DOCUMENT RESUME

ED 316 416 SE 051 247

TITLE Retention of Students in Engineering. A Report to the

Legislature in Response to Senate Concurrent

F

年間では、日本ので

Resolution 16 (1985).

INSTITUTION California State Postsecondary Education Commission,

Sacramento.

REPORT NO 85-33
PUB DATE Dec 86
NOTE 62p.

AVAILABLE FROM Publications Office, California Postsecondary

Education Commission, Third Floor, 1020 Twelfth Street, Sacramento CA 95814 (free while supply

lasts).

PUB TYPE Reports - Research/Technical (143) -- Reports -

Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS *Academic Persistence; *College Science; *Engineering

Education; *Females; Government Role; Higher Education; *Minority Groups; Physical Sciences;

Science Education; *Student Attrition

IDENTIFIERS *California

ABSTRACT

In 1985, the California legislature directed the California Postsecondary Education Commission to study the attrition rate of students in engineering education in order to learn if ethnic minority and women students had a higher drop-out rate than all engineering students and, if so, to 'termine the reasons for their high attrition. In that resolution, the Legislature also directed the Commission to assess the impact of the Minority Engineering Program in reducing the attrition of minority students in engineering education. This report responds to that resolution by providing information about the attrition rate of women and ethnic minority engineering students and about the impact of the Minority Engineering Program. The study includes discussions of continuation and graduation rates, differing tracking rates by institution and campus, and discussions of the background, effectiveness, characteristics, significant components, and recommendations of the Minority Engineering Program. Appendices include the text of Senate Concurrent Resolution No. 16 (1985), and 25 supplemental tables. (CW)

Reproductions supplied by EDRS are the best that can be made

* from the original document. *

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originati: g it.

Minor changes have been made to improve
reproduction quality.

Points of view or opinions attated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Summary

This report responds to Senate Concurrent Resolution 16 (1985, Bill Greene), which directed the California Postsecondary Education Commission to (1) study the attrition rate of students in engineering education in order to determine if ethnic minority and women students have a higher drop-out rate than all engineering students and (2) assess the impact of the Minority Engineering Program in reducing the attrition rate of minority students in engineering education.

In Part One of the report on pages 3-8, the Commission analyzes by sex and ethnicity the continuation and graduation rates of students majoring in engineering at the University of California and the California State University. In Part Two on pages 9-16, it then examines the success of the Minority Engineering Program.

In brief, the Commission concludes that (1) women continue in and graduate from the University's and State University's engineering programs at approximately the same rate as men; (2) Mexican-American, Black, and other Hispanic students continue in and graduate from these programs at a lower rate than white students, while Asian and Filipino students continue in and graduate at a higher rate; (3) participants in the Minority Engineering Program continue in engineering at a higher rate than non-participants; and (4) three crucial elements of the program are community building among students, academic support through mathematics and science workshops, and professional and personal support through participation in student organizations, summer jobs, internships, and career awareness activities.

On pages 15 and 16, the Commission offers two recommendations: (1) "beginning in the 1988-89 Budget Act, the Minority Engineering Program should be a line item in the budgets of both the University of California and the California State University, and thereby involve both systems in the effort to secure funds for the maintenance and possible expansion of the program," and (2) "prior to January 1, 1990, the Legislature should request a comprehensive evaluation of the Minority Engineering Program, to assess the progress of each participating campus in implementing all of the program's components and document its full impact in increasing the graduation rate of ethnic minority students."

The Commission adopted this report on December 15, 1986, on recommendation of its Policy Evaluation Committee. Additional copies of the report may be obtained from the Publications Office of the Commission. Further information about the report may be obtained from Bruce D. Hamlett of the Commission staff at (916) 322-8010 or from Suzanne Ness, the public information officer of the Commission, at (916) 322-0145.



RETENTION OF STUDENTS IN ENGINEERING

A Report to the Legislature in Response to Senate Concurrent Resolution 16 (1985)

POSTSECONDARY
EDUCATION
OMMISSION

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION Third Floor • 1020 Twelfth Street • Sacramento, California 95814





COMMISSION REPORT 86-33 PUBLISHED DECEMBER 1986

THIS report, like other publications of the California Postsecondary Education Commission, is not copyrighted. It may be reproduced in the public interest, but proper attribution to Report 86-33 of the California Postsecondary Education Commission is requested.

ON THE COVER: Students in the Minority Engineering Program at the School of Engineering and Computer Science, California State University, Northridge.



大人のないのでは、 日本のでは、 日本ので

Contents

	Conten	ıts
Intı	roduction	
	Limits of the Report	
	Definitions	
	Questions to be Answered	
1.	Graduation and Continuation Rates	
	in Engineering	(
	Continuation and Graduation Rates of Women	
	Continuation and Graduation of Ethnic Minority Students	
	Differing Tracking Rates by Institution of Origin	,
	Differing Tracking Rates By Campus	i
2 .	Impact of the Minority Engineering Program	9
	Background on the Program	;
	Effectiveness of the Program	1
	Characteristics of Program Participants	1
	Significant Components of the Program	1
	Conclusions and Recommendations	1
App	endix A: Senate Concurrent Resolution No. 16 (1985)	14
App	endix B: Supplemental Tables	2
Refe	erences	53
	6	•

Displays

0.00			
	ļ.	Baccalaureate Degrees Awarded in Engineering by California's Public Universities, 1984-85	3
	2.	Four-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Sex	5
	3.	Four-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Sex	5
	4.	Seven-Year Tracking Rates for Fall 1978 Freshmen Majoring in Engineering at the California State University, By Sex	5
	5.	Four-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Ethnicity	6
: - %	6.	Four-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Ethnicity	6
	7.	Seven-Year Tracking Rates for Fall 1978 Freshmen Majoring in Engineering at the California State University, by Ethnicity	8
±1.7	8.	Three-Year Continuation Rate of Fall 1982 Ethnic Minority Freshmen Majoring in Engineering at the University of California, by Participation in the Minority Engineering Program	10
	9.	Two-Year Continuation Rate of Fall 1983 Ethnic Minority Freshmen Majoring in Engineering at the University of California, by Participation in the Minority Engineering Program	11
	lO.	Three-Year Continuation Rate of Fall 1982 Ethnic Minority Freshmen Majoring in Engineering at the California State University, by Participation in the Minority Engineering Program	12
ERIC	::	· 7	



Introduction

THROUGH Senate Concurrent Resolution 16 of 1985 (Bill Greene), the Legislature directed the California Postsecondary Education Commission to study the attrition rate of students in engineering education in order to learn if ethnic minority and women students have a higher drop-out rate than all engineering students and, if so, to determine the reasons for their high attrition. In that resolution, which is reproduced in Appendix A, the Legislature also directed the Commission to assess the impact of the Minority Engineering Program in reducing the attrition of minority students in engineering education.

This report responds to Senate Concurrent Resolution 16 by providing information first about the attrition rate of women and ethnic minority engineering students, and then about the impact of the Minority Engineering Program.

Limits of the report

The University of California and the California State University have provided extensive assistance to the Commission in compiling the data necessary for this report, with the University, in particular, providing extensive data about the academic performance of engineering students. In addition, the systemwide office for MESA (Mathematics, Engineering, Science Achievement), which administers the Minority Engineering Program and maintains a thorough data base about program participants, shared these data with Commission staff.

Despite this extensive data support, four limitations are inherent on the types of analyses and conclusions that can be presented in this report:

1. The data provided to the Commission for this report from the University, the State University, and MESA are not comparable, and thus comparisons cannot be made between the University and State University regarding student retention or attrition. For example, the information provided by the University permits tracking students from their enrollment in engineering to

their completion of a degree either in engineering or another field, but that provided by the State University does not differentiate between engineering enrollees who graduate in engineering and those who change their majors and graduate in another field.

- 2. Strate Concurrent Resolution 16 requested the Commission to "assess the impact of differing levels of academic preparation and secondary school education on academic success by ethnic minority and women students in engineering education." Data to answer this question would have to be gathered through a detailed and costly analysis of the secondary school education of engineering students. Lacking funds for such a study, the Commission has not addressed this question in this report.
- 3. The statewide Minority Engineering Program was initiated in Fal: 1982, and it has not been in operation long enough for students who enter the program as freshmen to complete a baccalaureate degree. Consequently, no conclusions can be presented about the impact of the program in improving the graduation rate of minority students in engineering. However, analyses have been made on the continuation rate of these students in engineering after two or three years of study.
- 4. In response to the request of the Legislature to analyze the academic progress of underrepresented ethnic students in engineering education, the Commission provides information on the following pages about all major ethnic groups of students, but it gives emphasis to only three underrepresented groups -- Black, Mexican-American, and other Hispanic (those Hispanic students with a background other than Mexico).

Definitions

In order to respond to Senate Concurrent Resolution 16, the Commission uses three terms frequently in this report -- continuation rate, graduation rate, and



tracking rate. These terms have the following meaning:

- 1. Continuation rate refers to the number of students who are still enrolled in engineering at a specified institution and who have not graduated, withdrawn from the institution, or changed majors while remaining at the institution. This rate is determined by dividing this number by the total number of students who initially enrolled in engineering.
- 2. Graduation rate refers to the number of students who graduated with a baccalaureate degree in engineering from the institution where they originally enrolled. It is determined by dividing this number by the total number of students who initially enrolled in engineering.
- 3. Tracking rate refers to the number of students who have either graduated with a degree in engineering or are still enrolled in an engineering program. It is calculated by adding the continuation and graduation rates.

Questions answered in the report

The report answers four questions asked in Senate Concurrent Resolution 16:

- 1. Do women continue in and graduate from engineering programs at a lower rate than men?
- 2. Do ethnic minority students continue in and graduate from engineering programs at a lower rate than white students?
- 3. Do participants in the Minority Engineering Program continue in engineering programs at a higher rate than students who are not receiving its services?
- 4. If students in the Minority Engineering Program do continue at a higher rate, what components of the program are particularly successful?

The Commission answers the first two questions in Part One of the report on pages 3-7 and the last two in Part Two on pages 9-12.

Graduation and Continuation Rates in Engineering

NINETEEN public university campuses in California offer baccalaureate degree programs in engineering - 13 State University campuses and six University of California campuses. In Fall 1984, these campuses enrolled 31,398 undergraduates in their engineering programs, and in the 1984-85 academic year they awarded 5,391 baccalaureate degrees in engineering. Approximately 16 percent of the engineering students in the public universities are female, 22 percent at the University of California and 14 percent at the State University. Among ethnic groups, approximately 8 percent of the engineering students are Hispanic and approximately 3 percent are Black, with their enrollment levels relatively equal in the University of California and the State University.

Display 1 below presents information on degrees awarded by these 19 campuses to all students, to women, and to Black and Hispanic students. As can be seen, the four largest of the 19 programs are offered at the University of California, Berkeley; California Polytechnic State University, San Luis Obis-

po; California State University, Long Beach; and California State Polytechnic University, Pomona. Among all 19 campuses, Humboldt State University awarded women a larger proportion (30 percent) of its engineering degrees than any other, while the Los Angeles and Northridge campuses of the State University awarded the largest proportion (13 percent) to Hispanic and Black students.

Efforts to increase the numbers of women and ethnic minority students who complete engineering programs began at least a decade ago, following publication of Minorities in Engineering: A Blueprint for Action in 1974 by the Alfred P. Sloan Foundation. As a result of that report, the National Academy of Engineering assumed leadership in convening engineers, educators, and corporate leaders to increase minority representation in the engineering profession. The Academy adopted the goal of achieving a tenfold increase in minority engineering graduates within a decade and established the Committee on Minorities in Engineering to promote this goal. The operations of the Committee were funded by some 30 major cor-

DISPLAY 1 Baccalaureate Degrees Awarded in Engineering by California's Public Universities, 1984-85

Total Number of Degrees Awarde	€ d	Number of Degree Awarded to Black a Hispanic Students	nd	Proportion of Deg Awarded to Black Hispanic Studen	and	Number of Degree Awarded to Wome	es <u>n</u>	Proportion of Degr Awarded to Wome	eus <u>:n</u>
UC Berkeley	573	CSU Long Beach	38	CSU Los Angeles	13.2%	¹ JC Berkeley	132	CSU Humboldt	30.3%
CSU San Luis Obispo	553	CSU Pomona	34	CSU Northridge	12.9	CSU Long Beach	82	UC Davis	25.0
CSU Long Beach	516	UC Berkeley	30	CSU Long Beach	7.4	UC Davis	78	UC Berkeley	23.0
CSU Pomona	492	CSU Northridge	27	CSU San Francisco	7.2	UC Los Angeles	71	UC Los Angeles	22.5
CSU San Diego	324	CSU San Luis Obispo	26	CSU Fresno	7.0	CSU San Luis Obispo	65	UC Irvine	19.8
CSU San Jose	317	CSU Los Angeles	24	CSU Pomona	6.9	CSU San Jose	58	UC San Diego	19.5
UC Los Angeles	315	CSU San Diego	17	UC Davis	5.4	UC San Diego	52	CSU San Jose	18.3
UC Davis	312	UC Davis	17	UC Los Angeles	5.4	UC Santa Barbara	47	C3U Northridge	16.7
UC Santa Barbara	283	UC Los Angeles	17	CSU San Diego	5.2	CSU Pomona	41	UC Santa Barbara	16.6
UC Sun Diego	266	CSU Fresno	15	UC Berkeley	5.2	CSU San Diego	38	CSU Long Beach	15.9
CSU Sacramento	251	UC Santa Barbara	13	CSU San Luis Obispo		CSU Northridge	35	CSU Fullerton	14.7
CSU Fresno	213	CSU San Jose	11	UC Santa Barbara	4.6	CSU Sacramento	33	CSU Sacramento	13.1
CSU Northridge	209	CSU Sacramento	9	CSU Chico	4.6	UC Irvine	32	CSU San Luis Obispo	11.8
CSU Los Angeles	182	CSU San Francisco	7	CSU Fullerton	3.7	CSU Fullerton	24	CSU San Diego	11.7
CSU Fuller con	163	UC San Diego	7	CSU Sacramento	3.6	CSU Fresno	19	CSU San Francisco	11.3
UC irvine	162	CSU Chico	6	C" San Jose	3.5	CSU Los Angeles	18	CSU Los Angeles	9.9
rsu Chico	130	CSU Fullerton	6	UC Irvine	3.1	CSU San Francisco	11	CSU Freano	8.9
CSU San Francisco	97	UC Irvine	5	CSU Humboldt	3.0	CSU liumboldt	10	CSU Pomona	8.3
est Humboldt	33	CSU Humboldt	i	UC San Diego	2.6	CSU Chico	8	CSU Chico	6.2

Source: California Postsecondary Education Commission.



porations working through the National Advisory Council on Minorities in Engineering.

Parallel with this effort, the Engineer's Council for Professional Development, which accredits engineering programs, established both the Minority Engineering Education Effort ("ME3") and the Minority Introduction to Engineering. The purpose of both programs was to identify and motivate ethnic minority high school students to consider the engineering profession. An additional nationwide effort initiated in the 1970s was the formation of the National Fund for Minority Engineering Students in order to provide scholarship support.

The national minority engineering effort was well established by the late '70s, when the several individual efforts were consolidated into one entity, the National Action Council for Minorities in Engineering, based in New York City. During the 1980s, this Council has assumed national leadership in initiating and supporting efforts at many universities throughout the country.

In California, efforts to increase the number of ethnic minorities and women completing engineering programs were initiated in the 1970s through the establishment of three programs:

- 1. Mathematics, Engineering, Science Achievement (MESA), which was initiated in 1970 with 25 students at Oakland Technical High School The primary goal of MESA, which has expanded to a statewide operation with a combination of State and private funding, is to increase the number of high school graduates from underrepresented minority groups with the needed information and academic preparation in mathematics, sciences, and English to pursue a university education in a mathematics-based field.
- 2. The Minority Engineering Program, which began at the California State University, Northridge in 1973. In 1982, State funding was provided through the MESA organization to implement the program on 14 other university campuses, with the goal of increasing the number of underrepresented ethnic minority students who complete baccalaureate programs in engineering. (Part Two of this report evaluates the success of this program.)
- 3. EQUALS, which was launched in 1977 at the Lawrence Hall of Science of the University of California, Berkeley, and which offers workshops for ele-

mentary and secondary school teachers as well as prospective teachers that aim to help them increase the number of young women and minority students who participate in mathematics and computer science education. With the help of funds from the State, the Carnegie Corporation of New York, and the National Science Foundation, EQUALS has expanded to include 15 additional sites -- five of them in California -- and has served over 10,000 teachers in California and 6,000 in 34 other states.

Continuation and graduation rates of women

Available data indicate that women continue in and graduate from engineering programs at approximately the same rate as men at both the University of California and the California State University.

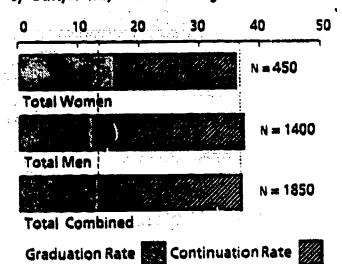
University of California

Freshman entrants: Among freshmen entering the University of California as regular admissions engineering majors in Fall 1981, approximately 37 percent had either completed a baccalaureate degree in engineering or were still enrolled as engineering majors after four years of study. Thirty-five percent had withdrawn from the University, and 27 percent had changed majors while continuing their enrollment. As is shown in Display 2 at the top of the opposite page, these graduation, continuation, and withdrawal rates are approximately the same for men and women, with a slightly larger proportion of women graduating after four years, and a slightly larger proportion of men not graduating but continuing their enrollment as engineering majors. (Table 1 in Appendix B contains detailed additional data on these rates by ethnic group.)

Similar conclusions can be made about freshmen who entered the University as special-action admits in Fall 1981, and about freshmen entering in Fall 1982 and Fall 1983, as Display 3 on page 3 and Tables 2-6 in Appendix B show.

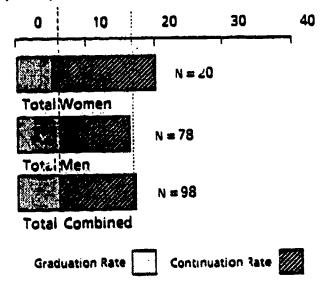
Transfer students: Among transfer students majoring in engineering who entered the University as juniors in Fall 1981, approximately 51 percent had either completed a baccalaureate degree in engineering or were still enrolled as engineering majors after four years. Forty-two percent had withdrawn from the University, and 7 percent had changed majors

DISPLAY 2 Four-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1981. by Sex



Source: California Postsecondary Education Commission.

DISPLAY 3 Four-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Sex



Source: California Postsecondary Education Commission.

while continuing their enrollment. These graduation, continuation, and withdrawal rates are approximately the same for men and women, with a slightly larger proportion of women graduating after four years and a slightly larger proportion of men withdrawing from the institution. (Table 7 in Appendix B contains detailed additional data on these rates by ethnic group.)

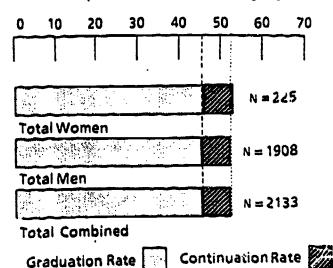
The California State University

Women majoring in engineering in the State University also appear to have graduation and retention records comparable to that of men both among freshman entrants and transfer students.

Freshman entrants: Among all freshman engineering majors entering the State University in Fall 1978 as regular admission students, 45 percent had graduated and 7 percent were still enrolled after seven years of study, with virtually no difference between men's and women's rates, as Display 4 at the top of the next column and Table 8 in Appendix B show. (Available data from the State University do not indicate the proportion of these graduates who received their degrees in engineering.)

Transfer students: Among engineering majors transferring into the State University in Fall 1978, 54 percent had graduated after seven years of study—although not necessarily in engineering; and 4 percent were still enrolled. While women graduated at a slightly lower rate than men (51 percent to 54 percent), a slightly larger proportion of them were still enrolled (6 percent to 4 percent), as Table 9 in Appendix B shows. Available data for engineering had jors entering the State University in Fall 1981, 1982, and 1983 that also appear in Appendix B support the same conclusion.

DISPLAY 4 Seven-Year Tracking Rates for Fall 1978 Freshmen Majoring in Engineering at the California State University, by Sex



Note: These rates include students who changed majors from en-

Source: California Postsecondary Education Commission.



gineering.

· 1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年,1967年

Continuation and graduation of ethnic minority students

Considerable variation exists in the rate in which students from various ethnic groups complete baccalaureate programs in engineering. Generally, Asian and Filipino students graduate from and continue in engineering programs at a higher rate than other students, and Black and Hispanic students graduate and continue at a lower rate. This generalization is based on data for students entering the University of California in Fall 1981 and the California State University in Fall 1978. (Since the Minority Engineering Program was not begun until Fall 1982, these data do not reflect its impact.)

University of California

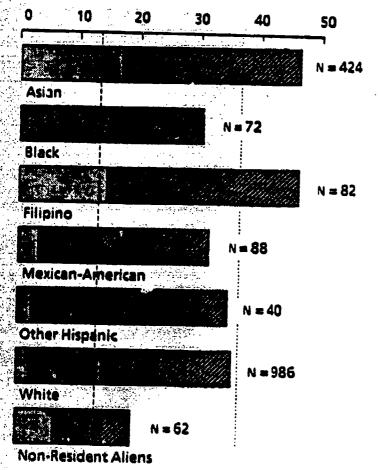
Among engineering students entering the University as regular admits in Fall 1981, 13 percent graduated with baccalaureate degrees in engineering

after four years of study. Asian, Filipino, and white students all graduated at a higher rate -- 17 percent, 15 percent, and 14 percent, respectively, as Display 5 shows. In contrast, none of the Black engineering majors and only 3 percent of the Mexican-American and other Hispanic students had graduated.

Four years after entering, 37 percent of all Fall 1981 regular admission freshmen had either graduated or were still enrolled in engineering. Asian and Filioino students were being tracked at higher rates -- 47 and 46 percent, respectively -- than Black and Hispanic students, at 31 and 32 percent, respectively. The proportion who entered the University in Fall 1981 but withdrew within four years was close to 35 percent for all ethnic groups except Black students, who withdrew at a 49 percent rate.

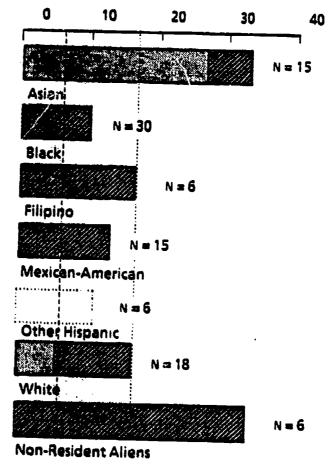
Among special-action admission engineering students entering the University in Fall 1981, 6 percent graduated after four years of study, and 11 percent were still enrolled in engineering programs (Display

DISPLAY 5 Four-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1931, by Ethnicity



Source: California Postsecondary Education Commission.

DISPLAY 6 Four-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Ethnicity



6). Graduation and continuation rates were lower for special-action admits than for regular admits, but the variation by ethnic group among special-action admits was similar to that described above for regular admits.

The California State University

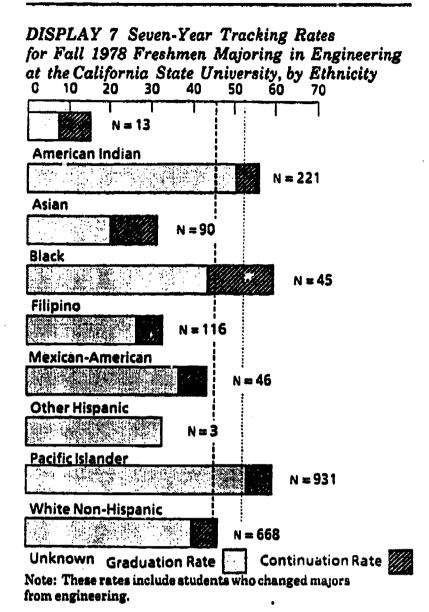
Freshman entrants: A similar pattern exists for engineering students who entered the California State University as freshmen in Fall 1978, with Black and Hispanic students demonstrating low graduation and continuation rates, compared with that of white, Filipino, and Asian students. As Display 7 shows, approximately 52 percent of all freshman engineering majors entering the State University had either graduated or were still enrolled after seven years of study. White and Filipino students maintained a higher tracking rate (60 percent), but Black and Mexican-American students maintained a considerably lower rate (32 and 33 percent, respectively). In addition, Mexican-American students graduated at a lower rate than other Hispanic students (27 percent compared to 37 percent).

Among engineering students entering the State University as freshmen in Fall 1981, a similar pattern exists in their continuation and graduation rates. As Table 10 in Appendix B indicates, approximately 62 percent had either graduated or were still enrolled after four years of study. Asian, Pacific Islander, Filipino, and white students maintained a higher tracking rate than the average of nearly 62 percent, while Black students maintained a substantially lower rate of 34 percent.

