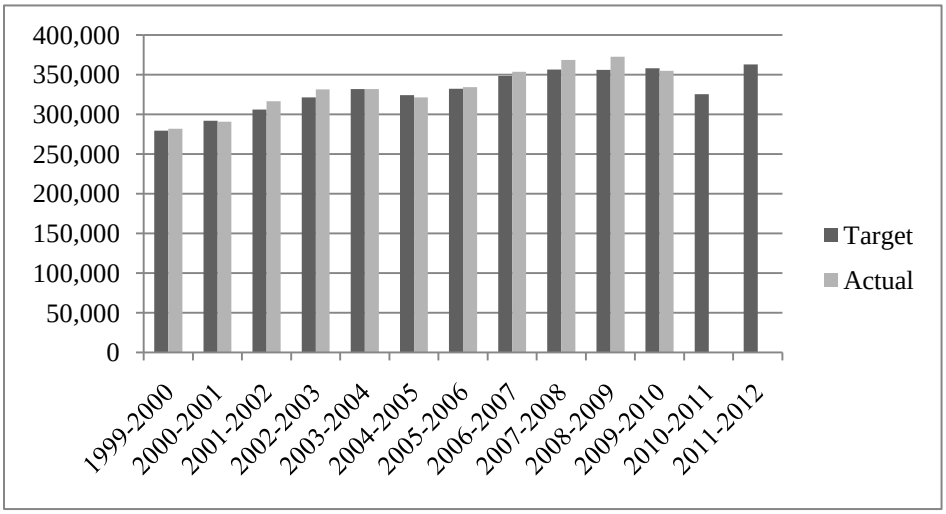
In total, student fees have increased 242% over the past 8 years. Yet, despite steady increases in the State University Fee, CSU student fees have remained consistently lower than the fees of comparable institutions (California State University, 2010f). In 2010-11, CSU fees were $5,180 in comparison to North Carolina State University's $6,529 and Cleveland State University's $8,466 (2010f). Unfortunately, fee increases alone could not combat the CSU's budget shortfalls, which is why the CSU implemented extreme actions such as enrollment cuts to alleviate it.

Over-Enrollment

Too much enrollment growth heightened financial strife within the CSU. In addition to its general fund allocation, on a year-by-year basis, the state typically allocates additional fiscal support for student enrollment growth up to a specific FTES enrollment target established by the state. Available funding, predicted demand and number of continuing students determines the FTES enrollment target each year.

FTES, or full-time equivalent student, is a term for calculating student workload for purposes of state funding. The general standard for calculating FTES is 15 units for undergraduates and 12 units for undergraduates. On the other hand, the term "headcount" refers to each individual student. Based on the availability of data, I calculate the impact of enrollment cuts in terms of headcount not FTES.

Figure 4
CSU System-wide Enrollment- Funded Targets vs. Actual FTES, 1999-2000 to 2011-2012



Source: CSU Budget Office 2010b

CSU FTES student enrollment grew steadily between the 2004-2005 and 2009-2010 academic years (see Figure 4). From the 2005-2006 to 2008-2009 academic years, the CSU system enrolled FTES beyond its funded enrollment target. Some CSU campuses enrolled more FTES than they had the financial resources to support, seeking to meet a rapidly increasing demand from eligible students. This was a common practice among CSU campuses. Over 75% of CSU campuses enrolled students above their enrollment target more than 5 times over the past decade (California State University, n.d. (c), n.d. (d), n.d. (e), n.d. (f), n.d. (g), n.d. (h)).

At these campuses, over-enrollment led to an unfunded gap between target enrollment and actual enrollment that campuses had to allocate money and resources to serve. In the 2007-2008 academic year, the CSU had over 11,000 unfunded full-time equivalent students (FTES) system-wide (Turnage, 2010). Additional growth in 2008-2009 was also unfunded, widening the system-wide gap between target and actual enrollment.

Campuses used reserve funds as one-time funding sources to support unfunded students with larger class sizes, temporary faculty and additional class sections while decreasing support for student services such as academic advising and financial aid services. Anecdotal evidence suggests some campuses were able to achieve economies of scale such that student fee revenues were sufficient to offset the costs associated with additional students. To realign actual enrollment to target (or state-funded) levels, CSU

campuses implemented enrollment management strategies to re-align its 2010-2011 enrollments to funded levels, similar to its 2007-2008 enrollment. I will present the actual impacts of this realignment within the Results chapter.

Implementing Enrollment Cuts

Despite consecutive years of enrollment growth funding, the CSU's actual enrollment outpaced its enrollment target. This left CSU campuses with the challenge of supporting unfunded students while trying to balance budgets in light of decreased financial support from the state. Money-saving strategies negotiated at the system level included staff and employee furloughs. Additionally, each campus had to make ends meet individually, reconciling its campus budget with its student enrollment.

The overall goal of enrollment cuts was to align actual enrollment with funded enrollment levels, requiring a nearly 10% reduction of the CSU's student enrollment. To achieve this goal, the CSU provided each campus with a mandated FTES reduction for the 2010-2011 academic year (see Table 1).

Table 1
Mandated FTES Reductions for 2010-2011 Academic Year

Campus Size	Mandated FTES Reduction (%)
20,000+ FTES	10.8
12,000-20,000 FTES	9.5
7,000-12,000 FTES	6.0
Less than 7,000 FTES	No Reduction

Source: Varlotta, 2010

Enrollment Management Strategies

To reach their mandated reduced enrollment reduction, a range of enrollment management techniques were implemented campus-by-campus. Application deadlines (ie: November 30 for Fall) were strictly enforced especially as campuses approached their enrollment targets. Through enforcement of application deadlines and other often-ignored rules, the CSU estimated an enrollment reduction of 4,000 students for Fall 2009 (California State University, 2009d). Campuses, who did not yet meet their enrollment target, were able to accept applications until they reached their target, but no later March 1 (California State University, 2008b).

In addition, as necessary, Winter and Spring enrollment was limited or closed for campuses who had met their enrollment target such was the case for many campuses' Winter and/or Spring 2010 terms. By eliminating new Spring enrollment, the CSU estimated enrollment had the potential to be reduced by nearly 35,000 students (California State University, 2009a). Additionally, campuses were encouraged to require mandatory orientations for first-time freshman or transfers, enrollment deposits, and/or disqualify students who could not meet the conditions of their acceptance (Jones, 2008).

Impaction

For campuses facing a larger enrollment demand than it could serve, the CSU offered campuses the option to declare impaction (Jones, 2008). Impaction allowed a campus to manage new student enrollment with additional targeted strategies. Because CSU's are required to accept all local eligible students, a campus could be in danger of

exceeding its enrollment target if it received more applications from local fully qualified applicants than the campus had the resources and/or physical capacity to serve (California State University, 2010g).

Impaction could occur at the campus and/or degree program level. Previously, campus and/or program impaction had been enforced at select highly popular campuses such as San Luis Obispo. In the 2008-2009 academic year, 6 campuses declared impaction, more than doubling to 14 campuses in 2009-2010 (Varlotta, 2010).

How is Impaction Implemented?

When managing enrollment, continuing students receive enrollment priority. An impacted campus then prioritizes enrollment opportunities to CSU-eligible upper-division transfer students then first-time freshman from within its "local admission area". (The matrix of the "local admission areas" for each campus including specific local high schools and community colleges is available on the CSU website.) Secondarily, pending space, CSU-eligible students from outside the "local admission area" had the potential for admittance. Their admittance was based on available space and position on a campus priority waitlist, ranking student's eligibility to meet additional admission criteria such as the CSU freshman eligibility index, additional GPA requirements for A-G coursework or transferrable community college courses. After enrolling such students, if an impacted campus still had not met its enrollment target, it could then offer enrollment to the following categories of students until it met its target: ineligible first-time freshman, lower-division or upper-division transfers, students seeking a second Bachelor's degree,

and/or un-classified post-baccalaureate students (Jones, 2008).

