## California State University Northridge

Factors Affecting the Success of Freshmen From CSUN's Top Feeder High Schools (Fall 2003-06 Entry Cohorts)

> by

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June 2008
(revised)

## Factors Affecting the Success of Freshmen From CSUN's Top Feeder High Schools (Fall 2003-06 Entry Cohorts)

The students in each Fall's cohort of new CSUN freshmen come to the university as recent graduates of a large number of high schools. By way of example, 543 California high schools sent at least one new student to CSUN in Fall 2006, with 144 sending at least five and 99 sending 10 or more. The comparable figures for the Fall 2005 freshman cohort are 513, 142, and 92. The number of high schools consistently sending relatively large numbers of new students to CSUN (i.e., 25 or more per year), however, is small. Students from this select group are worthy of closer examination, since the area high schools from which they stem might be engaged in partnerships designed to strengthen the preparation they provide to future graduates bound for CSUN. Since the patterns described below for the largest feeder high schools are likely to also apply to high schools sending smaller numbers of students to CSUN (e.g., 10-20 annually), similar partnerships with some of them might prove fruitful as well.

The following pages highlight a range of factors that contribute to the success of those CSUN freshmen who graduated from the 34 local public high schools sending the largest number of freshmen to the university during the five most recent Fall terms (2003-07). For the purposes of the present discussion, "success" is defined as persistence into the second year of college. Factors fostering this "one-year continuation rate," as it is called, were isolated with the aid of a series of multivariate regression analyses; they are summarized in Appendix A.

Table 1 lists the 34 public high schools that are the focus of discussion here. All sent at least 124 students to CSUN during the 2003-07 period, an average of 25 per year. This cut-off was chosen to insure that the averages and percentages calculated for individual schools would be stable and not subject to significant fluctuation with small changes in the underlying numbers. Twenty-three of the high schools shown in Table 1 are part of LAUSD, while 11 belong to school districts elsewhere in Los Angeles County. In any given Fall term during the 2003-07 period, students from the high schools in question
account for $37 \%$ to $49 \%$ of all freshmen entering CSUN in that term. Collectively, the students from the largest feeders make up two-fifths of the first time freshmen entering CSUN during the period under study, with the LAUSD schools contributing approximately three-tenths of the newly enrolled freshmen and the schools elsewhere in the county one-tenth.

The second-to-last column of Table 1 shows the one-year continuation rates of the freshmen from each school who entered CSUN during the 2003-06 period. ${ }^{1}$ Although the continuation rate of freshmen from the LAUSD schools is somewhat lower than the comparable rate for the other large feeder schools, the difference is modest ( $78 \%$ vs. $81 \%$ ). Even more unexpected is the fact that the $79 \%$ continuation rate for the CSUN students graduating from the 34 large feeders exceeds the $75 \%$ continuation rate for all freshmen entering during the period under study. In addition, the range of continuation rates is relatively small. Although it ranges from $60 \%$ to $91 \%$ for the LAUSD schools, this 31 -point range shrinks to $12 \%$ $(73 \%$ to $85 \%)$, if one excludes the two schools with the lowest continuation rates and the one with the highest rate. The continuation rates for the schools outside LAUSD do not vary greatly either, ranging from $75 \%$ to $89 \%$.

## Factors Distinguishing Students from Clusters of High Schools

Despite the limited variation, three relatively distinct groups of high schools could be distinguished by the one-year CSUN continuation rates of their graduates:

- "low" continuation rate schools, whose rates do not exceed the overall rate for all freshmen entering during the 2003-06 period (i.e., they are below 76\%).
- "medium" continuation rate schools, whose rates range between $76 \%$ and $81.9 \%$.
- "high" continuation rate schools, whose rates are $82 \%$ or higher.

Although the cut-points among these three groups are somewhat arbitrary, using them to group the freshmen entering CSUN during the 2003-06 period yields relatively equal groupings, with $33 \%$ of the

[^0]students falling into the high category, $39 \%$ into the medium grouping, and $27 \%$ into the low grouping. The tri-partite division also allows one to identify potentially important antecedents of differing continuation rates.

The wide range of antecedent factors initially examined is evident from Tables 2, 3, and 4. The indicators considered are of three sorts: student background, high school preparation, and CSUN performance. The three tables show the degree to which each distinguishes the freshmen within the three continuation rate groupings. The first row of Table 2 indicates that the mean continuation rate of the high schools in each grouping is clearly distinct, with, on average, $85 \%$ of the students in the high grouping persisting into a second year of study, compared to $79 \%$ for the medium grouping and $71 \%$ for the low grouping. By and large, the three values for any of the variables shown in Tables 2-4 tend to vary in a linear fashion, with the high and low groupings defining the two extremes and the value for the medium grouping falling somewhere in between.

The remainder of Table 2 examines the importance of a range of socio-economic characteristics for one-year continuation rates. The figures indicate that the typical freshman entering CSUN from the top feeder high schools under study is a U.S. citizen, a woman, a student of color, and received some grant or scholarship aid during her first year at CSUN. Not surprisingly, this profile also typifies the larger group of freshmen entering CSUN during the 2003-06 period.

The second section of Table 2 indicates that school district clearly differentiates continuation rates, with students in the low rate grouping considerably more likely to stem from LAUSD schools than those in the high rate grouping ( $93 \%$ vs. $71 \%$ ). Students' racial and ethnic background is also an important distinguishing characteristic, as is evident from the fact that under-represented minority students are a far greater presence in the low rate grouping than in the high rate grouping ( $73 \%$ vs. $31 \%$ ). Finally, students receiving grant or scholarship aid during their first year at CSUN are more evident in the low rate than in the high rate grouping ( $77 \%$ vs. $54 \%$ ). The average amount of aid received, however, appears to have
little impact on continuation rates. The same applies to gender, citizenship status, and the degree to which students rely on loans to help cover their college expenses. In keeping with the program's emphasis on disadvantaged students, the EOP freshmen are somewhat more frequently found in the low than in the high continuation rate grouping ( $23 \%$ vs. $10 \%$ ). This reflects the socio-economic differences between these two types of schools.

Table 3 contains a series of factors reflecting different aspects of students' high school preparation, most of which revolve around their proficiency in English and mathematics at CSUN entry. The figures indicate that the majority of students are not proficient in both subjects at entry, though students from the high continuation rate schools are more than twice as likely as those from the low rate schools to be fully proficient ( $36 \%$ vs. $15 \%$ ). Of those who are proficient in either mathematics or English at entry, the majority are exempt from taking the Elementary Mathematics or English Proficiency Tests (ELM and EPT). During the period under study, relatively few students were exempt from these CSU entry examinations thanks to their performance on the EAP (5\% for English and 3\% for mathematics), though this may change for cohorts entering in the next few years. The pass rates for students from the top feeder high schools attempting the entry examinations are surprisingly low: $19 \%$ for the EPT and $28 \%$ for the ELM.

Students needing remediation in English at entry are far more numerous in the low continuation rate grouping than in the high continuation rate grouping ( $78 \% \mathrm{vs} .55 \%$ ) and less likely to be exempt from taking the EPT ( $12 \%$ vs. $27 \%$ ). Differences in proficiency in mathematics at entry follow a similar pattern, but tend to be more sharply drawn than those for English. Students in the high continuation rate grouping are more likely than those in the low grouping to be exempt from taking the ELM test ( $37 \%$ vs. $16 \%$ ), to have passed the test if they attempted it ( $35 \%$ vs. $18 \%$ ), and to have higher average ELM scores (44 vs. 36). Further, they are less likely than students in the low rate grouping to need remediation in mathematics at entry ( $41 \%$ vs. $69 \%$ ).

Surprisingly, high school GPA appears to bear little relationship to persistence at CSUN; half of the students from the largest CSUN feeder high schools graduate with cumulative GPAs ranging from 2.85 to 3.41. Admission status also has little effect on continuation rates, largely because so few specially admitted students (3\%) are among those under study. In contrast, students' average SAT scores do vary significantly for each of the three continuation rate groupings, with the differences more pronounced for the SAT mathematics scores ( 500 for the high grouping vs. 430 for the low grouping). On average, the students under study received scores of 450 on the English section of the SAT, 470 on the mathematics section, for an average composite score of 930.

The performance indicators summarized in Table 4 suggest that students from the top feeder high schools tend to be relatively successful during their initial year at CSUN. Three-fifths attempted more than 12 units during their first term ( $61 \%$ ), while half attempted 15-24 units during their first year. These course-taking patterns, coupled with the college credits students brought with them, yielded 19-27 earned units for just over half of the students by the end of their first year. ${ }^{2}$ Approximately nine-in-ten students are fully proficient within a year of entry and three-quarters end the first year in good academic standing (i.e., they are not on probation). Finally, almost three-fifths have CSUN GPAs of 2.5 or higher at the end of their first year, with $36 \%$ having GPAs of 3.0 or better. The proportion achieving this last is significantly lower than was the case in high school (see the second section of Table 3), but the attainment is solid nonetheless.

Table 4 indicates that three measures of CSUN performance differentiate students in the three continuation rate groupings. Students in the high continuation rate grouping attempted more units, on average, during their first year at CSUN than those in the low grouping ( 21 units vs. 16 units). CSUN

[^1]GPA at the end of the first year also varies by continuation rate grouping, with $42 \%$ of the students in the high rate grouping attaining a GPA of 3.00 or higher compared to $26 \%$ of those in the low rate grouping. In addition, students in the high continuation rate grouping are more likely than those in the low rate grouping to be fully proficient in English and mathematics within one year of entry ( $94 \% \mathrm{vs} .81 \%$ ). In contrast to these three CSUN performance factors, the average number of units attempted in the first semester at CSUN, the average number earned during students' first year at CSUN, and their academic standing at the end of the first year differ less significantly by continuation rate level.

## Characteristics of Feeder High Schools With Differing CSUN Continuation Rates

In an effort to better assess the features of top feeder high schools that foster persistence at CSUN, the potentially important factors identified in the preceding section were converted into the following school characteristics: ${ }^{3}$

## Student Background Characteristics

- School district (LAUSD vs. Other)
- Percentage of students stemming from disadvantaged minority backgrounds (e.g., African American, American Indian, Latina/o)
- Percentage of students receiving grant or scholarship aid


## High School Preparation

- Percent exempt from taking the EPT (due to SAT, ACT, EAP, or AP performance)
- Percent needing remediation in English at entry
- Mean EPT score
- Percent exempt from taking the ELM (due to SAT, ACT, EAP, or AP performance)
- Percent needing remediation in mathematics at entry
- Pass rate on the ELM
- Mean ELM score
- Mean SAT verbal score
- Mean SAT mathematics score

[^2]
## CSUN Performance During Students' First Year

- Mean number of units attempted in the first year
- Mean CSUN GPA at the end of the first year
- Percentage fully proficient in math and English within one year of entry

Once defined, the factors just enumerated were included in a series of multivariate regression analyses designed to disentangle their various effects on the one-year continuation rates of the freshmen entering CSUN from the individual high schools under study. Initially, all variants of proficiency at entry delineated on the preceding page were included in the regression analyses. The very high intercorrelation of these variants (see Table A-2), however, coupled with the small number of units under study, soon led to the exclusion of all but the most comprehensive (i.e., percentage needing remediation at entry, shown in bold and italics on the list). The final set of regression models appears in full in the Appendix A. The major findings that emerged are summarized below.