Transfer students: Transfer students entering the State University as engineering majors do not demonstrate as large a variation in tracking rate among the various ethnic groups as do freshmen students, as Table 11 in Appendix B demonstrates. Among those transferring into the State University in Fall 1981, for example, 62 percent were still enrolled after four years, but Black and Mexican-American students had only slightly lower tracking rates -- 59 and 56 percent, respectively, while those of white and Asian students were slightly higher -- 65 and 62 percent, respectively.

Differing tracking rates by institution of origin

Substantial variation exists in the tracking rate of engineering students at the University of Califor-



Source: California Postsecondary Education Commission.

nia, depending on which type of in titution the students attended previously, as Tables 12 and 13 in Appendix B show. Students enrolling directly after graduation from public or private high school who constitute nearly 70 percent of the total, have a substantially higher retention rate in engineering than do transfers from Community Colleges, State University campuses, or other University of California campuses, who make up about 16, 2, and 4 percent, respectively. Mexican-American and Black students enter the University's engineering programs directly from high school at a higher rate than white students but from Community College transfer programs at a lower rate.

Differing tracking rates by campus

Considerable variation exists in the tracking rate of engineering students among the six University of



かっているとうかとなるなどのとはなるないのではないのでき

California campuses and 13 State University campuses that offer engineering degrees.

University of California: The Davis and Los Angeles campuses of the six University campuses, have the highest continuation and graduation rates. For example, among freshmen entering the University in Fall 1982, approximately 71 percent of the students at Los Angeles and 64 percent of the students at Davis had either graduated or were still enrolled after three years of study (Table 14, in Appendix B). Similarly, among transfer students entering the University in Fall 1981, approximately 85 percent of the students at Davis and 83 percent at Los Angeles had either graduated or were still enrolled in engineering after four years of study (Table 15 in Appendix B).

California State University: Within the State University, the Chico and San Luis Obispo campuses had the highest tracking rates of all 13 among Fall

をいっているできているというとは、いちをからできるというのであれるのできるとなっているというできない。

1981 freshmen (Table 16 in Appendix B) while Chico, Fresno, Sacramento, and San Jose have the highest rates among transfer students (Table 17). For example, among transfer students entering in Fall, approximately 73 percent of those at Chico and 72 percent of those at Sacramento had either graduated or were still enrolled at the institution after four years of study. As of 1981, eight of the 13 campuses enrolled more of their engineering majors as transfer students, rather than as first-time freshmen. (The five exceptions to this generalization were Fresno, Northridge, Pomona, San Francisco, and San Luis Obispo.)

The number of Hispanic and Black engineering students enrolling at many of the smaller State University campuses is not large enough to permit useful comparisons of campus retention rates by ethnicity, although Tables 16 and 17 contain data on these rates.

Impact of the Minority Engineering Program

Background on the program

In 1973, Ray Landis, an engineering professor at the California State University, Northridge, initiated the Minority Engineering Program, working with 23 students. The program expanded on that campus in the following seven years and served almost 400 students in Fall 1980. The success of the program led to the allocation of State funding to expand it to these 14 university campuses beginning in Fall 1982:

California Polytechnic State University,
San Luis Obispo
California State University, Fresno
California State University, Long Beach
California State University, Los Angeles
California State University, Northridge
California State Polytechnic University, Pomona
California State University, Sacramento
San Diego State University
San Jose State University
University of California, Berkeley
University of California, Davis
University of California, Los Angeles
University of California, Santa Barbara
University of Southern California

In Fall 1983, the program was expanded to California State University, Fullerton, and in Fall 1986, to the Chico and San Francisco campuses. In the latter year, the program at the University of Southern California was eliminated.

On each of the 16 campuses, the Minority Engineering Program is housed in and administered by the school of engineering where a full-time staff director reports to the dean of engineering or another tenured faculty member. Engineering faculty members are involved directly in working with students as academic advisors, mentors, and counselors.

Each campus program is expected to have 12 components, concentrated on freshmen and sophomores:

- 1. Recruitment, to build a st: ong applicant pool for the engineering program.
- 2. Assistance in securing financial aid and scholar-ships.
- 3. Admissions assistance, to ensure that new students are admitted speedily and efficiently.
- 4. Matriculation activities, including financial aid budgeting, housing, diagnostic testing, academic advising, registration, and orientation.
- 5. Freshman orientation through a formal orientation course, preferably for academic credit, focusing on motivation, career awareness, group dynamics, a thorough orientation to the university, and the development of a strong sense of group cohesiveness.
- 6. Academic advising and registration, to ensure that students take the proper courses and credit load, have the best available teachers, and enroll in the same sections of classes as much as possible.
- 7. Academic support, including study skills training and pre-freshman mathematics and science courses as appropriate.
- 8. Tutoring in all lower-division mathematics, science, and engineering courses.
- 9. A student study center, providing a place for students to study in groups and for tutoring.
- 10. Membership and participation in student organizations, such as the National Society of Black Engineers, the Society of Hispanic Professional Engineers, and the American Indian Science of Engineering Society.
- 11. Personal counseling regarding non-academic factors that might interfere with academic work.
- 12. Assistance in finding students' summer jobs in engineering-related employment, which helps to provide financial support, increased motivation, and enhanced awareness of engineering as a career.



The resource guide to the program, Handbook on Improving the Retention and Graduation of Minorities in Engineering (Landis, 1985) argues that the "successful minority engineering program creates an environment, a subculture within the engineering school, that mitigates negative circumstances . . . and helps students to fulfill their social needs within their academic environment Within the MEP community, students develop relationships with others who share common goals and similar workloads. When one's friends are all studying, studying becomes the order of the day" (p. 11).

Approximately 15 percent of the students in the Minority Engineering Program have participated in the Mathematics, Science, Engineering Achievement (MESA) program while enrolled in secondary schools.

Effectiveness of the program

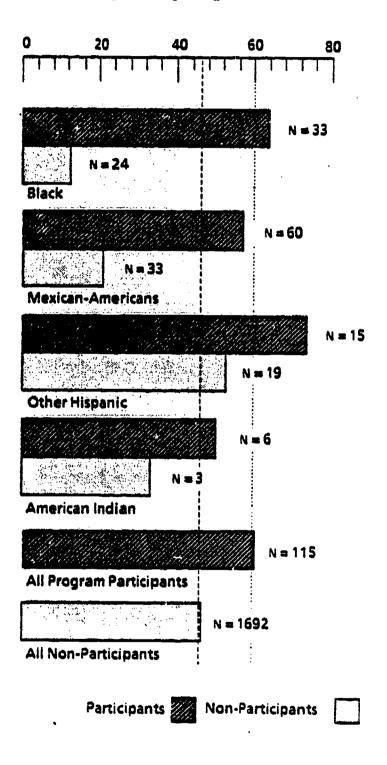
An analysis of data on the impact of the program indicates that its participants continue in engineering at a higher rate than non-participants. This conclusion is based on the following evidence:

University of California

th pain 19 fre ma net Before-and-after comparisons: An analysis of the continuation rates for all freshmen entering the University as engineering majors in either Fall 1981, Fall 1982, or Fall 1983 indicates that on the average 70 percent were still enrolled in engineering after two years of study (Table 18 in Appendix B), but the participants in the Minority Engineering Program who entered the University in Fall 1982 and Fall 1983 continued at a slightly higher rate --73.5 percent. Moreover, each of the four ethnic groups targeted by the program increased their rates substantially after its establishment. For example, only 51 percent of the Mexican-American students and 59 percent of the Black students who entered the University in Fall 1981 prior to the establishment of the program were still enrolled after two years, compared to 65 and 70 percent of those who participated in the program during its first two years.

1982 cohort comparisons: Forty-seven percent of all freshmen entering the University in Fall 1982 and majoring in engineering were still enrolled in engineering after three years of study, in contrast to 60

DISPLAY 8 Three-Year Continuation Rate of Fall 1982 Ethnic Minority Freshmen Majoring in Engineering at the University of California, by Participation in the Minority Engineering Program



Note: None of the students had graduated within three years. Source: California Postsecondary Education Commission.

percent of all program participants (Display 8 at the right and Table 19 in Appendix B). Among the major ethnic groups, 64 percent of the Black student participants in the program continued in engineering, compared with only 13 percent of Black non-participants. Among Mexican-American students, 57 percent of the participants continued, compared to 21 percent of non-participants. Among other Hispanic students, 73 percent of the participants continued, compared to 53 percent of the non-participants.

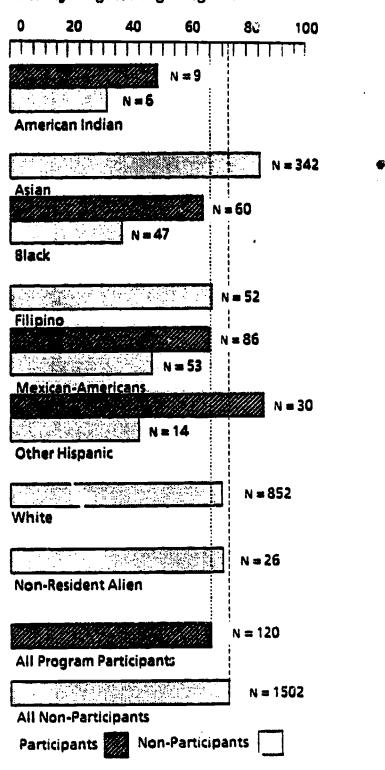
Each of the three ethnic groups targeted by the program -- Black, Mexican-American, and other Hispanic -- continued at a higher rate than all other ethnic groups, except Asian students who had a 63 percent continuation rate.

Among the 98 freshmen entering the University through special-action admissions in Fall 1982 and majoring in engineering, 33 percent of the participants were still enrolled in engineering after three years of study, compared with 30 percent of the non-participants (Table 20 in Appendix B). Among the 30 Black students who began their engineering studies through special-action admissions, 17 participated in the program. Thirty-five percent of these participants were still enrolled in engineering after three years of study, while all 13 of the Black non-participants had discontinued their studies in engineering.

Campus-by-campus comparisons show the same differences: Program participants demonstrated at least the same or higher continuation rates as all engineering students on three of the four campuses (Table 21 in Appendix B). For example, on the Santa Barbara campus, 56 percent of the participants were still enrolled in engineering after three years of study, compared to 49 percent for all engineering majors. Only on the Berkeley campus did the participants have a lower continuation rate than all engineering students (50 percent compared with 58 percent). For each ethnic group on each of the four campuses, the continuation rate of participants was higher than that for non-participants.

1983 cohort comparisons: Among freshmen entering the University in Fall 1983 and majoring in engineering, 73 percent of all of the students were still enrolled in engineering after two years of study. Program participants were continuing at a comparable but slightly lower rate -- 68 percent (Display 9 on this page). Among the various ethnic groups, 68

DISPLAY 9 Two-Year Continuation Rate of Fall 1983 Ethnic Minority Freshmen Majoring in Engineering at the University of California, by Participation in the Minority Engineering Program



Note: None of the students had graduated within three years.

Source: California Postsecondary Education Commission.



percent of the Mexican-American participants were still enrolled, compared with 48 percent of the Mexican-American non-participants. Sixty-six percent of the Black participants were still enrolled in engineering, compared with 38 percent of the non-participants.

The California State University

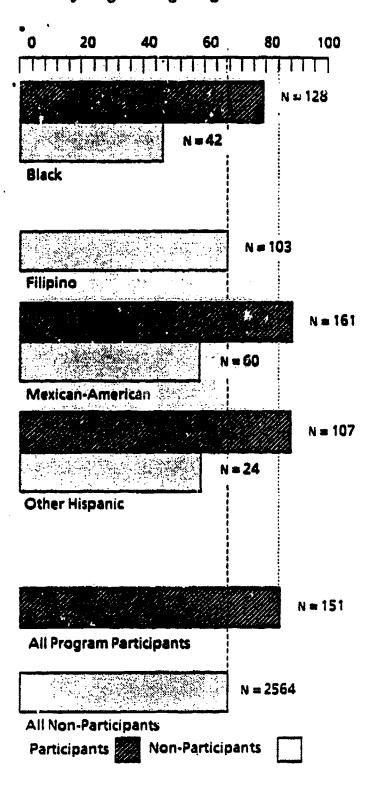
Freshman entrants: Among freshmen entering the State University in Fall 1982 and majoring in engineering, 67 percent were still enrolled three years later — but not necessarily in engineering. In contrast, 84 percent of all participants were still enrolled (Display 10 and Table 22 in Appendix B). Among the various ethnic groups, 88 percent of the Mexican-American student participants were still enrolled, compared with 41 percent of the non-participants. Seventy-nine percent of the Black participants were still enrolled, compared with 30 percent of the non-participants.

On each campus of the State University in Fall 1982, program participants demonstrated a higher continuation rate than that of all engineering students (Table 23 in Appendix B). For example, on the Northridge campus, 78 percent of the participants were still enrolled after three years of study, compared to 68 percent for all engineering majors. For each ethnic group, the continuation rate of participants was higher than that for non-participants. This same fact is accurate for all of the ten State University campuses with a Minority Engineering Program.

Transfer students: Among all transfer students entering the State University in Fall 1982 and majoring in engineering, 65 percent had either graduated or were still enrolled three years later, although not necessarily in engineering, compared to 70 percent of program participants (Table 24 in Appendix B). Among the various ethnic groups, 76 percent of Mexican-American participants were still enrolled, compared to 53 percent of non-participants, and 79 percent of Black participants were still enrolled, compared with 37 percent of non-participants.

Among these Fall 1982 transfer students, program participants demonstrated a higher continuation rate on six campuses than all engineering students and a lower rate on three -- Fresno, Northridge, and San Luis Obispo (Table 25 in Appendix B). The Pomona campus had 21 transfer students participat-

DISPLAY 10 Three-Year Continuation Rate of Fall 1982 Ethnic Minority Freshmen Majoring in Engineering at the California State University, by Participation in the Minority Engineering Program



THE PARTY OF THE P

Note: None of the students had graduated within three years.

Source: California Postsecondary Education Commission.

ing in the Minority Engineering Program -- the largest number of any campus; and 67 percent of them had either graduated or were still enrolled in the institution after three years of study, compared to 62 percent of all transfer students.

Characteristics of program participants

The following generalizations can be me about the participants in the Minority Engineering Program during the first four years of its operation:

- 1. Seventy-three percent have been men, and 27 percent have been women.
- 2. The largest ethnic group served by the program has been Mexican-American, constituting approximately 52 percent of all participants. Thirty-four percent of the participants have been Black, 10 percent other Hispanic, and 3 percent American Indian.
- 3. For a majority of the participants, neither of their parents have attended college, and for 35 percent of the participants their parents have not graduated from high school. For approximately 26 percent of the participants, at least one parent has only an eighth-grade education or less.
- 4. Approximately 15 percent of participants have participated in the Mathematics, Science, Engineering Achievement (MESA) program while enrolled in secondary school.
- 5. The mean high school grade-point average of the participants was 3.26, reaching its highest level of 3.32 among Fall 1985 entrants. Considerable variation in mean high school grade-point average exists among campuses, with participants at UCLA having the highest in the University (at 3.70), and those at the Long Beach, Pomona, and San Luis Obispo campuses having the highest in the State University (at 3.15), with California State University, Los Angeles having the lowest of all campuses (2.98).
- 6. The mean Scholastic Aptitude Test (SAT) score for participants has been 956, with 433 in the verbal test and 523 in mathematics. American Indian participants have had the highest mean score at 1043, while Black participants have had the lowest at 939. Participants entering the Berkeley and Los Angeles campuses have had the highest mean SAT score, at 1122 and 1076 respectively,

- and California State University, Los Angeles, has served participants with the lowest mean score, at 824.
- 7. Most participants have completed four years of high school mathematics. For example, 87 percent have completed algebra 11, and 75 percent have completed trigonometry, but only half have completed pre-calculus and only 26 percent have completed colculus. The programs at UCLA and Northridge serve the largest proportion of participants in their respective segments who have advanced mathematics preparation, with 78 percent and 50 percent, respectively, having completed pre-calculus in high school.
- 8. Approximately 71 percent of the participants have completed a high school chemistry course; 55 percent have completed a high school course in physics; and over half have also completed four years of English, with the mean for all participants being 3.6 years of English.
- 9. The mean undergraduate grade-point average for the 377 participants who have graduated with baccalaureate degrees in engineering has been 2.7, and 23 percent of them had a grade-point average of 3.0 or above.

Significant components of the program

Recent studies of minority student retention in engineering programs have identified a set of factors that cause high attrition ("Retention of Minority Students in Engineering," and Penick and Morning):

- inadequate preparation in mathematics and the physical sciences;
- inadequate motivation toward engineering as a career:
- inadequate financial resources:
- lack of self-confidence:
- ethnic isolation within the program and the institution:
- excessive expenditure of time for social and nonacademic student activities;
- poor teaching and faculty insensitivity to minority students; and
- inadequate student support services in counseling, tutoring, and academic advising.
 20



不是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们也会会会会会会会,我们也会会会会会会会会会会会会会会会会会会会 一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是

Three crucial elements of the Minority Engineering Program that help overcome these causes of high attrition appear to be (1) a sense of community, (2) academic support, and (3) professional and personal support.

Sense of community

Historically, when only one or two Mexican-American or Black students were enrolled in a mathematics or engineering course, they were forced to separate their academic life from their social life: Their ethnic isolation meant that they had no classmates with whom to study or share information, and they tended to socialize with friends not in the academic community who often had a negative influence on their academic work.

Several components of the Minority Engineering Program are designed to weld the participants into a community of scholars who provide each other positive peer support while helping to reduce ethnic isolation and alienation: a freshman orientation course for all participants; the clustering of program participants in the same mathematics and engineering courses during their freshman and sophomore years; and the operation of a student study center.

- The freshman orientation course, which is particularly well developed at Northridge, focuses on career awareness and motivation, group dynamics, study skills development, and an orientation to the institution. By the end of the course, students are expected to know one another and share an attitude of mutual support.
- The clustering of participants in the same classes is inexpensive to implement but has major benefits, as students more easily establish study groups and friendships based on similar academic interests.
- The student study center provides a place for students to study in groups, facilitates student-to-student communication, and guarantees a location where students can find other students with similar academic concerns and problems. On many of the campuses, this study center is open 24 hours a day, and student utilization is high on all of the campuses.

Academic support

Traditional components of all retention programs are tutoring, study skills training, and academic advising to improve course selection. The Minority Engineering Program includes these components, as well as mathematics and science workshops or "shadow" courses designed to provide students with additional exposure to course materials and the benefits of group study.

The model for the mathematics and science workshops was developed by Professor U i Treisman in the Professional Development Program at the University of California, Berkeley. The philosophy of the workshops is that minority students can learn mathematics and science more effectively by studying together with their peers, under the guidance of a skilled teacher. A group of students, all enrolled in the same course, meet regularly throughout the term, working together on homework assignments, reviewing class activities, and preparing for tests. This group activity both helps the students succeed academically and prepares them for subsequent employment in engineering, where cooperative work skills are essential (Treisman, 1985).

了一个时间,这个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个 第一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们就是一个时间,我们

Professional and personal support

Several components of the program seek to enhance the students' professional and career development through participation in student organizations, summer jobs, internships, and career awareness activities. For example, participants are expected to participate in student organizations affiliated with professional societies such as the National Society of Black Engineers, the Society of Hispanic Professional Engineers, and the American Indian Science and Engineering Society. Such organizations provide students with opportunities to develop communication and interpersonal skills, participate in field trips and conferences, interact with their peers in social situations directly related to their academic interests, and gain personal self-confidence through membership in a professional society.

The Minority Engineering Program is also unique from most other State-funded retention programs in at least three ways -- (1) its disciplinary base, (2) itsemphasis on student-to-student interaction, and (3) its approach to recruitment.

Disciplinary base

The program is based in a specific discipline rather than providing institution-wide services. Students share a common curriculum which is relatively well structured over a four-year period. Faculty members are directly involved as academic advisers, and the program is viewed as part of the engineering department. As a consequence, faculty members frequently contribute their time and energy to its operation as well as assist in gaining support from private industry.

Emphasis on student-to-student interaction

The program emphasizes student-to-student relationships organized around a common academic activity, seeking to develop among students the ability and self-confidence to work together to resolve problems, improve their understanding of course material, and overcome the institutional barriers that traditionally inhibit the retention of minority students in engineering. In contrast, most other state funded retention programs emphasize student-to-staff relationships, with professional staff providing most of the counseling, tutoring, and advising.

Specialized recruitment

Students are recruited into the program through several strategies, including direct contact by program staff with high school mathematics and science instructors, who frequently identify talented minority students and assist in encouraging them to attend a particular institution and study engineering. In addition, program participants frequently visit high schools as representatives of their professional society and encourage other minority students to consider the opportunities for university study in engineering.

Conclusions and recommendations

Available data demonstrate that the Minority Engineering Program is increasing the retention rate of ethnic minority students in engineering, but several problems must be resolved if the program is going to continue its success in the coming years.

- Not all campuses are at the same level in implementing the program. Some are only now beginning to develop a freshman orientation course and mathematics and science workshops, despite the essential importance of these components.
- Most campuses do not pay the salary of the project director through institutional funds, despite the acceptance of the program as an integral part of the engineering department and some campuses have experienced instability in staffing, with one campus having four different program directors in the four years of its operation.
- The number of participants on each campus is increasing, as a larger proportion of minority students choose to participate in it. Currently, approximately 65 percent of the eligible ethnic minority students participate on each of the campuses. In addition, three public campuses with engineering programs do not operate a Minority Engineering Program -- Humboldt State University and the University of California at Irvine and San Diego. Success of the existing program warrants its expansion to all public universities and its availability to all interested minority students in engineering.

However, the existing structure for funding the program is faulty. The administrative office of the program is housed with the MESA (Mathematics, Engineering, Science Achievement) program at the Lawrence Hall of Science of the University of California, Berkeley, and the University Office of the President is responsible for submitting budget requests for both programs. However, of the 16 campuses with Minority Engineering Programs, only one-fourth are part of the University, while three-fourths belong to the State University. As a result, there is an incongruity between the segment responsible for preparing budget proposals—the University of California—and the segment with the most campuses in the program—the California State University.

The Commission therefore recommends that, beginning in the 1988-89 Budget Act, the Minority Engineering Program should be a line item in the budgets of both the University of California and the California State University, and thereby involve both systems in the effort to secure funds for the maintenance and possible expansion of the program.



22

Finally, although the program has demonstrated success after three years of operation, its first participants who entered as first-time freshmen have not yet graduated. Accordingly, further monitoring and evaluation of the program is desirable, in order to verify continued improvements in campus-level administration and the ultimate success of the program in increasing graduation rates.

The Commission therefore recommends that, prior to January 1, 1996, the Legislature should request a second comprehensive evaluation of the Minority Engineering Program, to assess the progress of each participating campus in implementing all of the program's components and document its full impact in increasing the graduation rate of ethnic minority students.

Control of the second of the s

Appendix A

Senate Concurrent Resolution No 16 (1985)

Senate Concurrent Resolution No. 16—Relative to engineering education.

LEGISLATIVE COUNSEL'S DIGEST

SCR 16, B. Greene. Engineering education.

This measure would request the California Postsecondary Education Commission to conduct a study of the attrition rate of students in angineering education, to determine if ethnic minoral and women students have a higher attrition rate than all engineering students, and, if so, to determine the causes of this higher attrition rate and develop recommended solutions to increase the retention rate for minority and women students in engineering programs, as specified.

WHEREAS, There are many successful programs that are being conducted to increase the number of minority high school students who enroll in engineering education programs; and

WHEREAS, Few minority students in engineering education complete the engineering requirements in postsecondary education and receive their degrees in

engineering; and

WHEREAS, Congress has passed Public Law 98-377 which contains "Title II of the Education For Economic Security Act of 1984," and this legislation appropriates significant funding for the states, including California, to conduct a needs assessment of the challenges faced by underrepresented groups entering and remaining in science and math related education career paths, including the qualification of teachers; and

WHEREAS, Some researchers have estimated that the attrition rate of minority students in engineering education is in excess of 90 percent from some school

districts; now, therefore, be it

Resolved by the Senate of the State of California, the Assembly thereof concurring, That the California Postsecondary Education Commission is requested to



conduct a study of the attrition rate of students in engineering education, to determine if ethnic minority and women students have a higher attrition rate than all engineering students, and, if so, to determine the causes of this higher attrition rate and develop recommended solutions to increase the retention rate for minority and women students in engineering programs; and be it further

Resolved, That the California State University and the University of California, in cooperation with the California Postsecondary Education Commission, shall identify the types of data necessary to determine the attrition rate for engineering students; and be it further

Resolved, That the California State University and the University of California are requested to collect these data and provide them to the California Postsecondary Education Commission prior to April 1, 1986; and be it further

Resolved, That the California Postsecondary Education Commission assess the impact of the Minority Engineering Program in improving the retention rate of minority students in engineering education and identify those components of the program which have been particularly successful; and be it further

Resolved, That the California Postsecondary Education Commission, in conducting the study, assess the impact of differing levels of academic preparation and secondary school education on academic success by ethnic minority and women students in engineering education; and be it further

Resolved, That the California Postsecondary Education Commission is requested to cooperate with other agencies and groups to assist in this research and develop recommendations; and be it further

Resolved, That the California Postsecondary Education Commission complete the study prior to December 1, 1986, and that the results be transmitted to the Senate and Assembly Education Committees, the Assembly Committee on Economic Development and New Technologies, the Joint Committee on Science and Technology, and to the Mathematics Engineering

THE PARTY OF THE P

Science Achievement and Minority Engineering Program offices located in the Lawrence Hall of Science at the University of California at Berkeley; and be it further

Resolved, That the data derived from the "needs assessment" required in Public Law 98-377 and conducted in California schools be included in the report developed in conjunction with this resolution; and be it further

Resolved, That the Secretary of the Senate transmit a copy of this resolution to the California Postsecondary Education Commission.