Campus Spotlight: Northridge

With each campus charged to develop its own customized enrollment management plan, Vice President of Student Affairs Terry D. Piper led such efforts at California State University, Northridge. As one of the CSU's largest campuses, CSU Northridge's enrollment reduction mandate 10.8% (or 2,787 FTES). To cut 2,787 FTES, Northridge sought to reduce FTES at every level.

To begin, an elimination of state support for summer classes would reduce FTES by 750 (Piper, 2009). (Moving summer classes into Continuing Education places full financial costs of instruction onto students.) Next, first-time freshman enrollment was to be reduced 310 FTES through actions such as scaling back recruitment activities and enforcing all deadlines including the November 30 Fall application deadline. To reduce transfer students by 356 FTES, Northridge would implement the aforementioned actions in addition to requiring all transfer students to complete no less than 60 transferable units.

Continuing students were to be reduced by 1,371 FTES by some of the following tactics establishing paths to graduation for super seniors and the enforcement of strict academic policies including disqualification and course repeat limits. Finally, Northridge would not enroll new students for the Spring 2011 semester. Further, planning for the subsequent academic year 2011-2012, Northridge predicted it would continue these strategies. The enrollment management strategies implemented by Northridge mirrors standard enrollment management techniques recommended by the CSU and implemented

at campuses throughout the system.

Impact of Enrollment Cuts

If fully implemented, the California Post-Secondary Education Commission (CPEC) reported the actual impact of the CSU's 10% enrollment cuts would have translated to up to 55,000 un-served undergraduate students (Wilson, Newell, & Fuller, 2010): 22,272 students in 2009-2010 and 33,051 students in 2010-2011 academic years. The CPEC calculated this opportunity cost, or loss of "college opportunity" (2010), using the following formula and traditional enrollment percentages by class level.

Basing 2009-2010 enrollment on the total Fall 2008 enrollment (437,008), 70% (or 305,095 students) of the students would be continuing undergraduate students while 30% (or 131,103) would be new enrollees. From the 131,103 spaces available for new students, a cut of 20,000, or half of the 40,000 enrollment cut, would bring total availability to 111,103. Of these 111,103 spaces, undergraduates occupied 83% (or 92,215) of these spaces such as first-time freshman and transfer students. CPEC predicted the demand for enrollment in the CSU by undergraduates in 2009-2010 to be 114,987. Therefore, the real loss of students is the demand less the actual spaces, calculating up to 22,772 un-served students in the 2009-2010 academic year.

Following this same formula with 91,103 available spaces (the 2009-2010 level of new enrollees less a 20,000 cut), the 2010-2011 academic year would have denied 33,051 students to complete the enrollment cuts of 10%, or approximately 40,000students, for an actual total impact of over 56,000 students un-served.

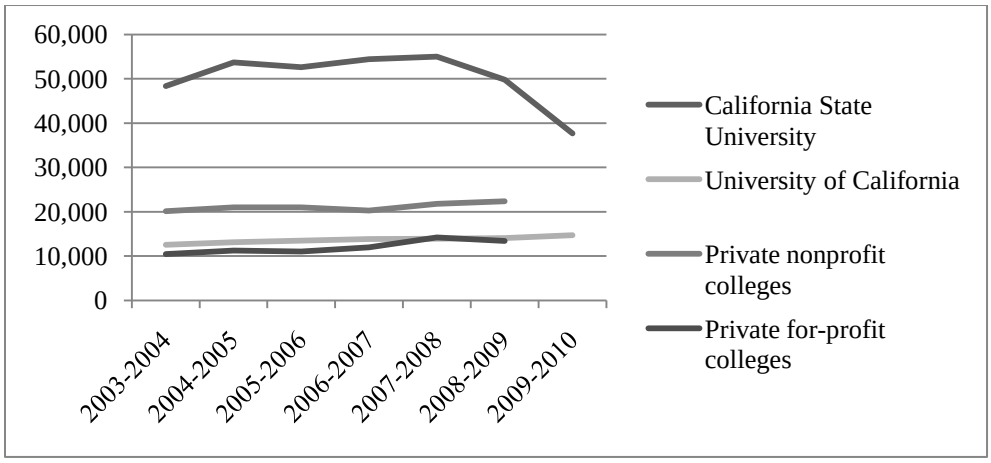
Prioritizing applications based on “local admission areas” would not make a large impact on curtailing enrollment except at popular campuses such as San Luis Obispo, San Diego, Fullerton or Long Beach, who enroll students from throughout the state. Traditionally, 80-85% of CSU students attend their local campus (California State University, 2008c). Therefore, “local admission areas” simply serve to protect priority admission to a student’s local campus- assuming they meet admission requirements.

CSU enrollment cuts may have had the most negative impact on the California Community College system and its eligible transfer students. Increased demand from first-time freshman rejected from the CSU and/or decreased transfer opportunities into the CSU may have led the CCC into a situation of “enrollment back-up”. Like the CSU, the California Community College system exceeded its funded enrollment target by 13,000 students in the 2007-2008 academic year (LAO, 2010) but then decreased its enrollment by 140,000 students between the 2008-2009 and 2009-2010 academic years (Newell, 2010). Of these enrollment cuts, first-time freshman represented an overwhelming majority (2010).

Traditionally, the CSU enrolls more community-college transfers than any other university system (Keller, 2011) in California. But in the 2009-2010 academic year, only 37,000 students successfully completed transfer from a community college to a CSU campus- compared to 54,000 only two years prior (see Figure 5). This represents a decrease of 23,000 students, who transferred to either a private college or a UC, dropped out, or not complete transfer to a 4-year college. While private colleges cost more, they

lack the funding and enrollment management issues of California's public higher education systems and may represent a more stable and viable alternative to those who could afford them. However, overall, what happened to these community college students is unknown.

Figure 5
Where California's California Community College Students Transferred, 2003-2004 to 2009-2010



Source: Keller, 2011

* Private-college data for 2009-10 are not yet available.

The beginning of this chapter discussed how decreasing financial support from the state and campus over-enrollment led to the enrollment of more students than CSU campuses could financially support. These factors, in the midst of continuing budget cuts, influenced the Chancellor's Office and Board of Trustees to announce a 10% mandated enrollment reduction of total CSU student enrollment for the 2010-2011 academic year. Implemented on a campus-by-campus basis, enrollment cuts utilized a variety of enrollment management strategies including impaction. This thesis is specifically

concerned with discovering if any student populations were disproportionally negatively impacted by enrollment cuts. While the Background touched on why transfer students could be disproportionally impacted by enrollment cuts, the next section will discuss why Latino students could also potentially the most vulnerable to enrollment cuts.

Literature Review

Why Latino Students Are Hypothesized to be the Most Vulnerable to Enrollment Cuts

As the largest segment of California's population but the smallest segment of college graduates, Latino's who do attend college are only half as likely to graduate from college than their White peers (Fry 2005a). While California Latino youth believe it is important to have a college education (Zarate & Pachon, 2006), Latino's are also the least likely to finish high school (Tornatzky, Cutler, & Lee, 2002). The literature shows Latino enrollment in higher education is constrained by access to higher education information and resources as well as low levels of academic preparedness. These conditions directly relate as to why Latino students may be the most vulnerable to the CSU's enrollment cuts.

To sustain growth in Latino college graduates, it will be increasingly important to support Latino enrollment in higher education- particularly because of implications for California's future shortfall of college graduates. I will present the two key factors that may make Latino students vulnerable to CSU enrollment cuts, lack of information and academic preparedness, next.