Preliminary analysis focused on the interrelationships among various background factors. As one might expect, the two key CSUN student background characteristics - minority background and percentage receiving grant/scholarship aid - proved to be proxies for the racial/ethnic and socio-economic composition of the largest feeder high schools. The close relationships between the variable pairs are shown in Appendix B. Table B-1 also lists each school's 2007 API Base Score. Regression analysis showed that much of the variance in these scores could be explained by the percentage of students from minority backgrounds enrolled at the feeder high schools (see Figure B-3). Although included in the relevant regression analyses, the API scores did not help to explain the variance in the two CSUN student background characteristics or in the measures of high school preparation examined. Instead, the two student characteristics proved to be interrelated, with the percentage of CSUN students receiving grant or scholarship aid varying by the percentage of CSUN students stemming from minority backgrounds. This is evident from Figure 1 and the first two columns of Table 5.

Initial examination of the factors explaining variation in the one-year continuation rates revealed that the percentage of freshmen stemming from disadvantaged minority backgrounds plays a key role. As Figure 2 and Table 5 indicate, minority background is inversely related to continuation rates: as the percentage of minority students a high school sends to CSUN increases, the one-year continuation rates of these CSUN students tends to decrease. Although the amount of variance explained in this way is substantial (48\%), the conclusion the figure suggests is of limited value for policy purposes, because it implies that high continuation rates at CSUN require altering the racial and ethnic composition of our feeder schools. Since this is clearly not feasible, most of the regression analyses summarized in Appendix A focus on arriving at a more nuanced explanation of the antecedents of high CSUN continuation rates by examining three temporally separate, but closely linked, variable clusters: the effect of the student background factors considered on students' preparation at CSUN entry, the effect of the latter on their first-year CSUN performance, and, finally, the effect of the performance factors on the one-year continuation rates of the students from CSUN's largest feeder high schools.

The first two columns of Table 6 reproduce the minority and grant/scholarship aid distributions from Table 5, though the high schools are now arranged by the figures in the third column of the table: the percentage of students fully proficient in mathematics and English at entry. Although variation in this percentage is affected by both of the background factors, the percentage with grant/scholarship aid is the more important. As Figure 3 indicates, the latter explains $83 \%$ of the variance in the percentage of students fully proficient at entry.

The first two columns of Tables 7 and 8 again show the minority and grant/scholarship aid distributions shown in Tables 5 and 6. The next four columns display the four dimensions of proficiency in either English (Table 7) or mathematics (Table 8). The multiple distributions in each table are arranged in terms of the percentage in each high school needing remediation at entry in the appropriate subject. The other three distributions on the right, which tend to go from high to low, are provided for reference
purposes. As was the case for full proficiency at entry, variation in the percentage of students needing remediation in mathematics is directly affected by both the minority and grant/scholarship aid percentages, as the figures in Table 8 indicate, with the second again having the greater effect. Further, variation in the percentage needing remediation in English at entry is primarily affected by the percent of CSUN students receiving grant or scholarship aid (see Table 7). Thus, Figures 4 and 5 show the interrelationship of the two dependent variables with the grant/scholarship aid variable only. Each variable pair tends to increase jointly, with schools with larger percentages of students with grant aid also having larger percentages of freshmen needing remediation at CSUN entry. The relationships depicted in the figures are quite strong; the grant/scholarship aid variable explains between $66 \%$ and $84 \%$ of the variance in the need for remediation at entry.

As was the case for remediation at entry, the pattern for average SAT scores differs by subject. Average SAT mathematics scores vary by the percentage of CSUN students from minority backgrounds and receiving grant/scholarship aid in college, with the second exercising the stronger influence. Variation in the average SAT verbal scores, in contrast, varies primarily by the percentage of CSUN students with grant/scholarship aid. According to Table 9, as well as Figures 6 and 7, both scores tend to decrease as the percentage with grant or scholarship aid at CSUN increases.

Distributions by high school for the three CSUN performance factors appear in the three right-hand columns of Table 10. The two columns on the left show the percentage of students needing remediation in mathematics or English at CSUN entry, since these are the two factors that directly affect performance levels. Both proficiency one year later and average CSUN GPA vary strongly by the percentage of students needing remediation in mathematics at entry. Number of units attempted varies by the percentage needing remediation in English as well. Figures 8-10 graphically depict the close relationship between the need for remediation in math at entry and the percent fully proficient within one year, the average CSUN GPA, or the number of units attempted in the first year. In all three cases, the need for
remediation explains approximately seven- to nine-tenths of the variation in the dependent variable shown. The two variables depicted in each figure are negatively related: as the percentage needing remediation in math increases, the percentage fully proficient within one year declines, as does the average CSUN GPA and the number of units attempted in the first year.

Table 11 once again examines one-year continuation rates, but this time from the point of view of CSUN performance during the first year. It, along with Figures 11 and 12, indicates that continuation rates are most directly affected by proficiency within one year of entry and average CSUN GPA. As one might expect, continuation rates are positively related to both of the performance factors, with increases in the latter giving rise to increases in the former.

## Strengthening Persistence at CSUN

Figure 13 summarizes the web of interrelationships outlined in the preceding section. It shows that the percentage of students qualifying for grant aid at CSUN or stemming from minority backgrounds helps determine students' performance on several indicators used to assess their preparation for entrylevel college work. The percentage needing remediation at entry, in turn, plays an important role in students' initial performance at CSUN. And it is this performance, especially in the form of achieved GPA and full proficiency within one year of entry, that most directly determines the one-year continuation rates of students from different feeder high schools. Since full proficiency in mathematics and English is required before students can register for their third term at the university, the very close correlation between full proficiency and the one-year continuation rate suggests that the two variables are measuring the same thing (see Figure 11 and the bottom row of Table A-4). Thus, CSUN GPA, which encompasses academic standing at the end of the first year of college, may be the most immediate precursor to longerterm persistence.

The analyses summarized above have not changed the fact that the percentage of CSUN-bound students from disadvantaged minority backgrounds is linked to the one-year continuation rates of all
students from different feeder high schools. But, as Figure 13 indicates, we can now see that its influence is mediated by the adequacy of students' high school preparation in mathematics in particular and their performance during their first year at CSUN. Thus, partnerships with area high schools designed to strengthen training in mathematics and English might strengthen their students' first-year performance at CSUN and their eventual persistence without changing the socio-economic character of the schools in question. With this in mind, we can look at Figure 2 with new eyes.

Now, as has been done in Figure 14, we can seek to identify schools whose students have above- or below-average continuation rates, given the minority background of the students they send to CSUN. As is evident from Figure 15, a somewhat different set of schools stands out when one examines the continuation rates of schools whose CSUN-bound students display differing needs for remediation in mathematics at entry. Schools appearing to have higher-than-expected continuation rates in either figure (e.g., Reseda, Grant, or Marshall) might have developed best practices in the teaching of mathematics and English that could be profitably applied at schools with lower-than-expected continuation rates, given their students' racial and ethnic background or need for remediation at entry (e.g., Hamilton, Francis Polytechnic). ${ }^{4}$ Additionally, one might try to introduce better, if not best, teaching practices at schools that are performing at expected, albeit low, levels (e.g., Sylmar, Santa Monica). Table 12 presents the percentages used to construct Figures 14 and 15, along with the full names of the schools under study, thereby making it easier to identify those most deserving of further study or assistance.

[^3]
## Appendix A: <br> Summary of Regression Analyses

The discussion in the main text of this report rests on a series of multivariate regression analyses that examine how the one-year continuation rates of students from CSUN's 34 top feeder high schools are affected by a range of independent variables, some of which measure either the incoming freshmen's background characteristics, high school preparation, or performance during their first year at CSUN. Since the unit of analysis used here is the high school attended by the students in question, most of the variables employed in the analyses summarized below are expressed as the percentage or average scores of students sent to CSUN by each of the schools in question during the 2003-06 period.

This approach allowed creation of a series of continuous variables suitable for ordinary least squares regression. They are listed below.

## Background Characteristics

- Percentage of freshmen stemming from disadvantaged minority backgrounds (i.e., African American, American Indian, and Latina/o)
- Percentage of freshmen receiving grant or scholarship aid at CSUN


## High School Performance

- Percentage fully proficient in mathematics and English at entry
- Percentage displaying different levels of proficiency in English at entry
- Percentage displaying different levels of proficiency in mathematics at entry
- Average SAT verbal score
- Average SAT mathematics score


## Performance at CSUN

- Average number of units attempted in the first year at CSUN
- Average CSUN GPA at the end of the first year at CSUN
- Percentage fully proficient in English and mathematics within one year of entry

In addition to the student background characteristics, three school characteristics were included in the initial analyses: percentage of students at the feeder high schools stemming from minority backgrounds (i.e., African American, American Indian, and Latina/o), percentage of students eligible for free school lunches, and the feeder school's 2007 Academic Performance Index (API) score. A final background
variable - school district - was incorporated into the initial analyses as a dummy variable with two categories: LAUSD schools (1) and schools elsewhere in Los Angeles County (0).

Zero-order correlations are shown in Tables A-1 through A-4. The first three tables are arranged in temporal order, with Table A-1 containing the correlations for the six background characteristics under consideration, Table A-2 the correlations for the high school preparation variables, and Table A-3 the correlations for the three CSUN performance variables. The tables indicate that some of the background characteristics are highly correlated with one another. Less expected is the high degree of correlation evident for the high school preparation and CSUN performance variables. Given this high degree of inter-correlation, only one of the three variables initially developed for each aspect of proficiency at entry was included in the final regression analyses: percent requiring remediation in English or mathematics at entry. These variants were chosen because they are the most comprehensive and most closely related to the other two variants defined.

Various rows in Table A-4 list the zero-order correlations for the full set of school characteristics included in the main regression analyses, while the columns contain the variables included in at least one of the final regression models (see Tables A-6, A-7, A-8). The bottom row of the table indicates that the one-year continuation rate is moderately correlated with two of the independent variables shown and highly correlated with the remaining four: minority background, proficiency in math at entry, average CSUN GPA, and full proficiency within one year of entry.

Tables A-5 through A-8 summarize the multiple regression models defined. Given the small number of cases included $(\mathrm{N}=34)$ and the high correlations among most variables, separate analyses were undertaken for each of the three temporally separate variable clusters shown on the preceding page. In addition, in an effort to deal with the collinearity evident among the independent variables, it was assumed that one variable cluster was affected only by the cluster immediately preceding it in time (e.g., the performance variables were assumed to be directly affected by the high school performance variables
only). To be included in a final model, variables had to have F-values significant at the .01 level, to have effects significant at the .01 level, and to explain at least $3 \%$ of the total variance.

Table A-5 examines the interrelationship of the background characteristics. The three models derived were built assuming that school district might affect all of the other variables, while the three high school characteristics might affect the type of students from each school enrolling at CSUN. The first model shown also rests on the assumption that the API score might vary in terms of the other two high school characteristics considered. And, indeed, three-quarters of the variance in these scores is accounted for by the percentage of minority students at various feeder high schools.

The second model shown in Table A-5 indicates that four-fifths of the variance in the percentage of minority students among those enrolling at CSUN is accounted for by the percentage of such students at the schools from which the students graduated. Similarly, the percentage of CSUN freshmen from various high schools receiving grant and scholarship aid at the university is largely determined by the percentage of students at that high school entitled to free lunches. In addition, the percentage of minority students entering CSUN also accounts for some of the variance in the percentage receiving grant or scholarship aid. Taken together, these initial analyses indicate that the two background characteristics of the CSUN freshmen can be considered proxies for the racial/ethnic and socio-economic composition of the schools under study.

Table A-6 shows the effect of the background factors on the high school preparation variables. Both minority background and grant/scholarship aid have significant direct effects, with the two variables explaining $78 \%-85 \%$ of the variance in the dependent variables. The percentage of students with grant or scholarship aid is key in all models but one. The exception is the need for remediation in mathematics at entry, where minority background accounts for all but $10 \%$ of the substantial variance explained. The math remediation variable also has a significant direct effect on the other two math-based variables (i.e., average SAT mathematics score and percentage fully proficient in math and English at entry).