0



Appendix B Supplemental Tables

TABLE 1 Four-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Ethnicity and Sex

Ethnic Group & Sex	Number Enrolled Fall 1981	Number Who Withdrew From University	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Tracking <u>Rate</u>
All Ethnic Groups	420	420	.00	00	00.44	74 '	12.50	00.00
Female	450 1400	158 494	12 9 377	92 353	20.44 25.21	71 · 173	15.78 12.36	36.22 37.57
Male Total	1850	652	506	445	24.05	244	13.19	37.24
10001	1000	002	000	140	24100	644	-0.20	01.50
Asian			_					
Female	110	36	21	24	21.82	29	26.36	48.18
Male	314	1.6	53	101	32.17	43	13.69	45.86
Total	424	152	74	125	29.48	72	16.98	46.46
Black								
Female	42	22	9	11	26.19	0	.00	26.19
Male	30	. 13	6	11	36.67	0	.00	36.67
Total	72	35	15	22	30.56	0	.00	30.56
Filipino .		_	_	_	07.00	•	4.5.00	F0 00
Female	20	7	3	7	35.00	3	15.00	50.00
Male	62	19	15	19	30.65	9	14.62	45.17
Total	82	26	18	26	31.71	12	14.63	46.34
Mexican-American								
Female	19	7	5	7	36.84	0	.00	36.84
Male	69	27	21	18	26.09	3	4.35	30.44
Total	88	34	26	25	28.41	3	3.41	31.82
Other Hispanic								
Female	9	1	3	5	55.56	0	.00	55.56
Male	31	12	10	8	25.81	ĭ	3.23	29.04
Total	. 40	13	13	13	32.50	i	2.50	35.00
• • • • • • • • • • • • • • • • • • • •	•••			••	52.5	-	_,,,	
White								
Female	220	71	75	38	17.27	36	16.36	33.64
Male	766	252	236	172	22.45	105	13.71	36.16
Total	986	323	311	210	21.30	141	14.30	35.60
Non-resident aliens								
Female	10	4	6	0	.00	0	.00	.00
Male	52	26	19	8	15.38	4	7.69	23.07
Total	62	24	25	8	12.90	. 4	6.45	19.35
	_							



TABLE 2 Four-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1981, by Ethnicity and Sex

Ethn	ic Group & Sex	Number Enrolled Fall 1981	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>
AllE	Ethnic Groups								
	Female	20	7	9	· 3	15.00	1	5.00	20.00
	Male	78	44	21	8	10.26	5	6.41	16.67
	Total	98	51	30	11	11.22	6	6.12	17.34
Asia	n								
674A	Female	2	1	0	0	00	•		
	Male	13	8	1	1	.00 6.69	1	50.00	50.00
	Total	15	ğ	i	i	6.67	3 4	23.08	29.77
			•	•	•	0.07	•	26.67	33.34
Black									
	Female	13	5	6 5	2	15.38	0	.00	15.38
	Male	17	11	5	1	5.88	0	.00	5.88
f	Total	30	16	11	3	10.00	0	.00	10.00
Filip	ino								
w.	Female	0	0	0	0	N/A	0	00	STA
	Male	6	3	2	ĭ	16.67	Ŏ	.00 .00	N/A 16.67
	Total	6	3	2	i	16.67	ŏ	.00	16.67
Mari	can-American								
MAN	Female	1	1	0	^	00	^		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Male	14	7	, , , , , , , , , , , , , , , , , , ,	9	.00 1 4.29	0	.00	.00
	Total	15	8	5 5	0 2 2	13.33	0 0	.00	14.29
23.			J	· ·	•	10.00	U	.00	13.33
2	r Hispanic	_							
	Female	0	Q	0	0	.00	0	.00	N/A
	Male	6	6	0	0	.00	0	.00	.00
i de la Carrena Carrena	Total	6	6	0	0	.00	0	.00	.00
White	•								
	Female	3	0	3	0	.00	0	.00	.00
3	Male	15	7	3 5 8	2	13.33	i	.00 6.67	.00 20.00
	Total	18	7	8	2 2	11.11	i	5.56	16.67
Non-I	Resident Aliens							_	- · · ·
******	Female	1	0	0	1	100.00	^	00	100.00
	Male	5	ĭ	3	1	20.00	0	.00	100.00
	Total	6	i	3	2	20.00 33.33	0 0	.00 .00	20.00
* 155		•	-	•	~	00.00	U	.00	33.33

Source: California Postsecondary Education Commission staff analysis of University of California data.

Three-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the TABLE 3 University of California, Fall 1982, by Ethnicity and Sex

Maie 1.383 276 424 648 47.89 537 Total 1,808 3364 588 851 47.07 538 Asian Female 126 21 27 78 61.90 000 Male 290 43 61 183 63.10 3 1.03 Total 416 64 89 261 62.74 372 Black Female 24 6 9 9 9 37.50 0 000 Male 33 11 7 16 24 42.11 000 Total 57 17 16 24 42.11 000 Filipino Female 16 5 5 6 37.50 0 000 Maie 54 12 16 26 49.15 000 Masie 54 12 16 26 49.15 000 Masie 54 12 16 26 49.15 000 Mexican-American Female 7 7 10 10 37.03 000 Mexican-American Female 33 32 20 41 44.09 000 Other Hispanic Female 13 2 2 9 9 69.22 000 Total 34 9 4 21 61.76 000 White Female 13 2 2 12 57.14 000 White Female 13 2 2 12 57.14 000 Maie 56 43 68 85 85 39.35 000 White Female 216 43 88 85 39.35 000 Maie 805 165 286 352 44.73 225 Nor-Resident Aliens Female 14 1 12 1 7.14 000 Nor-Resident Aliens Female 14 1 12 1 7.14 000 Total 52 6 36 36 51.33 000 Source: California Postsecondary Education Commission staff analysis of University of California data.	Ethnic Group & Sex	Number Enrolled V Fall 1982	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking Rate
Maile					030	44.00	•	00	44.00
Total 1,808 364 588 361 47.07 5 .28 Asian Female 126 21 27 73 61.90 0 .00 Male 290 43 61 183 63.10 3 1.03 Total 416 64 88 261 62.74 3 1.03 Total 57 17 16 15 45.45 0 .00 Total 57 17 16 24 42.11 0 .00 Total 57 17 16 26 43.15 0 .00 Total 70 17 21 32 45.71 0 .00 Total 93 32 20 41 44.09 0 .00 Total 93 32 20 41 44.09 0 .00 Total 34 34 9 4 21 61.76 0 .00 Total 38 9 7 24 7 18.42 0 .00 Total 38 9 7 24 7 18.42 0 .00 Total 62 8 36 36 8 15.38 0 .00 Total 62 8 3 36 8 5 39.35 0 .00 Total 62 8 3 36 8 5 39.35 0 .00 Total 62 8 3 36 8 5 39.35 0 .00 Total 62 8 3 36 8 5 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .00 Total 62 8 8 36 8 35 39.35 0 .0									44.62 48.26
Semale 126 21 27 78 61.90 0 .00 Male 220 43 61 183 63.10 3 1.03 1.		1,808		588			5	.28	47.35
Female 126 21 27 78 61.90 0		* = - *		•					· 변경 - 19
Maile 290 43 61 183 62.10 3 1.03 1.04 1.05		126	91	97	78	61.90	0	.00	61.90
State			43	61	183	63.10	3	1.03	64.13
Female	Total	416	64	88	261	62.74	3	.72	63.46
Female 24 6 9 9 37.00 0 .00 Male 33 11 7 15 45.45 0 .00 Total 57 17 16 24 42.11 0 .00 illipino Female 16 5 5 6 37.60 0 .00 Male 54 12 16 26 49.15 0 .00 Male 54 12 16 26 49.15 0 .00 Iexican-American Female 66 25 10 31 46.97 0 .00 Total 93 32 20 41 44.09 0 .00 ther Hispanic Female 13 2 2 9 69.23 0 .00 Total 34 9 6 4 21 61.76 0 .00 Total 34 9 6 4 21 61.76 0 .00 Male 21 7 2 2 12 57.14 0 .00 Total 34 9 4 21 61.76 0 .00 Male 21 7 2 12 25.71 0 .00 Total 34 9 4 21 61.76 0 .00 Male 21 7 2 1 2 12 57.14 0 .00 Total 34 9 4 21 61.76 0 .00 Male 805 165 286 352 43.73 2 .25 Total 1.021 208 374 437 42.80 2 .25 Total 1.021 208 374 437 42.80 2 .25 Total 38 7 24 7 18.42 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Total 52 8 36 8 8 15.38 0 .00 Total 52 8 36 8 8 15.38 0 .00 Total 52 8 36 8 8 15.38 0 .00 Total 52 8 36 8 8 15.38 0 .00 Total 52 8 36 8 8 15.38 0 .00 Total 52 8 36 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	lack								e de la companya de La companya de la companya de l
Total 57 17 16 24 42.11 0 .00			6	9	9				37.50
Comparison Com			11	7	15		0		45.45
Female 16 5 5 6 37.50 0 .00 Male 54 12 16 26 43.15 0 .00 Total 70 17 21 32 45.71 0 .00 Exican-American	Total	57	17	16	24	42.11	O	.00	42.11
Female 16 5 5 6 37.50 0 .00 Male 54 12 16 26 43.15 0 .00 Total 70 17 21 32 45.71 0 .00 Fexican-American	ilipino								
Sexican-American Female 27 7 10 10 37.03 0 .00 Male 66 25 10 31 46.97 0 .00 .00 Total 93 32 20 41 44.09 0 .00	Female	16	5	5	6			.00	37.50
Sexican-American Female 27 7 10 10 37.03 0 .00 Male 66 25 10 31 46.97 0 .00 .00 Total 93 32 20 41 44.09 0 .00			12 17	l t 91	26 32				48.15 45.71
Female 27 7 10 10 37.03 0 .00 Male 66 25 10 31 46.97 0 .00 Total 93 32 20 41 44.09 0 .00 ther Hispanic	TOPE	40	& (44	U4	TU.15	•	.00	45.71
Male 66 25 10 31 46.97 0 .00 Total 93 32 20 41 44.09 0 .00 Total 93 32 20 41 44.09 0 .00 Total 13 2 2 9 69.23 0 .00 Male 21 7 2 12 57.14 0 .00 Total 34 9 4 21 61.76 0 .00 Total 34 9 4 21 61.76 0 .00 Total 1.021 208 374 437 42.80 2 .20 Total 1.021 208 374 437 42.80 2 .00 Male 38 7 24 7 18.42 0 .00 Male 38		A	_	4.0	4.0	0= 00	^	00	`; - .
Total 93 32 20 41 44.09 0 .00 ther Hispanic Female 13 2 2 9 69.23 0 .00 Male 21 7 2 12 57.14 0 .00 Total 34 9 4 21 61.76 0 .Cu Thite Female 216 43 88 85 39.35 0 .00 Male 805 165 286 352 43.73 2 .25 Total 1,021 208 374 437 42.80 2 .20 on-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Durce: California Postsecondary Education Commission staff analysis of University of California data.		27 66	7 95	10 10					37.03 46.97
ther Hispanic Female		93	32	20	41	44.09	ŏ	.00	44.09
Female 13 2 2 9 69.23 0 .00 Male 21 7 2 12 57.14 0 .00 Total 34 9 4 21 61.76 0 .Cu Thite Female 216 43 88 85 39.35 0 .00 Male 805 165 286 352 43.73 2 .25 Total 1,021 208 374 437 42.80 2 .20 con-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 13.42 0 .00 Male 38 7 24 7 13.42 0 .00 Total 52 8 36 8 15.38 0 .00 course: California Postsecondary Education Commission staff analysis of University of California data.									ilan Mari Lan
Male 21 7 2 12 57.14 0 .00 7 Total 34 9 4 21 61.76 0 .Cu 7 Total 34 9 4 21 61.76 0 .Cu 7 Total 34 9 4 21 61.76 0 .Cu 7 Total 80.5 165 286 352 43.73 2 .25 7 Total 1,021 208 374 437 42.80 2 .20 100-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Total 52 8 36 8 15.38 0 .00 purce: California Postsecondary Education Commission staff analysis of University of California data.		1.2	9	9	9	69.23	O	.00	69.23
Total 34 9 4 21 61.76 0 .Cu (Thite Female 216 43 88 85 39.35 0 .00 Male 805 165 286 352 43.73 2 .25 Total 1,021 208 374 437 42.80 2 .20 On-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Durce: California Postsecondary Education Commission staff analysis of University of California data.		21	7	2	12	57.14	0	.00	57.14
Female 216 43 98 85 39.35 0 .00 3 Male 805 165 286 352 43.73 2 .25 Total 1,021 208 374 437 42.80 2 .20 3000 On-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Daurce: California Postsecondary Education Commission staff analysis of University of California data.			9	4	21		0	.Cu	61.76
Female 216 43 98 85 39.35 0 .00 3 Male 805 165 286 352 43.73 2 .25 Total 1.021 208 374 437 42.80 2 .20 3000 On-Resident Aliens Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 Total 52 8 36 8 15.38 0 .00 Durce: California Postsecondary Education Commission staff analysis of University of California data.	Thite								
Male 805 165 286 352 43.73 2 .25 Total 1,021 208 374 437 42.80 2 .20 on-Resident Aliens Female 14 1 12 1 7.14 0 .00 Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 nurce: California Postsecondary Education Commission staff analysis of University of California data.						39.35	0		39.35
Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 murce: California Postsecondary Education Commission staff analysis of University of California data.	Male	805	165			43.73	2	.25	43.98 43.00
Female 14 1 12 1 7.14 0 .00 Male 38 7 24 7 18.42 0 .00 Total 52 8 36 8 15.38 0 .00 murce: California Postsecondary Education Commission staff analysis of University of California data.	Total	1,021	208	374	437	42.80	Z	.20	40.00
Female					,		_		100 mg
nurce: California Postsecondary Education Commission staff analysis of University of California data.		14	1 7		1 7	7.14			7.14
nurce: California Postsecondary Education Commission staff analysis of University of California data.	Male Total	38 52		2 4 36		15.42 15.38		.00	18.42 15.38
20	urce: Californi	a Postsecond	iary Education C	ommission stati an		ity of Californ			39.35 43.98 43.00 7.14 18.42 15.38
æ3				•	29	, <u>, , , , , , , , , , , , , , , , , , </u>			 23.



TABLE 4 Three-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1982, by Ethnicity and Sex

Ethr	nic Group & Sex	Number Enrolled Fall 1982	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>
All	Ethnic Groups								
21.	Female	19	4	9	6	31.58	0	00	01.50
	Male	79	32	23	24	30.38	ŏ	.00 .00	31.58 30.38
1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Total	98	36	32	30	30.61	ŏ	.00 .00	30.35 30.61
Asia	n								00.00
	Female .	5	Ú	9	0	00.55			
*:*** 	Male	17	4	4	3	30.77	0	.00	30.77
	Yotal	22	4	2 3 5	10	58.82	0	.00	52. 32
	2044.	44	•	5	13	59.09	0	.00	59. 09
Blac	k								
	Female	.6	3	2	1	16.67	0	.00	16.67
4	Male	24	12	7	5	20.83	ŏ	.00	20.83
	Total	30	15	9	6	20.00	ŏ	.00	20.00
Filip	ino								
ૢૺ૽ૺ૽ૼ	Female	3	1	2	^	00	•		_
, Š.	Male	3 2	i	ĩ	0 0	.00	0	.00	.00
	Total	5	ż	3	0	.00	0	.00	.00
70		•	•	v	U	.00	0	.00	.00
Mexi	can-American								
***	Female	1	0	0	1	100.00	0	.00	100.00
	Male	10	5 5	3 3	2	20.00	Ŏ	.00	20.00
W.	Total	11	5	3	3	27.27	ŏ	co.	27.77
Othe	r Hispanie								
	Female	1	0	1	0	00	•		
. 4:	Male	3	2	Ö	1	.00 33.33	0	.00	.00
	Total	4	0 2 2	i	i	25.00	0	.00	33.33
		•	_	•	•	25.00	0	.00	25.00
Whit									
	Female	0	0	0	0	N/A	0	N/A	N/A
ilana ya Lisan	Male	13	6	3	4	30.77	ŏ	.00	30.77
	Total	13	6	3	4	30.77	Ŏ	.00	30.77
- 4 -	Resident Aliens			•					- ••••
	Female	3	0	9	•	00.00			
-31. 12.5	Male	9	2	ć G	1	33.33	0	.00	33.33
	Total	12	2	2 6 8	1	11.11	0	.00	11.11
		•=	4	0	2	16.67	0	.00	16.67

Source: California Postsecondary Education Commission staff analysis of University of California data.

TABLE 5 Two-Year Tracking Rates of Regular-Admission Freshmen Majoring in Engineering at the University of California, Fall 1983, by Ethnicity and Sex

le 337 51 58 228 67.66 0 .00 67.66 1.165 163 138 864 74.16 0 .00 74.16 1.502 214 196 1.092 72.70 0 .00 74.16 1.502 214 196 1.092 72.70 0 .00 72.70 le 82 4 9 69 84.15 0 .00 84.62 260 24 16 220 84.62 0 .00 84.62 342 28 25 289 84.50 0 .00 84.62 342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 55.56 33 7 5 21 63.64 0 .00 63.64 60 16 8 36 60.00 0 .00 63.64 60 16 8 36 60.00 0 .00 63.64 60 16 8 36 60.00 0 .00 63.64 60 16 8 36 60.00 0 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 60 60 60 60 60 60 60 60 60 60 60 60 60	Male Total 1,165 163 138 864 74.16 0 .00 Total 1,502 214 196 1,092 72.70 0 .00 sian Female 82 4 9 69 84.15 0 .00 Male 260 24 16 220 84.62 0 .00 Total 342 28 25 289 84.50 0 .00 Jack Female 27 9 3 15 55.56 0 .00 Male 27 9 3 15 55.56 0 .00 .00 Male 27 9 3 15 55.56 0 .00 .00 Male 24 8 1 15 62.50 0 .00 Male 24 8 1 15 62.50 0 .00 Male 24 8 1 15 62.50 0 .00 .00 Male 24	.00 67.66 .00 74.16 .00 72.70 .00 84.15 .00 84.62 .00 84.50 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00 .00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	74.16 72.70 84.15 84.62 84.50 55.56 63.64 60.00	864 1,092 69 220 289 15 21 36	138 196 9 16 25 3 5 8	163 214 4 24 28 9 7 16	1,165 1,502 82 260 342 27 33 60	Female Male Total sian Female Male Total lack Female Male Total	
1,165 163 138 864 74.16 0 .00 74.16 1,502 214 196 1,092 72.70 0 .00 72.70 le 82 4 9 69 84.15 0 .00 84.62 260 24 16 220 84.62 0 .00 84.62 342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 .00 84.50 le 27 9 3 15 55.56 0 .00 .00 63.64 60 16 8 36 60.00 0 .00 63.64 60 16 8 36 60.00 0 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 64.41 86 20 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 64.47 nic le 8 2 0 6 7 55.00 0 .00 75.00 22 7 2 13 59.09 0 .00 75.00 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Male 1,165 163 138 864 74.16 0 .00 Total 1,502 214 196 1,092 72.70 0 .00 isin Female 82 4 9 69 84.15 0 .00 Male 260 24 16 220 84.62 0 .00 Total 342 28 25 289 84.50 0 .00 Total 342 28 25 289 84.50 0 .00 Male 27 9 3 15 55.56 0 .00 Male 27 9 3 15 55.56 0 .00 Male 27 9 3 15 55.56 0 .00 Male 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 <td colspan<="" td=""><td>.00 74.16 .00 72.70 .00 84.15 .00 84.62 .00 84.50 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 64.41 .00 60.47</td><td>.00 .00 .00 .00 .00 .00 .00</td><td>0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>74.16 72.70 84.15 84.62 84.50 55.56 63.64 60.00</td><td>864 1,092 69 220 289 15 21 36</td><td>138 196 9 16 25 3 5 8</td><td>163 214 4 24 28 9 7 16</td><td>1,165 1,502 82 260 342 27 33 60</td><td>Male Total ian Female Male Total ack Female Male Total</td></td>	<td>.00 74.16 .00 72.70 .00 84.15 .00 84.62 .00 84.50 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 64.41 .00 60.47</td> <td>.00 .00 .00 .00 .00 .00 .00</td> <td>0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>74.16 72.70 84.15 84.62 84.50 55.56 63.64 60.00</td> <td>864 1,092 69 220 289 15 21 36</td> <td>138 196 9 16 25 3 5 8</td> <td>163 214 4 24 28 9 7 16</td> <td>1,165 1,502 82 260 342 27 33 60</td> <td>Male Total ian Female Male Total ack Female Male Total</td>	.00 74.16 .00 72.70 .00 84.15 .00 84.62 .00 84.50 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00 .00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	74.16 72.70 84.15 84.62 84.50 55.56 63.64 60.00	864 1,092 69 220 289 15 21 36	138 196 9 16 25 3 5 8	163 214 4 24 28 9 7 16	1,165 1,502 82 260 342 27 33 60	Male Total ian Female Male Total ack Female Male Total
1,502 214 196 1,092 72.70 0 .00 72.70 le 82 4 9 68 84.15 0 .00 84.62 260 24 16 220 84.62 0 .00 84.62 342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 55.66 33 7 5 21 63.64 0 .00 63.64 60 16 8 36 60.00 0 .00 60.00 le 24 8 1 15 62.50 0 .00 60.00 le 24 8 1 15 62.50 0 .00 60.00 le 24 8 1 15 62.50 0 .00 60.00 le 25 33 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 60.47 le 8 2 0 14 52 60.47 0 .00 60.47 nic le 8 2 0 6 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 60.47	Total 1,502 214 196 1,092 72.70 0 .00 ian Female 82 4 9 69 84.15 0 .00 Male 260 24 16 220 84.62 0 .00 Total 342 28 25 289 84.50 0 .00 ick Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 ipino I emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ier Hispanic Female 8 2 0 6 75.00 0 .00 mer Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 72.70 .00 84.15 .00 84.62 .00 84.50 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	72.70 84.15 84.62 84.50 55.56 63.64 60.00	1,092 69 220 289 15 21 36	196 9 16 25 3 5 8	214 4 24 28 9 7 16	1,502 82 260 342 27 33 60	Total ian Female Male Total ick Female Male Total	
260 24 16 220 84.62 0 .00 84.62 342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 .00 55.56 33 7 5 21 63.64 0 .00 63.64 60 16 8 36 60.00 0 .00 60.00 le 24 8 1 155 62.50 0 .00 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 64.41 86 20 14 52 60.47 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 7 2 13 59.09 0 .00 60.47 nic le 8 2 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Female 82 4 9 69 84.15 0 .00 Male 260 24 16 220 84.62 0 .00 Total 342 28 25 289 84.50 0 .00 ack Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 spins I emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 mer Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 84.62 .00 84.50 .00 55.56 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00	0 0 0 0 0	84.62 84.50 55.56 63.64 60.00 62.50 71.43	220 289 15 21 36	16 25 3 5 8	24 28 9 7 16	260 342 27 33 60	Female Male Total ack Female Male Total	
260 24 16 220 84.62 0 .00 84.62 342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 .00 55.56 33 7 5 21 63.64 0 .00 63.64 60 16 8 36 60.00 0 .00 60.00 le 24 8 1 1 15 62.50 0 .00 60.00 le 24 8 1 1 15 62.50 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 le 38 20 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 7 2 13 59.09 0 .00 60.47 nic le 8 2 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33	Male 260 24 16 220 84.62 0 .00 Total 342 28 25 289 84.50 0 .00 ck Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 spino 1 emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Male 28 5 3 20 71.43 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 ter Hispanic Female 8 2	.00 84.62 .00 84.50 .00 55.56 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00	0 0 0 0 0	84.62 84.50 55.56 63.64 60.00 62.50 71.43	220 289 15 21 36	16 25 3 5 8	24 28 9 7 16	260 342 27 33 60	Male Total ck Female Male Total	
342 28 25 289 84.50 0 .00 84.50 le 27 9 3 15 55.56 0 .00 55.56 33 7 5 21 63.64 0 .00 63.64 60 16 8 36 60.00 0 .00 60.00 le 24 8 1 1 15 62.50 0 .00 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 67.31 lerican le 27 6 7 14 51.85 0 .00 64.41 86 20 14 52 60.47 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 7 7 2 13 59.09 0 .00 60.47 nic le 8 2 7 2 13 59.09 0 .00 75.00 22 7 2 13 59.09 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33	Total 342 28 25 289 84.50 0 .00 ck Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 pino I emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 sican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 84.50 .00 55.56 .00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00 .00	0 0 0 0	84.50 55.56 63.64 60.00 62.50 71.43	289 15 21 36 15 20	25 3 5 8	28 9 7 16	342 27 33 60	Total ck Female Male Total	
10	Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 pino 1 emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00	0 0 0 0	63.64 60.00 62.50 71.43	21 36 15 20	1	16	33 60	Female Male Total	
10	Female 27 9 3 15 55.56 0 .00 Male 33 7 5 21 63.64 0 .00 Total 60 16 8 36 60.00 0 .00 pino 1 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 sican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 63.64 .00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00 .00	0 0 0 0	63.64 60.00 62.50 71.43	21 36 15 20	1	16	33 60	Female Male Total	
60 16 8 36 60.00 0 .00 60.00 1e 24 8 1 15 62.50 0 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 1erican 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic 1e 8 2 0 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 1e 150 20 34 96 64 00 0 .00 64.00 702 98 90 514 73	Total 60 16 8 36 60.00 0 .00 pino l emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 60.00 .00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00	0 0 0 0	60.00 62.50 71.43	36 15 20	1	16	. 60	Total	
te 24 8 1 1 15 62.50 0 .00 62.50 28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 terican te 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 64.41 nic te 8 2 0 6 7 2 13 59.09 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 te 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	ping l emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 62.50 .00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00	0 0 0	62.50 71.43	15 20	1		•		
28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 nerican le 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 0 6 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	1 emale 24 8 1 15 62.50 0 .00 Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00	0 0 0	71.43	20		8		nina	
28 5 3 20 71.43 0 .00 71.43 52 13 4 35 67.31 0 .00 67.31 nerican le 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 0 6 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Male 28 5 3 20 71.43 0 .00 Total 52 13 4 35 67.31 0 .00 kican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 71.43 .00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00 .00	0 0 0	71.43	20			24		
52 13 4 35 67.31 0 .00 67.31 terican 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic 22 7 2 13 59.09 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 de 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Total 52 13 4 35 67.31 0 .00 xican-American Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 67.31 .00 51.85 .00 64.41 .00 60.47	.00 .00 .00	0		35	U	5	28		
le 27 6 7 14 51.85 0 .00 51.85 59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic le 8 2 0 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Female 27 6 7 14 51.85 0 .00 Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 64.41 .00 60.47	.00 .00					13	52		
59 14 7 38 64.41 0 .00 64.41 86 20 14 52 60.47 0 .00 60.47 nic 8 2 0 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Male 59 14 7 38 64.41 0 .00 Total 86 20 14 52 60.47 0 .00 Her Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 64.41 .00 60.47	.00 .00		=		_	4	4 =		
nic le 8 2 0 6 75.00 0 .00 75.00	ter Hispanic Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00	.00 60.47	.00			14	7	6 1.4			
le 8 2 0 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00			Ŏ		52		20	86		
le 8 2 0 6 75.00 0 .00 75.00 22 7 2 13 59.09 0 .00 59.09 30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Female 8 2 0 6 75.00 0 .00 Male 22 7 2 13 59.09 0 .00				,					er Hispanic	
30 9 2 19 63.33 0 .00 63.33 le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	Male 22 7 2 13 59.09 0 .00 Total 30 9 2 19 63.33 0 .00	.00 75.00		0		6	0	<u>2</u>	8	Female	
le 150 20 34 96 64.00 0 .00 64.00 702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60	00. U 85.80 E1 S E UG 11401			0		13	2	7			
702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60		.00 63.33	.00	U	0 3.33	19	Z	9	30		
702 98 90 514 73.22 0 .00 73.22 852 118 124 610 71.60 0 .00 71.60		.00 64.00	.00	0	64.00	96	34	20	150		
852 118 124 610 71.60 0 .00 71.60	Male 702 98 90 514 73.22 0 .00	.00 73.22	.00	0	73.22	514	90	98	702		
AAD		.00 71.60		0							
		00 00	00	^	on an	g	^	•			
ie o i u a 58.38 U .UU 88.38		.00 83.33 .00 70 60	.UU .00		อ ช.ชช 7ก.กก		U A				
20 2 4 14 70.00 0 .00 70.60 26 3 4 19 73.08 0 .00 73.08 dalifornia Postsecondary Education Commission staff analysis of University of California data	Total 26 3 4 19 73.08 0 .00	.00 73.08			73.08	19	4	3	26	Total	
le 6 1 0 5 83.33 0 .00 8	Male 702 98 90 514 73.22 0 .00 Total 852 118 124 610 71.60 0 .00 Non-Resident Aliens Female 6 1 0 5 83.33 0 .00	.00 7. .00 7	.00 .00	0 0 0	73.22 71.60 83.33	514 610 5	90 124	98 118	702 852 8	Female Male Total on-Resident Aliens Female	
	Male 20 2 4 14 70.00 0 .00	.00 70.60	.00		70.00	14	4	2	20	Male Total	
20 2 4 14 70.00 0 .00 70.60	Total 26 3 4 19 73.08 0 .00	.00 73.08	.00	0	73.08	19	4	3	26	Total	
le 6 1 0 5 83.33 0 .00 83.33	Total 852 118 124 610 71.60 0 .00 n-Resident Aliens Female 6 1 0 5 83.33 0 .00 Male 20 2 4 14 70.00 0 .00	.00 71.60 .00 83.33 .00 70.60	.00 .00 .00	0 0 0	71.60 83.33 70.00 73.08	610 5 14 19	124 0 4 4	118 1 2 3	852 3 6 20 26	Total n-Resident Aliens Female Male Total	