Lack of Information

Latino's are likely to lack essential information about higher education from two trusted support systems: their parents and their high school. While 96% of Latino parents want their children to go to college (Zarate & Pachon, 2006), they do not have the knowledge to assist their children with the college process. Among over 1,000 Latino parents surveyed, an overwhelming majority demonstrated low "college knowledge" (Tornatzky, Cutler, & Lee, 2002) about topics such as pre-requisites, application and acceptance- particularly parents with lower income and lower levels of educational attainment. This puts Latino students at a disadvantage for various steps in the college process such as taking college-level curriculum in high school, graduating from high school, learning about higher education and paying for related costs (2002).

Specifically, when it comes to financial aid information, more than 50% of Latino parents and approximately 43% of Latino students were unable to name one financial aid option (Tomás Rivera Policy Institute, n.d.). This survey also established a link between financial aid knowledge and college attendance with three out of four Latino's not enrolled in college reporting they would have been more likely to attend college if they knew about their financial aid options (n.d.).

Latino parents and students prefer to receive college information in-person from a trusted source such as a teacher or counselor (n.d.). Yet, Latino's (40%) are more likely to attend high schools with large student populations, high student-to-teacher ratios and have peers with low socioeconomic status (Fry, 2005b) as compared to White (8%) and

African American (30%) students in California. Their high schools are also likely to have fewer social resources and networks that promote higher education (Perna & Titus, 2005). For Latino students as well as African American students, Perna & Titus (2005) linked lower enrollment in higher education to a lack of social resources. Such resources include peers who are also planning on attending college and parental interaction with their high school about academics in addition to lower levels of family income and parental education (2005; Tornatzky, Cutler, & Lee, 2002).

How Lack of Information Exacerbates Enrollment Cuts for Latino Students

Since Latino students lack regular access to trusted sources of higher education resources, the CSU expressed concern about how minority students will fair with evolving application and enrollment policies. Without timely updates, Latino students may miss the opportunity to apply to the CSU. Traditionally, minority students submit their applications later in the application period because they have to figure out how they are going to pay for college (California State University, 2008c). As just explained, the financial aid process may be more complicated for Latino students due to their lack of higher education information and resources from trusted messengers. Therefore, once a Latino student does decide to apply to the CSU, they must be aware of application deadlines to ensure the review of their application occurs.

But, without key application information, Latino students may not realize the urgency of submitting their application in a timely manner and could potentially lose their chance to apply immediately, requiring them to wait until the next academic year or

semester (if applications will be accepted) to successfully apply to the CSU. This delay could be troublesome because delaying enrollment in higher education leads to low completion rates for Latino's (Fry, 2002). But in the case that a campus still accepts applications after the November 30th application deadline, the later a student applies still diminishes the chance that their application will be reviewed because once a campus reaches their enrollment target, they halt application review.

To be competitive, all students must submit their applications prior to the November 30th application deadline, making knowledge of the CSU's application policies more important than ever. This will require Latino students, parents, their teachers and counselors to keep track of the CSU, their campus admission requirements and its enrollment deadlines closer than ever. With the current challenges of the state budget, the CSU and their campuses will likely change their policies often as the financial support from the state evolves along with the availability for new student enrollment.

Lower Level of Academic Preparedness

When measured using GPA, senior class rank, and SAT/ACT scores (Swail, Cabrera, and Lee, 2004), nearly 59% of Latino students were "not qualified" for higher education compared to all other racial/ethnic groups. Further, just over 50% of 8th grade Latino students surveyed expected to obtain a Bachelor's degree (2004). The implications for this represent themselves in academic preparedness. If a student does not expect to attend college, they will not properly prepare for its academic admission requirements. For example, Latino's are less likely to take college-preparatory coursework such as

high-level mathematics (2004). Additionally, Latino and African American students are more likely than any other race/ethnicity to attend a high school, which lacks a complete offering of the required A-G college prep classes (Oakes, Rogers, & Silver, et. al., 2006). Academic unpreparedness negatively affects Latino's acceptance and enrollment into a higher education institution as well as their retention and graduation rates (Muñiz, 2006).

How Lower Academic Preparedness Exacerbates Enrollment Cuts for Latino Students

As mentioned earlier in this section, one of the CSU's enrollment management strategies is additional academic admission requirements for out-of-area applications such as higher GPA's. Therefore, lack of academic preparedness will be a greater threat to a Latino student's admission to an out-of-area CSU campus. If a Latino student is already academically unprepared for the basic academic requirements of college admission, they will face a larger academic barrier when seeking admission to a CSU campus outside of their local area.

Hypothesized to be the most vulnerable to CSU's enrollment cuts, Latino students lack higher education information and are less academically prepared. Latino students lack access to information about higher education from trusted messengers- most notably, parents and teachers. Due to this lack of information, Latino students may not have the most up-to-date information about the CSU's evolving application and enrollment policies, threatening their acceptance to a CSU campus. Additionally, Latino students tend to be less academically prepared for higher education than their peers. With additional academic requirements for acceptance to CSU campuses outside their local

area, Latino students may face more academic barriers to higher education.

The California State University system, its budget challenges and chronic over-enrollment, established a backdrop for the implementation of enrollment cuts in the beginning of this chapter. The implementation and impact of enrollment cuts were reviewed in addition to why transfer students and Latino students could be disproportionately impacted by enrollment cuts. Next, in Chapter 3, the methodology presents a full description of data analysis.

Chapter 3

METHODOLOGY

This chapter explainS the method of analysis used to assess the research question: were any student populations disproportionally impacted by CSU's enrollment cuts. The key characteristics studied by the method of analysis will be reviewed in depth. Finally, through an explanatory table, I will introduce the data.

Method of Analysis

I will use a descriptive analysis to analyze CSU enrollment data to discover if any student populations were disproportionally impacted by enrollment cuts. Defined broadly, a descriptive analysis summarizes, organizes and interprets raw data to provide a "situational analysis", or a "snap shot of the situation under study" (Mason, Gillenwater, & Pugh et. al., n.d.). Specifically, I will provide a descriptive, or situational, analysis of enrollment cuts through statistical graphics, or the visual representation of quantitative data. Statistical graphics allows the achievement of four important analytical goals: explore the data, find a structure within the data, check assumptions, and communicate results of analysis (Jacoby, 1997). The rest of this paper will focus on achieving these four analytical goals.

To achieve these goals, bar graphs will visually present the data. Bar graphs are the appropriate form for this analysis because they allow for the comparison of large groups of one-time, discrete data- in this case, percent change in student enrollment. General trends and patterns in student enrollment data will be discussed in terms of

campus, race/ethnicity, and/or class level. Introduced in the Results chapter and fully analyzed within the Conclusion, these trends will focus on the significant ends of the spectrum of positive or negative percent changes in student enrollment.

Data

To discover if any student populations were disproportionally impacted by enrollment cuts within the CSU, this analysis will measure percent change in student enrollment. Percent change in student enrollment will be measured as a change in enrollment between the Fall 2009 and Fall 2010 semesters. This period is appropriate for this analysis because enrollment cuts were to be achieved by the end of the 2010-2011 academic year. Thus, cuts were made within both the 2009-2010 and 2010-2011 academic years, beginning in the Spring 2010 term. Since the 2010-2011 academic year is not complete, this analysis measures enrollment cuts enacted as of the census date for Fall 2010.

Percent change in student enrollment will measure impacts at the system level as well as at each of the 23 CSU campuses. Enrollment data from Fall 2009 and Fall 2010, retrieved from various data sets found on the California State University's Analytic Studies website (http://www.calstate.edu/as/), was used to calculate percent change in enrollment for various race/ethnicities and class level by campus and system-wide.

Key Student Characteristics

I will assess percent change in student enrollment through two student characteristics: class level and student race/ethnicity. Since enrollment cuts primarily

focus on managing the enrollment of new students, class level measures percent change in the enrollment of both first-time freshman (FTF) (typically, recent high school graduates) and transfer students (the majority of which are upper-division students transferring from a community college). These students make up the bulk of newly enrolled students each semester. Total student enrollment by race/ethnicity will also be measured to capture the total impact of enrollment cuts at the campus level to account for continuing students as well as other newly enrolled student groups.