The two SAT variables are absent from the models in Table A-7, which summarize the effect of the high school preparation variables on the three CSUN performance variables. This absence is a sign that they explained none of the variance in the dependent variables. Instead, the percentage of students needing remediation in mathematics at entry is key to all three, while the need for remediation in English plays a role in the average number of units attempted in the first year at CSUN. Once again, the variance explained by the factors included in each model is substantial, ranging from $68 \%$ to $93 \%$.

Table A-8 shows the outcome of the final set of regression analyses undertaken. They examined the effect of the three CSUN performance variables on the one-year continuation rates of the students from the high schools under study. Initially, all three performance factors were included in the analysis. This revealed that full proficiency within one year of entry is key to continuation in the following Fall term. Given the fact that full proficiency in English and mathematics is required before students can register for their third term at CSUN, one might well argue that the two variables measure the same thing. ${ }^{5}$ Should this be the case, the proficiency variable needs to be excluded from consideration, as has been done in the second model shown in Table A-8. It indicates that average CSUN GPA is key to the one-year continuation rate, with the former explaining $62 \%$ of the variance in the latter.

Figure A-1 provides an overview of the interrelationships of the variables shown to be important in the models summarized in Tables A-5 through A-8. The figure indicates that the minority and financial aid status of CSUN students from the top feeder high schools, which reflect the racial/ethnic and socioeconomic composition of their schools, helps determine their need for remediation in English and mathematics at entry. These, in turn, play an important role in students' initial performance at CSUN. And these performance factors, especially students' GPA at the end of their first year at the university, has a significant impact on the one-year continuation rates of freshmen from CSUN's top feeder high schools.

[^4]Figure A-1. Interrelationship of the Variables Shown to Play a Role in Determining the One-Year Continuation Rates of Freshmen from CSUN's Top Feeder High Schools


Table A-1. Zero-Order Correlations for Background Characteristics of CSUN Students from the Top Feeder High Schools

|  | A | B | C | D | E | F |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| A. School district (1=LAUSD; 0=Other) | - | 0.724 | 0.709 | -0.602 | 0.540 | 0.563 |
| B. Percent of high school students from minority backgrounds | 0.724 | -- | 0.819 | -0.874 | 0.889 | 0.745 |
| C. Percent of high school students eligible for free lunches | 0.709 | 0.819 | -- | -0.734 | 0.614 | 0.816 |
| D. Academic Performance Index (API) score | -0.602 | -0.874 | -0.734 | -- | -0.784 | -0.747 |
| E. Percent of CSUN entrants from minority backgrounds | 0.540 | 0.889 | 0.614 | -0.784 | -- | 0.701 |
| F. Percent of CSUN entrants with grants/scholarships | 0.563 | 0.745 | 0.816 | -0.747 | 0.701 | -- |
| Mean | 0.68 | 59.68 | 40.83 | 699.55 | 46.12 | 61.90 |
| Standard deviation | 0.47 | 24.63 | 22.35 | 78.29 | 21.59 | 17.52 |
|  | 34 | 34 | 34 | 34 | 34 | 34 |

Note: all correlation coefficients are significant at the .001 level (2-tailed test).

Table A-2. Zero-Order Correlations for Variables Summarizing High School Preparation of CSUN Students


|  | the Top Feeder High Schools |  |  |  |  |  |  | N | O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G. Percent fully proficient in math \& English at enty | -- | -0.977 | 0.949 | 0.923 | -0.925 | 0.937 | 0.841 | 0.928 | 0.929 |
| H. Percent needing remediation in English at entry | -0.977 | -- | -0.971 | -0.943 | 0.884 | -0.903 | -0.794 | -0.953 | -0.912 |
| I. Percent exempt from EPT | 0.949 | -0.971 | -- | 0.877 | -0.842 | 0.880 | 0.730 | 0.949 | 0.875 |
| J. Mean EPT score | 0.923 | -0.943 | 0.877 | -- | -0.847 | 0.817 | 0.795 | 0.914 | 0.858 |
| K. Percent needing remediation in math at entry | -0.925 | 0.884 | -0.842 | -0.847 | -- | -0.947 | -0.960 | -0.849 | -0.959 |
| L. Percent exempt from ELM | 0.937 | -0.903 | 0.880 | 0.817 | -0.947 | -- | 0.843 | 0.869 | 0.955 |
| M. Mean ELM score | 0.841 | -0.794 | 0.730 | 0.795 | -0.960 | 0.843 | -- | 0.745 | 0.895 |
| N. Mean SAT verbal score | 0.928 | -0.953 | 0.949 | 0.914 | -0.849 | 0.869 | 0.745 | -- | 0.910 |
| O. Mean SAT math scores | 0.929 | -0.912 | 0.875 | 0.858 | -0.959 | 0.955 | 0.895 | 0.910 | -- |
| Mean | 27.38 | 63.75 | 20.99 | 143.58 | 51.40 | 28.10 | 42.48 | 457.41 | 477.89 |
| Standard deviation | 13.89 | 14.16 | 10.20 | 2.47 | 16.62 | 12.86 | 4.84 | 31.70 | 37.00 |
| Number of schools | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |

Note: all correlation coefficients are significant at the .001 level (2-tailed test).
Table A-3. Zero-Order Correlations for Variables Summarizing the First-Year Performance

at CSUN of Students from the Ton Feeder High Schools

Table A-3. Zero-Order Correlations for Variables Summarizing the First-Year Performance at CSUN of Students from the Top Feeder High Schools

|  | P | Q | R |
| :--- | :---: | :---: | :---: |
| P. Mean number of units attempted in first year | -- | 0.891 | 0.859 |
| Q. Mean CSUN GPA at end of first year | 0.891 | -- | 0.825 |
| R. Percent fully proficient one year after entry | 0.859 | 0.825 | -- |
| Mean | 19.38 | 2.57 | 88.86 |
| Standard deviation | 2.17 | 0.17 | 5.82 |
| Number of schools | 34 | 34 | 34 |

Note: all correlation coefficients are signficant at the . 001 level (2-tailed test).

Table A-4. Zero-Order Correlations for the Final Set of Characteristics Included in the Regression Analysis of the One

Continuation Rates of the Students From CSUN's Top Feeder High Schools (Fall 2003-06)

|  | E | F | H | K | Q | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background Characteristics |  |  |  |  |  |  |
| A. School district ( $1=$ LAUSD; $0=$ Other $)$ | 0.540 | 0.563 | 0.566 | 0.539 | -0.431 | -0.364 |
| D. Academic Performance Index (API) score | -0.784 | -0.747 | -0.769 | -0.754 | 0.596 | 0.669 |
| E. Percent of CSUN entrants from minority backgrounds | -- | 0.701 | 0.742 | 0.819 | -0.817 | -0.828 |
| F. Percent of CSUN entrants with grants/scholarships | 0.701 | -- | 0.917 | 0.813 | -0.691 | -0.636 |
| High School Preparation |  |  |  |  |  |  |
| G. Percent fully proficient in math \& English at enty | -0.768 | -0.911 | -0.977 | -0.925 | 0.800 | 0.741 |
| H. Percent needing remediation in English at entry | 0.742 | 0.917 | -- | 0.884 | -0.794 | -0.707 |
| K. Percent needing remediation in math at entry | 0.819 | 0.813 | 0.884 | -- | -0.822 | -0.831 |
| N. Mean SAT verbal score | -0.709 | -0.907 | -0.953 | -0.849 | 0.729 | 0.663 |
| O. Mean SAT math scores | -0.827 | -0.846 | -0.912 | -0.959 | 0.816 | 0.817 |
| CSUN Performance |  |  |  |  |  |  |
| P. Mean number of units attempted in first year | -0.828 | -0.820 | -0.921 | -0.947 | 0.891 | 0.859 |
| Q. Mean CSUN GPA at end of first year | -0.817 | -0.691 | -0.794 | -0.822 | -- | 0.825 |
| R. Percent fully proficient one year after entry | -0.828 | -0.636 | -0.707 | -0.831 | 0.825 | -- |
| S. One-year continuation rate* | -0.691 | -0.468 | -0.550 | -0.686 | 0.797 | 0.902 |

* The mean one-year continuation rate is 78.76 , with a standard deviation of 6.01 .

Note: the coefficients in italics are not significant at the .005 level (2-tailed test); all others are.
each correlation coefficient is based on all 34 high schools..

Table A-5. Estimated Regression Models for Student Background Variables

|  | Unstandard. Coefficient | Standard <br> Error | Standardized Coefficient | Signif. <br> Level | Contribution to adjusted $\mathrm{R}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Performance Index (API) scores of feeder high schools |  |  |  |  |  |
| Minority students at feeder high school (percentage) | -2.784 | 0.277 | -0.874 | . 001 | 0.757 |
| Constant | 863.537 |  |  | . 001 |  |
| Percentage of freshmen stemming from minority backgrounds |  |  |  |  |  |
| Minority students at feeder high school (percentage) | 0.793 | 0.072 | 0.892 | . 001 | 0.790 |
| Constant | -0.896 | 4.592 |  | . 001 |  |
| Percentage of freshmen with grant/scholarship aid H.S. students entitled to free lunches (percentage) | 0.494 | 0.094 | 0.625 | . 001 | 0.661 |
| Minority background (percentage) | 0.260 | 0.096 | 0.319 | . 011 | 0.057 |
| Constant Total | 29.991 | 4.012 |  | . 001 | 0.718 |

Note: All 34 high schools are included in the regression analyses shown.
Coefficients are calculated using ordinary least squares (OLS) regression.

Table A-6. Estimated Regression Models for High School Preparation Variables

|  | Unstandard. Standard Coefficient Error | Standardized Coefficient | Signif. <br> Level | Contribution to adjusted $\mathrm{R}^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of freshmen fully proficient in mathematics \& English at entry |  |  |  |  |
| Grants and scholarships (percentage) | -0.581 0.075 | -0.733 | . 001 | 0.825 |
| Minority background (percentage) | -0.164 0.065 | -0.255 | . 011 | 0.029 |
| Constant Total | 70.8903 .464 |  | . 001 | 0.854 |
| Percentage of freshmen needing remediation in English at entry |  |  |  |  |
| Grants and scholarships (percentage) | $0.741 \quad 0.058$ | 0.917 | . 001 | 0.836 |
| Constant | 17.8663 .718 |  | . 001 |  |
| Percentage of freshmen needing remediation in mathematics at entry |  |  |  |  |
| Minority background (percentage) | 0.3880 .089 | 0.503 | . 001 | 0.676 |
| Grants and scholarships (percentage) | $0.439 \quad 0.110$ | 0.464 | . 001 | 0.106 |
| Constant Total | $6.667 \quad 5.067$ |  | . 198 | 0.782 |
| Mean SAT verbal score Grants and scholarships (percentage) | -1.641 0.137 | -0.907 | . 001 | 0.816 |
| Constant | 558.8998 .807 |  | . 001 |  |
| Mean SAT mathematics score Grants and scholarships (percentage) | -1.098 0.223 | -0.520 | . 001 | 0.709 |
| Minority background (percentage) | -0.803 0.182 | -0.468 | . 001 | 0.109 |
| Constant Total | $582.551 \quad 10.597$ |  | . 001 | 0.818 |

Note: All 34 high schools are included in the regression analyses shown.
Coefficients are calculated using ordinary least squares (OLS) regression.