Two-Year Tracking Rates of Special-Action Admission Freshmen Majoring in Engineering at TABLE 6 the University of California, Fall 1983, by Ethnicity and Sex

Total 14 3 3 8 57.14 0 .00 Black Female 1 1 0 0 0 .00 0 .00 Male 8 5 0 3 37.50 0 .00 Total 9 6 0 3 33.33 0 .00 Filipino Female 1 1 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Mexican-American Female 4 2 0 2 50.00 0 .00 Male 4 2 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 .00 White Female 1 0 0 1 100.00 0 .00 1 White Female 2 0 1 1 100.00 0 .00 1 White Female 9 3 2 4 44.44 0 .00 Male 9 3 2 4 44.44 0 .00 Non-Resident Aliens	5 2 4 36.36 0 .00 36.36 13 6 19 50.00 0 .00 50.00 18 8 23 46.94 0 .00 46.94 0 0 1 100.00 0 .00 100.00 3 3 7 53.85 0 .00 53.85 3 3 8 57.14 0 .00 .00 57.14 1 0 0 .00 0 .00 .00 .00 .00 5 0 3 37.50 0 .00 37.50 0 .00 33.33 1 0 0 0 .00 .00 33.33 .00 .33.33 1 0 0 0 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00	All Ethnic Groups Female	Female Male Total	38		9					***********
Female 1 1 5 2 4 36.36 0 .00 Male 38 13 6 19 50.00 0 .00 Total 49 18 8 23 46.94 0 .00 Asian Female 1 0 0 0 1 100.00 0 .00 Male 13 3 3 3 7 53.86 0 .00 Black Female 1 1 0 0 0 0 .00 Total 14 3 3 3 8 57.14 0 .00 Black Female 1 1 0 0 0 0 .00 0 .00 Male 8 5 0 0 3 37.50 0 .00 Total 9 6 0 3 37.50 0 .00 Filipino Female 1 1 0 0 0 0 .00 0 .00 Formale 1 1 0 0 0 0 .00 Total 9 6 0 0 3 33.33 0 .00 Filipino Female 1 1 0 0 0 0 .00 Male 0 0 0 0 0 N/A 0 N/A Total 1 1 0 0 0 2 50.00 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Mexican-American Female 4 2 0 2 50.00 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 N/A Total 1 0 0 0 1 100.00 0 .00 Other Hispanic Female 1 0 0 0 1 100.00 0 .00 Total 1 0 0 0 1 100.00 0 .00 White Female 2 0 1 1 50.00 0 .00 White Female 2 0 1 1 50.00 0 .00 Whale 1 0 0 0 1 100.00 0 .00 Non-Resident Aliens	13 6 19 50.00 0 .00 50.00 18 8 23 46.94 0 .00 46.94 0 0 1 100.00 0 .00 100.00 3 3 7 53.85 0 .00 53.85 3 3 8 57.14 0 .00 57.14 1 0 0 0 .00 0 .00 0 .00 57.14 1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 3 33.33 0 .00 33.33 1 0 0 0 .00 0 .00 .00 .00 0 0 0 N/A 0 N/A N/A N/A 1 0 0 0 1 100.00 0 .00 100.00 2 0 1 33.33 0 .00 33.33 2 0 0 1 33.33 0 .00 33.33 2 0 0 1 33.33 0 .00 33.33 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Female	Female Male Total	38		9					
Asian Female 1 0 0 1 1 100.00 0 .00 Male 13 3 3 3 7 53.85 0 .00 Total 14 3 0 0 0 .00 Black Female 1 1 0 0 0 .00 0 .00 Male 8 5 0 0 3 37.50 0 .00 Total 9 6 0 3 37.50 0 .00 Filipino Female 1 1 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Male 4 2 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 .00 Other Hispanic Female 1 0 0 0 1 100.00 0 .00 Total 1 0 0 0 1 100.00 0 .00 White Female 2 0 1 1 100.00 0 .00 White Female 2 0 1 1 50.00 0 .00 White Female 2 0 1 1 50.00 0 .00 Total 1 1 0 0 1 100.00 0 .00 Non-Resident Aliens	0 0 1 100.00 0 .00 100.00 3 3 7 53.85 0 .00 53.85 3 8 57.14 0 .00 57.14 1 0 0 .00 0 .00 .00 5 0 3 37.50 0 .00 37.50 6 0 3 33.33 0 .00 33.33 1 0 0 .00 0 .00 .00 33.33 1 0 0 .00 0 .00	Asian Female 1 0 0 0 1 100.00 0 .00 100.00 Male 13 3 3 7 53.85 0 .00 53.85 Total 14 3 3 3 8 87.14 0 .00 53.85 Total 14 3 3 3 8 87.14 0 .00 53.85 Black Female 1 1 0 0 0 .00 .00 0 .00 .00 .00 Male 8 5 0 0 3 37.50 0 .00 37.50 Total 9 6 0 3 3 33.33 0 .00 37.50 Total 9 6 0 0 3 33.33 0 .00 37.50 Female 1 1 1 0 0 0 0 .00 0 .00 37.50 Male 0 0 0 0 0 .00 0 .00 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 33.33 Male 4 2 0 2 50.00 0 .00 33.33 Cher Hispanic Female 0 0 0 0 0 N/A 0 .00 Total 7 4 0 0 3 42.86 0 .00 50.00 Cher Hispanic Female 1 0 0 0 1 100.00 0 .00 .00 Total 1 0 0 0 1 100.00 0 .00 White Female 2 0 1 1 100.00 0 .00 100.00 White Female 2 0 1 1 4 50.00 0 .00 100.00 White Female 9 3 2 4 4 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 44.44 0 .00 .00 44.44 Total 11 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total	38		~	4	36.36	0	00	36.36
Asian Female 1 0 0 1 1 100.00 0 .00 Male 13 3 3 3 7 53.85 0 .00 Total 14 3 0 0 0 .00 Black Female 1 1 0 0 0 .00 0 .00 Male 8 5 0 3 37.50 0 .00 Total 9 6 0 3 37.50 0 .00 Filipino Female 1 1 0 0 0 .00 0 .00 Male 0 0 0 0 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 .00 Cher Hispanic Female 1 0 0 1 100.00 0 .00 White Female 2 0 1 100.00 0 .00 White Female 2 0 1 100.00 0 .00 White Female 2 0 1 1 100.00 0 .00 Total 1 0 0 1 100.00 0 .00 Non-Resident Aliens	0 0 1 1 100.00 0 .00 100.00 3 3 7 53.85 0 .00 53.85 3 8 57.14 0 .00 57.14 1 0 0 0 .00 0 .00 .00 .00 .00 57.14 1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 3 33.33 0 .00 33.33 1 0 0 0 .00 0 .00 .00 .00 0 0 N/A 0 N/A N/A N/A 1 0 0 0 .30 0 .00 33.33 2 0 1 33.33 0 .00 33.33 2 0 1 33.33 0 .00 33.33 4 0 0 1 33.33 0 .00 33.33 4 0 0 1 1 33.33 0 .00 33.33 4 0 0 1 1 33.35 0 .00 33.33 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Asian Female 1 0 0 0 1 100.00 0 .00 100.00 Male 13 3 3 7 53.85 0 .00 53.85 Total 14 3 3 3 7 53.85 0 .00 53.85 Total 14 3 3 3 8 57.14 0 .00 57.14 Black Female 1 1 0 0 0 .00 .00 0 .00 .00 .00 Male 8 5 0 0 3 37.50 0 .00 37.50 Total 9 6 0 3 3 33.33 0 .00 37.50 Total 9 6 0 0 3 3.33.33 0 .00 37.50 Female 1 1 1 0 0 0 0 .00 0 .00 .00 .00 37.50 Male 0 0 0 0 0 .00 0 .00 .00 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 .00 Male 0 0 0 0 0 .00 0 .00 .00 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 33.33 Male 4 2 0 2 50.00 0 .00 50.00 Total 7 4 0 3 42.86 0 .00 50.00 Cother Hispanic Female 0 0 0 0 0 N/A 0 .00 .00 .00 .00 Total 1 0 0 0 1 100.00 0 .00 100.00 White Female 2 0 1 1 100.00 0 .00 100.00 White Female 2 0 1 1 100.00 0 .00 100.00 White Female 9 3 2 1 4 44.44 0 .00 .00 100.00 White Female 9 3 2 1 4 44.44 0 .00 .00 44.44 Total 11 3 3 3 6 45.45 0 .00 44.44 Total 11 3 3 3 6 45.45 0 .00 44.44 Total 11 3 3 3 6 45.45 0 .00 44.44 Male 9 3 3 2 1 4 50.40 0 .00 44.44 Total 11 3 3 3 6 45.45 0 .00 44.44 Total 11 3 3 3 6 45.45 0 .00 45.45	Asian		13	6	19	50.00			
Female	1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 3 33.33 1 0 0 .00 33.33 1 0 0 0 0 .00 0 .00 .00 .00 0 0 0 0 N/A 0 N/A N/A 1 0 0 0 3.333 2 0 0 0 3.333 2 0 0 0 0 0 0 .00 .00 .00 4 0 0 0 N/A 0 N/A N/A 0 0 0 0 0 N/A 0 N/A N/A 0 0 0 0 0 N/A 0 N/A N/A 0 0 0 1 100.00 0 .00 100.00 0 1 1 100.00 0 .00 100.00 0 1 1 1 50.00 0 .00 100.00 0 1 1 1 50.00 0 .00 50.00 0 1 1 1 50.00 0 .00 100.00 0 1 1 1 50.00 0 .00 44.44 3 3 5 45.45 0 .00 44.44	Female	Asian	49	18	8	23	46.94	0	.00	46.94
Male	1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 0 .00 0 .00 37.50 1 0 0 0 .00 0 .00 .00 33.33 1 0 0 0 0 .00 0 .00 .00 .00 0 0 0 0 0 0 0	Male 13 3 3 7 53.85 0 .00 53.85 Total 14 3 3 7 53.85 0 .00 57.14 Black Female 1 1 0 0 .00 0 .00									
Black	1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 3 33.33 1 0 0 0 0 .00 33.33 1 0 0 0 0 0 .00 0 .00 .00 0 0 0 0 0 0 0 0	Black Female 1	remate	1	0	0	1	100.00	0	.00	100.00
Black	1 0 0 0 .00 0 .00 .00 37.50 6 0 3 37.50 0 .00 37.50 6 0 0 3 33.33 1 0 0 .00 33.33 1 0 0 0 0 .00 0 .00 .00 .00 0 0 0 0 N/A 0 N/A N/A 1 0 0 0 3.333 2 0 0 0 3.333 2 0 0 0 0 0 0 .00 .00 .00 4 0 0 0 N/A 0 N/A N/A 0 0 0 0 0 N/A 0 N/A N/A 0 0 0 0 0 N/A 0 N/A N/A 0 0 0 1 100.00 0 .00 100.00 0 1 1 100.00 0 .00 100.00 0 1 1 1 50.00 0 .00 100.00 0 1 1 1 50.00 0 .00 50.00 0 1 1 1 50.00 0 .00 100.00 0 1 1 1 50.00 0 .00 44.44 3 3 5 45.45 0 .00 44.44	Black Female 1		13	3	3	7	53.85			
Female 1 1 0 0 0 .00 0 .00 Male 8 5 0 3 37.50 0 .00	5 0 3 37.50 0 .00 37.50 6 0 3 33.33 0 .00 37.50 1 0 0 .00 .00 .00 .00 0 0 0 .00 .00 .00 .00 1 0 0 .00 .00 .00 .00 2 0 1 33.33 0 .00 .00 .00 2 0 2 50.00 0 .00 50.00 4 0 3 42.86 0 .00 42.86 0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 1 100.00 0 .00 50.00 3 2 4 44.44 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 0 .00 45.45	Female		14	3	3 .	8	57.14	0	.00	57.14
Male 8 5 0 3 3.7.50 0 .00 Total 9 6 0 3 33.33 0 .00 Filipino Female 1 1 0 0 .00 0 .00	5 0 3 37.50 0 .00 37.50 6 0 3 33.33 0 .00 37.50 1 0 0 .00 0 .00 .00 .00 0 0 0 N/A 0 N/A N/A N/A 1 0 0 0 0 .00 <	Male	Black _								
Filipino Female 1 1 0 0 0 .00 0 .00 Male 0 0 0 0 N/A 0 N/A Total 1 1 0 0 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 Total 1 0 0 1 100.00 0 .00 White Female 2 0 1 1 50.00 0 .00 White Female 9 3 2 4 44.44 0 .00 Male 9 3 2 4 44.44 0 .00 Non-Resident Aliens	1 0 0 0 .00 0 .00 .00 .00 .00 .00 .00 .0	Filipino Female 1 1 1 0 0 0 .00 0 .00 .00 .00 .00 .00 .		1	1	Ō	0	.00	0	.00	.00
Filipino Female 1 1 0 0 0 .00 0 .00 Male 0 0 0 0 N/A 0 N/A Total 1 1 0 0 0 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 Total 1 0 0 1 100.00 0 .00 White Female 2 0 1 1 50.00 0 .00 White Female 9 3 2 4 44.44 0 .00 Male 9 3 2 4 44.44 0 .00 Non-Resident Aliens	1 0 0 0 .00 0 .00 .00 .00 .00 .00 .00 .0	Filipino Female 1 1 1 0 0 0 .00 0 .00 .00 .00 .00 .00 .	" Total	8	5	0	3	37.50	0	.00	37.50
Female 1 1 1 0 0 0 .00 0 .00 0 .00 Male 0 0 0 0 .00 N/A 0 N/A Total 1 1 0 0 0 0 .00 0 .00 N/A 0 N/A Total 1 1 0 0 0 0 .00 0 .00 N/A 0 .00 N/A Total 1 1 1 0 0 0 1 33.33 0 .00 .00 Mexican-American Female 3 2 0 1 33.33 0 .00 .00 Male 4 2 0 2 50.00 0 .00 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 1 100.00 0 .00 1 100.00 0 .00 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 100.00 0 .00 1 1 1 1	0 0 0 N/A 0 N/A N/A 1 0 0 0 0 0 0 0 2 0 1 33.33 0 .00 33.33 2 0 2 50.00 0 .00 50.00 4 0 3 42.86 0 .00 50.00 4 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 50.00 3 2 4 44.44 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 .00 100.00	Female 1 1 1 0 0 0 .00 0 .00 0 .00 .00 .00 .00	'.	9	O	U	3	33.33	0	.00	33.33
Male 0 0 0 0 N/A 0 N/A Total 1 1 0 0 0 N/A 0 N/A Total 1 1 1 0 0 0 0 N/A 0 N/A 0 N/A Total 1 1 1 0 0 0 0 N/A 0 N/A 0 N/A N/A N/A Total 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 N/A 0 N/A N/A 1 0 0 0 0 0 0 0 2 0 1 33.33 0 .00 33.33 2 0 2 50.00 0 .00 50.00 4 0 3 42.86 0 .00 42.86 0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 45.45 0 0 0 N/A N/A N/A N/A 0 0 0 .00 100.00 .00 100.00	Male	Filipin <u>o</u>								
Male	0 0 0 N/A 0 N/A N/A 1 0 0 .00 .00 .00 .00 2 0 1 33.33 0 .00 33.33 2 0 2 50.00 0 .00 50.00 4 0 3 42.86 0 .00 42.86 0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 .00 100.00	Total 1 1 0 0 0 N/A 0 N/A N/A N/A N/A N/A Total 1 1 0 0 0 0 N/A 0 0 N/A		1		0 '	0		0	.00	.00
Mexican-American Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 N/A 0 N/A Male 1 0 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 White Female 2 0 1 1 1 50.00 0 .00 White Female 9 3 2 4 44.44 0 .00 Mon-Resident Aliens	1 0 0 .00 0 .00 .00 2 0 1 33.33 0 .00 33.33 2 0 2 50.00 0 .00 50.00 4 0 3 42.86 0 .00 50.00 0 0 0 N/A 0 N/A N/A 0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A N/A N/A 0 0 0 .00 100.00	Mexican-American Female 3 2 0 1 33.33 0 .00 33.33 Male 4 2 0 2 50.00 0 .00 50.00 Total 7 4 0 3 42.86 0 .00 .00 100.00 0 .00	maie Total		0	0	0	N/A	0	N/A	
Female 3 2 0 1 33.33 0 .00 Male 4 2 0 2 50.00 0 .00 Total 7 4 0 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 0 0 N/A 0 N/A Male 1 0 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 Total 1 0 0 0 1 50.00 0 .00 1 White Female 2 0 1 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Male 9 3 5 45.45 0 .00 Von-Resident Aliens	0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 N/A 0 N/A N/A 0 0 0 100.00 0 .00 100.00	Female 3 2 0 1 33.33 0 .00 33.33 Male 4 2 0 2 50.00 0 .00 50.00 Total 7 4 0 3 3 42.86 0 .00 42.86 Other Hispanic Female 0 0 0 0 0 N/A 0 N/A N/A Male 1 0 0 0 1 100.00 0 .00 100.00 Total 1 3 3 3 3 5 45.45 0 .00 44.44 Total 1 3 3 3 5 45.45 0 .00 45.45 Ion-Resident Aliens Female 0 0 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 0 N/A 0 0 N/A	•	1	1	U	0	.00	0		
Male 4 2 0 2 50.00 0 .00 Total 7 4 0 3 42.86 0 .00 Other Hispanic Female 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 White Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00	0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 N/A 0 N/A N/A 0 0 0 100.00 0 .00 100.00	Male 4 2 0 2 50.00 0 .00 50.00 Other Hispanic Female 0 0 0 N/A 0 N/A N/A Male 1 0 0 1 100.00 0 .00 100.00 Total 1 0 0 1 100.00 0 .00 100.00 White Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 45.45 Non-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 N/A 0 N/A N/A Male 2 0 0		_							
Other Hispanic Female 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 Vhite Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Yon-Resident Aliens	0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 N/A 0 N/A N/A 0 0 0 100.00 0 .00 100.00	Other Hispanic Female 0 0 0 N/A 0 N/A N/A Male 1 0 0 1 100.00 0 .00 100.00 Total 1 0 0 1 100.00 0 .00 100.00 White Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Mon-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 <td>r'emale</td> <td>3</td> <td>2</td> <td>0</td> <td>1</td> <td></td> <td>0</td> <td>.00</td> <td>33.33</td>	r'emale	3	2	0	1		0	.00	33.33
Other Hispanic Female 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 Vhite Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Yon-Resident Aliens	0 0 0 N/A 0 N/A N/A 0 0 1 100.00 0 .00 100.00 0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 0 N/A 0 N/A N/A 0 0 0 100.00 0 .00 100.00	Other Hispanic Female 0 0 0 0 N/A 0 N/A N/A Male 1 0 0 1 100.00 0 .00 100.00 Total 1 0 1 100.00 0 .00 100.00 White Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Jon-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00	Male Total	4	2	0	2		0	.00	50.00
Female 0 0 0 0 N/A 0 N/A Male 1 0 0 1 100.00 0 .00 1 Total 1 0 0 1 100.00 0 .00 1 White Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Non-Resident Aliens	0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	Female 0 0 0 0 N/A N/A N/A Male 1 0 0 1 100.00 0 .00 100.00 Total 1 0 0 0 1 100.00 0 .00 100.00 N/A		ť	•	U	3	42.86	• 0	.00	
White Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Non-Resident Aliens	0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	White Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Non-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00)ther Hispanic			•					
Vhite Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Yon-Resident Aliens	0 0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	Vhite Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Ion-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00	Female		Ō	0		N/A	0	N/A	N/A
Vhite Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Yon-Resident Aliens	0 1 100.00 0 .00 100.00 0 1 1 50.00 0 .00 50.00 3 2 4 44.44 0 .00 44.44 3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	Vhite Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Non-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00	Male Total		0		1	100.00	0	.00	100.00
Female 2 0 1 1 50.00 0 .00 Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Non-Resident Aliens	3	Female 2 0 1 1 50.00 0 .00 50.00 Male 9 3 2 4 44.44 0 .00 44.44 Total 11 3 3 5 45.45 0 .00 45.45 Non-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00		I.	U	U	1	100.00	0		100.00
Male 9 3 2 4 44.44 0 .00 Total 11 3 3 5 45.45 0 .00 Von-Resident Aliens	3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	Male 9 3 2 4 44.44 0 .00 50.00 Total 11 3 3 5 45.45 0 .00 44.44 Von-Resident Aliens Female 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00	Nhite								
Total 11 3 3 5 45.45 0 .00 Total	3 3 5 45.45 0 .00 45.45 0 0 0 N/A 0 N/A N/A 0 0 2 100.00 0 .00 100.00	Total 11 3 3 5 45.45 0 .00 45.45 Ion-Resident Aliens Female 0 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00		2	0	1			0	.00	50.00
ion-Resident Aliens	0 0 0 N/A 0 N/A N/A 0 0 0 0 100.00	Female 0 0 0 0 N/A 0 N/A N/A Male 2 0 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00		9 11	ર્સ ૧	2	4		0	.00	44.44
lacksquare	0 0 2 100.00 0 .00 100.00	Female 0 0 0 0 N/A 0 N/A N/A Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00		••	IJ	J	ð	45.45	0	.00	45.45
Pamala A -	0 0 2 100.00 0 .00 100.00	Male 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00		•	_	_					
Male 2 0 N/A	2 100.00 0 .00 100.00	Total 2 0 0 2 100.00 0 .00 100.00 Total 2 0 0 2 100.00 0 .00 100.00	remate Mala		_	-	•	N/A		N/A	N/A
Total 2 0 0 2 100.00 0 .00 1	V V 2 100 00 0 00 00 00 00 00	100.00	Total						_	.00	100.00
ource: California Postsecondary Education Commission staff analysis of University of California data.	Education Commission staff analysis of University of California data.		ource: California	Postseconda	ry Education Co	mmission staff ana	lysis of Universit	y of California	data.		
									•••		