Student race/ethnicity will measure the following race/ethnicities: Latino, African American (AA), Asian/Pacific Islander (API), and White. Latino combines "Mexican American" and "Other Latino" race/ethnicity categories. Similarly, Asian/Pacific Islander combines "Asian American" and "Pacific Islander" categories. As discussed in the Introduction, it is important to study the impacts of enrollment cuts in terms of race/ethnicity. Because not only California is the most racially/ethnically diverse state in the nation, but also as a majority-minority state, California needs to ensure its policies do not limit the opportunities of its diverse population.

Assessing multiple student characteristics adds another layer to this analysis, allowing for specific conclusions to be drawn about the impacts of enrollment cuts within the CSU system or a campus; for example, African American first-time freshman system-wide or Latino transfer students at Northridge, etc. To give the reader an idea of the full range of what will be studied by this analysis, Table 2 lists each of the student populations to be studied.

Table 2
Label and Description of the Student Populations to Be Studied

	Label	Description
1	% Change in Total Campus/System-wide Enrollment	Percent change in total enrollment from Fall 2009 to Fall 2010 by campus or system-wide
2	% Change in Campus/System-wide FTF	Percent change in first-time freshman enrollment from Fall 2009 to Fall 2010 by campus or system-wide
3	% Change in Campus/System-wide Transfers	Percent change in transfer student enrollment from Fall 2009 to Fall 2010 by campus or system-wide
4	% Change in Total AA	Percent change in total enrollment of African American students from Fall 2009 to Fall 2010
5	% Change in FTF AA	Percent change in enrollment of African American first-time freshman from Fall 2009 to Fall 2010
6	% Change in AA Transfers	Percent change in enrollment of African American transfer students from Fall 2009 to Fall 2010
7	% Change in Total API	Percent change in total enrollment of Asian/Pacific Islander students from Fall 2009 to Fall 2010
8	% Change in FTF API	Percent change in enrollment of Asian/Pacific Islander first-time freshman from Fall 2009 to Fall 2010
9	% Change in API Transfers	Percent change in enrollment of Asian/Pacific Islander transfer students from Fall 2009 to Fall 2010
10	% Change in Total Latino	Percent change in total enrollment of Latino students from Fall 2009 to Fall 2010
11	% Change in FTF Latino	Percent change in enrollment of Latino first-time freshman from Fall 2009 to Fall 2010
12	% Change in Latino Transfers	Percent change in enrollment of Latino transfer students from Fall 2009 to Fall 2010
13	% Change in Total White	Percent change in total enrollment of White students from Fall 2009 to Fall 2010
14	% Change in FTF White	Percent change in enrollment of White first-time freshman from Fall 2009 to Fall 2010
15	% Change in White Transfers	Percent change in enrollment of White transfer students from Fall 2009 to Fall 2010

This chapter presented the methodology by introducing the method of analysis, key student characteristics and the data. The next chapter will present the results of the descriptive analysis, focusing on a discussion of general enrollment trends for each student population by race/ethnicity.

Chapter 4

RESULTS

To assess the impact of enrollment cuts within the California State University (CSU) system, percent change in enrollment of various student populations from Fall 2009 to Fall 2010 were analyzed. Using descriptive statistics and a visual representation of the data via bar graphs, trends and patterns present among the percent change in student enrollment data were decoded. This section will review major enrollment trends and patterns in enrollment by race/ethnicity. Trends presented will represent percent changes in enrollment at the significant ends of the spectrum where enrollment cuts had the most positive or negative impact.

Table 3 introduces the reader to the raw data of percent change in student enrollment across campuses and system-wide. Specifically, the mean, standard deviation, minimum and maximum for each student population studied are presented. This table provides a sneak peak as to the variation among the impacts of enrollment cuts on various student populations throughout the system. For example, the mean percent change between Fall 2009 and Fall 2010 for total African American student population across all campuses and the system is -12.6%, with a minimum of -57.66% and maximum of +34.38%.

Table 3
Mean, Standard Deviation, Minimum & Maximum Values Of the Student Populations To Be Studied By Campus/System-wide

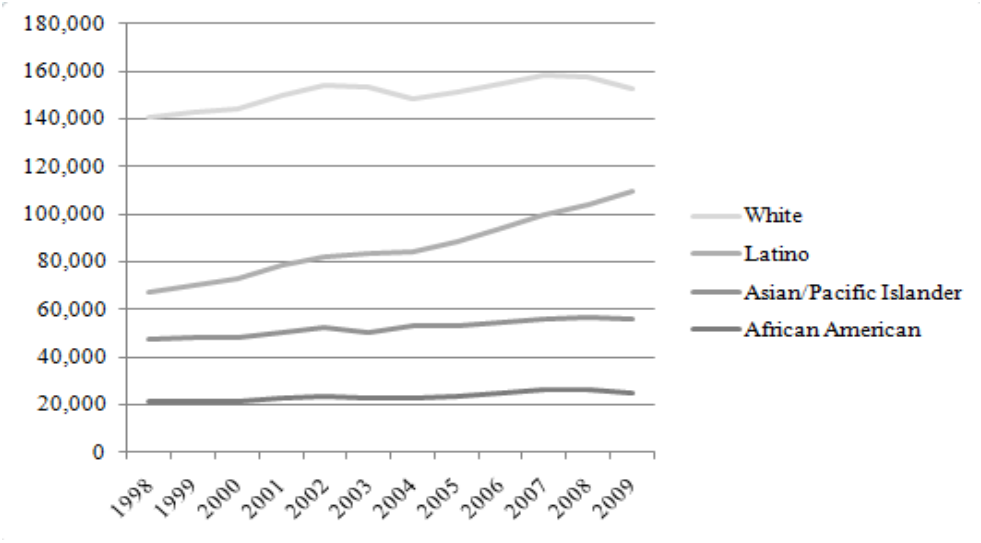
Label	Mean	Standard Deviation	Minimum	Maximum
% Change in Total Campus Enrollment	-4.07	4.32	-14.43	3.86
% Change in Campus/System-wide FTF	-7.33	15.25	-43.94	16.63
% Change in Campus/System-wide Transfers	1.43	19.07	-42.76	28.70
% Change in Total AA	-12.60	14.13	-39.62	34.38
% Change in FTF AA	-8.33	37.96	-57.66	77.78
% Change in AA Transfers	-16.62	55.00	-125.00	80.00
% Change in Total API	1.55	12.71	-40.43	21.97
% Change in FTF API	0.54	26.51	-75.00	32.76
% Change in API Transfers	11.52	28.03	-84.09	52.94
% Change in Total Latino	3.82	10.38	-32.12	24.36
% Change in FTF Latino	-1.36	22.28	-56.88	30.68
% Change in Latino Transfers	9.34	19.85	-36.29	39.75
% Change in Total White	-12.17	16.23	-84.52	0.00
% Change in FTF White	-11.20	18.67	-51.46	18.69
% Change in White Transfers	0.29	23.11	-53.93	28.24

Current Race/Ethnicity Breakdown of the CSU

Despite the fiscal challenges of the CSU, its student population grew by more than 80,000 students between Fall 1998 and Fall 2009. Of this growth, over 40,000 students (or around 50%) were Latino. This increase represents the largest growth of any racial/ethnic student population within the CSU during this timeframe. This growth has been steady over the past decade (see Figure 6), generally reflecting the overall population trend in California. Additionally, White student growth was an estimated

12,000 students along with nearly 10,000 Asian/Pacific Islander students. African American student enrollment made minor gains of 3,000 students. The rest of this section will outline the impacts of enrollment cuts between the Fall 2009 and Fall 2010 semesters by race/ethnicity and class level.