Table A-7. Estimated Regression Models for CSUN Performance Variables

Table A-7. Estimated Regression Models for CSUN Performance Variables

|  | Unstandard. Coefficient | Standard <br> Error | Standardized Coefficient | Signif. <br> Level | Contribution to adjusted $\mathrm{R}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mean number of units attempted in first year at CSUN |  |  |  |  |  |
| Need remediation in mathematics (percentage) | -0.080 | 0.013 | -0.609 | . 001 | 0.894 |
| Need remediation in English (percentage) | -0.059 | 0.016 | -0.383 | . 001 | 0.031 |
| Constant | 27.214 | 0.516 |  | . 001 |  |
| Total |  |  |  |  | 0.925 |
| Mean GPA at the end of the first year at CSUN Need remediation in mathematics (percentage) | -0.008 | 0.001 | -0.822 | . 001 | 0.666 |
| Constant | 2.993 | 0.040 |  | . 001 |  |
| Percentage of freshmen fully proficient one year after entry |  |  |  |  |  |
| Need remediation in mathematics (percentage) | -0.291 | 0.034 | -0.831 | . 001 | 0.680 |
| Constant | 103.806 | 1.860 |  | . 001 |  |




Table A-8. Estimated Regression Models for One-Year Continuation Rate Table A-8. Estimated Regression Models for One-Year Continuation Rate

|  | Unstandard. <br> Coefficient | Standard <br> Error | Standardized <br> Coefficient | Signif. <br> Level | Contribution <br> to adjusted $R^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Model 1: Includes All Three CSUN Performance Variables <br> Proficiency with one year (percentage) | 0.931 | 0.079 | 0.908 | .001 | 0.808 |
| Constant | -3.987 | 7.015 |  | .574 |  |
| Model 2: Proficiency Within One Year Excluded * <br> CSUN GPA (mean) |  |  |  |  |  |
| Constant | 28.740 | 3.848 | 0.797 | .001 | 0.624 |

[^5]
## Appendix B:

The Relationship Between Selected Characteristics of CSUN's Top Feeder High Schools and the Background Characteristics of the First Time Freshmen Entering CSUN From These Schools

Figure B-1. Percentage of High School and CSUN Students Stemming from Minority Backgrounds by Feeder High School (Fall 2003-06)


Figure B-2. Percentage of High School Students Qualifying for Free Lunches and
Receiving Grant or Scholarship Aid at CSUN by Feeder High School (Fall 2003-06)


Figure B-3. API Base Scores by Percentage of Feeder High School Students Stemming from Minority Backgrounds (Fall 2003-06)


Table B-1. Percentage of Students Stemming from Minority Backgrounds, Qualifying for Free Lunches, or Receiving Grant/Scholarship Aid and Academic Performance Index (API) Scores by Top Feeder High School and School District (Fall 2003-06 Entrants)

| High School Code Name | Percentag from Minorit at Feeder High School | Students <br> kgrounds* <br> entering CSUN | Percentage Entitled to Free Lunches (at High Schl.) | Percentage <br> Receiving Grants/ Scholarships (at CSUN) | API <br> Base <br> Score^ <br> (2007) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High Schools in LAUSD |  |  |  |  |  |
| GH Granada Hills | 38.0 | 26.3 | 19.1 | 41.1 | 816 |
| RES Reseda | 78.0 | 41.7 | 56.8 | 68.8 | 653 |
| GC Cleveland (Grover) | 63.0 | 50.4 | 55.1 | 58.3 | 730 |
| FBM Bravo (Francisco) Med Magnet | 70.0 | 39.4 | 70.4 | 72.7 | 807 |
| USG Grant (Ulysses S) | 65.0 | 44.4 | 67.1 | 73.5 | 625 |
| CHA Chatsworth | 58.0 | 31.2 | 39.1 | 49.2 | 704 |
| CP Canoga Park | 85.0 | 55.5 | 57.9 | 64.8 | 999 |
| VN Van Nuys | 67.0 | 37.7 | 59.7 | 62.3 | 670 |
| WHT Taft (William Howard) | 50.0 | 27.1 | 34.9 | 53.6 | 703 |
| LA Los Angeles | 89.0 | 64.2 | 62.3 | 74.5 | 549 |
| ECR El Camino Real | 33.0 | 25.6 | 17.7 | 39.5 | 748 |
| MAR Marshall (John) | 71.0 | 50.6 | 62.2 | 81.6 | 653 |
| FAI Fairfax | 73.0 | 55.4 | 57.6 | 77.2 | 668 |
| BIR Birmingham | 74.0 | 58.3 | 55.5 | 70.2 | 638 |
| VEN Venice | 77.0 | 71.7 | 49.6 | 80.2 | 675 |
| JFK Kennedy (John F) | 79.0 | 57.2 | 44.5 | 64.2 | 672 |
| SF San Fernando | 99.0 | 88.1 | 40.5 | 92.2 | 561 |
| VER Verdugo Hills | 56.0 | 48.0 | 49.4 | 78.6 | 655 |
| SYL Sylmar | 96.0 | 86.5 | 58.9 | 71.0 | 587 |
| MON Monroe (James) | 87.0 | 69.9 | 63.7 | 78.1 | 610 |
| NH North Hollywood | 75.0 | 64.5 | 61.7 | 74.8 | 674 |
| JFP Francis (John H) Polytechnic | 91.0 | 75.8 | 64.9 | 75.8 | 608 |
| AH Hamilton (Alexander) | 78.0 | 73.8 | 38.8 | 76.2 | 662 |
| Average | 71.8 | 54.1 | 51.6 | 68.6 | 681.2 |
| High Schools in Other Districts in Los Angeles County |  |  |  |  |  |
| SAU Saugus | 25.0 | 13.7 | 2.0 | 23.1 | 792 |
| CV Crescenta Valley | 9.0 | 10.5 | 4.3 | 38.5 | 861 |
| BB Burbank | 28.0 | 23.7 | 9.6 | 53.8 | 761 |
| GLE Glendale | 30.0 | 14.9 | 40.5 | 73.0 | 733 |
| CAN Canyon | 35.0 | 26.3 | 6.4 | 32.8 | 769 |
| HH Hoover (Herbert) | 27.0 | 15.2 | 39.1 | 70.3 | 747 |
| BUR Burroughs | 45.0 | 32.3 | 8.1 | 43.4 | 768 |
| VAL Valencia | 22.0 | 29.1 | 1.9 | 35.9 | 797 |
| WSH Hart (William S) | 35.0 | 32.0 | 10.1 | 27.8 | 779 |
| PAL Palmdale | 80.0 | 65.5 | 59.1 | 64.3 | 639 |
| SM Santa Monica | 41.0 | 61.5 | 19.7 | 63.3 | 771 |
| Average | 34.3 | 29.5 | 18.3 | 47.8 | 765.2 |


${ }^{\wedge} \mathrm{A} A \mathrm{~A} h \overline{\mathrm{~F}} / \mathrm{A}$ cademic Performance Index. The mean 2007 API score for all LAUSD high schools is 624 , while the equivalent score

 LAUSD is above average for the district, but not for the state as a whole.

Figures 1-15

Figure 1. Percent of Students From the Largest CSUN Feeder High Schools Receiving Grant or Scholarship Aid by Percent Stemming From Minority Backgrounds (Fall 2003-06)


Figure 2. One-Year Continuation Rates of Students From Largest CSUN Feeder High Schools by Percent Stemming from Minority Backgrounds (Fall 2003-06)


Figure 3. Percent of Students From Largest Feeder High Schools Fully Proficient in English and Mathematics at Entry by Percent Receiving Grants or Scholarships (Fall 2003-06)


Figure 4. Percent of Students From Largest Feeder High Schools Needing Remediation in English at Entry by Percent Receiving Grant or Scholarship Aid (Fall 2003-06)


Figure 5. Percent of Students From Largest Feeder High Schools Needing Remediation in Mathematics at Entry by Percent Receiving Grant or Scholarship Aid (Fall 2003-06)


Figure 6. Average SAT Verbal Scores by Percent Receiving Grant or Scholarship Aid (Fall 2003-06)


Figure 7. Average SAT Mathematics Scores by Percent Receiving Grant or


Figure 8. Students From Largest Feeder High Schools Who Are Fully Proficient One Year Later by Percent Needing Remediation in Mathematics at Entry (Fall 2003-06)


Figure 9. Average CSUN GPA of Students From Largest Feeder High Schools by Percent Needing Remediation in Mathematics at Entry (Fall 2003-06)


Figure 10. Average Number of Units Attempted by Students From Largest Feeder High Schools During Their First Year at CSUN by Percent Needing Remediation in


Figure 11. One-Year Continuation Rates of Students From Largest Feeder High Schools by Percent Fully Proficient One Year After Entry (Fall 2003-06)


Figure 12. One-Year Continuation Rates of Students From Largest Feeder High Schools by Average CSUN GPA (Fall 2003-06)


Figure 13. Factors Giving Rise to the One-Year Continuation Rates of Freshmen from CSUN's Top Feeder High Schools


Figure 14. One-Year Continuation Rates of Students From Largest CSUN Feeder High Schools by Percent Stemming from Minority Backgrounds (Fall 2003-06)


Figure 15. One-Year Continuation Rates of Students From Largest CSUN Feeder High Schools by Percent Needing Remediation in Mathematics at Entry (Fall 2003-


CSUN Feeders cont'd. - 36

Tables 1-12

Table 1. Number of First Time Freshmen From Top Feeder High Schools Entering CSUN and Continuing Into the Second Year of College During the 2003-07 Period