Four-Year Tracking Rates of Regular-Admission Junior Transfers Majoring in Engineering at TABLE 7 the University of California Fall 1981, by Ethnicity

hnic	Group & Sex	Number Enrolled Fall 1981	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Trackin <u>Rate</u>
ll Eti	nic Groups								∆ ģ =
	Female	72	29	5	1	1.39	37	51.39	52.78
	Male	379	159	26	4	1.06	190	50.13	51.19
	Total	451	188	31	5	1.11	227	50.33	51.44
sian									1,3
	Female	16	7	1	0	.00	8	50.00	50.00
	Male	72	31	1	0	.00	40	55.56	55.56
	Total	88	38	2	0	.00	48	54.55	54.55
ack									
	Female	0	0	0	0	N/A	0	N/A	N/A
	Male	4	2 2	1	0 0 0	.00	ĭ	25.00	25.00
	Total	4	2	1	0	.00	1	25.00	25.00
lipin	3								
4	Female	0	0	0	0	N/A	0	N/A	N/A
	Male	0 5 5	1	0 0 0	0	.00	ă	80.00	80.00
	Total	5	1	0	Ö	.00	4	80.00	80.00
exica	n-American								- 16 () - 16 ()
	Female	0	0	0	0	N/A	0	N/A	RT/A
	Male	14	0 6	ŏ	ŏ	.00	Ř	57.14	N/A 57.14
	Total	14	6	Ŏ	ŏ	.00	8 8	57.14	57.14
har F	lispanic								
****	Female	0	0	0	0	N/A	^	N/A	
	Male	0 6	0 2 2	ĭ	ĭ	16.67	0	33.33	N/A 50.00
	Total	6	2	1	ī	16.67	2 2	33.33	50.00
hite									
	Female	44	19	0	1	2.27	24	54.55	E0 00
	Male	181	71	19	Ö	.00	91	50.28	56.82 50.28
	Total	225	90	19 19	1	.44	115	51.11	51.55
n-Re	sident Aliens								Š.
	Female	8	3	3	0	.00	2	25.00	
	Male	69	34	3 2	ĭ	1.45	32	46.38	47.83
	Total	77	37	5	1	1.30	34	44.16	45.46
				ssion staff analysis					25.00 47.83 45.46
								 	—

Seven-Year Tracking Rates for Fall 1978 Freshman Majoring in Engineering at the California TABLE 8 State University

Ethnic Groups Fall 1978 the Institution Rate Graduating Rate Rate	Ethn All I Ame Asia Blac Filip	Ethnic Groups Female Male	Enrolled Fall 1978 225	Continuing In			Graduation	Tracki
All Ethnic Groups Female	Ame Asia Blac Filip	Female Male				Graduating		Rate
Male Total 1,908 123 6.5 866 45.4 51 Total 2,133 139 6.5 969 45.4 51 American Indian 13 1 7.7 1 7.7 15 Asian 221 13 5.9 112 50.7 56 Black 90 10 11.1 18 20.0 31 Filipino 45 7 15.6 20 44.4 60 Mexican-American 116 7 6.0 31 26.7 32 Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 3.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.	Asia Blac Filip	Male			_			
Asian 221 13 5.9 112 50.7 56 Black 90 10 11.1 18 20.0 31 Filipino 45 7 15.6 20 44.4 60 Mexican-American 116 7 6.0 31 26.7 32 Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.	Asia Blac Filip		1,908 2,133	123	6.5	866	45.4	52. 51. 51.
Black 90 10 11.1 18 20.0 31 Filipino 45 7 15.6 20 44.4 60 Mexican-American 116 7 6.0 31 26.7 32 Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data. 50 <td< td=""><td>Blac Filip</td><td>rican Indian</td><td>13</td><td>1</td><td>7.7</td><td>1</td><td>7.7</td><td>15.</td></td<>	Blac Filip	rican Indian	13	1	7.7	1	7.7	15.
Filipino 45 7 15.6 20 44.4 60 Mexican-American 116 7 6.0 31 26.7 32 Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.	Filip	n	221	13	5.9	112	50.7	56.
Mexican-American 116 7 6.0 31 26.7 32 Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data. .		k	90	10	11.1	18	20.0	31.
Other Hispanic 46 3 6.5 17 37.0 43 Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data. 46 46		ino	45	7	15.6	20	44.4	60.
Pacific Islander 3 0 0 1 33.3 33 White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.	Mex	can-American	116	7	6.0	31	26.7	32
White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.	Othe	r Hispanic	46	3	6.5	17	37.0	43
White, Non-Hispanic 931 58 6.2 501 53.8 60 Unknown 668 40 6.0 268 40.1 46 Source: California Postsecondary Education Commission staff analysis of California State University data.		ic islander	3	0	0	1	33.3	33.
Source: California Postsecondary Education Commission staff analysis of California State University data.	.*	e, Non-Hispanic	931	58	6.2	501	53.8	60
Source: California Postsecondary Education Commission staff analysis of California State University data.	Unk	10 W D	668	40	6.0	268	40.1	46
		•	•					

Seven-Year Tracking Rates for Fall 1978 Transfer Students Majoring in Engineering at the TABLE 9 California State University

Ethnic Group & Sex (Systemwide)	Number Enrolled	Number Continuing In	Continuation	Number	Graduation	Tracking
	Fall 1978	the Institution	Rate	Graduating	Rate	Rate
All Ethnic Groups Female Male Total	264 2,659 2,913	16 108 124	6.3 4.1 4.3	129 1,445 1,574	50.8 54.3 54.0	57.1 58.4 58.3
American Indian	20	1	5.0	5	25.0	30.0
Asian	217	6	2.8	148	68.2	71.0
Black	59	6	10.2	16	27.1	37.3
Filipino	24	1	4.2	9	37.5	41.7
Mexican-American	84	7	8.3	45	53.6	61.9
Other Hispanic	43	5	11.6	16	37.2	48.8
Pacific Islander	19	0	U	14	73.7	73.7
White, Non-Hispanic	1,103	41	3.7	661	59.9	63.6
Unknown	1,344	57	4.2	660	49.1	• •
Source: California Postsecondary	Education Com	mission staff analysis	of California State l	Jniversity data.	•	
						53.3
	,	•	35			



TABLE 10 Four-Year Tracking Rates of Reguler-Admission Freshmen Majoring in Engineering at the California State University, Fall 1981, by Ethnicity

Ethnic Group	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>
All Ethnic Groups	2569	1 463	56.9	123	4.8	61.7
American Indian	62	31	50.0	- 1	1.6	51.6
Asian	342	207	60.5	20	5.8	66.4
Black	139	46	33.1	1	.7	33.8
Filipino	105	68	64.8	0	.0	64.8
Mexican-American	159	77	48.4	4	2.5	50.9
Other Hispanic	63	32	50.8	2	3.2	54.0
Pacific Islander	28	13	46.4	8	28.6	75.0
White	1402	847	60.4	62	4.4	64.8

Source: California Postsecondary Education Commission staff analysis of California State University data.

TABLE 11 Four-Year Tracking Rates for Fall 1981 Transfer Students Majoring in Engineering at the California State University

Ethnic Group	Number Transferred <u>Fall 1981</u>	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Tracking <u>Rate</u>
All Ethnic Groups	2949	622	21.1	1203	40.8	61.9
American Indian	88	12	13.6	35	39.8	53.4
Asian	466	93	20.0	198	42.5	62.4
Black	63	25	39.7	12	19.0	58.7
Filipino	55	12	21.8	22	40.0	61.8
Mexican-American	102	28	27.5	29	28.4	55.9
Other Hispanic	86	24	27.9	24	27.9	55.8
Pacific Islander	31	4	12.9	10	32.3	45.2
White	1455	318	21.9	632	43.4	65.3

Source: California Postsecondary Education Commission staff analysis of California State University data.



TABLE 12 Four-Year Tracking Rates of Fall 1981 Students Majoring in Engineering at the University of California, by Institution of Origin and Ethnicity

Indiana	rabi	LE 12 Four- Unive	Year Tracersity of C	king Rat alifornia,	es of Fe	all 1981 titution	Student of Origin	ts Majoring n and Ethn	in Engine icity	ecring at	the
Number 68						Black	Filipino		_	White	Non-Reside <u>Alien</u>
Percent of Total 2.41%	Total N	Jumber Enrolled	2,817	8	602	126	103	139	62	1,413	213
Percent of Total 2.41%	State L	Iniversity Transfers	j								
Percent Who Changed Major 10.42%	1	Number	68	••	8	1	3	2	3	38	9
Changed Major 10.42% 0.00% 10.00% 0.00% 0.00% 33.33% 7.89% 0.00%	1	Percent of Total	2.41%	••	1.33%	.79%	2.91%	1.44%	4.84%	2.69%	4.23%
Tracking Rate 1.47 0.00 0.00 0.00 0.72 0.00 0.00 0.00			10.42%	**	0.00%	100.00%	0.00%	0.00%	33.33%	7.89%	0.00%
Number 458 2 95 9 5 15 8 237 60 Percent of Total 16.26% 25.00% 15.78% 7.14% 4.86% 10.79% 12.90% 16.77% 28.17% Percent Who Changed Major 8.30% 0.00% 4.21% 11.11% 0.00% 0.00% 0.00% 10.97% 8.33% Tracking Rate 1.09 0.00 0.00 0.00 0.97 .00 0.00 .21 0.90 Inter-Campus Transfers Number 105 - 28 3 1 4 2 43 16 Percent of Total 3.73% - 4.32% 2.38% 0.97% 2.88% 3.23% 3.04% 7.51% Per_sent Who Changed Major 8.57% - 3.85% 0.00% 10.00% 0.00% 0.00% 11.63% 12.50% Tracking Rate 1.90 . 0.00 0.00 0.00 0.00 0.00 0.00 0.		•	1.47	••							
Number 458 2 95 9 5 15 8 237 60 Percent of Total 16.26% 25.00% 15.73% 7.14% 4.86% 10.79% 12.90% 16.77% 28.17% Percent Who Changed Major 8.30% 0.00% 4.21% 11.11% 0.00% 0.00% 0.00% 0.00% 10.97% 8.33% Tracking Rate 1.09 0.00 0.00 0.00 0.97 .00 0.00 .21 0.90 Inter-Campus Transfers Number 105 - 26 3 1 4 2 43 16 Percent of Total 3.73% - 4.32% 2.38% 0.97% 2.88% 3.23% 3.04% 7.51% Per_sont Who Changed Major 8.57% - 3.85% 0.00% 100.00% 0.00% 0.00% 11.63% 12.50% Tracking Rate 1.90 . 0.00 0.00 0.00 0.00 0.00 0.00 11.63% 12.50% Tracking Rate 1.90 . 0.00 0.00 0.00 0.00 50.00 0.00 0.0	Commi	unity College Transf	iers						a ·		
Percent of Total 16.26% 25.00% 15.78% 7.14% 4.85% 10.79% 12.90% 16.77% 28.17%				2	95	9	5	15	8	237	60
Changed Major 8.30% 0.00% 4.21% 11.11% 0.00% 0.00% 0.00% 10.97% 8.33% Tracking Rate 1.09 0.00 0.00 0.00 0.97 .00 0.00 .21 0.00	1	Percent of Total	16.26%	25.00%	15.78%	7.14%	4.85%	10.79%	12.90%	16.77%	
Number 105			8.30%	0.00%	4.21%	11.11%	0.00%	0.00%	0.00%	10.97%	8.33%
Percent of Total 3.73% 4.32% 2.38% 0.97% 2.88% 3.23% 3.04% 7.51%	7	Fracking Rate	1.09	0.00	0.00	0.00	0.97	.00	0.00	.21	0.00
Percent of Total 3.73% 4.32% 2.38% 0.97% 2.88% 3.23% 3.04% 7.51%	Inter-C	ampus Transfers							-		
Per_ant Who Changed Major 8.57% 3.85% 0.00% 100.00% 0.00% 0.00% 0.00% 11.63% 12.50%	1	Number	105	••	26	3	1	4	2	43	16
Changed Major 8.57% 3.85% 0.00% 100.00% 0.00% 0.00% 11.63% 12.50% Tracking Rate 1.90 0.00 0.00 0.00 0.00 50.00 0.00 0.00	F	ercent of Total	3.73%	••	4.32%	2.38%	0.97%	2.88%	3.23%	3.04%	7.51%
Public High School Graduates Number 1.615 4 411 81 68 88 35 810 43 Percent of Total 57.33% 50.00% 68.67% 64.29% 66.02% 63.31% 56.45% 57.32% 20.19% Percent Who Changed Major 26.44% 25.00% 16.30% 24.69% 23.53% 29.55% 28.57% 30.12% 53.49% Tracking Rate 23.96 50.00 28.71 24.69 30.88 25.00 28.57 20.66 20.93 Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of			8.57%	••	3.85%	0.00%	100.00%	0.00%	0.00%	11.63%	12.50%
Number 1,615 4 411 81 63 88 35 810 43 Percent of Total 57.33% 50.00% 68.57% 64.29% 66.02% 63.31% 56.45% 57.32% 20.19% Percent Who Changed Major 26.44% 25.00% 16.30% 24.69% 23.53% 29.55% 28.57% 30.12% 53.49% Tracking Rate 23.96 50.00 28.71 24.69 30.88 25.00 28.57 20.66 20.93 Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	<u> </u>	Fracking Rate	1.90	••	0.00	0.00	0.00	0.00	50.00	0.00	0.00
Percent of Total 57.33% 50.00% 68.57% 64.29% 66.02% 63.31% 56.45% 57.32% 20.19% Percent Who Changed Major 26.44% 25.00% 16.30% 24.69% 23.53% 29.55% 28.57% 30.12% 53.49% Tracking Rate 23.96 50.00 28.71 24.69 30.88 25.00 28.57 20.86 20.93 Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	Public I	High School Graduat	tes			•					
Percent Who Changed Major 26.44% 25.00% 16.30% 24.69% 23.53% 29.55% 28.57% 30.12% 53.49% "racking Rate 23.96 50.00 28.71 24.69 30.88 25.00 28.57 20.66 20.93 Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	Þ	Vumber	1,615	. 4	411	81	63	88	35	810	43
Changed Major 26.44% 25.00% 16.30% 24.69% 23.53% 29.55% 28.57% 30.12% 53.49% Tracking Rate 23.96 50.00 28.71 24.69 30.88 25.00 28.57 20.86 20.93 Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	F	ercent of Total	57.33%	50.00%	68.57%	64.29%	ê6.02%	63.31%	56.45%	57.32%	20.19%
Private High School Graduates Number 221 13 18 16 13 11 128 7 Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of		· · · · · · · · · · · · · · · · · · ·	26.44%	25.00%	16.30%	24.69%	23.53%	29.55%	28.57%	30.12%	53.49%
Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	197	racking Rate	23.96	50.00	28.71	24.69	30 88	25.00	28.57	20.86	20.93
Percent of Total 7.85% 2.16% 14.29% 15.53% 9.35% 17.74% 9.06% 3.29% Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	Private	High School Gradue	ites								-
Percent Who Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	N	lumber	221	••	13	18	16	13	11	128	7
Changed Majors 33.03% 30.77% 27.78% 12.50% 38.46% 36.36% 37.50% 14.29% Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of	P	ercent of Total	7.85%	••	2.16%	14.29%	15.53%	9.35%	17.74%	9.06%	3.29%
Tracking Rate 21.27 15.38 22.22 31.25 23.08 27.27 22.66 .00 Note: "Percent Who Changed Major" indicates the percentage of			33.03%	••	30.77%	27.78%	12.50%	38.46%	36,36%	37.50%	14.29%
Note: "Percent Who Changed Major" indicates the percentage of		-		••							
		"Percent Who (Changed Maj	or" indicate he percenta	es the perc				- - -		:



TABLE 13 Three-Year Tracking Rates of Fall 1982 Students Majoring in Engineering at the University of California, by Institution of Origin and Ethnicity

•	All Groups	American <u>Indian</u>	Asian	Black	Filipino	Mexican <u>American</u>	Other <u>Hispanic</u>	White	Non-Resid <u>Alien</u>
Total Number Enrolled	2,543	10	601	98	82	119	45	1,371	130
State University Transfers								-	
Vumber	48	••	9	1	. ••	••	••	27	4
Percent of Total	1.89%	••	1.50%	1.02%	••	••	••	1.97%	3.08%
Percent Who Changed Major	28.00%	••	22.22%	0.00%	••	••	••	18.52%	25.00%
Fracking Rate	10.42	••	11.11	.00	••	••	••	14.81	.00
ommunity College Transf	ers								
lumber	394	1	106	6	4	9	5	209	37
ercent of Total	15.49%	10.00%	17.64%	6.12%	4.88%	7.56%	11.11%	15.24%	28.46%
ercent Who hanged Major	13.71%	0.00%	0.94%	0.00%	0.00%	22.22%	0.00%	17.70%	32.43%
racking Rate	6.85	.00	28.30	33.33	.00	.00	.00	5.50	6.67
nter-Campus Transfers									
lumber	91	••	26	••	••	2	••	49	7
ercent of Total	3.58%	••	4.33%	••	••	1.68%	••	3.57%	5.38%
ercent Who hanged Major	5.49%	••	0.00	••	**	50.00%	••	6.12%	14.29%
racking Rate	7.69	••	15.38	••	••	0.00	••	6.25	0.00
ublic High School Graduat	ies .								
lumber	1,560	8	406	65	59	84	24	825	43
ercent of Total	61.34%	80.00%	67.55%	66.33%	71.95%	70.59%	53.33%	60.18%	33.08%
ercent Who hanged Major	30.64%	25.00%	19.46%	21.54%	38.98%	25.00%	16.67%	33.33%	79.07%
racking Rate	48.14	50.00	63.79	36.92	42.59	42.86	50.00	44.85	9.30
rivate High School Gradus	ites								
umber	225	••	16	16	12	20	11	138	6
ercent of Total	8.85%	••	2.66%	16.33%	14.63%	16.81%	24.44%	10.07%	4.62%
ercent Who hanged Majors	41.33%	••	25.00%	37.50%	8.33%	10.00%	9.09%	51.45%	83.33%
racking Rate	39.11	40	50.00	37.50	58.33	45.00	72.7 3	34.78	.00

TABLE 14 Three-Year Continuation and Progress Rates of Freshmen Majoring in Engineering at the University of California, Fall 1982, by Campus and Ethnicity

Berkeley All Ethnic Groups Asian Black Filipino Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	464 136 20 14 20 8 7 245 213 40 11 9	100.00 29.3 4.3 3.0 4.3 1.7 1.5 52.8	126 24 9 5 8 1 2 74	70 19 1 1 3 0 0 46	0 0 0 0 0	.0 .0 .0 .0	268 93 10 8 9 7	57.8 68.4 50.0 57.1 45.0 87.5	n/a 30.4 8.3 54.6 16.7 42.9
All Éthnic Groups Asian Black Filipino Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	136 20 14 20 8 7 245	29.3 4.3 3.0 4.3 1.7 1.5 52.8	24 9 5 8 1 2 74	19 1 1 3 0	0 0 0 0	.0 .0 .0 .0	93 10 8 9 7	68.4 50.0 57.1 45.0	30.4 8.3 54.6 16.7
Asian Black Filipino Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	136 20 14 20 8 7 245	29.3 4.3 3.0 4.3 1.7 1.5 52.8	24 9 5 8 1 2 74	19 1 1 3 0	0 0 0 0	.0 .0 .0 .0	93 10 8 9 7	68.4 50.0 57.1 45.0	30.4 8.3 54.6 16.7
Black Filipino Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	20 14 20 8 7 245 213 40 11	4.3 3.0 4.3 1.7 1.5 52.8	9 5 8 1 2 74	1 1 3 0	0 0 0 0	.0 .0 .0 .0	10 8 9 7	50.0 57.1 45.0	8.3 54.6 16.7
Filipino Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	14 20 8 7 245 213 40 11 9	3.0 4.3 1.7 1.5 52.8 100.00 18.8	1 2 74	1 3 0 0	0 0 0	.0 .0 .0	8 9 7	57.1 45.0	54.6 16.7
Mexican-American Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	20 8 7 245 213 40 11 9	4.3 1.7 1.5 52.8 100.00 18.8	1 2 74	0	0 0 0	0. 0. 0.	9 7	45.0	16.7
Other Hispanic Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	8 7 245 213 40 11 9	1.7 1.5 52.8 100.00 18.8	1 2 74	0	0 0	.0 .0	7		
Non-Resident Alien White Davis All Ethnic Groups Asian Black Filipino Mexican-American	7 245 213 40 11 9	1.5 52.8 100.00 18.8	2 7 4	0	Ō	.0		01.0	
White Davis All Ethnic Groups Asian Black Filipino Mexican-American	245 213 40 11 9	52.8 100.00 18.8	74		ŏ	.0		71.4	n/a
All Ethnic Groups Asian Black Filipino Mexican-American	40 11 9	18.8	47			.Õ	125	51.0	42.3
All Ethnic Groups Asian Black Filipino Mexican-American	40 11 9	18.8	47					,	
Asian Black Filipino Mexican-American	40 11 9	18.8	97	00	•				
Black Filipino Mexican-American	11 9			29	0	0.0	137	64.3	n/a
Filipino Mexican-American	9	5.2	10	6	0	0.0	24	60.0	60.7
Mexican-American		5.2 4.2	2 3	3	0	0.0	6	54.5	10.0
		11.7	9		0	0,	5	55.6	0.0
Other Hispanic	9	4.2	3	1 0	0	0.0	15	60.0	13.3
Non-Resident Alien	4	1.9	0		0	.0	6	66.7	83.3
White	108	50.7	17	0 15	0 0	0.	4	100.0	n/a .
, Walley	100	00.1	4.0	10	U	0.0	0.76	70.4	57.1
rvine									}
All Ethnic Groups	169	100.00	39	45	2	1.2	83	49.1	n/a
Asian	57	33.7	8	15	ī	1.8	33	57.9	73.2
Black	1	0.6	• 1	Ö	Õ	.0	Ö	.0	.0.
Filipino	5	3.0	1	Ö	ŏ	.ŏ	4	80.0	100.00
Mexican-American	4	2.4	2	Ŏ	Ŏ	.0		50.0	66.7
Other Hispanic	4	2.4	2	Ö	Ŏ	.0	2 2	50.0	100.0
Non-Resident Alien	4	2.4	1	i	ŏ	••	2	5 0.0	n/a
White	84	49.7	23	25	1	1.2	35	41.7	65.0
s Angeles									
All Ethnic Groups	299	100.00	52	0e	•	0.0	011		
Asian	111	37.1		35		0.3	211	70.6	n/a
Black	13	4.3	12	ē	1	0.9	92	82.9	50.0
Filipino	20	4.3 6.7	4	5	0	.0	4	30.8	16.7
Mexican-American	9	3.0	5 3 2	2 0	0	.0	13	65.0	23.1
Other Hispanic	6	2.0	ა ი	0	0 0	.0	6	66.7	0.0
Non-resident Alien	ĭ	0.3	Õ	0	0	0	4	66.7	20.0
White	129	43.1	24	19	0	.0 0	86	100.0 66.7	n/a 40.0
					•		30	00.1	40.0
ian Diego	004								
All Ethnic Groups	351	100.00							
Asian	37	10.5							
Black	6	1.7							
Filipino	18	5.1		Data for UC	, San Diego	are not a	vailable		
Mexican-American	14	4.0							
Other Hispanic	3	0.9							
Non-resident Alien	38	10.8							
White	222	63.2							
anta Barbara						•			
All Ethnic Groups	312	100.00	67	91	2	0.6	152	48.7	
Asian	35	11.2	4	11	1	2.9	19		n/a
Black	6	1.9	1	1	Ó	.0		54.3 66.7	72.0
Filipino	4	1.3	2	Ö	0	.0 .0	4 2	50.0	40.0
Mexican-American	21	6.7	ã	4	0	.0 .0	9	50.0 42.9	0.0
Other Hispanic	4	1.3	1	1	0	.0 .0	3	42.9 50.0	30.0 0.0
Non-resident Alien	2	0.6	i	1	ŏ	.0	Õ	0.0	
White	233	74.7	50	67	i	0.4	115	49.4	п/а 56.6
					•			77.7	JU.U
ource: California Post	secondary Edu	cation Commissio	on staff analysi	s of University of C	alifornia da	ta.			
			35	<i>f</i>					