Figure 6
CSU Enrollment by Race/Ethnicity, Fall 1998-2009



Source: California State University. n.d (a) & California State University, n.d (b)

Percent Change in Student Enrollment Trends

Overall, total student enrollment decreased -5% system-wide. This -5% decrease played out differently at campuses across the system. In Chapter 2, Table 1 laid out the mandated enrollment reductions by campus size, ranging from -10.8% to 0% for a total reduction of 40,000 students. All campuses decreased their total enrollment except three, achieving a reduction of nearly 21,000 students. In reality, by campus, the impact of enrollment cuts from Fall 2009 to Fall 2010 on total student enrollment ranged from

-14% (East Bay) to +3.86% (Maritime Academy).The increases made at three campuses were +3.86% at Maritime Academy, +2.13% at Monterey Bay, and +0.21% at Northridge. Further, student enrollment by class levels realized mixed results.

Per California's Master Plan for Higher Education, first-time freshman were negatively impacted by enrollment cuts, decreasing -6.13% system-wide. At 14 of 23 campuses, decreases in first-time freshman ranged from -43.94% at Pomona to -1.27% at Chico. Additionally, transfer students increased +4.64% system-wide. Of the 13 campuses whose transfer student enrollment increased, Los Angeles transfer students increased the most (+28.70) while Long Beach increased the least (+8.7).

As I present the results, it is important to keep in mind CSU campuses range in total student enrollment from less than 1,000 at Maritime Academy to over 35,000 at Northridge (see Appendix B) with various amounts of students of each race/ethnicity and at class level. Therefore, large positive or negative percent changes in student enrollment have to be synthesized in the context of the campus' size.

African American Students

African American students make up an average of 4% of the CSU student population. The following section will review the impacts of enrollment cuts to African American enrollment. Presented first are impacts to total African American students system-wide and by campus then proceeded by first-time freshman, transfer students and concluding with campus trends. As a preview to this discussion, Table 4 summarizes system-wide impacts to African American student enrollment at the multiple class levels

studied including campuses who saw a major increase or decrease in their African American population, as noted by the plus (+) or minus (-) sign after the campus' name.

Table 4
Summary of Impact of Enrollment Cuts on African American Students

	Total Enrollment System-wide	First-Time Freshman	Transfer Students	Notable Campus Trends
African American	-15.4%	-10.5%	-23.4%	San Marcos (-) Monterey Bay (+) Maritime Academy (+)

African American Total Student Enrollment

System-wide, African American student enrollment decreased under enrollment cuts. At all but two CSU campuses, total African American student enrollment was negatively impacted, ranging from -37% at Channel Islands to -1.4% at Northridge. As previously mentioned, percent change must be put into context. A decrease of -37% at Channel Islands represents a loss of 21 African American students, but at Northridge, a decrease of -1.4% represents a loss of 35 students. Maritime Academy (+34.4%) and Monterey Bay (+11.5%) were the only two campus to see an increase in total African American enrollment.

African American First-Time Freshman Enrollment

System-wide, African American first-time freshman enrollment decreased -10.5%. At the campus level, 14 CSU campuses saw their African American first-time freshman enrollment decrease from -57.7% at San Diego to -2.9% at Fullerton. Of the nine campuses who increased their African American first-time freshman enrollment,

increases ranged from +6.98% at Monterey Bay to +77.8% at Channel Islands.

African American Transfer Student Enrollment

Additionally, African American transfer student enrollment decreased system-wide by -23.4%. The impact to the enrollment of African American transfer students' was 50-50 with half of campuses increasing and half decreasing (Channel Island saw no change). Increases in African American transfer student enrollment ranged from +1.14% at San Diego to +80% at Monterey Bay. On the other hand, decreases ranged from -125% at San Marcos to -14% at Humboldt.

Campus Trends in African American Student Enrollment

African American student enrollment faired the best at Maritime Academy and Monterey Bay with both seeing an increase in the enrollment at all class levels studied. Conversely, San Marcos, East Bay, Dominguez Hills, and San Bernardino realized significant decreases in their African American student enrollment at all levels studied (see Table 4).

Asian/Pacific Islander Students

Asian/Pacific Islander students make up approximately 13% of the CSU student population. The following section will review the impacts of enrollment cuts to Asian/Pacific Islander students. Presented first are impacts to total Asian/Pacific Islander enrollment system-wide and by campus then proceeded by first-time freshman, transfer students and concluding with campus trends. As a preview to this discussion, Table 5 summarizes system-wide impacts to Asian/Pacific Islander student enrollment at the

multiple class levels studied including campuses who saw a major increase or decrease in their Asian/Pacific Islander population, as noted by the plus(+) and minus (-) sign after the campus' name.

Table 5
Summary of Impact of Enrollment Cuts on Asian/Pacific Islander Students

	Total Enrollment System-wide	First-Time Freshman	Transfer Students	Notable Campus Trends
Asian/Pacific Islander	+3.84%	+3.49%	+18.96%	Channel Islands (-) Pomona (-) Stanislaus (+)

Total Asian/Pacific Islander Student Enrollment

Asian/Pacific Islander total student enrollment increased system-wide nearly +4%. Total campus enrollment of Asian/Pacific Islander students increased at 17 campuses, decreasing at 6 campuses. Total campus enrollment of Asian/Pacific Islander student increases peaked at nearly +22% (San Luis Obispo) while campuses total Asian/Pacific Islander student enrollment decreased as much as -40% (Channel Islands).

Asian/Pacific Islander First-Time Freshman

Overall, Asian/Pacific Islander first-time freshman student enrollment increased +3.5%. Asian/Pacific Islander first-time freshman increased enrollment at 16 out of 23 campuses, ranging from +2.24% at Fullerton to +32.8% at Sonoma. Of the six campuses that saw decreases in Asian/Pacific Islander first-time freshman, Channel Islands saw the largest decrease at -75% while Pomona saw the smallest decrease at -18.9%. There was

no change in the enrollment of Asian/Pacific Islander first-time freshman at San Bernardino.

Asian/Pacific Islander Transfer Students

Additionally, Asian/Pacific Islander transfer students increased system-wide almost +19%. Asian/Pacific Islander transfer student enrollment increased at 16 campuses ranging from +2.9% at Sacramento to +52.9% at Chico. The six campuses whose Asian/Pacific Islander transfer student enrollment decreased ranged from -84% at San Luis Obispo to -3.4% at Pomona. There was no change in Asian/Pacific Islander transfer students at Monterey Bay.

Campus Trends in Asian/Pacific Islander Student Enrollment

At 10 out of 23 campuses, Asian/Pacific Islander enrollment increased at all class levels studied. Standout campuses for Asian/Pacific Islander student enrollment included Stanislaus (over +27% increases at two levels). Additionally, Asian/Pacific Islander enrollment decreased at all class levels at two campuses: Pomona and Channel Islands.

Latino Students

Latino students make up around 25% of the CSU student population. The following section will review the impacts of enrollment cuts to Latino students. Presented first are impacts to total Latino enrollment system-wide and by campus then proceeded by first-time freshman, transfer students and concluding with campus trends. As a preview to this discussion, Table 6 summarizes system-wide impacts to Latino student enrollment at the multiple class levels studied including campuses who saw a major

increase or decrease in their Latino population, as noted by the plus (+) or minus (-) sign after the campus' name.