| High School Code Name | Fall Entry Term |  |  |  |  | Total | $\frac{\text { One-Year Contin. }}{(2003-06)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | 2007 |  | Rate | Level |
| High Schools in LAUSD |  |  |  |  |  |  |  |  |
| GH Granada Hills | 85 | 122 | 93 | 145 | 97 | 542 | 91.0 | High |
| RES Reseda | 49 | 41 | 57 | 52 | 35 | 234 | 84.9 | High |
| GC Cleveland (Grover) | 59 | 52 | 78 | 63 | 69 | 321 | 82.9 | High |
| FBM Bravo (Francisco) Med Magnet | 19 | 21 | 40 | 19 | 24 | 123 | 82.8 | High |
| USG Grant (Ulysses S) | 46 | 42 | 49 | 25 | 35 | 197 | 82.7 | High |
| CHA Chatsworth | 76 | 61 | 59 | 54 | 77 | 327 | 82.0 | High |
| CP Canoga Park | 33 | 40 | 26 | 29 | 16 | 144 | 81.3 | Med |
| vN Van Nuys | 58 | 51 | 54 | 60 | 53 | 276 | 81.2 | Med |
| WHT Taft (William Howard) | 44 | 38 | 50 | 34 | 49 | 215 | 80.7 | Med |
| LA Los Angeles | 38 | 46 | 47 | 34 | 58 | 223 | 80.6 | Med |
| ECR El Camino Real | 43 | 49 | 80 | 43 | 91 | 306 | 80.0 | Med |
| MAR Marshall (John) | 47 | 42 | 35 | 34 | 33 | 191 | 79.1 | Med |
| FAI Fairfax | 26 | 13 | 25 | 37 | 22 | 123 | 78.2 | Med |
| BIR Birmingham | 56 | 72 | 49 | 58 | 63 | 298 | 77.0 | Med |
| VEN Venice | 25 | 29 | 24 | 28 | 18 | 124 | 76.4 | Med |
| JFK Kennedy (John F) | 23 | 40 | 48 | 62 | 52 | 225 | 76.3 | Med |
| SF San Fernando | 72 | 67 | 77 | 53 | 60 | 329 | 75.8 | Low |
| VER Verdugo Hills | 26 | 19 | 31 | 22 | 26 | 124 | 75.5 | Low |
| SYL Sylmar | 58 | 40 | 49 | 60 | 50 | 257 | 73.4 | Low |
| MON Monroe (James) | 63 | 48 | 56 | 52 | 56 | 275 | 73.1 | Low |
| NH North Hollywood | 78 | 82 | 108 | 53 | 60 | 381 | 72.6 | Low |
| JFP Francis (John H) Polytechnic | 51 | 61 | 73 | 88 | 79 | 352 | 64.1 | Low |
| AH Hamilton (Alexander) | 48 | 28 | 33 | 21 | 40 | 170 | 60.0 | Low |
| Subtotal | 1,123 | 1,104 | 1,241 | 1,126 | 1,163 | 5,757 | 77.9 |  |
| High Schools in Other Districts in Los Angeles County * |  |  |  |  |  |  |  |  |
| SaU Saugus [W.S. Hart Union High] | 27 | 32 | 26 | 32 | 24 | 141 | 88.9 | High |
| CV Crescenta Valley [Glendale Unified] | 25 | 36 | 43 | 39 | 33 | 176 | 86.0 | High |
| BB Burbank [Burbank Unified] | 60 | 33 | 37 | 43 | 41 | 214 | 83.8 | High |
| GLE Glendale [Glendale Unified] | 29 | 60 | 32 | 20 | 31 | 172 | 83.0 | High |
| CaN Canyon [W.S. Hart Union High] | 44 | 20 | 32 | 41 | 34 | 171 | 80.3 | Med |
| HH Hoover (Herbert) [Glendale Unified] | 31 | 47 | 35 | 25 | 21 | 159 | 79.0 | Med |
| BUR Burroughs [Burbank Unified] | 16 | 25 | 31 | 27 | 42 | 141 | 78.8 | Med |
| VAL Valencia [W.S. Hart Union High] | 26 | 20 | 22 | 35 | 45 | 148 | 77.7 | Med |
| wsh Hart (William S) [W.S. Hart Union High] | 19 | 30 | 27 | 21 | 27 | 124 | 77.3 | Med |
| PAL Palmdale [Antelope Valley Union High] | 11 | 26 | 23 | 24 | 45 | 129 | 76.2 | Med |
| SM Santa Monica [Santa Monica-Malibu United] | 30 | 21 | 31 | 27 | 25 | 134 | 75.2 | Low |
| Subtotal | 318 | 350 | 339 | 334 | 368 | 1,709 | 80.6 |  |
| Grand Total | 1,441 | 1,454 | 1,580 | 1,460 | 1,531 | 7,466 | 78.8 |  |
| Percent of All Newly Enrolled First Time Freshmen | 39.9\% | 48.8\% | 42.5\% | 39.5\% | 37.1\% | 41.2\% |  |  |

[^6]Table 2. Background and Demographic Characteristics of Students Attending CSUN's Largest Feeder High Schools by One-Year Continuation Rate Levels of Their High


[^7]
## CSUN Feeders cont'd. - 39

Table 2 cont'd.

| Characteristic | Continuation Rate Level |  |  | Total | $\begin{aligned} & \text { Chi square = 230.10 (.000); } \\ & \text { dif=2 } \\ & \text { Cramer's v=. } 197 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Medium | Low |  |  |
| Received Grants and Scholarships |  |  |  |  |  |
| No | 46.5 | 40.3 | 22.6 | 37.5 |  |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ |  |
| Average Grant and Scholarship Stipend |  |  |  |  |  |
| Mean | \$6,400 | \$6,441 | \$6,492 | \$6,447 |  |
| Median | \$7,417 | \$7,395 | \$7,661 | \$7,495 |  |
| Interquartile range | \$4070-\$8487 | \$4249-\$8587 | \$4049-\$8921 | \$4144-\$8629 |  |
| (No. of students receiving) | $(1,059)$ | $(1,390)$ | $(1,258)$ | $(3,707)$ |  |
| Received Loan Funds |  |  |  |  |  |
| Yes | 18.1 | 20.5 | 19.9 | 19.5 | Chi square $=4.29$ (NS); |
| No | 81.9 | 79.5 | 80.1 | 80.5 | di=2 |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ | Cramer's V=. 027 |
| Average Loan Amount |  |  |  |  |  |
| Median | \$2,625 | \$2,625 | \$2,625 | \$2,625 |  |
| (No. of students receiving) | (358) | (478) | (323) | $(1,159)$ |  |

Table 3. High School Preparation of Students Attending CSUN's Largest Feeder High Schools by One-Year Continuation Rate Levels of Their High Schools

Table 3. High School Preparation of Students Attending CSUN's Largest Feeder High Schools by One-Year Continuation Rate Levels of Their High Schools

| Characteristic | Continuation Rate Level |  |  | Total | $\begin{aligned} & \text { Chi square = } 18.84 \text { (.001); } \\ & \text { df=2 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Medium | Low |  |  |
| CSUN Admission Status |  |  |  |  |  |
| Special Admit | 1.8 | 2.6 | 4.2 | 2.8 |  |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ |  |
| High School GPA |  |  |  |  |  |
| Under 2.49 | 4.7 | 4.4 | 4.5 | 4.5 |  |
| 2.5 to 2.99 | 31.4 | 33.3 | 29.7 | 31.7 |  |
| 3.00 to 3.49 | 44.5 | 43.0 | 43.1 | 43.5 |  |
| 3.50 and above | 19.4 | 19.3 | 22.8 | 20.3 |  |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,978) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,322) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,625) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,925) \end{gathered}$ |  |
| Mean | 3.13 | 3.12 | 3.16 | 3.13 | F-ratio $=5.06$ (.006); |
| Median | 3.10 | 3.09 | 3.13 | 3.10 | Eta=. 041 |
| Interquartile range | 2.8-3.4 | 2.8-3.4 | 2.9-3.5 | 2.9-3.4 |  |
| Fully Proficient in English and Mathematics at Entry |  |  |  |  |  |
| Yes | 36.0 | 27.1 | 14.6 | 26.7 | Chi square = 209.61 (.000); |
| No | 64.0 | 72.9 | 85.4 | 73.3 |  |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ | Cramer's V=. 188 |
| Proficiency in English at Entry Exempt | 27.3 | 21.4 | 11.7 | 20.7 |  |
| Score on SAT/ACT exams | 14.6 | 12.4 | 4.9 | 11.1 |  |
| Score on EAP exam | 6.5 | 4.8 | 2.3 | 4.7 |  |
| Other (AP, summer work) | 6.2 | 4.2 | 4.6 | 5.0 | Chi square = 204.01 (.000); |
| Passed EPT | 17.9 | 14.9 | 10.7 | 14.8 | df=2 |
| Needs remediation at entry | 54.8 | 63.6 | 77.6 | 64.5 | Cramer's V=. 185 |
| Total (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ |  |
| Pass Rate on the English Proficiency Test (EPT) |  |  |  |  |  |
| Passed exam | 24.6 | 19.0 | 12.1 | 18.6 | Chi square $=74.08$ (.000); |
| Did not pass exam (needs remediation) | 75.4 | 81.0 | 87.9 | 81.4 | df= |
| Total <br> (No. of students attempting) | $\begin{gathered} 100.0 \\ (1,440) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,829) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,436) \end{gathered}$ | $\begin{gathered} 100.0 \\ (4,705) \end{gathered}$ | Cramer's V=. 130 |
| Average EPT Score |  |  |  |  |  |
| Median | 145.0 | 144.0 | 141.0 | 144.0 |  |
| Interquartile range | 140-151 | 138-149 | 135-147 | 137-149 |  |
| (No. of students taking) | $(1,514)$ | $(1,900)$ | $(1,473)$ | $(4,887)$ |  |

Table 3 cont'd.

| Characteristic | Continuation Rate Level |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Medium | Low |  |  |
| Proficiency in Mathematics at Entry |  |  |  |  |  |
| Exempt | 37.1 | 27.9 | 15.9 | 27.7 |  |
| Score on SAT/ACT exams | 28.0 | 20.5 | 10.3 | 20.2 |  |
| Score on EAP exam | 3.6 | 3.0 | 3.3 | 3.3 |  |
| Other (AP, summer work) | 5.4 | 4.3 | 2.3 | 4.1 | Chi square $=291.61$ (.000); |
| Passed ELM | 21.7 | 22.3 | 14.8 | 20.0 |  |
| Needs remediation at entry | 41.2 | 49.8 | 69.3 | 52.3 | Cramer's V=. 222 |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ |  |
| Pass Rate on the Entry Level Mathematics (ELM) |  |  |  |  |  |
| Passed exam | 34.5 | 30.9 | 17.6 | 27.7 | Chi square $=107.61$ (.000); |
| Did not pass exam (needs remediation) | 65.5 | 69.1 | 82.4 | 72.3 |  |
| Total <br> (No. of students attempting) | $\begin{gathered} 100.0 \\ (1,247) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,678) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,367) \end{gathered}$ | $\begin{gathered} 100.0 \\ (4,292) \end{gathered}$ | Cramer's V=. 158 |
| Average ELM Score |  |  |  |  |  |
| Mean | 44.7 | 42.8 | 37.2 | 41.6 | F-ratio = 133.19 (.000); |
| Median | 44.0 | 42.0 | 36.0 | 42.0 | Eta= 236 |
| Interquartile range | 36-54 | 34-52 | 28-46 | 32-50 |  |
| (No. of students taking) | $(1,344)$ | $(1,760)$ | $(1,426)$ | $(4,530)$ |  |
| Average SAT Verbal Score |  |  |  |  |  |
| Mean | 472.4 | 463.2 | 422.4 | 455.5 | F-ratio = 137.32 (.000); |
| Median | 470.0 | 460.0 | 420.0 | 450.0 | Eta= 226 |
| Interquartile range | 410-540 | 410-520 | 370-470 | 390-520 |  |
| (No. of students taking) | $(1,763)$ | $(1,958)$ | $(1,365)$ | $(5,086)$ |  |
| Average SAT Mathematics Score |  |  |  |  |  |
| Mean | 501.2 | 483.8 | 433.8 | 476.4 | F-ratio = 225.60 (.000); |
| Median | 500.0 | 480.0 | 430.0 | 470.0 | Eta=286 |
| Interquartile range | 440-560 | 420-550 | 370-490 | 410-540 |  |
| (No. of students taking) | $(1,763)$ | $(1,958)$ | $(1,365)$ | $(5,086)$ |  |
| Average SAT Composite Score |  |  |  |  |  |
| Mean | 973.6 | 947.0 | 856.2 | 931.9 | F-ratio = 224.18 (.000); |
| Median | 970.0 | 950.0 | 850.0 | 930.0 | Eta= 285 |
| Interquartile range | 860-1090 | 830-1060 | 750-950 | 810-1050 |  |
| (No. of students taking) | $(1,763)$ | $(1,958)$ | $(1,365)$ | $(5,086)$ |  |

Table 4. CSUN Performance by Students Graduating From the Largest Feeder High Schools
by One-Year Continuation Rate Levels of Their High Schools by One-Year Continuation Rate Levels of Their High Schools