TABLE 15 Four-Year Tracking Rates of Fall 1981 University of California
Transfer Students Majoring in Engineering, by Campus and Ethnicity

	Campus	Number Enrolled Fall 1981	Number Who Withdrew From University	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking Rate
Beri	kelev								
47.4	All Ethnic Groups	291	262	15	4	1.37	10	3.44	4.81
3 9 4	Asian	75	70	2	0	.0	3	4.00	4.00
	Black	15	15.	o	0 0	.0	0 0	.0 .0	.0 .0
74 A	Filipino	4	3	0	Ŏ	.0 .0	1	7.69	7.69
	Mexican-American Other Hispanic	13 5	12 5	Ŏ	Ŏ	.0	Ô	.0	.0
	Non-Resident Alies		37	i	ŏ	.0	$\overset{\circ}{2}$	5.00	5.00
	White	122	106	9	3	2.46	4	3.28	5.74
			-						
Davi		80	11	1	5	6.25	63	78.75	85.00
	All Ethnic Groups Asian	16	1	ó	ŏ	.0	15	93.75	93.75
	Black	3	i	ŏ	ŏ	.0	2	66.67	66.67
•	Filipino	5	ī	Ŏ	2	40.00	2	40.00	80.00
	Mexican-Arierican		4	1	1	12.50	2	25.00	37.50
	Other Hispanic	1	1	Q	0	.0	2	100.00	100.00
	Non-Resident Alie	n 2	0	0	0	.0	2	100.00	100.00
	White	41	3	0	2	4.88	36	87.80	92.68
Irvi	n e								
	Ail Ethnic Groups	101	29	3	Q	.0	69	68.32	68.32
	Asian	20	4	1	0	.0	15	75.00	75.00
	Black	1	0	1	0	.0	0	.0	.0 100.00
	Filipino	1	0	0	0	.0 .0	2	100. 0 0 66.67	66.67
	Mexican-American	1 3	ļ	U	0 0	.0 .0	1	33.33	33.33
	Other Hispanic	3 n 28	10	Ŏ	Ŏ	.0 .0	18	64.29	64.29
	Non-Resident Alie White	33	7	ŏ	ŏ	.0	26	78.79	78.79
Los	Angeles				_		an 5		00.00
, ne	All Ethnic Groups	90	11	4	5	5.55	? 0	77.78	83.33
	Asian	28	3	1	1	3.57	23	82.14 100. 0 0	85.71 100.00
. j. '	Black	1	0	0	U	.0	1	100.00	100.00
	Filipino	. E	 0	^-	1	20.00	4	80.00	100.00
*. 	Mexican-American Other Hispanic	1 5	0	0	i	50 .00	ī	50.00	100.00
	Non-Resident Alie	~	•	ŏ	Ŏ	.0	11	78.57	78.57
	White	37	3 5	2	2	5.41	28	75.68	81.09
	T1								
37.5	Diego All Ethnic Groups	185	63	44	6	3.24	72	38.92	42.16
	Asian	9	i	3	0	.0	5	55.56	55.56
7.,	Black	3	1	2	0	.0	0	.0	.0
7.5	Filipino	3	2	1	0	.0	0	.0	.0
1.4	Mexican-American	1 3	3 3	0	0	.0	0	.0	.0 .0
	Other Hispanic	4	3	1	Ö	.0	0 28	.0 46. 6 7	.0 51. 67
27	Non-Resident Alie	n 60 88	16 32	13 23	3 1	5.00 1.14	32	36.36	37.50
	White	88	32	20	•	****	02	00.00	01.00
San	ta Barbara								
	All Ethnic Groups	122	34	15	2	1.64	71	58.20	59.84
387	Asian	15	4	2	9	60.00	0 .	.0	60.00
700	Black	1	1	0	0	.0	0 2	.0 100.00	.0 100.00
	Filipino	2	0	0	0	.0	2 2	50.00	50.00
	Mexican-American	n. 4	U	2 0	0	.0 .0	0	,0	.0
(L)	Other Hispanic	n 1	0	Ö	Ŏ	.0 .0	i	100.00	100.00
	Non-Resident Alie White	88	24	11	3	3.41	50	56.82	60.23
	**************************************	00	47						

Source: California Postsecondary Education Commission staff analysis of University of California data.

TABLE 16 Four-Year Tracking Rates of Freshmen Majoring in Engineering Fall 1981, at the California State University by Campus and Ethnicity

<u>Campus</u>	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation <u>Rate</u>	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>
				in Engineering	NOVE	VOLE
Chico All Ethnic Groups	94	54	57.4	16	17.0	74.5
American Indian	••	••	••	••		14.0
Asian	2	1	50.0	0	.0	50.0
Black	2	1	50.0	0	.0	50.0
Filipino	••	••	**	••	••	••
Mexican-American	4	4	100.0	0	.0	100.0
Other Hispanic Pacific Islander	 15	 5	 33.3	 8	 E0 0	86.7
White	62	40	64.5	2	53.3 3.2	67.7
Fresno						
All Ethnic Groups	135	75	55.6	10	7.4	63.0
American Indian	4	1	25.0	0	.0	25.0
Asian	16	10	62.5	1	6.3	68.8
Black	4	1	25.0	0	.0	25.0
Filipino Mexican-American	6	4	66.7	0	0	66.7
Other Hispanic	9 2	3 1	33.3 50.0	1	11.1	44.4
Pacific Islander	4 ••		50.0 ••	I	50.0 	100.0
White	58	41	70.7	44	5.2	75.9
Fullerton						
All Ethnic Groups	123	65	52.8	5	4.1	56.9
American Indian	14	7	50.0	0	.0	50.0
Asian Black	25 4	13	52.0 05.0	1	4.0	56.0
Filipino	1	1 0	25.0 .0	0 0	.0 .0	25.0
Mexican-American	5	4	0.0 80.0	Ö	.0 .0	.0 . 80. 0
Other Hispanic	ž	3	42.9	ŏ	.0 .0	42.9
Pacific Islander	i	ĭ	100.0	Ŏ	.0	100.0
White	60	31	51.7	4	6.7	58.3
Humbolt	•=	••	5 0.0	_	_	
All Ethnic Groups	17	10	58.8	0	.0	58.8
American Indian Asian	••	••	••	**	••	••
Black	••	••	••	•		••
Filipino	1	1	100.0	0	. 0	100.0
Mexican-American	••	••	••	••	••	•••
Other Hispanic	1	1	100.0	0	.0	100.0
Pacific Islander	••	••	••	••	••	••
White	15	8	53.3	0	.0	53.3
Long Beach	0=1	100				•
All Ethnic Groups American Indian	271	162	59.8	10	3.7	63.5
American Indian Asian	8 65	6 45	75.0 69.2	0 2	.0	75.0
Black	15	40 5	33.3	0	3.1 .0	72.3 33.3
Filipino	14	11	78.6	Ö	.0 .0	78.6
Mexican-American	29	15	51.7	ŏ	. 0	51.7
Other Hispanic	8	4	50.0	0 .	.0	50.0
Pacific Islander	5	3	60.0	0	.0	60.0
White	109	63	57.8	6	5.5	63.3
Los Angeles	40	00	45.0			
All Ethnic Groups	42	20	47.6	3	7.1	54.8
American Indian Asian	13	 6	46.2	 2	15.4	61.5
Black	3	9	40. <i>2</i> 66.7	0	.0	66.7
. Filipino	2	2	100.0	Ŏ	.0 .0	100.0
Mexican-American	11	6 2 2 5 0	45.5	ŏ	. ŏ	45.5
Other Hispanic	3	Ō	.0	ŏ	. ŏ	0.0
Pacific Islander	••	••	••	••	••	
White	4	1	25.0	1	25.0	50,0
			41			

ERC

Nerthridge		ABLE 16 (continued	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking Rate
All Ethinic Groups 207	All Ethnic Groups 207 114 55.1 4 1.3 87.0 American Indian 5 4 80.0 0 0.0 80.0 Anian 28 14 83.8 0 0.0 0.0 83.8 Black 17 6 80.7 0 0.0 0.0 83.0 Black 19 12 9 75.0 0 0.0 75.0 Partific Islander	.,,						
Asian 26	Asian 26 14 53.8 0 0 0 53.8 Black Asian 26 12 30.0 0 0 0 0 30.0 Filipine 7 6 85.7 0 0 0 0 30.0 Filipine 7 6 85.7 0 0 0 0 30.0 Filipine 7 6 85.7 0 0 0 0 22.6 0 0 0 22.6 0 0 0 22.6 0 0 0 0 22.6 0 0 0 0 22.6 0 0 0 0 22.6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups				-		
Black	Black	Asian	26	14	53.8		.0	
Mexican-American	Mexican-American 19						.0	30.0
Other Hispanic	Other Hispanic 12	Mexican-American					.0 .0	
Pennona All Ethnic Groups 459 232 50.5 Anserican Indian 40 00 10 10 10 10 10 10 10 10	Presents All Ethnic Groups All	Other Hispanic	12		75.0		.0	75.0
Pamona	Pennona	Pacific Islander White						
All Ethnic Groups 459 232 50.5 31 6.8 67.3 American Indian 4 0 0 .0 1 25.0 25.0 Asian 10dan 4 0 0 .0 1 25.0 25.0 25.0 Asian 40 23 57.5 6 6 15.0 72.5 Black 9 4 44.4 0 0 .0 44.4 Filipino 12 9 75.0 0 0 .0 75.0 Mexican-American 27 8 29.6 2 7.4 37.0 Other Hispanic 7 2 38.6 1 14.3 42.9 Fedicial Calander 27 8 29.6 2 7.4 37.0 Other Hispanic 7 2 38.6 1 14.3 42.9 Fedicial Calander 27 8 3 29.6 2 7.4 37.0 Other Hispanic 7 2 38.6 1 14.3 42.9 Fedicial Calander 27 8 3 29.6 2 7.4 37.0 Other Hispanic 7 2 38.6 1 1 14.3 42.9 Fedicial Calander 27 8 3 29.6 1 1 14.3 42.9 Fedicial Calander 27 8 3 29.6 1 1 14.3 42.9 Fedicial Calander 27 8 3 29.6 1 1 14.3 42.9 Fedicial Calander 28 29.6 1 1 14.3 42.9 Fedicial Calander 29 2 30.0 0 0 .0 50.0 Asian 11 4 4 2 5 50.0 0 0 .0 50.0 Asian 11 4 4 36.4 1 9.1 45.6 Black 10 4 4 30.0 0 0 .0 40.0 Filipino 4 3 75.0 0 0 .0 75.0 Fedicial Calander 2 6 8 85.7 0 0 .0 75.0 Fedicial Calander 2 6 8 85.7 0 0 .0 75.0 Fedicial Calander 2 7 8 6 8 85.7 0 0 .0 75.0 Fedicial Calander 2 8 6 8 85.7 0 0 .0 75.0 Fedicial Calander 2 7 8 6 8 85.7 0 0 .0 75.0 Fedicial Calander 2 8 6 8 8 8 1 1.5 5 63.2 Fedicial Calander 2 8 10.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups 459 232 50.5 31 6.8 57.3 American Indian 4 0 0 0 1 25.0 25.0 25.0 Asian 40 23 57.5 6 15.0 72.5 Black 9 9 4 44.4 0 0 .0 44.4 Filipino 12 9 75.0 0 .0 75.0 Mexican-American 27 8 29.6 2 7.4 37.0 Other Hispanic 7 2 28.6 1 14.3 42.9 Pacific Islander			••	¥-1¥	•	5.4	-
American Indian 4 0 0 .0 1 25.0 25.0 25.0 Asian 40 23 57.5 6 6 15.0 72.5 Black 9 4 44.4 0 0 .0 44.4 Filipino 12 9 75.0 0 0 .0 75.0 Mexican-American 27 8 29.8 2 7.4 37.0 Other lispanic 7 2 2 28.6 1 14.3 42.9 Feditic Islander 7 2 2 28.6 1 14.3 42.9 Feditic Islander 7 2 2 28.6 1 14.3 42.9 Feditic Islander 7 2 2 28.6 1 14.3 42.9 Feditic Islander 8 256 126 49.4 13 5.1 54.5 Secrement All Ethnic Groups 109 63 57.8 3 2.8 60.6 American Indian 4 2 50.0 0 0 0 50.0 50.0 Mexican-American 7 6 85.7 0 0 0 0 75.0 Mexican-American 7 6 85.7 0 0 0 0 75.0 Mexican-American 7 6 85.7 0 0 0 85.7 Other Hispanic 2 2 100.0 0 0 0 0 85.7 Other Hispanic 8 4 2 61.8 1 1.5 63.2 Sea 11.5 63.2 Sea 11.	American Indian 4 0 0 0 1 25.0 25.0 Asian 40 23 57.5 6 15.0 72.5 Black 9 4 44.4 0 0 0 44.4 Filipino 12 9 75.0 0 0 0 75.0 Mexican-American 27 8 29.6 2 7.4 37.0 Other Hispanic 7 2 28.6 1 14.3 42.9 Facilic lalander		459	232	50.5	31	6.8	57.3
Black 9	Black 9	American Indian	4	0	.0	1	25.0	25.0
Filipine	Filipino 12 9 75.0 0 .0 75.0			_				
Cother Hispanic 7	Other Hispanic 7 2 28.6 1 14.3 42.9 Pacific Islander .	Filipino	12	9	75.0	Ō	.0	75.0
Pacific talander	Pacific Islander			_		2		
All Ethnic Groups Assian Assian Assian All Ethnic Groups All Ethnic Groups Assian Ass	Secremento	Pacific Islander	••	••	••			••
All Ethnic Groups 109 63 57.8 3 2.8 60.6 American Indian 1 4 2 50.0 0 .0 50.0 Asian 11 4 36.4 1 9.1 45.5 Black 10 4 40.0 0 .0 .0 40.0 Filipino 4 3 75.0 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 38.7 Other Hispanic 2 2 2 100.0 0 .0 100.0 Pacific Islander	All Ethnic Groups 109 63 57.8 3 2.8 60.6 American Indian 4 2 50.0 0 .0 50.0 50.0 Asian 11 4 36.4 1 9.1 45.5 Black 10 4 40.0 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 85.7 Other Hispanic 2 2 100.0 0 .0 .0 100.0 Pacific Islander	White	255	126	49.4	13	5.1	54.5
American Indian 4 2 50.0 0 .0 50.0 Asian 11 4 36.4 1 9.1 45.5 Black 10 4 40.0 0 .0 .0 40.0 Filipino 4 3 75.0 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 85.7 Other Hispanic 2 2 100.0 0 .0 .0 100.0 Pacific Islander	American Indian 4 2 50.0 0 .0 50.0 Asian 11 4 36.4 1 9.1 45.5 Black 10 4 40.0 0 .0 .0 40.0 Filipino 4 3 75.0 0 .0 .0 75.0 Mexican-American 7 6 85.7 0 .0 .0 85.7 Other Hispanic 2 2 100.0 0 .0 .0 100.0 Pacific Islander					_	• -	
Asian	Asian 11 4 36.4 1 9.1 45.5 Black 10 4 40.0 0 0 40.0 Filipino 4 3 75.0 0 0 75.0 Mexican-American 7 6 85.7 0 0 85.7 Other Hispanic 2 2 100.0 0 100.0 Pacific Islander		109 4					
Black	Black	Asian		4	36.4	1		
All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 0 33.3 Asian 30 15 80.0 2 6.7 86.7 Black 17 4 23.5 0 0 0 23.5 Filipino 16 7 43.8 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 0 23.5 Filipino 16 7 43.8 0 0 0 43.8 Mexican-American 14 7 50.0 0 0 50.0 Other Hispanic 5 1 20.0 0 0 50.0 Pacific Islander 2 1 50.0 0 0 50.0 White 177 105 59.3 5 2.8 62.1 San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 0 0 0 0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 0 0 0 0 Filipino 10 6 60.0 0 0 0 Filipino 10 6 60.0 0 0 0 Mexican-American 4 1 25.0 0 0 0 0 Mexican-American 4 1 25.0 0 0 0 0 Pacific Islander 1 0 0 0 0 0 0 0 Pacific Islander 1 0 0 0 0 0 0 0 0 Pacific Islander 1 0 0 0 0 0 0 0 0 0 Pacific Islander 1 0 0 0 0 0 0 0 0 0 0 White 9 6 66.7 1 1 11.1 77.8	Plants		4	40.0	· · ·	.0	40.0
All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 0 33.3 Asian 30 15 80.0 2 6.7 86.7 Black 17 4 23.5 0 0 0 23.5 Filipino 16 7 43.8 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 23.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 Pacific Islander 2 1 50.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 Sen Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .	rilipino Mexican-American	4 7	ช 6	75.U 85.7			75.0 85.7
All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 0 33.3 Asian 30 15 80.0 2 6.7 86.7 Black 17 4 23.5 0 0 0 23.5 Filipino 16 7 43.8 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 23.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 Pacific Islander 2 1 50.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 Sen Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .	Other Hispanic	2	ž				
All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 0 33.3 Asian 30 15 80.0 2 6.7 86.7 Black 17 4 23.5 0 0 0 23.5 Filipino 16 7 43.8 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 43.8 Mexican-American 14 7 7 50.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 23.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 Pacific Islander 2 1 50.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 Sen Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Mexican-American 4 1 25.0 0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 Pacific Islander 1 1 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .	Pacific Islander						
All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 0 0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 23.5 Filipino 16 7 43.8 0 .0 0 33.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 0 .0 0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 0 0 0 0 0 0 0 Filipino 10 6 60.0 0 0 0 0 Filipino 10 6 60.0 0 0 0 0 0 Mexican-American 4 1 25.0 0 0 0 0 0 Pecific Islander 1 0 0 0 0 0 0 0 0 Mexican-American 4 1 25.0 0 0 0 0 0 Pecific Islander 1 0 0 0 0 0 0 0 0 0 Pecific Islander 1 0 0 0 0 0 0 0 0 0 0 American Indian 1 0 0 0 0 0 0 0 0 0 0 0 0 Asian 58 45 77.6 1 11.1 77.8 San Jose All Ethnic Groups 294 174 9.2 16 5.4 64.6 American Indian 10 5 50.0 0 0 0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 0 0 57.9 Mexican-American 11 3 27.3 1 19.1 38.4 Other Hispanic 8 3 3 77.5 0 0 0 37.5 Pecific Islander 8 3 2 66.7 0 0 0 67.7 White 145 90 62.1 11 7.6 69.7	All Ethnic Groups 278 144 51.8 7 2.5 54.3 American Indian 9 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 23.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	***************************************	4 0	74	U4.U	•	1.0	VU.A
American Indian 9 3 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 22.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 Other Hispanic 2 1 50.0 0 .0 .0 50.0 Other Hispanic 177 105 59.3 5 2.8 62.1 Senting Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .	American Indian 9 3 3 33.3 0 .0 .0 33.3 Asian 30 15 50.0 2 6.7 56.7 Black 17 4 23.5 0 .0 .0 23.5 Filipino 16 7 43.8 0 .0 .0 43.8 Mexican-American 14 7 50.0 0 .0 .0 50.0 Other Hispanic 5 1 20.0 0 .0 .0 50.0 Pacific Islander 2 1 50.0 0 .0 .0 50.0 White 177 105 59.3 5 2.8 62.1 San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .	San Diego All Ethnic Grouns	278	144	51.8	7	2.5	54.3
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8		9	3	33.3	0	.0	33.3
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8	Asian Ricab	30 17	15	50.0 22 K			56.7 22 5
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8	Filipino	16	7	43.8	0	.0 .0	43.8
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8	Mexican-American	14	7	50.0	0	.0	50.0
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8	Uther Hispanic Pacific Islander		1 1			.0 .0	20.0 50.0
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 69.7 White 145 90 62.1 11 7.6 69.7	San Francisco All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8	White		105			2.8	62.1
All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 0 .0 .0 .0 Filipino 10 6 60.0 0 0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 3.9.2 16 5.4 64.6 American Indian 10 5 50.0 0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 0 57.9 Mexican-American 11 3 27.3 1 9.1 38.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	All Ethnic Groups 77 41 53.2 3 3.9 57.1 American Indian 1 0 .0 0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 0 .0 .0 Filipino 10 6 60.0 0 .0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 17.8							
Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	American Indian 1 0 .01 0 .0 .0 .0 .0 Asian 15 7 46.7 1 6.7 53.3 Black 3 0 .0 .0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	All Ethnic Groups				-		
Black 3 0 .0 <t< td=""><td> Black 3</td><td></td><td></td><td></td><td></td><td>0 1</td><td>.0 6.7</td><td></td></t<>	Black 3					0 1	.0 6.7	
Filipino 10 6 60.0 0 .0 60.0 Mexican-American 4 1 25.0 0 .0 25.0 Other Hispanic 1 0 .0 0 .0 .0 .0 Pacific Islander 1 0 .0 0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 .92 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 <t< td=""><td>Filipino 10 6 60.0 0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 .0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0</td><td>Black</td><td>3</td><td>-</td><td>.0</td><td></td><td>.0</td><td>.0</td></t<>	Filipino 10 6 60.0 0 .0 60.0 Mexican-American 4 1 25.0 0 .0 .0 25.0 Other Hispanic 1 0 .0 .0 0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	Black	3	-	.0		.0	.0
Other Hispanic 1 0 .0 0 .0 .0 Pacific Islander 1 0 .0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 Sam Jose All Ethnic Groups 294 174 .59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Other Hispanic 1 25.0 0 .0 25.0 Pacific Islander 1 0 .0 0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 .9.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 66.7 White 145 90 66.7 0 .0 66.7		10	6	60.0		.0	60.0
Pacific Islander 1 0 .0 0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose San Jose All Ethnic Groups 294 174 .92 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Pacific Islander 1 0 .0 .0 .0 .0 White 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 .59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 1 7.6 69.7		1	0			.u .0	
All Ethnic Groups 294 174 19.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	WRITE 9 6 66.7 1 11.1 77.8 San Jose All Ethnic Groups 294 174 J.9.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Pacific Islander	Ī	0	.0	0	.0	.0
All Ethnic Groups 294 174 19.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	San Jose All Ethnic Groups 294 174 19.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	White	9	6	66.7	1	11.1	77.8
American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	All Ethnic Groups 294 174 59.2 16 5.4 64.6 American Indian 10 5 50.0 0 .0 50.0 Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	ian Jose	**	4-4				0.4.0
Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Asian 58 45 77.6 1 1.7 79.3 Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7	All Ethnic Groups American Indian			.9.2 50.0			64.6 50.0
Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Black 21 9 42.9 1 4.8 47.6 Filipino 19 11 57.9 0 .0 57.9 Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7	Asian	58	45	77.6	ĭ	1.7	79.3
Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Mexican-American 11 3 27.3 1 9.1 36.4 Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7					1		47.6
Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7 White 145 90 62.1 11 7.6 69.7	Other Hispanic 8 3 37.5 0 .0 37.5 Pacific Islander 3 2 66.7 0 .0 66.7	r шрико M exica n-American	19		อา. ช 27.3	1	.u 9.1	36.4
White 145 90 62.1 11 7.6 69.7	Pacific Islander 3 2 66.7 0 .0 66.7 White 1.45 90 62.1 11 7.6 69.7	Other Hispanic	8	3	37.5		.0 `	37.5
vintes 140 30 02.1 11 (.0 03.) (Continued)		Pacific Islander				0		
	(Continued)	AA UITAB	1.40	JU	U4.1	11	7.0	