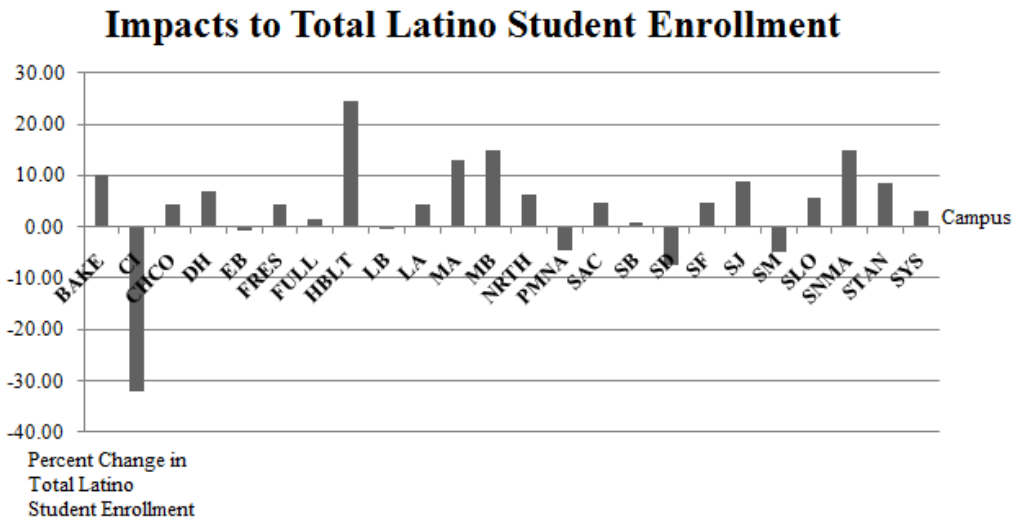
Table 6
Summary of Impact of Enrollment Cuts on Latino Students

	Total Enrollment System-wide	First-Time Freshman	Transfer Students	Notable Campus Trends
Latino	+3%	+1.6%	+11%	San Diego (-) Pomona (-) Humboldt (+) Sonoma (+)

Latino Total Student Enrollment

System-wide, Latino student enrollment increased at all levels, ranging from +3% for total campus enrollment to nearly +11% for transfer students. Total campus enrollment of Latino students increased at all but six campuses. Increases in total Latino student enrollment peaked at +24.4% (Humboldt) (see Figure 7 below). On the other hand, decreases in total Latino student enrollment ranged from -32% at Channel Islands to -0.04% at Long Beach.

Figure 7
Summary of Impact of Enrollment Cuts on Total Latino Student Enrollment



Legend: BAKE (Bakersfield), CI (Channel Islands), CHCO (Chico), DH (Dominguez Hills), EB (East Bay), FRES (Fresno), FULL (Fullerton), HBLT (Humboldt), LB (Long Beach), LA (Los Angeles), MA (Maritime Academy), MB (Monterey Bay), NRTH (Northridge), PMNA (Pomona), SAC (Sacramento), SB (San Bernadino), SD (San Diego), SF (San Francisco), SJ (San Jose), SLO (San Luis Obispo), SM (San Marcos), SNMA (Sonoma), STAN (Stanislaus), SYS (System-wide)

Latino First-Time Freshman Enrollment

Latino first-time freshman enrollment increased a mere +1.6% system-wide. Only 8 out of 23 campuses realized a decrease in their Latino first-time freshman enrollment. Negative impacts to Latino first-time freshman enrollment ranged from -56.9% at San Diego to -1.4% at Sacramento while positive gains ranged from +4% at Los Angeles to +30.7% at Bakersfield.

Latino Transfer Student Enrollment

Latino transfer students realized the largest gains system-wide out of all the class levels studied, increasing nearly +11%. Of the 16 campuses whose Latino transfer student enrollment increased, the percent change in transfer student enrollments ranged from +0.11% at Dominguez Hills to +39.75% at Humboldt. At seven campuses, decreases in Latino transfer student enrollment ranged from almost -31% at San Marcos to -0.66% at San Diego.

Campus Trends in Latino Student Enrollment

Latino enrollment increased at all class levels at 12 campuses and at two class levels at 7 campuses. Humboldt and Sonoma saw some of the greatest gains in Latino enrollment with Humboldt increasing as much as +24% at two levels and Sonoma +25% at two levels. Campuses increasing their enrollment of Latino students at two levels were Channel Islands, Chico, Long Beach, and Maritime Academy. As for decreasing Latino enrollment, East Bay, Northridge, San Diego and Pomona decreased Latino student enrollment at all levels studied.

White Students

White students make up approximately 35% of the CSU student population. The following section will review the impacts of enrollment cuts to White students. Presented first are impacts to total White enrollment system-wide and by campus then proceeded by first-time freshman, transfer students and concluding with campus trends. As a preview to this discussion, Table 7 summarizes system-wide impacts to White student enrollment

at the various class levels studied including campuses who saw a major increase or decrease in their White student population at multiple class levels, as designated by the plus (+) or minus (-) sign after the campus' name.

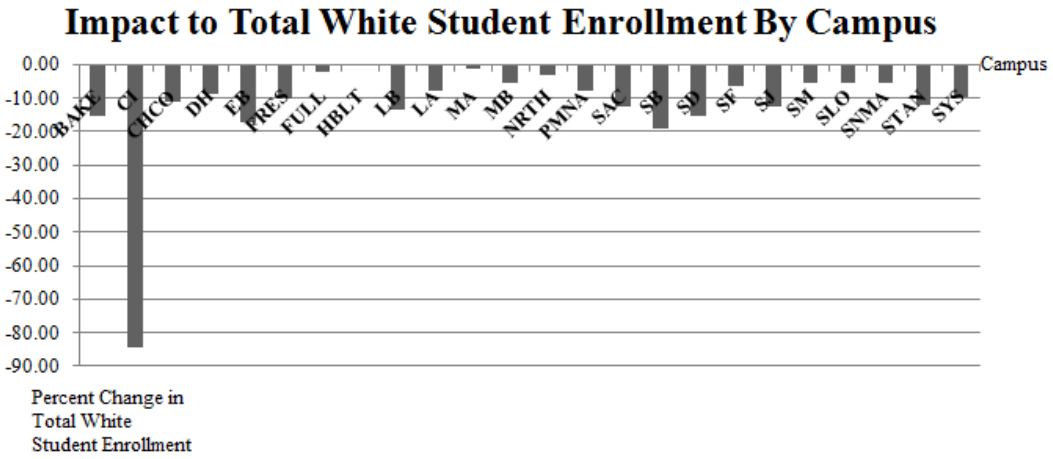
Table 7
Summary of Impact of Enrollment Cuts on White Students

	Total Enrollment System-wide	First-Time Freshman	Transfer Students	Notable Campus Trends
White	-9.8%	-13.5%	4.75&	East Bay (-) Monterey Bay (-)

White Total Student Enrollment

White student enrollment decreased nearly -10% system-wide. Additionally, White student enrollment decreased at all campuses except at Humboldt where there was no change (see Figure 8- for campus legend, refer to Figure 7). Total White student enrollment decreases ranged from -84.52% at Channel Islands to -1.14% at Maritime Academy.

Figure 8
Percent Change in Total White Student Enrollment by Campus, Fall 2009 to Fall 2010



White First-Time Freshman Enrollment

White first-time freshman student enrollment decreased at 17 campuses with impacts ranging from -51.5% at Pomona to -2.7% at Sonoma for a total decrease of -13.5% system-wide. From Long Beach (+4.3%) to Northridge (+18.7%), six campuses realized increases in their White first-time freshman enrollment.