Table 4. CSUN Performance by Students Graduating From the Largest Feeder High Schools by One-Year Continuation Rate Levels of Their High Schools

| Characteristic | Continuation Rate Level |  |  | Total | Chi square = 6.02 (NS); |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Medium | Low |  |  |
| Units Attempted in First Semester at CSUN |  |  |  |  |  |
| 12 or fewer units | 38.3 | 37.8 | 40.2 | 38.6 |  |
| 13-14 units | 39.2 | 39.3 | 35.8 | 38.3 | $\mathrm{df}=4$ |
| 15 or more units | 22.6 | 23.0 | 24.0 | 23.1 | Cramer's V=.023 |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (5,935) \end{aligned}$ |  |
| Average Number of Units Attempted in First Year at CSUN |  |  |  |  |  |
| Mean | 21.1 | 19.6 | 16.7 | 19.3 | F-ratio $=210.58$ (.000); |
| Median | 21.0 | 19.0 | 16.0 | 19.0 | Eta= 258 |
| Interquartile range | 17-25 | 15-24 | 12-21 | 15-24 |  |
| (No. of students attending HS) | $(1,977)$ | $(2,316)$ | $(1,617)$ | $(5,910)$ |  |
| Average Number of Units Earned in First Year at CSUN * |  |  |  |  |  |
| Mean | 23.6 | 22.4 | 20.9 | 22.4 | F-ratio = 57.61 (.000); |
| Median | 25.0 | 24.0 | 23.0 | 24.0 | Eta=. 138 |
| Interquartile range | 21-28 | 20-27 | 17-26 | 19-27 |  |
| (No. of students attending HS) | $(1,981)$ | $(2,328)$ | $(1,626)$ | $(5,935)$ |  |
| CSUN GPA at the End of First Year at CSUN |  |  |  |  |  |
| Under 2.00 | 17.7 | 22.0 | 30.0 | 22.7 |  |
| 2.00 to 2.49 | 17.7 | 17.8 | 21.5 | 18.8 |  |
| 2.5 to 2.99 | 22.3 | 22.9 | 22.5 | 22.6 |  |
| 3.00 to 3.49 | 24.4 | 23.7 | 18.0 | 22.4 |  |
| 3.50 and Above | 17.9 | 13.6 | 8.0 | 13.6 |  |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,942) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,245) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,542) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,729) \end{gathered}$ |  |
| Mean | 2.72 | 2.59 | 2.37 | 2.57 | F-ratio = 74.11 (.000); |
| Median | 2.85 | 2.72 | 2.46 | 2.68 | Eta=. 159 |
| Interquartile range | 2.2-3.4 | 2.1-3.2 | 1.9-3.0 | 2.1-3.2 |  |
| Academic Standing at the End of the First Year at CSUN |  |  |  |  |  |
| In good standing | 80.6 | 75.5 | 66.5 | 74.7 |  |
| Not in good standing | 19.4 | 24.5 | 33.5 | 25.3 | Chi square = 95.83 (.000); |
| On probation | 13.2 | 16.8 | 22.3 | 17.1 | $\mathrm{df}=2$ |
| Disqualified | 6.2 | 7.7 | 11.2 | 8.2 | Cramer's V=. 127 |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,324) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,625) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,930) \end{gathered}$ |  |
| Fully Proficient in English and Math Within One Year of Entry |  |  |  |  |  |
| Yes | 94.0 | 89.6 | 81.2 | 88.7 | Chi square $=149.32$ (.000); |
| No | 6.0 | 10.4 | 18.8 | 11.3 | $\mathrm{df}=2$ |
| Total <br> (No. of students attending HS) | $\begin{gathered} 100.0 \\ (1,981) \end{gathered}$ | $\begin{gathered} 100.0 \\ (2,328) \end{gathered}$ | $\begin{gathered} 100.0 \\ (1,626) \end{gathered}$ | $\begin{gathered} 100.0 \\ (5,935) \end{gathered}$ | Cramer's V=. 159 |

[^8]Table 5. Percent of CSUN Students Stemming from Minority Backgrounds, Receiving Grant or Scholarship Aid, and Their One-Year Continuation Rate by Top Feeder High School and School District (Fall 2003-06 Entrants)

| High School Code Name | Percent Minority* | Percent <br> Receiving Grants/ Scholarships | One-Year Contin. Rate (2003-06) |
| :---: | :---: | :---: | :---: |
| GH Granada Hills | 26.3 | 41.1 | 91.0 |
| SAU Saugus | 13.7 | 23.1 | 88.9 |
| CV Crescenta Valley | 10.5 | 38.5 | 86.0 |
| RES Reseda | 41.7 | 68.8 | 84.9 |
| BB Burbank | 23.7 | 53.8 | 83.8 |
| GLE Glendale | 14.9 | 73.0 | 83.0 |
| GC Cleveland (Grover) | 50.4 | 58.3 | 82.9 |
| FBM Bravo (Francisco) Med Magnet | 39.4 | 72.7 | 82.8 |
| USG Grant (Ulysses S) | 44.4 | 73.5 | 82.7 |
| CHA Chatsworth | 31.2 | 49.2 | 82.0 |
| CP Canoga Park | 55.5 | 64.8 | 81.3 |
| vn Van Nuys | 37.7 | 62.3 | 81.2 |
| WHT Taft (William Howard) | 27.1 | 53.6 | 80.7 |
| LA Los Angeles | 64.2 | 74.5 | 80.6 |
| CAN Canyon | 26.3 | 32.8 | 80.3 |
| ECR El Camino Real | 25.6 | 39.5 | 80.0 |
| MAR Marshall (John) | 50.6 | 81.6 | 79.1 |
| HH Hoover (Herbert) | 15.2 | 70.3 | 79.0 |
| BUR Burroughs | 32.3 | 43.4 | 78.8 |
| FAI Fairfax | 55.4 | 77.2 | 78.2 |
| VAL Valencia | 29.1 | 35.9 | 77.7 |
| wsh Hart (William S) | 32.0 | 27.8 | 77.3 |
| BIR Birmingham | 58.3 | 70.2 | 77.0 |
| VEN Venice | 71.7 | 80.2 | 76.4 |
| JFK Kennedy (John F) | 57.2 | 64.2 | 76.3 |
| PAL Palmdale | 65.5 | 64.3 | 76.2 |
| SF San Fernando | 88.1 | 92.2 | 75.8 |
| VER Verdugo Hills | 48.0 | 78.6 | 75.5 |
| SM Santa Monica | 61.5 | 63.3 | 75.2 |
| SYL Sylmar | 86.5 | 71.0 | 73.4 |
| MON Monroe (James) | 69.9 | 78.1 | 73.1 |
| NH North Hollywood | 64.5 | 74.8 | 72.6 |
| JFP Francis (John H) Polytechnic | 75.8 | 75.8 | 64.1 |
| AH Hamilton (Alexander) | 73.8 | 76.2 | 60.0 |

*This percentage includes students belonging to three racial and ethnic groups: African American, American Indian, and Latina/o.

Table 6. Percent of CSUN Students Stemming from Minority Backgrounds, Receiving Grant or Scholarship Aid, and Fully Proficient in Mathematics and English at Entry by Top Feeder High School (Fall 2003-06 Entrants)

Table 6. Percent of CSUN Students Stemming from Minority Backgrounds, Receiving Grant or Scholarship Aid, and Fully Proficient in Mathematics and English at Entry by Top Feeder High School (Fall 2003-06 Entrants)

| High School Code Name | Percent Minority* | Percent <br> Receiving Grants/ Scholarships | Fully Profic. in Math \& English at Entry |
| :---: | :---: | :---: | :---: |
| Sau Saugus | 13.7 | 23.1 | 65.0 |
| Can Canyon | 26.3 | 32.8 | 51.1 |
| VAL Valencia | 29.1 | 35.9 | 49.5 |
| CV Crescenta Valley | 10.5 | 38.5 | 49.0 |
| wsh Hart (William S) | 32.0 | 27.8 | 46.4 |
| GH Granada Hills | 26.3 | 41.1 | 45.6 |
| wHT Taft (William Howard) | 27.1 | 53.6 | 36.7 |
| BB Burbank | 23.7 | 53.8 | 36.4 |
| BUR Burroughs | 32.3 | 43.4 | 35.4 |
| CHA Chatsworth | 31.2 | 49.2 | 33.2 |
| ECR El Camino Real | 25.6 | 39.5 | 32.6 |
| VN Van Nuys | 37.7 | 62.3 | 30.0 |
| FBM Bravo (Francisco) Med Magnet | 39.4 | 72.7 | 29.3 |
| RES Reseda | 41.7 | 68.8 | 29.1 |
| JFK Kennedy (John F) | 57.2 | 64.2 | 27.7 |
| GLE Glendale | 14.9 | 73.0 | 27.0 |
| GC Cleveland (Grover) | 50.4 | 58.3 | 25.0 |
| CP Canoga Park | 55.5 | 64.8 | 25.0 |
| HH Hoover (Herbert) | 15.2 | 70.3 | 23.9 |
| SM Santa Monica | 61.5 | 63.3 | 22.9 |
| PAL Palmdale | 65.5 | 64.3 | 20.2 |
| AH Hamilton (Alexander) | 73.8 | 76.2 | 20.0 |
| VEN Venice | 71.7 | 80.2 | 19.8 |
| USG Grant (Ulysses S) | 44.4 | 73.5 | 19.1 |
| VER Verdugo Hills | 48.0 | 78.6 | 18.4 |
| MON Monroe (James) | 69.9 | 78.1 | 17.4 |
| NH North Hollywood | 64.5 | 74.8 | 15.0 |
| BIR Birmingham | 58.3 | 70.2 | 14.9 |
| SF San Fernando | 88.1 | 92.2 | 13.8 |
| SYL Sylmar | 86.5 | 71.0 | 13.5 |
| LA Los Angeles | 64.2 | 74.5 | 11.5 |
| MAR Marshall (John) | 50.6 | 81.6 | 10.1 |
| FAI Fairfax | 55.4 | 77.2 | 9.9 |
| JFP Francis (John H) Polytechnic | 75.8 | 75.8 | 6.6 |

* This percentage includes students belonging to three racial and ethnic groups: African American, American Indian, and Latina/o.

Table 9. Percent of CSUN Students Stemming from Minority Backgrounds, Receiving Grant or Scholarship Aid, and Their Average SAT Scores by Top Feeder High School (Fall 2003-06

Table 7. Aspects of Students' Proficiency at Entry in English and Percentage of Freshmen Receiving Grant and Scholarship Aid by Top Feeder High School (Fall 2003-06 Entrants)