TABLE 16 (continued)

Campus	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Tracking <u>Rate</u>
uis Obsipo All Ethnic Groups American Indian Asian Black Filipino Mexican-American Other Hispanic Pacific Islander White	463 3 41 11 13 19 7 1	309 3 24 3 8 11 6 1 240	66.7 100.0 58.5 27.3 61.5 57.9 85.7 100.0 68.2	15 0 3 0 0 0 0 0	3.2 .0 7.3 .0 .0 .0 .0	Tracking Rate 70.0 100.0 65.9 27.3 61.5 57.9 85.7 100.0 71.6
ce: California Post	secondary Edu	cation Commission st	aff analysis of Califor	nia State University o	lata.	
•						
•						
				,		



TABLE 17 Four-Year Tracking Rates of Transfer Students Majoring in Engineering Fall 1981, California State University by Campus and Ethnicity

Campus	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Tracking <u>Rate</u>
Bhico						
All Ethnic Groups	148	40	27 .0	68	45.9	73.0
American Indian Asian	4	0	.0	3	75.0	75.0
	6	0	.0	3	50.0	50.0
Black Filipino	1	0	.0	0	.0	.0
	••	••	••	••	• /	••
	4	1.	25.0	3	75.0	100.0
Other Hispanic Pacific Islander	1 5	0 0	.0	1	100.0	100.0
Pacific Islander White	108	35	.0 32.4	2 51	40.0	40.0
A POWAR	100	30	32.4	91	47.2	79.6
resno			_			
All Ethnic Groups	125	26	20.8	60	48.0	68.8
American Indian	1	0	0.0	1	100.0	100.0
Asian Black	9 3	1 0	11.1	3	33.3	44.4
Filipino		-	.0	2	66.7	66.7
Mexican-American	8	 4	50.0	 1	 10 E	 20 E
Other Hispanic	4	i	25.0	Ŏ	12.5	62.5
Pacific Islander	•	•	20.0	••	.0	25.0
White	77	18	23.4	42	54.5	77.9
					- 	- • • •
ullerton All Ethnic Groups	147	37	25.2	4.6	90.0	e= .
	9	37	25.2 11.1	44	29.9	55.1
Acien	57	15	26.3	2 20	22.2 35.1	33.3 61.4
Black	1	0	.0	4U 1	35.1 100.0	61. 4 100.0
Filipino	ż	ŏ	.0 .0	Ó	.0	.0
Mexican-American	6	2	33.3	2	33.3	66.7
Other Hispanic	5	2	40.0	1	20.0	60.0
Pacific Islander	1	į	100.0	Ō	.0	100.0
Black Filipino Mexican-American Other Hispanic Pacific Islander White	54	12	22.2	16	29.6	51.9
umbolt						
All Ethnic Groups	47	20	42.6	8	17.0	59.6
American Indian	ï	Ö	.0	ĭ	100.0	100.0
Asia n	1	0	.0	Ō	.0	.0
Black		••	••	••	••	••
Filipino	2	2	100.0	0	.0	100.0
Mexican-American	••	••	••	••	••	••
Other Hispanic	3	1	33.3	0	.0	33.3
Pacific Islander	••	••	**	••	••	••
White	34	15	44.1	6	17.6	61.8
ong Beach						
All Ethnic Groups	454	109	24.0	151	33.3	57.3
American Indian	13	2	15.4	5	38.5	59.8
Asian	127	29	22.8	43	33.9	56.7
Black	15	8	53.3	1	6.7	60.0
Filipino	13	4	30.8	4	30.8	61.5
Mexican-American	11	1	9.1	3	27.3	36.4
Other Hispanic	21	5	23.8	9	42.9	66.7
Pacific Islander	20	2	10.0	5	25.0	35.0
White	175	48	27.4	57	32.6 .	60.0
s Angeles						
All Ethnic Groups	105	21	20.0	25	23.8	43.8
American Indian	••	••	••			
Asian	12	2	16.7	3	25.0	41.7
Black	7	1	24.3	0	.0	14.3
Filipino	1	0	.0	1	100.0	100.0
Mexican-American	8	3	37.5	3	37.5	75.0
Other Hispanic	2	1	50.0	0	.0	50.0
Pacific Islander White	16	 4	25.0	 0	 10 E	00.5
77 18 1.00	<u> </u>		48.V	2	12.5	37.5 (Conti
a				4.4		
ĬĊ			3.	44		
10			.5			

Northridge	TARLE	17 (continued)	Number	Number		Number Who		
All Ethnic Groups American Indian American American Indian Ame	d a treatment		Enrolled Fall 1981	Continuing in Engineering	Continuation Rate	Graduated in Engineering	Graduation <u>Rate</u>	Track <u>Rate</u>
American Indian 7 3 42.9 3 42.9 66.7 1 33.3 100 Asian 21 3 14.3 10 47.6 66 Black 3 2 66.7 1 33.3 100 Pilipino 6 0 0 1 21.6 21 41.2 62 Pomona All Pinnic Groups 383 71 18.5 169 44.1 62 Asian 13 2 12.2 13.3 100 Asian 13 2 12.2 13.3 100 Asian 13 2 12.3 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nort	hridge	• • • •	A.	24.2		40.0	A.
Asian 21 3 14.3 10 47.6 61 Black 3 2 66.7 1 33.3 100 Filipino 1 0 0 0 1 100.0 100 Maxican-American 9 2 2 22.2 3 33.3 56 Other Hispanic 4 3 75.0 1 25.0 100 Pacific Islander								65. 85.
Filipino		Asian		•		10		61.
Other Hispanic		Filipino	1	Ō	.0	i	100.0	100.
Pacific Islander		Mexican-American Other Hispanic	9 4			3 1		55. 100.
Pomona		Pacific Islander		••	••		••	
All Ethnic Groups 383 71 18.5 169 44.1 62 Amesucan Indian 2 0 0 0 0 0 0 Asian 16 2 12.5 7 43.8 56 Black 3 1 33.3 0 0 0 33 Filipino 5 0 0 0 3 60.0 66 Mexican-American 15 4 26.7 6 40.0 66 Other Hispanic 5 2 40.0 1 20.0 60 Pacific Islander			51	11	21.6	21	41.2	62.
American Indian 2 0 0 0 0 0 0 0 0 0 Asian 16 2 12.5 7 43.8 55 Black 3 1 33.3 0 0 0 3 360.0 66 Mexican-American 15 4 26.7 6 40.0 66 Other Hispanic 5 2 40.0 1 20.0 66 Pacific Islander	Pom	ona All Ethnic Groups	383	71	18.5	169	44.1	62.
Black 3		American Indian	2		.0	0	.0	.(
Filipino 5				2 1		7 0		56. 33.
Other Hispanic 5 2 40.0 1 20.0 66 Pacific Islander		Filipino	5	0	.0	3	60.0	60.
Pacific Islander				4 2		1		60.
Sacramento	•	Pacific Islander						 65.
All Ethnic Groups 267 53 18.5 153 53.3 77.5 55 Adres Indian 8 1 12.5 3 3 37.5 55 Adres Indian 8 1 12.5 3 3 37.5 55 Black 4 2 50.0 120 17 53.1 76 Black 4 2 50.0 1 2 50.0 100 Filipino 5 1 20.0 440 Mexican-American 3 2 66.7 0 .0 .0 40 Mexican-American 3 2 66.7 0 .0 .0 66 Other Hispanic 3 0 .0 .1 33.3 33 Pacific Islander	0		V .	10		30	40.2	
Asian 32 7 21.9 17 53.1 76 Black 4 2 55.0 2 55.0 100 Filipino 5 1 20.0 1 20.0 40 Mexican-American 3 2 66.7 0 0 68 Other Hispanic 3 0	Sacr	All Ethnic Groups		53		153		71.
Black			8	1 7		3		50.0
Filipino 5 1 20.0 40 Mexican-American 3 2 66.7 0 0 .0 66 Other Hispanic 3 0 .0 1 33.3 33. Facific Islander		Black	4	2	50.0		50.0	100.
Other Hispanic 3 0 .0 1 33.3 33 Pecific Islander		Filipino		1		1		40.
San Diego		Other Hispanic	3			1		33.
San Diego								73.
Ail Ethnic Groups 363 75 20.7 125 34.4 55 American Indian 11 1 9.1 2 18.2 27 Asian 44 7 15.9 20 45.5 61 Black 7 3 42.9 1 14.3 57 Filipino 10 2 20.0 3 30.0 60 Mexican American 15 4 26.7 4 26.7 53 Othor Hispanic 12 3 25.0 2 16.7 41 Pacific Islander 3 1 33.3 2 66.7 100 White 226 46 20.4 83 36.7 57 San Francisco All Ethnic Groups 73 9 12.3 29 39.7 52 American Indian 2 0 0 0 0 0 Asian 6 2 33.3 2 33.3 66 Black 1 1 1 100.0 0 0 .0 100 Filipino 2 0 0 0 0 0 0 Mexican American 1 1 100.0 0 0 .0 100 Pacific Islander White 29 2 6 6.9 15 51.7 58 San Jose All Ethnic Groups 390 72 18.5 191 49.0 67 American Indian 24 3 12.5 13 54.2 66 Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican American 1 3 21.4 9 64.3 85 Mexican American 1 4 0 0 0 0 1 100.0 100	8 T				33.3		•	
Asian 44 7 15.9 20 45.5 61 Black 7 3 42.9 1 14.3 57 Filipino 10 2 20.0 3 30.0 50 Mexican-American 15 4 26.7 4 26.7 53 Other Hispanic 12 3 25.0 2 16.7 41 Pacific Islander 3 1 33.3 2 66.7 100 White 226 46 20.4 83 36.7 57 San Francisco All Ethnic Groups 73 9 12.3 29 39.7 52 American Indian 2 0 0 0 0 0 Asian 6 2 33.3 2 33.3 66 Black 1 1 1 100.0 0 .0 .0 Mexican-American 1 1 1 100.0 0 .0 100 Filipino 2 0 0 0 0 0 .0 Mexican-American 1 1 1 100.0 0 0 .0 Mexican-American 1 1 1 100.0 0 .0 .0 Pacific Islander White 29 2 6 6.9 15 51.7 58 San Jose San Jose San Jose All Ethnic Groups 390 72 18.5 191 49.0 67 American Indian 24 3 12.5 13 54.2 66 Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 15 3 37.5 1 10.5 50	San i	All Ethnic Groups		75			34.4	55.
Black								27.5 61.4
Mexican-American 15 4 26.7 4 26.7 53 Othor Hispanic 12 3 25.0 2 16.7 41 Pacific Islander 3 1 33.3 2 66.7 100 White 226 46 20.4 83 36.7 57 San Francisco All Ethnic Groups 73 9 12.3 29 39.7 52 American Indian 2 0 .0 0 .0<		Black	7	3	42.9	1	14.3	57.
Other Hispanic 12 3 25.0 2 16.7 41 Pacific Islander 3 1 33.3 2 66.7 100 White 226 46 20.4 83 36.7 57 San Francisco All Ethnic Groups 73 9 12.3 29 39.7 52 American Indian 2 0 .0 0 .0 .0 Asian 6 2 33.3 2 33.3 66 Black 1 1 100.0 0 .0 100 Filipino 2 0 .0 0 .0 .0 .0 Mexican-American 1 1 100.0 0 .0 <t< td=""><td></td><td>Filipino Mexican American</td><td>10 15</td><td>2 4</td><td>20.0 26.7</td><td>3 4</td><td></td><td>50.0 53.</td></t<>		Filipino Mexican American	10 15	2 4	20.0 26.7	3 4		50.0 53.
San Francisco		Other Hispanic	12		25.0		16.7	41.
San Francisco						2 83		100.0 57.1
All Ethnic Groups 73 9 12.3 29 39.7 52 American Iudian 2 0 .0 0 0 0 Asian 6 2 33.3 2 33.3 66 Black 1 1 1 100.0 0 .0 .0 100 Filipino 2 0 .0 0 0 .0 .0 Mexican-American 1 1 100.0 0 0 .0 100 Other Hispanic 2 0 .0 0 0 .0 0 .0 Pacific Islander	San 1	Francisco						
Asian 6 2 33.3 2 33.3 66 Black 1 1 1 100.0 0 .0 100 Filipino 2 0 .0 0 0 .0 Mexican-American 1 1 100.0 0 .0 100 Other Hispanic 2 0 .0 0 0 .0 .0 Pacific Islander	San I	All Ethnic Groups						52.
Black			2 6		.0 33.3). 66.'
Mexican-American 1 1 100.0 0 .0 100 Other Hispanic 2 0 .0 0 .0 .0 Pacific Islander		Black	1	1	100.0	0	D	100.0
Other Hispanic 2 0 .0 0 .0 Pacific Islander			2 1	U 1		•). 100.0
White 29 2 6.9 15 51.7 58 San Jose All Ethnic Groups 390 72 18.5 191 49.0 67 American Indian 24 3 12.5 13 54.2 66 Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100		Other Hispanic			.0	0	.0).
All Ethnic Groups 390 72 18.5 191 49.0 67 American Indian 24 3 12.5 13 54.2 66 Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100								58.6
All Ethnic Groups 390 72 18.5 191 49.0 67 American Indian 24 3 12.5 13 54.2 66 Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100	San J	lose				•		
Asian 101 18 17.8 51 50.5 68 Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100	Sait	All Ethnic Groups		72				67.
Black 13 4 30.8 4 30.8 61 Filipino 14 3 21.4 9 64.3 85 Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100								66.1 68.1
Mexican-American 14 3 21.4 2 14.3 35 Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100		Black	13	4	30.8	4	30.8	61.6
Other Hispanic 8 3 37.5 1 12.5 50 Pacific Islander 1 0 .0 1 100.0 100		Filipino Mexican-American						85.′ 35.′
		Other Hispanic		3	37.5	ĭ	12.5	50.0
White 181 32 17.7 97 53.6 71		Pacific Islander	1 1 1 1	0 32	.0 17.7	1 97	100.0 53.6	100.0 71.3

TABLE 17 (continued) Campus	Number Enrolled Fall 1981	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>	
San Luis Obsipo							
Ail Ethnic Groups	326	64	19.6	139	42.6	62.3	
American Indian	6	1	16.7	2	33.3	50.0	
Asian	34	7	20.6	19	55,9	76.5	
black	5	3	60.0	0	.0	60.0	
Filipino	••	4•	••	••	••	**	
Mexican-American	8	1	12.5	2	25.0	37.5	
Other Hispanic	16	3	18.8	7	43.8	62.5	
Parific Islander	1	0	0,	0	.0	.0	
White	231	41	17.7	102	44.2	61.9	

Source: California Postsecondary Education Commission staff analysis of California State University data.

TABLE 18 Comparative Two-Year Continuation Rates of Freshmen Majoring in Engineering at the University of California, by Ethnicity and Participation in the Minority Engineering Program (MEP), Fall 1981 through Fall 1983

Ethnic Group	All Groups	All MEP		nerican ndian <u>MEP</u>	Asian <u>All</u>	<u>All</u>	llack <u>MEP</u>	Filipino <u>All</u>		exican nerican <u>MEP</u>		Other Spanic MEP	White	Non- Resident Alien <u>All</u>
Number First-Time Fresh- men Enrolled, Fail 1981	1542	••	4	••	395	69	••	-68	79	••	40	••	789	27
Number Still Enrolled Fall 1983	1039	••	2	••	307	41	••	55	40	••	27	••	506	19
Continuation Rate	67.38	••	50.00	••	77.72	59.42	••	80.88	50.63	••	67.50	••	64.13	70.37
Number First-Time Fresh- men Enrolled, Fall 1982	1457	114	8	6	379	51	33	52	79	60	31	15	799	14
Number Still Enrolled Fall 1984	1012	90	6	5	299	33	25	36	46	37	24	12	528	11
Continuation Rate	69.46	78.95	75.00	83.33	78.89	64.71	75.76	69.23	58.23	61.67	77.42	80.00	66.08	78.57
Number First-Time Fresh- men Enrolled Fall 1983	1502	120	9	6	342	60	47	52	86	53	30	14	852	26
Number Still Enrolled Fall 1985	1092	82	4	3	289	36	31	35	52	36	19	12	610	19
Continuation Rate	72.70	68.33	44.44	50.00	84.50	60.00	65.96	67.31	60.47	67.92	63.33	85.71	71.60	73.68
Change in Number Entering, 1981 Compared to 1983	-40	••	+5		-53	-9		-16	+7		-10		+63	-1
Average two-year Continuation Rate	69.83	73.50	57.14	66.67	80.20	61.11	70.00	73.26	56.55	64.60	69.31	82.76	67.38	73.13
Change in the Contin- uation Rate, 1981 Compared to 1983	+2.45	•-	+5.56		+6.78	+.58		-13.57	+9.84		-4.17		+7.47	+1.71

Note: Data for the University of California, San Diego campus are not included in these totals

Source: California Postsecondary Education Commission staff analysis of University of California data.

. . .



Three-Year Continuation Rate of Fall 1982 Ethnic Minority Freshmen Majoring in Engineering TABLE 19 at the University of California, by Participation in the Minority Engineering Program (MEP)

; ~	Ethnic Group	Number Enrolled Fall 1982	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Tracking <u>Rate</u>
4	Black					· · · · · · · · · · · · · · · · · · ·		11016
٠.	MEP Non-MEP	33 24	9 8	3 13	21 3	63.64 12.50	0	63.64 12.50
. :	Filipino		•			-2.00		12.00
	MEP Non-MEP	1 69	1 16	0 21	0 32	.00 46 ,38	0	.00 46.38
	Mexican-American	1				55,55	J	40.00
 :	MEP Non-MEP	60 33	19 13	7 13	34 7	56.67 21.21	0	56.67 · 21.21
(Other Hispanic				·		V	21.21
	MEP Non-MEP	15 19	4 5	0 4	11 10	73.33 52.63	0	73.33 52.6 3
- 1	American Indian		•			02.00	Ū	U2.UU
•	MEP Non-MEP	6 3	1 1	2 1	3 1	50.00 33.33	0	50.00
1	All MEP	115	34	12	69	60.00	0	33.33 60.00
4	III Non-MEP includes all						-	-3.00
•	thnic groups)	1,693	330	576	782	46.19	5	46.50

California Postsecondary Education Commission staff analysis of University of California data.

TABLE 20 Three-Year Tracking Rates of Ethnic Minority Special-Action Admission Freshmen Majoring in Engineering at the University of California, Fall 1982, by Ethnicity and Participation in the Minority Engineering Program (MEP)

Ethnic Group	Number Enrolled Fall 1982	Number Who Withdrew From <u>University</u>	Number Who Changed Majors	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Tracking <u>Rate</u>
Black							
MEP	17	7	4	6	35.29	0	35.29
Non-MEP	13	8	5	0	.00	ŏ	.00
Mexican-American							
MEP Non-MEP	5	4	0	1	20.00	n	20.00
	6	1	3	2	33.33	ŏ	33.33
Other Hispanic							
MEP	2	1	0	1	50.00	0	50.00
Other Hispanic MEP Non-MEP	2	1	1	õ	.00	Ö	.00
All MEP (Special Action)	24	12	4	8	33.33	0	33.33
All Non-MEP (Special Action) (includes all ethnic groups)	74	24	28	22	29.73	0	29.73

California Postsecondary Education Commission staff analysis of University of California data.

TABLE 21 Three-Year Continuation and Progress Rates of Freshmen Majoring in Engineering at the University of California, Fall 1982, by Campus, Ethnicity, and Participation in the Minority Engineering Program (MEP)

	in the Minority	Engineering P	rogram (MEP)			Proportion of	3
<u>Campus</u>	Number First-Time Freshmen in Engineering	Number Who Withdrew 1983-85	Number Who Changed Majors 1983-85	Number Continuing in Engineering	Continuation Rate	Continuing Students Who Achieved Junior or Senior Status	
					<u> </u>	251101131443	
Berkeley	404	100	70	000	5 0.00	PR 44	
All Ethnic Groups Female	464 103	126 21	70 21	268 61	57.76 59.22	57.11 61.17	
Male	361	105	49	207	57.3 4	56.23	
MEP	36	15	3	18	50.00	44.44	25
Non-MEP	428	111	67	250	58.41	59.35	
Asian	136	24	19	93	68.38	89.99	
Black	20	9	1	10	50.00	75.00	
MEP Non-MEP	14 6	6 3	U 1	8	57.1 4 33.33	87.50 50.00	
Mexican-American		8	. 3	2 9	45 .00	75.00	1
MEP	17	ž	3	7	41.18	70.00	***
Non-MEP	••	••	••	••	••	••	
Other Hispanic	8	1	0	7	87.50	100.00	
MEP Non-MEP	2 6	0	0 0	2	100.00	100.00	
White	245	74	46	5 125	83.33 51.02	100.00 78. 57	
** H108	440	14	70	120	04.02	10.01	22.
·Davis		•					
All Ethnic Groups	213	4 7	29	137	64.32	67.14	
Female	61	14	12	35	57.38	50.82	
Male MEP	152 42	33 13	17 2	102 28	67.11 64.29	53.29 64.29	~~
Non-MEP	171	34	27	110	64.33	04.23	14.5 15.4
Asian	40	10	6	24	60.00	92.86	
Black	11	2	3	6 ·	54.55	80.00	13 / 2
MEP	9	2	1	6	66.67	77.78	
Non-MEP	2	0	2	0	· .0	100.00	14.2
Mexican-American MEP	25 24	9	1	15 15	60.00 62. 30	100.00 100.00	
Non-MEP	1	1	,	0	.0	.0	. t.
Other Hispanic	9	3	ŏ	6	66.67	83.33	
MEP	8	3	Ō	5	62.50	80.00	2.
Non-MEP	1	0	0	1	100.00	100.00	, 100 m 100 m 100 m
White	108	17	15	76	70.37	98.81	13 A
Irvine*							.
All Ethnic Groups	169	39	45	83	49.11	50.30	
Female	47	10	13	24	51.06	53.19	71 ga- 6
Male	122	29	32	59	48.36	46.72	
Asian Black	57	8	15 0	33	57.89	9 7.56	~
Mexican-American	4	1 2	0	0	.0 50.00	.0 66.67	10
Other Hispanic	4	2	Ŏ	2 2	50.00	100.00	
White	84	23	25	35	41.67	95.00	3
Los Angeles All Ethnic Groups	299	52	35	211	70.57	63.88	
Female	92	18	13	61	66.30	60.87	18
Male	207	34	22	150	72.46	65.22	漢
MEP	21	3	3	15	71.43	61.90	
Non-MEP	278	49	32	196	70.50	64.03	*
Asian	111	12	6	92	82.88	95.74	
Black MEP	13 7	4	5 2	4 4	30.77 51.14	66.67 80.00	- 1
MEP Non-MEP		3	3	0	.0	.0	**************************************
Mexican-American	6 9 7	3	ŏ	Ğ	66.67	83.33	是一个人,我们就是一个人的人,也是一个人的人,也是一个人的人,也是一个人的人的人,也是一个人的人的人的人,也是一个人的人的人的人,也是一个人的人的人的人,也是一个人的人
MEP	7	1	0	6 6	85.71	83.33	93
Non-MEP	2 6	2	0	0	.0	.0	
Other Hispanic	6 5	2	0 0	4	66.67 80.00	80.00 80.00	1
MEP Non-MEP	อ 1	1	0	0	80.00 .0	.0	.0
White	129	24	19	86	66.67	88 00	4.7
· · · · · · · · · · · · · · · · · · ·	- 	3.	_	- -		(Contin	rued)
C			49			,	- 10 T

TABLE 21 (continued)

Campus	Number First-time Freshmen in Engineering	Number Who Withdrew 1983-85	Number Who Changed Majors 1983-85	Number Continuing in Engineering	Continuation Rate	Proportion of Continuing Students Who Achieved Junior and Senior Status
Santa Barbara						
All Ethnic Groups	312	67	91	152	48.72	54.49
Female	61	16	23	22	36.07	39.34
Male	251	51	68	130	51.79	58.17
MEP	16	3	4	9	56.25	56.25
Non-MEP	296	64	87	143	48.31	54.39
Asian	35	4	11	19	54.29	100.00
Black	6	1	ī	4	66.67	80.00
MEP	3	0	Ö	3	100.00	100.00
Non-MEP	3	1	ī	ĭ	33.33	50.00
Mexican-American	21	8	4	ğ	42.86	90.00
MEP	12	3	3	6	50.00	100.00
Non-MEP	9	5	ī	3	33.33	75.00
Other Hispanic	4	1	ī	ž	50.00	75.00
MEP	0	0	0	Ō	.00	.00
Non-MEP	4	1	1	2	50.00	75.00
White	233	50	67	115	49.36	94.86

^{*}No MEP on this campus.

Note: UC San Diego data are not available because freshmen are enrolled in a pre-engineering program for lower division work.

Source: California Postsecondary Education Commission staff analysis of University of California data.