White Transfer Student Enrollment

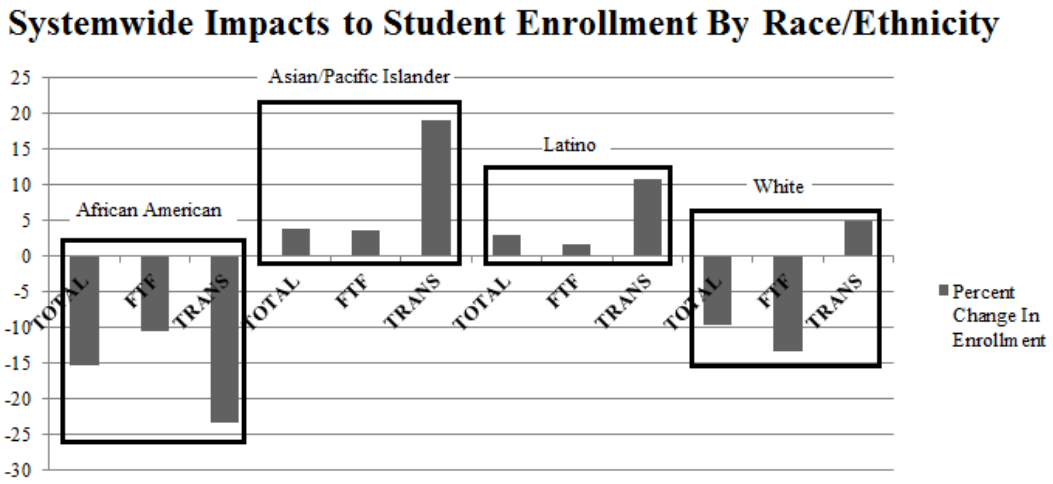
White transfer students were the only White class level whose enrollment increased (+4.75%) system-wide. At the campus level, White transfer student enrollment increased at 14 campuses. Increases in White transfer student enrollment ranged from +0.42% at Long Beach to +28.2% at Fresno. However, White transfer student enrollment decreased at nine campuses, ranging from -53.9% Monterey Bay to -2.3% at Chico.

Campus Trends in White Student Enrollment

No campus increased its White student enrollment at all class levels studied. Six campuses saw increases in White student enrollment at the two class levels studied. Of these six campuses, three saw the largest increases at two class levels: Los Angeles (+26.65% for transfers and +6.4% for first-time freshman), Long Beach (+14.81% for first-time freshman and +13.79% for transfers), and Northridge (+24.52% for transfers and +18.69% for first-time freshman). White student enrollment did decrease at all class levels studied at four campuses: Chico, East Bay, Monterey Bay, and San Luis Obispo. Monterey Bay saw the largest decreases of -54% for transfer students and -35% for first-time freshman.

To recap, the impacts of enrollment cuts by race/ethnicities were as follows. African American students realized the largest negative impact while Asian/Pacific Islander students realized the largest gains. Latino students also made gains, but not as large as Asian/Pacific Islander students. White students decreased overall but increased in transfer students. Figure 9 summarizes all trends by race/ethnicity.

Figure 9
System-wide Impacts to Student Enrollment by Race/Ethnicity

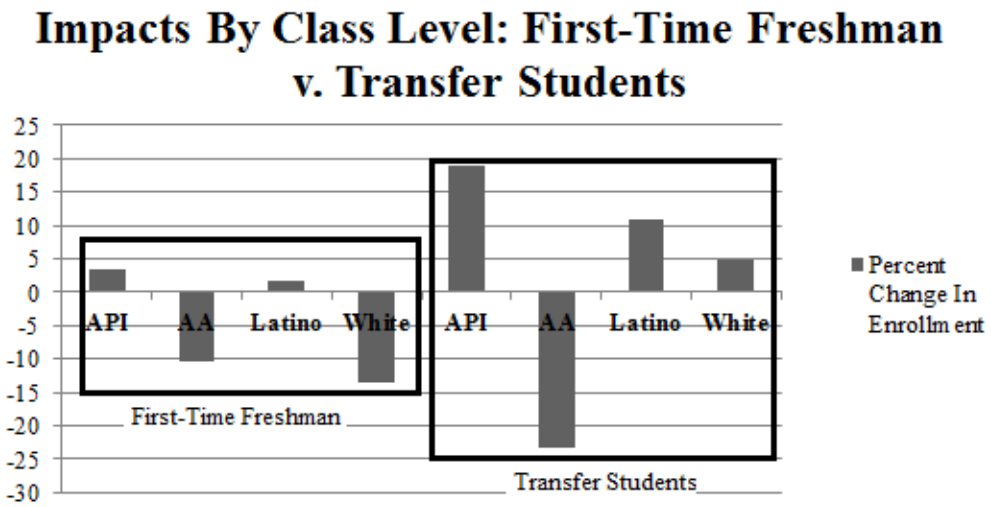


Class Level Impacts

Additionally, it is important to highlight the impacts at the class level for first-time freshman and transfer students. While initially hypothesized that transfer students would be disproportionally impacted by enrollment cuts as their enrollment has decreased over the past couple years (see Figure 5), first-time freshman were actually disproportionally impacted by enrollment cuts, realizing a decrease of -6.13%. Interestingly enough, first-time freshman increased for two of the race/ethnicities studied (Asian/Pacific Islander and Latino), but not for the other two (African American and White). Transfer students increased +4.64% system-wide and for 3 of 4 race/ethnicity studied. Specifically by race/ethnicities, impacts to transfer students are as follows: Asian/Pacific Islander +19%, Latino +10.8%, and White +4.8% but -23.4% for African American. This makes sense because transfer students have priority over first-time

freshman in the hierarchy of newly enrolled students. Figure 10 lays out these trends visually.

Figure 10
Impacts By Class Level: First-Time Freshman v. Transfer Students



This chapter outlined the impact of enrollment cuts within the California State University (CSU) system as measured by percent change in student enrollment of various student populations. Major trends and patterns in enrollment changes for the CSU system, by CSU campus, by class level and by race/ethnicity yielded some unexpected results. The next and final chapter, the Conclusion, will revisit the research question and discuss the implications of enrollment cuts outlined in this chapter.

Chapter 5

CONCLUSION

To complete this analysis, the implications of enrollment cuts will be analyzed in context of the research question. Then, I will present an update of the status of the California State University (CSU) student enrollment conditions. Finally, I will conclude with ideas for future analyses of student enrollment at the CSU.

Revisiting the Research Question

In this thesis, I sought to discover if any student populations were disproportionally impacted by enrollment cuts within the CSU. To answer this question, I assessed the preliminary impacts of enrollment cuts with a descriptive analysis of both system-wide and campus-level impacts to student enrollment. Additionally, I focused on two student characteristics: race/ethnicity and class level, hypothesizing that Latino students and transfer students would be disproportionally impacted by enrollment cuts. My results proved contrary to this hypothesis.

African American students were disproportionally impacted by CSU enrollment cuts. Systemwide, African American enrollment decreased -15.4%. Additionally, African American student enrollment decreased every class level studied: first-time freshman (-10.5%) and transfer students (-23.4%). Further, total African American student enrollment only increased at only two campuses, Maritime Academy (+34.4%) and Monterey Bay (+11.5%). In reality, Latino students made positive gains system-wide, at all class levels studied and at nearly every CSU campus. Latino students increased their

total enrollment within the CSU by +3% as well as +1.6% for first-time freshman and +10.8 for transfer students.

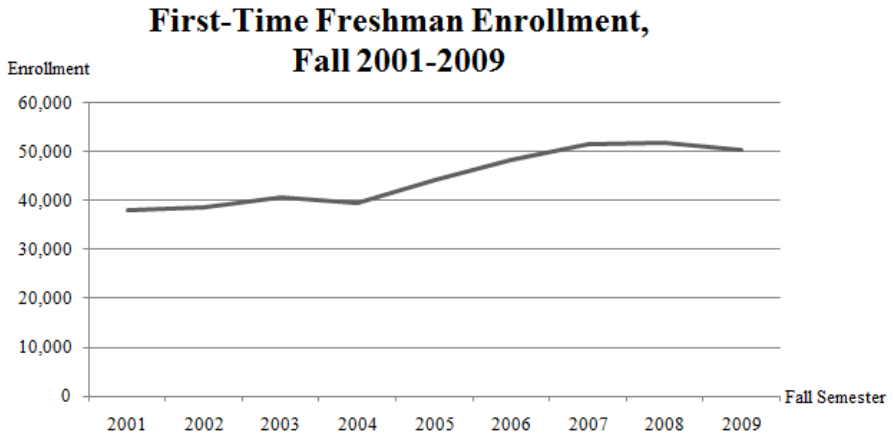
First-time freshman were disproportionally impacted by enrollment cuts. System-wide, first-time freshman decreased by -6.13%. At the campus level, 14 campuses saw their total first-time freshman enrollment decrease. On the other hand, transfer students increased by +4.64% system-wide and at 13 campuses. Overall, the hypothesis was incorrect in its predictions for both the race/ethnicity and class level impacts of enrollment cuts.