| High School Code Name | Percent Receiving Grant or Scholarship Aid | Percent Needing Remediation at Entry | Percent <br> Exempt From <br> Taking EPT | Percent <br> Passing the EPT Exam | Mean EPT Score (passing=151+) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SAU Saugus | 23.1 | 29.1 | 45.3 | 46.9 | 149.1 |
| VAL Valencia | 35.9 | 38.8 | 37.9 | 37.5 | 147.8 |
| CV Crescenta Valley | 38.5 | 42.0 | 36.4 | 34.1 | 146.3 |
| wsH Hart (William S) | 27.8 | 42.3 | 32.0 | 37.9 | 147.1 |
| CAN Canyon | 32.8 | 43.1 | 38.0 | 30.6 | 148.2 |
| GH Granada Hills | 41.1 | 44.5 | 33.9 | 32.7 | 145.9 |
| BUR Burroughs | 43.4 | 51.5 | 34.3 | 21.5 | 145.6 |
| WHT Taft (William Howard) | 53.6 | 54.8 | 29.5 | 22.2 | 143.9 |
| BB Burbank | 53.8 | 56.6 | 22.0 | 27.4 | 146.1 |
| CHA Chatsworth | 49.2 | 58.8 | 27.2 | 19.2 | 143.3 |
| ECR El Camino Real | 39.5 | 59.1 | 22.3 | 24.0 | 145.0 |
| RES Reseda | 68.8 | 61.3 | 24.1 | 19.2 | 142.7 |
| VN Van Nuys | 62.3 | 61.9 | 26.5 | 15.9 | 143.3 |
| FBM Bravo (Francisco) Med Magnet | 72.7 | 63.6 | 22.2 | 18.2 | 144.2 |
| JFK Kennedy (John F) | 64.2 | 64.7 | 21.4 | 17.6 | 143.6 |
| GC Cleveland (Grover) | 58.3 | 65.1 | 22.6 | 15.9 | 143.2 |
| GLE Glendale | 73.0 | 66.0 | 17.0 | 20.5 | 144.3 |
| USG Grant (Ulysses S) | 73.5 | 66.0 | 17.3 | 20.1 | 143.1 |
| AH Hamilton (Alexander) | 76.2 | 66.2 | 21.5 | 15.7 | 142.7 |
| CP Canoga Park | 64.8 | 66.4 | 15.6 | 21.3 | 144.5 |
| PAL Palmdale | 64.3 | 67.9 | 16.7 | 18.6 | 144.3 |
| BIR Birmingham | 70.2 | 68.1 | 17.0 | 17.9 | 143.6 |
| SM Santa Monica | 63.3 | 68.8 | 14.7 | 19.4 | 143.5 |
| HH Hoover (Herbert) | 70.3 | 69.6 | 14.5 | 18.6 | 142.7 |
| VER Verdugo Hills | 78.6 | 72.4 | 10.2 | 19.3 | 142.1 |
| SYL Sylmar | 71.0 | 75.4 | 12.1 | 14.3 | 141.4 |
| VEN Venice | 80.2 | 75.5 | 11.3 | 14.9 | 140.9 |
| NH North Hollywood | 74.8 | 76.3 | 15.6 | 9.6 | 140.1 |
| LA Los Angeles | 74.5 | 77.0 | 13.9 | 10.6 | 140.7 |
| MON Monroe (James) | 78.1 | 77.2 | 12.3 | 12.0 | 141.6 |
| SF San Fernando | 92.2 | 80.3 | 8.6 | 12.2 | 141.4 |
| MAR Marshall (John) | 81.6 | 83.5 | 8.9 | 8.3 | 140.0 |
| FAI Fairfax | 77.2 | 84.2 | 6.9 | 9.6 | 141.3 |
| JFP Francis (John H) Polytechnic | 75.8 | 89.4 | 4.0 | 6.9 | 138.3 |

* This percentage includes students belonging to three racial and ethnic groups: African American, American Indian, and Latina/o.

Table 8. Aspects of CSUN Students' Proficiency in Mathematics at Entry and Percentage of Freshmen Stemming from Minority Backgrounds or Receiving Grant and Scholarship Aid by Top Feeder High School (Fall 2003-06 Entrants)

Table 8. Aspects of CSUN Students' Proficiency in Mathematics at Entry and Percentage of Freshmen Stemming from Minority Backgrounds orReceiving Grant and Scholarship Aid by Top Feeder High School (Fall 2003-06 Entrants)

| High School Code Name | Percent Minority* | Percent with Grant/Scholarship Aid | Percent Needing Remediation at Entry | Percent Exempt From Taking ELM | Percent <br> Passing the ELM Exam | Mean ELM Score (passing=50+ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAU Saugus | 13.7 | 23.1 | 12.8 | 61.5 | 66.7 | 54.4 |
| CV Crescenta Valley | 10.5 | 38.5 | 23.1 | 52.4 | 51.5 | 48.6 |
| VAL Valencia | 29.1 | 35.9 | 29.1 | 44.7 | 47.4 | 48.3 |
| CAN Canyon | 26.3 | 32.8 | 29.2 | 39.4 | 51.8 | 48.9 |
| WSH Hart (William S) | 32.0 | 27.8 | 29.9 | 42.3 | 48.2 | 48.2 |
| GH Granada Hills | 26.3 | 41.1 | 33.5 | 47.0 | 36.9 | 45.8 |
| WHT Taft (William Howard) | 27.1 | 53.6 | 36.1 | 41.0 | 38.8 | 45.6 |
| GLE Glendale | 14.9 | 73.0 | 38.3 | 29.8 | 45.5 | 47.9 |
| RES Reseda | 41.7 | 68.8 | 40.7 | 36.2 | 36.2 | 46.0 |
| HH Hoover (Herbert) | 15.2 | 70.3 | 42.8 | 31.2 | 37.9 | 46.3 |
| ECR El Camino Real | 25.6 | 39.5 | 42.8 | 40.5 | 28.1 | 43.4 |
| BB Burbank | 23.7 | 53.8 | 44.5 | 30.6 | 35.8 | 45.3 |
| CP Canoga Park | 55.5 | 64.8 | 45.3 | 21.9 | 42.0 | 46.9 |
| BUR Burroughs | 32.3 | 43.4 | 45.5 | 33.3 | 31.8 | 41.6 |
| JFK Kennedy (John F) | 57.2 | 64.2 | 49.1 | 28.3 | 31.5 | 44.4 |
| GC Cleveland (Grover) | 50.4 | 58.3 | 49.2 | 29.8 | 29.9 | 44.0 |
| CHA Chatsworth | 31.2 | 49.2 | 49.6 | 29.6 | 29.5 | 42.2 |
| VN Van Nuys | 37.7 | 62.3 | 49.8 | 29.1 | 29.7 | 43.5 |
| FBM Bravo (Francisco) Med Magnet | 39.4 | 72.7 | 51.5 | 34.3 | 21.5 | 40.6 |
| VEN Venice | 71.7 | 80.2 | 58.5 | 21.7 | 25.3 | 40.7 |
| LA Los Angeles | 64.2 | 74.5 | 59.4 | 23.0 | 22.8 | 39.7 |
| SM Santa Monica | 61.5 | 63.3 | 59.6 | 29.4 | 15.6 | 38.8 |
| MON Monroe (James) | 69.9 | 78.1 | 60.3 | 16.4 | 27.9 | 41.6 |
| SF San Fernando | 88.1 | 92.2 | 62.1 | 18.6 | 23.7 | 39.5 |
| BIR Birmingham | 58.3 | 70.2 | 62.6 | 13.2 | 27.9 | 40.8 |
| VER Verdugo Hills | 48.0 | 78.6 | 64.3 | 18.4 | 21.3 | 39.5 |
| USG Grant (Ulysses S) | 44.4 | 73.5 | 67.3 | 17.3 | 18.7 | 39.3 |
| FAI Fairfax | 55.4 | 77.2 | 67.3 | 14.9 | 20.9 | 38.4 |
| PAL Palmdale | 65.5 | 64.3 | 70.2 | 13.1 | 19.2 | 37.4 |
| MAR Marshall (John) | 50.6 | 81.6 | 73.4 | 11.4 | 17.1 | 36.8 |
| SYL Sylmar | 86.5 | 71.0 | 73.4 | 14.0 | 14.6 | 37.6 |
| NH North Hollywood | 64.5 | 74.8 | 73.8 | 15.3 | 12.9 | 35.7 |
| AH Hamilton (Alexander) | 73.8 | 76.2 | 73.8 | 17.7 | 10.3 | 32.9 |
| JFP Francis (John H) Polytechnic | 75.8 | 75.8 | 78.8 | 8.1 | 14.3 | 33.8 |

[^9]Table 9. Percent of CSUN Students Stemming from Minority Backgrounds, Receiving Grant or Scholarship Aid, and Their Average SAT Scores by Top Feeder High School (Fall 2003-06 Entrants

| High School Code Name | Percent Minority* | Percent with Grants/ Scholarships | Mean SAT <br> Mathematics Mean SAT Score 'erbal Score |
| :---: | :---: | :---: | :---: |
| SAU Saugus | 13.7 | 23.1 | 562.7526 .2 |
| wsh Hart (William S) | 32.0 | 27.8 | 517.5496 .3 |
| CAN Canyon | 26.3 | 32.8 | 523.8 505.2 |
| VAL Valencia | 29.1 | 35.9 | 517.7506 .9 |
| CV Crescenta Valley | 10.5 | 38.5 | 545.9492 .7 |
| ECR El Camino Real | 25.6 | 39.5 | 509.5474 .5 |
| GH Granada Hills | 26.3 | 41.1 | 520.9491 .1 |
| BUR Burroughs | 32.3 | 43.4 | $491.4 \quad 497.4$ |
| CHA Chatsworth | 31.2 | 49.2 | $492.0 \quad 477.3$ |
| WHT Taft (William Howard) | 27.1 | 53.6 | 522.2495 .3 |
| BB Burbank | 23.7 | 53.8 | $492.4 \quad 468.9$ |
| GC Cleveland (Grover) | 50.4 | 58.3 | 471.2460 .3 |
| vn Van Nuys | 37.7 | 62.3 | 491.3 472.7 |
| SM Santa Monica | 61.5 | 63.3 | $475.7 \quad 455.4$ |
| JFK Kennedy (John F) | 57.2 | 64.2 | $487.4 \quad 462.7$ |
| PAL Palmdale | 65.5 | 64.3 | $449.1 \quad 456.5$ |
| CP Canoga Park | 55.5 | 64.8 | 484.4456 .3 |
| RES Reseda | 41.7 | 68.8 | 500.9457 .0 |
| BIR Birmingham | 58.3 | 70.2 | $443.9 \quad 444.3$ |
| HH Hoover (Herbert) | 15.2 | 70.3 | $493.8 \quad 448.7$ |
| SYL Sylmar | 86.5 | 71.0 | 439.5423 .6 |
| FBM Bravo (Francisco) Med Magnet | 39.4 | 72.7 | 465.2449 .7 |
| GLE Glendale | 14.9 | 73.0 | $488.9 \quad 439.4$ |
| USG Grant (Ulysses S) | 44.4 | 73.5 | 458.4 436.8 |
| LA Los Angeles | 64.2 | 74.5 | 469.1 441.1 |
| NH North Hollywood | 64.5 | 74.8 | 425.8 418.1 |
| JFP Francis (John H) Polytechnic | 75.8 | 75.8 | 398.6390 .9 |
| AH Hamilton (Alexander) | 73.8 | 76.2 | $446.4 \quad 461.7$ |
| FAI Fairfax | 55.4 | 77.2 | 443.3 433.4 |
| MON Monroe (James) | 69.9 | 78.1 | 440.3 427.8 |
| VER Verdugo Hills | 48.0 | 78.6 | $454.4 \quad 435.6$ |
| VEN Venice | 71.7 | 80.2 | $454.0 \quad 425.1$ |
| MAR Marshall (John) | 50.6 | 81.6 | 432.1 406.7 |
| SF San Fernando | 88.1 | 92.2 | $438.7 \quad 416.5$ |

[^10]Table 10. Percent of CSUN Students Needing Remediation in English or Mathematics at Entry and Selected CSUN Performance Characteristics by Top Feeder High School (Fall 2003-06 Entrants)