The results of this analysis may simply be consistent with demographic changes of the CSU student enrollment. Figure 6 (Chapter 4) presented CSU enrollment by race/ethnicity over the past decade, which read similar to the results of this analysis with African American and White enrollment declining and Asian/Pacific Islander and Latino enrollment increasing. It could be the case that no racial/ethnic student population was disproportionally impacted by enrollment cuts, but that the racial/ethnic impacts of enrollment cuts, while more dramatic than previous years, were consistent with trends in enrollment at the CSU by race/ethnicity or even the demographics of California, which are becoming increasingly Latino (see Figure 1 in Chapter 1).

While I focused the bulk of my attention on the impacts of enrollment cuts to race/ethnicity, surprising results for the class level analysis became evident. I predicted transfer students would be disproportionally impacted by enrollment cuts versus first-time freshmen due to the trend of decreasing enrollment of transfer students present

within the past three academic years as seen in Figure 5 (Chapter 2). Additionally, first-time freshman have also decreased their enrollment but at a lesser rate than transfer students (see Figure 11), hovering around the 50,000 student mark for the past three years. It could be the impacts of enrollment cuts by class level are consistent with class level enrollment trends over the past decade. Yet, these results are also consistent with CSU policy to give local eligible transfer students priority over local first-time freshman.

Figure 11
First-Time Freshman Enrollment, Fall 2001-Fall 2009



Source: California State University, n.d.(m), n.d.(p), n.d.(q), n.d.(r), n.d.(s), n.d.(t), n.d.(u), n.d.(v)

Recently enacted policies have sought to make transferring from a community college to a CSU easier such as SB 1440, which "creates an associate degree for transfer that guarantees admission with junior standing to the CSU system" (California Community College Chancellor's Office, 2010). It could be that such policies are achieving their goal to increase transfer students as a proportion of new student enrollment to the CSU each year. Again, Figure 5 (Chapter 2) shows transfer students

have been decreasingly choosing the CSU as a four-year option to complete their Bachelor's degree. Another explanation for the increase in transfer student enrollment, in the midst of consecutive years of decrease, is transfer students realized there would be less opportunity for them at a CSU campus if they were not on their game. Therefore, they ensured they met all eligibility requirements and deadlines when applying to the CSU. All of the trends presented within this analysis warrant further analysis as the state of California continues to face fiscal challenges, which can negatively impact CSU student enrollment as explained in Chapter 2.

Status of Student Enrollment in the CSU

Enrollment cuts sought to decrease total CSU enrollment by 40,000 students to eliminate unfunded students CSU campuses could not financially support. This analysis focused on the impacts of enrollment cuts through the Fall 2010 semester. Between Fall 2009 and Fall 2010, an enrollment decrease of -5%, or almost 21,000 students, was achieved. This represents about half of the goal established by the CSU. It is probably safe to say the CSU did not cut the other 19,000 students in the Winter and Spring 2011 semesters and therefore, did not realize the decrease in enrollment it sought to achieve. (At the time of this writing, Spring 2011 system-wide enrollment statistics had not been published.)

Further, contrary to the intent of enrollment cuts, the CSU actually added 8,100 course sections to its Fall 2010 academic schedule (California State University, 2010i) as well as up to 3,000 course sections for Winter and Spring 2011 (California State

University, 2010k) to admit up to 10,00 new students throughout the system (2010k). Similarly, the CSU accepted applications for the Spring 2011 semester despite Chancellor Reed's "uncertainty regarding state support for the 2010-2011 academic year" (California State University, 2010j). The CSU ultimately enrolled up to 30,000 students for the Winter and Spring 2011 semesters (California State University, 2010l).

These class section restorations were funded through one-time stimulus funding from the Federal American Recovery and Reinvestment Act. This is especially problematic because such funds were one-time in nature when the students it funded were not. In other words, the money to fund classes only comes once but the students, once admitted and enrolled, can be enrolled until they graduate without a commitment from the state to fund them. Without these course restorations, the CSU may have been able to realize its goal of cutting enrollment by 40,000 students. It is important to remember that even though enrollment cuts decrease opportunities for students, their objective was to put the CSU system into a better fiscal position. By eliminating students for whom there is no ongoing state financial support, the CSU would be better able to serve the education of students it does have, diminishing the need for such drastic enrollment cuts in the future.

As a side note, anecdotal evidence suggests some campuses have been strategically "over-enrolling", accepting more students than the state target would allow. The suggestion is that some larger campuses have sufficient economies of scale that, at least for now, the student fees provided sufficient revenue to keep the campus afloat.

This strategy is neither publicly documented nor effective in the end. In the meantime, students are feeling the effects of the CSU's financial instability through declining campus resources and the decreasing availability of classes needed to graduate.

Balancing the desire to enroll and educate as many CSU-eligible students with strained financial resources is a dilemma, which will not likely be resolved anytime soon. Despite receiving an increase in funding in 2010-2011 for the first time since 2007, the Governor's current budget proposal calls for a $500 million decrease in state support to the CSU. If implemented, the CSU's budget would be similar to 1999-2000 levels when it served 70,000 fewer students (California State University, n.d. (i)). Obviously, the CSU has been, and will likely continue to be, on a funding rollercoaster until the economy restores to a homeostasis. Therefore, it is likely the CSU will revisit enrollment cuts to manage budget deficits in the future.

Options for Further Research

As previously stated, the results of this thesis could lead to future research on enrollment by race/ethnicity and class level within the CSU. Regarding the student characteristic of race/ethnicity, more in depth research could further clarify whether CSU enrollment cuts are merely consistent with the demographic changes of the CSU and the state overall. Additionally, a similar analysis could present explore the linkages between new transfer student policies and transfer student enrollment levels. An assessment of new legislation and corresponding CSU/community college policy could show impacts on CSU transfer students.

As California moves forward, it will need to find a sustainable resolution to the problems plaguing its public higher education systems. With California facing a potential shortfall of a million college graduates, California will need to maintain college enrollment and graduation despite a poor economy and state budget deficits. Similarly, as the demographics of California evolve, the state will also need to provide educational opportunities for its population to thrive and move California into the future.

APPENDICES

APPENDIX A

Map of the 23 California State University Campuses

Source: California State University, n.d. (j)

APPENDIX B

Percent Change in Total Enrollment by Campus and System-wide, Fall 2009-Fall 2010

		Percent Change In Total Student Enrollment	Fall 2009	Fall 2010
1	Bakersfield	-1.23	8,003	7,906
2	Channel Islands	-0.89	3,862	3828
3	Chico	-5.91	16,934	15989
4	Dominguez Hills	-4.50	14,477	13854
5	East Bay	-14.43	14,749	12,889
6	Fresno	-2.71	21,500	20,932
7	Fullerton	-1.89	36,262	35,590
8	Humboldt	-0.65	7,954	7903
9	Long Beach	-6.41	35,557	33416
10	Los Angeles	-2.37	20,619	20142
11	Maritime Academy	3.86	823	856
12	Monterey Bay	2.13	4,688	4790
13	Northridge	0.21	35,198	35272
14	Pomona	-7.36	22,273	20747
15	Sacramento	-8.17	29,241	27033
16	San Bernardino	-8.85	17,852	16400
17	San Diego	-12.57	33,790	30016
18	San Francisco	-2.53	30,469	29718
19	San Jose	-7.58	31,280	29076
20	San Luis Obispo	-5.26	19,325	18360
21	San Marcos	-0.46	9,767	9722
22	Sonoma	-1.80	8,546	8395
23	Stanislaus	-3.38	8,586	8305
24	System-wide	-5.02	433,054	412,372

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