Table 10. Percent of CSUN Students Needing Remediation in English or Mathematics at Entry and Selected CSUN Performance Characteristics by Top Feeder High School (Fall 2003-06 Entrants)

| High School Code Name | Percent Needing <br> Remediation at Entry in |  | Fully <br> Proficient One Year After Entry | $\begin{gathered} \text { CSUN } \\ \text { GPA } \end{gathered}$ | Units Attempted in 1st Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SAU Saugus | 12.8 | 29.1 | 100.0 | 2.90 | 24.2 |
| CV Crescenta Valley | 23.1 | 42.0 | 95.1 | 2.70 | 22.3 |
| VAL Valencia | 29.1 | 38.8 | 91.3 | 2.74 | 22.8 |
| CAN Canyon | 29.2 | 43.1 | 95.6 | 2.87 | 22.0 |
| wsH Hart (William S) | 29.9 | 42.3 | 91.8 | 2.58 | 20.7 |
| GH Granada Hills | 33.5 | 44.5 | 97.5 | 2.86 | 22.9 |
| wHT Taft (William Howard) | 36.1 | 54.8 | 89.8 | 2.71 | 21.0 |
| GLE Glendale | 38.3 | 66.0 | 94.3 | 2.78 | 20.6 |
| RES Reseda | 40.7 | 61.3 | 91.5 | 2.64 | 20.4 |
| HH Hoover (Herbert) | 42.8 | 69.6 | 90.6 | 2.58 | 19.9 |
| ECR El Camino Real | 42.8 | 59.1 | 92.6 | 2.69 | 20.1 |
| BB Burbank | 44.5 | 56.6 | 96.0 | 2.71 | 20.8 |
| CP Canoga Park | 45.3 | 66.4 | 89.8 | 2.54 | 19.9 |
| BUR Burroughs | 45.5 | 51.5 | 89.9 | 2.57 | 21.3 |
| JFK Kennedy (John F) | 49.1 | 64.7 | 87.9 | 2.47 | 19.2 |
| GC Cleveland (Grover) | 49.2 | 65.1 | 90.9 | 2.61 | 19.6 |
| CHA Chatsworth | 49.6 | 58.8 | 90.4 | 2.65 | 20.1 |
| VN Van Nuys | 49.8 | 61.9 | 93.3 | 2.59 | 20.3 |
| FBM Bravo (Francisco) Med Magnet | 51.5 | 63.6 | 91.9 | 2.59 | 20.2 |
| VEN Venice | 58.5 | 75.5 | 86.8 | 2.43 | 18.1 |
| LA Los Angeles | 59.4 | 77.0 | 86.7 | 2.54 | 17.9 |
| SM Santa Monica | 59.6 | 68.8 | 86.2 | 2.37 | 17.8 |
| MON Monroe (James) | 60.3 | 77.2 | 82.2 | 2.46 | 18.1 |
| SF San Fernando | 62.1 | 80.3 | 84.0 | 2.43 | 17.1 |
| BIR Birmingham | 62.6 | 68.1 | 87.7 | 2.57 | 19.0 |
| VER Verdugo Hills | 64.3 | 72.4 | 86.7 | 2.54 | 17.9 |
| USG Grant (Ulysses S) | 67.3 | 66.0 | 91.4 | 2.60 | 18.4 |
| FAI Fairfax | 67.3 | 84.2 | 90.1 | 2.28 | 17.1 |
| PAL Palmdale | 70.2 | 67.9 | 79.8 | 2.59 | 18.4 |
| MAR Marshall (John) | 73.4 | 83.5 | 85.4 | 2.53 | 16.2 |
| SYL Sylmar | 73.4 | 75.4 | 82.6 | 2.35 | 17.0 |
| NH North Hollywood | 73.8 | 76.3 | 81.6 | 2.38 | 16.5 |
| AH Hamilton (Alexander) | 73.8 | 66.2 | 74.6 | 2.29 | 16.3 |
| JFP Francis (John H) Polytechnic | 78.8 | 89.4 | 75.1 | 2.22 | 14.8 |

Table 11. Percent of CSUN Students Fully Proficient One Year After Entry, Average CSUN GPA, and One-Year Continuation Rate by Top Feeder High School (Fall 2003-06

Table 11. Percent of CSUN Students Fully Proficient One Year After Entry, Average CSUN GPA, and One-Year Continuation Rate by Top Feeder High School (Fall 2003-06 Entrants)

| High School Code Name | Fully Proficient One Year After Entry | Mean CSUN GPA | One-Year Contin. Rate (2003-06) |
| :---: | :---: | :---: | :---: |
| GH Granada Hills | 97.5 | 2.86 | 91.0 |
| SAU Saugus | 100.0 | 2.90 | 88.9 |
| cV Crescenta Valley | 95.1 | 2.70 | 86.0 |
| RES Reseda | 91.5 | 2.64 | 84.9 |
| BB Burbank | 96.0 | 2.71 | 83.8 |
| GLE Glendale | 94.3 | 2.78 | 83.0 |
| GC Cleveland (Grover) | 90.9 | 2.61 | 82.9 |
| FBM Bravo (Francisco) Med Magnet | 91.9 | 2.59 | 82.8 |
| USG Grant (Ulysses S) | 91.4 | 2.60 | 82.7 |
| CHA Chatsworth | 90.4 | 2.65 | 82.0 |
| CP Canoga Park | 89.8 | 2.54 | 81.3 |
| vN Van Nuys | 93.3 | 2.59 | 81.2 |
| wHT Taft (William Howard) | 89.8 | 2.71 | 80.7 |
| LA Los Angeles | 86.7 | 2.54 | 80.6 |
| CAN Canyon | 95.6 | 2.87 | 80.3 |
| ECR El Camino Real | 92.6 | 2.69 | 80.0 |
| MAR Marshall (John) | 85.4 | 2.53 | 79.1 |
| HH Hoover (Herbert) | 90.6 | 2.58 | 79.0 |
| BUR Burroughs | 89.9 | 2.57 | 78.8 |
| FAI Fairfax | 90.1 | 2.28 | 78.2 |
| VAL Valencia | 91.3 | 2.74 | 77.7 |
| wSH Hart (William S) | 91.8 | 2.58 | 77.3 |
| BIR Birmingham | 87.7 | 2.57 | 77.0 |
| VEN Venice | 86.8 | 2.43 | 76.4 |
| JFK Kennedy (John F) | 87.9 | 2.47 | 76.3 |
| PAL Palmdale | 79.8 | 2.59 | 76.2 |
| SF San Fernando | 84.0 | 2.43 | 75.8 |
| VER Verdugo Hills | 86.7 | 2.54 | 75.5 |
| SM Santa Monica | 86.2 | 2.37 | 75.2 |
| SYL Sylmar | 82.6 | 2.35 | 73.4 |
| MON Monroe (James) | 82.2 | 2.46 | 73.1 |
| NH North Hollywood | 81.6 | 2.38 | 72.6 |
| JFP Francis (John H) Polytechnic | 75.1 | 2.22 | 64.1 |
| AH Hamilton (Alexander) | 74.6 | 2.29 | 60.0 |

Table 12. One-Year Continuation Rates and Percent of Freshmen Needing Remediation in Mathematics at Entry or Stemming From Minority Backgrounds by Top Feeder High School and School District (Fall 2003-06 Entrants)

Table 12. One-Year Continuation Rates and Percent of Freshmen Needing Remediation in Mathematics at Entry or Stemming From Minority Backgrounds by Top Feeder High School and School District (Fall 2003-06 Entrants)

| High School Code Name |  Percent <br>  Needing <br> Percent Remed. in <br> Minority Math at Entry | One-Year Continuation Rate (2003-06) Rate Level |
| :---: | :---: | :---: |
| High Schools in LAUSD |  |  |
| GH H Mranada:Hills sol | 2633 | 91.0 0 High |
| RES Reseda | 417.: $\quad 40.7$ | 84.9 High |
| GC Cleveland (Grover) | 50.4 : 49.2 | 82.9: High |
| FBM Bravo (Francisco) Med Magnet | 39.4 51.5 | 82.8 High |
| USG Grant (Ulysses S) | 44.4 6 67.30 | 82.7 \% High |
| CHA Chatsworth | 31.2 49.6 | 82.0 High |
| CP Canoga Park | 55.5 45.3 | 81.3 Med |
| vN Van Nuys | 37.7 49.8 | 81.2 Med |
| wht Taft (William Howard) | $27.1 \quad 36.1$ | 80.7 Med |
| LA Los Angeles | 64.2 : 59.4 | 80.6 Med |
| ECR El Camino Real | 25.6 42.8 | 80.0 Med |
| MAR Marshall (John) | 50.6 : 73.4 | 79.1.: Med |
| FAI Fairfax | $55.4 \quad 67.3$ | 78.2 Med |
| BIR Birmingham | 58.3 62.6 | 77.0 Med |
| VEN Venice | 71.758 .5 | 76.4 Med |
| JFK Kennedy (John F) | 57.2 49.1 | 76.3 Med |
| SF San Fernando | : 8807.: 62.1 | 75.8: ${ }^{\text {a }}$ Low |
| VER Verdugo Hills | $48.0 \quad 64.3$ | 75.5 Low |
| SYL Sylmar | $86.5 \quad 73.4$ | 73.4 Low |
| MON Monroe (James) | 69.9 60.3 | 73.1 Low |
| NH North Hollywood | $64.5 \quad 73.8$ | 72.6 Low |
| JFP Francis (John H) Polytechnic | 75.8 78.8 | 64.1 Low |
| AH Hamilton (Alexander) | 73.8 73.8 | 60.0 Low |
| High Schools in Other Districts in Los Angeles County |  |  |
| SAU Saugus | 13.7 12.8 | 88.9 High |
| CV Crescenta Valley | 10.5 23.1 | 86.0 High |
| BB Burbank | 23.7 44.5 | 83.8 High |
| GLE Glendale | 14.9 38.3 | 83.0 High |
| CAN Canyon | 26.3 29.2 | 80.3 Med |
| HH Hoover (Herbert) | 15.2 42.8 | 79.0 Med |
| BUR Burroughs | 32.3 45.5 | 78.8 Med |
| VAL Valencia | 29.1 29.1 | 77.7 Med |
| Wsh Hart (William S) | $32.0 \quad 29.9$ | 77.3 Med |
| PAL Palmdale | 65.5 70.2 | 76.2 Med |
| SM Santa Monica | 61.5 | 75.2 Low |

*This percentage includes students belonging to three racial and ethnic groups: African American, American. Indian, and Latina/o.

 NOTE: cells in bold denote schools whose continuation rates are lower than would be expected, while shaded cells denote schools whose continuation rates are higher than expected, given their minority and remediation percentages.

Table B-1. Percentage of Students Stemming from Minority Backgrounds, Qualifying for Free Lunches, or Receiving Grant/Scholarshin Aid and Academic Performance Index (API) Scores by Ton Feeder High


[^0]:    ${ }^{1}$ The Fall 2007 entrants are not included in any of the analyses discussed here, since their one-year continuation rates are yet to be determined.

[^1]:    ${ }^{2}$ A good many students complete courses at area community colleges while they are still in high school, thereby giving them a leg-up on CSUN's unit requirements. Advanced placement work in high school may provide additional credit. Consequently, many students end their first year at CSUN with more earned units than one would expect from the number attempted.

[^2]:    ${ }^{3}$ School characteristics were initially defined for all factors with measures of association (Cramer's V or Eta) of 0.15 or higher for the comparisons shown in Tables 2-4. There were two exceptions: average SAT composite scores were excluded as a needless duplication of the verbal and math sub-scores and the percentage of EOP students was ignored because of its atypical association with the low continuation rate schools.

[^3]:    ${ }^{4}$ Although Granada Hills has quite low percentages of students from minority backgrounds or needing remediation in mathematics at entry, its CSUN students are so much more likely to persist than one would expect that the school might be a good place to look for best practices.

[^4]:    ${ }^{5}$ The very high zero-order correlation between the two variables $-\mathrm{R}=0.902$ - supports such an interpretation (see the last row of Table A-4).

[^5]:    
    
    
    Coefficients are calculated using ordinary least squares (OLS) regression.

[^6]:    * Each school's district appears in square brackets.

[^7]:    * The Asian American group includes Pacific Islanders.

[^8]:    * The number of units earned by students includes advanced placement and community college credits.

[^9]:    * This percentage includes students belonging to three racial and ethnic groups: African American, American Indian, and Latina/o.

[^10]:    * This percentage includes students belonging to three racial and ethnic groups: African American, American Indian, and Latina/o.