TABLE 22 Three-Year Continuation and Progress Rates of Regular-Admission Freshmen Majoring in Engineering at the California State University, Fall 1982, by Ethnicity and Participation in the Minority Engineering Program (MEP)

Ethnic Group	Number Enrolled Fall 1982	Number Continuing in Engineering	Continuation <u>Rate</u>	Tracking <u>Rate</u>
All Groups				
All	2564	1722	67.2	67.2
MEP	151	127	84.1	84.1
American Indian				
All	10	7	70.0	70.0
Non-MEP	1	1	100.0	100.0
Asian				
All	439	339	77.2	77.2
Black				
All	128	59	46.1	46.1
MEP	42	33	78.6	78.6
Filipino				
All	103	69	67.0	67.0
Mexican-American				
All	161	94	58.4	58.4
Non-MEP	60	53	88.3	88.3
Other Hispania				
IIA.	107	63	58.9	58.9
Non-MEP	24	21	87.5	87.5
White				
All	1408	951	67.5	67.5

Note: None of the students graduated after three-years of study.

Source: California Postsecondary Education Commission staff analysis of University of California data.

TABLE 23 Three-Year Tracking Rates of Freshmen Majoring in Engineering at the California State University, Fall 1982, by Ethnicity and Sex

Institution	Number <u>Enrolled</u>	Number <u>Graduated</u>	Number Continuing in the Institution	Tracking <u>Rate</u>
Chico				
All Students*	75	0	50	66.7
Female	4	0	2	50.0
Male	71	0	48	67.6
Ethnic Groups (Male and Female)				
Asian	1	0	i	100.0
Black	••		••	••
Mexican-American	5	0	1	20.0
Other Hispanic	••	••	••	••
White	46	0	28	60.9
MEP Participants (Male and Female)	0			
Fresno				
All Students*	114	0	87	76.3
Female	11	0	9	81.8
Male	103	0	78	75.7
Ethnic Groups (Male and Female)				
Asian	9	0	9	100.0
Black	3	0 ,	2	66.7
Mexican-American	17	0	11	64.7
Other Hispanic	6	0	6	100.0
White	75	0	57	76.0
MEP Participants (Male and Female)	12	0	10	83.3
Fullerton				
All Students*	149	0	93	62.4
Female	20	0	11	55.0
Male	129	0	82	63.6
Ethnic Groups (Male and Female)				
Asian	40	0	25	62.5
Black	3	0	. 0	.0
Mexican-American	8	0	7	87.5
Other Hispanic	7	0	2	28.6
White	84	0	55	65.5
MEP Participants (Male and Female)	4	0	4	100.0
Humboldt				
All Students*	15	0	9	60.0
Feniale	4	0	2	50.0
Maie	11	0	7	63.6
Ethnic Groups (Male and Female)				
Asian	••	**	••	••
Black	••	••		••
Mexican-American	••	••	••	••
Other Hispanic	1	0	1	100.0
White	14	0	9	64.3
MEP Participants (Male and Female)	0			

(Continued)

TABLE 23 (continued)

ERIC

All Students* 302 0 Female 60 0 Male 242 0 Ethnic Groups (Male and Female) Asian 68 0 Black 22 0 Mexican-American 12 0 Other Hispanic 22 0 White 137 0 MEP Participants (Male and Female) 9 0 Os Angeles All Students* 84 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) 10 orthridge All Students* 230 0 Female 7 0 MEP Participants (Male and Female) 10 orthridge All Students* 230 0 Female 55 0 Mexican-American 10 Other Hispanic 7 0 MEP Participants (Male and Female) 10 orthridge All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) 31 0 Black 31 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 17	Number Continuing in the Institution 203 34 169 57 6 5 14 93 9 43 10 33	Tracking Rate 67.2 56.7 69.8 82.8 27.3 41.7 63.6 67.9 100.0
Ail Studenta* 302 0 Female 60 0 Male 242 0 Ethnic Groups (Male and Female) Asian 68 0 Black 22 0 Mexican-American 12 0 Other Hispanic 22 0 White 137 0 MEP Participants (Male and Female) 9 0 Os Angeles All Studenta* 84 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) 10 0 orthridge All Studenta* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 MEP Participants (Male and Female) Asian 34 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) Asian 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) Asian 30 0 Other Hispanic 17 0 Mile 30 0 Ethnic Groups (Male and Female) Asian 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 Other Hispanic 19 0 White 278 0	203 34 169 57 6 5 14 93 9	67.2 56.7 69.8 82.8 27.3 41.7 63.6 67.9 100.0
Ail Studenta* 302 0 Female 60 0 Male 242 0 Ethnic Groups (Male and Female) Asian 68 0 Black 22 0 Mexican-American 12 0 Other Hispanic 22 0 White 137 0 MEP Participants (Male and Female) Asian 31 0 Black 60 0 Ethnic Groups (Male and Female) Asian 31 0 Black 60 0 Ethnic Groups (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 White 7 0 MEP Participants (Male and Female) Orther Hispanic 7 0 White 7 0 MEP Participants (Male and Female) In this Groups (Male and Female) Asian 34 0 Black 31 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 17 0 White 17 0 White 17 0 MEP Participants (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) Asian 30 0 Ethnic Groups (Male and Female) Asian 30 0 Black 16 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Male 16 0 Male 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	34 169 57 6 5 14 93 9	56.7 69.8 83.8 27.3 41.7 63.6 67.9 100.0
Female	169 57 6 5 14 93 9	56.7 69.8 83.8 27.3 41.7 63.6 67.9 100.0
Ethnic Groups (Male and Female)	57 6 5 14 93 9	82.8 27.3 41.7 63.6 67.9 100.0
Asian Black Black Mexican-American Other Hispanic White 137 MEP Farticipants (Male and Female) Os Angeles All Students* All Students 18 Male Asian Black Mexican-American 12 Other Hispanic Mexican-American Other Hispanic Asian All Students* Asian All Students 20 Asian Black Asian All Students 31 All O Black Asian All Students 40 Asian Asian All Students 50 Male Asian A	6 5 14 93 9 43 10 33	27.3 41.7 63.6 67.9 100.0
Black	6 5 14 93 9 43 10 33	27.3 41.7 63.6 67.9 100.0
Mexican-American 12 0 Other Hispanic 22 0 White 137 0 MEP Farticipants (Male and Female) 9 0 Asian Alisan 34 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) 31 0 Asian 31 0 Black 5 0 0 Mexican-American 12 0 0 Other Hispanic 7 0 0 White 7 0 0 Orthridge All Students* 230 0 0 Female 55 0 0 0 0 Orthridge All Students* 230 0 <td>5 14 93 9 43 10 33</td> <td>41.7 63.6 67.9 100.0</td>	5 14 93 9 43 10 33	41.7 63.6 67.9 100.0
White 137 0 MEP Participants (Male and Female) 9 0 cos Angeles 34 0 All Students* 84 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 Male 175 0 Ethnic Groups (Male and Female) 34 0 Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Omona 46 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 452 0 Asian	93 9 43 10 33	67.9 100.0 51.2
MEP Participants (Male and Female) All Students* Female All Students	9 43 10 33 22	100.0 51.2
All Students* 84 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) 10 0 forthridge All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 omena All Students* 452 0 Female 62 0 Met 101 0 MEP Participants (Male and Female) 46 0 omena All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 46 0 omena All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 46 0 Other Hispanic 390 0 Ethnic Groups (Male and Female) 46 0 Other Hispanic 390 0 Ethnic Groups (Male and Female) 46 0 Other Hispanic 390 0 Ethnic Groups (Male and Female) 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 452 0 Other Hispanic 16 0 Mexican-American 26 0 Other Hispanic 19 0 Unite 278 0	43 10 33	51.2
All Students* 84 0 Female 18 0 Male 66 0 Ethnic Groups (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 MEP Participants (Male and Female) 10 0 forthridge All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 forthridge All Students* 250 0 Ethnic Groups (Male and Female) 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 female 390 0 Ethnic Groups (Male and Female) 46 0 Ethnic Groups (Male and Female) 46 0 Ethnic Groups (Male and Female) 46 0 Ethnic Groups (Male and Female) 452 0 Female 390 0 Ethnic Groups (Male and Female) 452 0 Female 390 0 Ethnic Groups (Male and Female) 452 0 Female 390 0 Ethnic Groups (Male and Female) 390 0 Ethnic Groups (Male and Female) 452 0 Female 390 0 Ethnic Groups (Male and Female) 390 0 Ethnic Groups (Male and F	10 33 22	
Female	10 33 22	
Male 66 0 Ethnic Groups (Male and Female) 31 0 Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) 10 0 forthridge 30 0 0 All Students* 230 0 0 Female 55 0 0 Asian 34 0 0 Black 31 0 0 Mexican-American 30 0 0 Other Hispanic 17 0 0 white 390 0 0 Ethnic Groups (Male and Female) 452 0 0 female 390 0 0 comona 452 0 0 All Students* 452 0 0 female 390 0 0 female 390 0 0 <	33 22	
Ethnic Groups (Male and Female) Asian 31 0 Black 5 0 Mexican-American 12 0 Other Hispanic 7 0 MEP Participants (Male and Female) 10 0 forthridge All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 comona All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Ethnic Groups (Male and Female) Asian 63 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278	22	55.6 50.0
Asian Black Black Mexican-American Other Hispanic White 7 MEP Participants (Male and Female) Female Asian Black B		50. 0
Black		71.0
Other Hispanic 7 0 White 7 0 MEP Participants (Male and Female) 10 0 Northridge 30 0 All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) 34 0 Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic (Male and Female) 46 0 Pomona All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 452 0 Asian 63 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White	v	.0
White 7 0 MEP Participants (Male and Female) 10 0 Northridge 30 0 0 All Students* 230 0 0 Female 55 0 0 Male 175 0 0 Ethnic Groups (Male and Female) 34 0 0 Black 31 0 0 Mexican-American 30 0 0 Other Hispanic 17 0 0 Pomona 46 0 0 All Students* 452 0 0 Female 62 0 0 Male 390 0 0 Ethnic Groups (Male and Female) 452 0 0 Asian 63 0 0 Black 16 0 0 Mexican-American 26 0 0 Other Hispanic 19 0 0 White 278 0 0	6	50.0
MEP Participants (Male and Female) 10 0 Northridge All Students* 230 0 Female 55 0 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Nomona All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Mexican-American 26 0 Mexican-American 26 0 Other Hispanic 19 0 White 278	3	42.9
Sorthridge	1 7	14.3 70.0
All Students* 230 0 Female 55 00 Male 175 0 Ethnic Groups (Male and Female) Asian 34 0 Black 31 00 Mexican-American 30 0 Other Hispanic 17 00 White 101 0 MEP Participants (Male and Female) 46 0 Comona All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 46 0 Ethnic Groups (Male and Female) 63 0 Black 16 0 Moxican-American 26 0 Other Hispanic 19 0 White 278 0		
Female 55 0 Male 175 0 Ethnic Groups (Male and Female) 34 0 Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Somona 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	156	67.8
Male 175 0 Ethnic Groups (Male and Female) 34 0 Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Omona 46 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	33	60.0
Asian 34 0 Black 31 0 Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Comona All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	123	70.3
Black 31 0 Mexican-American 30 0 0		
Mexican-American 30 0 Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Pomona 452 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	25	73.5
Other Hispanic 17 0 White 101 0 MEP Participants (Male and Female) 46 0 Jomona 452 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	16	51.6
White 101 0 MEP Participants (Male and Female) 46 0 Pomona 452 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	19 12	63.3 70.6
MEP Participants (Male and Female) 46 0 Pomona 452 0 All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	70	6 9 .3
All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	36	78.3
All Students* 452 0 Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0		
Female 62 0 Male 390 0 Ethnic Groups (Male and Female) 63 0 Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	307	67.9
Ethnic Groups (Male and Female) Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	47	75.8
Asian 63 0 Black 16 0 Mexican-American 26 0 Other Hispanic 19 0 White 278 0	260	66.7
Black160Mexican-American260Other Hispanic190White2780	4 ==	84 A
Mexican-American260Other Hispanic190White2780	47 10	74.6 62.5
Other Hispanic 19 0 White 278 0	15	57.7
White 278 0	10	52.6
MEP Participants (Male and Female) 17 0	187	67.3
	16	94.1
	•	
•		67.8 60.0 70.3 73.5 51.6 63.3 70.6 69.3 78.3 67.9 75.8 66.7 74.6 62.5 57.7 52.6 67.3 94.1

Institution	37	N. P	Number	
	Number Enrolled	Number <u>Graduated</u>	Continuing in the Institution	Trackii <u>Rate</u>
Sacramento				
All Students* Female	124 13	0 0	89 9	71.8
Male	111	Ŏ	80	69.2 72.1
Ethnic Groups (Male and Female)		•		
Asian Black	12	0	11	91.7
Black Mexican-American	2 3	0	1	50.0
Other Hispan:	3 2	0	3 2	100.0 100.0
White	98	ŏ	68	69.4
MEP Participants (Male and Female)	8	0	7	87.5
San Diego				
All Students*	321	0	174	54.2
Female Male	35 286	0 0	20	57.1
Ethnic Groups (Male and Female)	200	U	162	56.6
Asian	41	0	25	61.0
Black	16	o	10	62.5
Mexican-American Other Hispanic	21	0	8	38.1
White	5 185	0 0	4 100	80.0
MEP Participants (Male and Female)	19	ŏ	16	54.1 84.2
San Francisco				
All Students*	79	0	48	60.8
F male Male	19	0	14	73.7
Ethnic Groups (Male and Female)	60	0	34	56.7
Asian	21	0	17	81.0
Black	11	0	3	27.3
Mexican-American	5	0	3	60.0
Other Hispanic White	1 20	0	1	100.0
MEP Participants (Male and Female)	1	0 0	10 1	50.0 10 0 .0
San Jose				
All Students*	334	0	243	72.8
Female	51	Ö	33	64.7
Male	283	0	210	74.2
Ethnic Groups (Male and Female) Asian	77	O	67	^ ~
Black	13	0	67 8	87.0 61.5
Mexican-American	9	Ö	7	77.8
Other Hispanic	13	0	5	38.5
White	184	0	134	72.8
MEP Participants (Male and Female)	13	0	12	92,3
			·	
	•			
				

(Continued)

TABLE 23 (continued)

Institution	Number Enrolled	Number <u>Graduated</u>	Number Continuing in the Institution	Tracking Rate
San Luis Obispo				
All Students*	285	0	212	
Female	70	0	. 55	76,0
Male	215	0	157	73.0
Ethnic Groups (Male and Female)				••••
Asian	42	0	33	78.6
Black	6	0	3	50.0
Mexican-American	13	0	8	61.5
Other Hispanic	7	0	4	57.1
White	179	0	139	777
MEP Participants (Male and Female)	12	0	9	75.0

^{*}This total includes American Indian, Filipino, Pacific Islander, and Unknown categories not listed here.

Source: California Postsecondary Education Commission staff analysis of California State University data.



49

wit

TABLE 24 Three-Year Tracking Rates of Fall 1982 Transfer Students Majoring in Engineering at the California State University, by Ethnicity and Participation in the Minority Engineering Program (MEP)

Ethr	nic Group	Number Enrolled Fall 1982	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>
	Groups				•		
	. All	389	158	40.6	96	24.7	65.3
	MEP	84	50	59 .5	9	10.7	70.2
Ame	rican Indian						
MIII	All	30	11	00.7	•		
	MEP	1	0	36.7	6	20.0	56.7
	******	•	U	.0	0	.0	.0
Asia	n						
. : •	All	704	285	40.5	39	5.5	46.0
	•					0.0	40.0
Blac	X						
	All	107	38	35.5	12	11.2	46.7
•	MEP	24	16	66.7	3	12.5	79.2
Filip	ino	•					
»	Ali	71	36	E0. E	•		
	. 504	**	30	50.7	6	8.5	59.2
Mexi	ican-American						
	Ail	125	62	49.6	11	8.8	58.4
	MEP	29	18	62.1	4	13.8	75. 9
ir Vir			· -		•	10.0	10.5
Othe	r Hispanic						
	All	123	46	37.4	15	12.2	49.6
.2.7 \$	MEP	17	É	47.1	0	.0	47.1
Whit	_						
. wait	All	1710	CEO	00.0			
;	- CLA	4140	653	38.2	562	27.0	65.2

Source: California Postsecondary Education Commission staff analysis of California State University data.

TABLE 25 Three-Year Tracking Rates of Fall 1982 Transfer Students Majoring in Engineering at the California State University, by Campus, Ethnicity and Participation in the Minority Engineering Program (MEP)

Campus	Number Enrolled Fall 1982	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Tracking Rate	:
iço*							
All Fihnic Groups	123	60	48.8	. 31	25.2	74.0	
American Indian	1	0	.0	0	.0	.0	٠.
Asian	3	1	1	33.3	33.3	66.7	
Black	••	••	••	••	••	••	
Filipino	1	1	100.0	0	.0	100.0	
Mexican-American	4	1	25.0	2	5 0.0	75.0	
Other Hispanic	ì	1	10 0. 0	0	.0	100.0	
Pacific Islander	••	••	••	••	**	••	
White	89	46	51.7	20	22.5	74.2	
esno							
All Ethnic Groups	142	60	42.3	44	31.0	73.2	
American Indian	1	0	.0	0	.0	.0	
Asian	15	7	46.7	4	26.7	73.3	* 1
Black	4	0	.0	1	25.0	25.0	
Filipino	1	0	.0	0	.0	.0	•
Mexican-American	4	3	75.0	0	.0	75. 0	
Other Hispanic	9	5	55.6	3	33.3	88.9	10
Pacific Islander	••	••	•	••	••	••	E
White	92	35	38.0	35	38.0	76.1	
MEP participants	8	5	62.5	0	.0	62.5	•
All Non-MEP	134	55	41.0	44	31.0	72.0	
llerton							•
All Ethnic Groups	197	73	37.1	26	13.2	50.3	
American Indian	1	Ō	.0	0	0	0	
Asian	79	25	31.6	7	8.9	40.5	
Black	8	5	62.5	Ö	0	62.5	
Filipino	ĭ	Ö	.0	Ŏ	Č	0	
Mexican-American	3	i	33.3	Ö	Ö	33.3	
Other Hispanic	6	2	33.3	Ŏ	Ŏ	33.3	
Pacific Islander	2	<u></u>	50.0	i	50.0	100.0	
White	80	25	31.3	15	18.8	50.0	
MEP participants	2	1	50.0	Ö	o	50.0	
mbolt*							
All Ethnic Groups	38	15	39. 5	4	10.5	50.0	
American Indian	ĭ	ĭ	100.0	Ö	.0	100.0	
Asian	i	Ô	.0	Ŏ	.ö	.0	
Black	•	••	••	•			
Filipino	••	••	••	••	••	40	
Mexican-American	••	••	••	••	••	••	
Other Hispanic	••	4.	·-	••	••	••	
Pacific Islander	**	••	••	••	••	••	
White	34	14	41.2	3	8.8	50.0	
ng Beach							
All Ethnic Groups	563	237	42,1	115	20.4	62.5	
American Indian	7	201	57.1	2	28.6	85.7	
Asian	223	106	47.5	35	15.7	63.2	
Black	18	10	55.6	4	22.2	77.8	
Filipino	15	11	73.3	1	6.7	80.0	
Mexican-American	18	8	13.3 44.4	ň	0.1	44.4	
Other Hispanic	21	8	38.1	1	4.8	42.9	
Pacific Islander	31 4	0 1	25.0	ե 1	4.8 25.0	50.0	
	207	74	25.0 35.7	56	25.0 27.1	50.0 62.8	
White	207 11	10	35.7 90.9	ან 0	0	90.9	
MEP participants All Non-MEP	5 5 2	227		115	20.4	61.5 (<i>Co</i>	- خمالهای
AH MUNINKEK	902	441	41.1	7.10	4V.4	ウエ・コイクない	4661761

TAB	LE 25 (continued) Campus	Number Enrolled Fall 1982	Number Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation Rate	Tracking <u>Rate</u>	
Los	Angeles All Ethnic Groups	143	53	37.1	20	14.0	51.0	
	American Indian Asian	1 * 40	0 13	0	0	0	0	
*	Black	16	13 5	32,5 31.3	8 0	20.0 0	52.5 31.3	
	Filipino Mexican-American	3	2	66.7	0	0_	66.7	
	Other Hispanic	13 9	3	53.8 33.3	1 0	7.7 0	61.5 33.3	
:	Pacific Islander	1 .	Ö	0	i	100.0	100.0	
	White MEP participants	24 10	12 7	50.0 70.0	1	4.2	54.3	
, r .	All Non-MEP	133	46	34.6	19	10.0 14.3	80.0 4 8.9	
Nor	thridge							
	All Ethnic Groups American Indian	52	22	42.3	15	28.8	71.2	
	Asign	15	 8	 53.3	 2	 13.3	 66.7	
	Black	3	ī	33.3	õ	0	33.3	
:	Filipino Mexican-American	 1	 1	100.0	0	 0	100.0	
	Other Hispanic	ī	1	100.0	Ö	ŏ	100.0	
i.	Pacific Islander White	1 28	0 9	0 32 .1	0 13	0 46.4	.0 78.6	
	MEP participants	6	3	50.0	0	0	50.0	
	All Non-MEP	46	19	41.3	15	28.8	70.1	
Pon	iona All Estado Carama	058	222					
	All Ethnic Groups American Indian	657 8	239 3	36.4 37.5	170 1	25.9 12.5	62.3 50.0	
	Asian	••	••	**	• ••	••	••	
	Black Filipino	33 17	17 9	51.5 52.9	4	12.* 23.5	63.6	
	Mexican-American	43	19	44.2	4	9.3	76.5 5 3.5	
	Other Hispanic Pacific Islander	3 4 10	12	35.3	2	5.9	41.2	
	White	3 70	6 136	60.0 36.8	3 98	30.0 26.5	90.0 63.2	
	MEP participents All Non-MEP	21	9	42.9	5	23.8	66.7	
		636	230	36.2	165	25.9	62.1	
	amento All Ethnic Groups	270	99	36.7	96	35.6	72.2	
	American Indian		••	••	••	••		
•	Asian Black	50 1	15 0	30.0 0	21 0	42.0	72 .0	
	Filipino	2	1	50.0	0	0	0 50.0	
	Mexican-American	2	2	100.0	0	0	100.0	
	Other Hispanic Pacific Islander	3 	1	33.3 	1	33.3 	6 6 .7	
	White	192	76	39.6	67	34.9	74.5	
,	MEP participants All Non-MEP	4 266	2 97	50.0 36.5	2 9 4	50.0 3 5 .3	100.0 71.8	
	Diego	-		20.0		- 		
	All Ethnic Groups	353	135	38.2	69	19.5	57.8	
	American Indian Asian	4 48	2	50.0	0	0	50.0	
	Black	7	17 0	35. 4 0	9 2	18.8 28.6	54.2 28.6	
1	Filipino	14	3	21.4	1	7.1	28.6	
. (Mexican-American Other Hispanic	15 6	9 2	60.0 33.3	1	6.7 16.7	66.7 50.0	
1	Pacific Islander	2	0	0	1	50.0	50.0	•
	White MEP participants	213 7	81 6	38.0 85.7	50	23.5	61.5	
	MEP participants All Non-MEP	346	12 9	85.7 37.3	0 69	0 19.5	- 85.7 56.8	(C = 0.47 · ·
			_ _	<u> </u>	4.5	- 		(Continue

TABLE 25 (continued)	Number Enrolled Fall 1982	lvumber Continuing in Engineering	Continuation Rate	Number Who Graduated in Engineering	Graduation <u>Rate</u>	Trac Ra
<u>Campus</u> San Francisco*	<u>FBII 1302</u>	ar Envineering	<u>rrare</u>			
All Ethnic Groups American Indian	109	41 0	37.6 .0	16 0	14.7 .0	5
Asian	27	12	44.4	4 0	14.8 .0	5 · 4
Black Filipino	3	3 0	42.9 .0	Ŏ	.0	
Mexican-American Other Hispanic	2 10	0 4	.0 40 .0	2 2	100.0 20.0	10 ⁶
Pacific Islander	1	0	.0	0 5	.0 14.7	5
White	34	13	38.2	5	14.1	J.
San Jose All Ethnic Groups	330	133	40.3	85	25.8	6
American Indian	4	0	0	3 16	75.0 21.1	7! 6!
Asian Black	76 7	37 4	48.7 57.1	1	14.3	7
Filipino Mexican-American	12 8	7 4	58.3 50.0	0	0 0	58 50
Other Hispanic	เนื้	4	36.4	2	18.2	54
Pacific Islander White	1 184	69	100.0 3 7 .5	0 55	0 29.9	100 67
MEP participants All Non-MEP	4 326	2 131	50.0 40.2	1 84	25.0 25.8	78 60
	320	101	40.2	04	20.0	
San Luis Obispo All Ethnic Groups	267	106	39.7	0	22.5	6
American Indian Asian	1 30	0 8	.0 26.7	0 9	0 30.0	5(
Black	3	2	66.7	Ŏ	0	6
Filipino Mexican-American	2 12	1 6	50.0 50.0	0 1	0 8.3	50 58
Other Hispanic	12	3	25.0	3	25.0	50
Pacific Islander White	 163	63	38.7	44	27.0	6
MEP participants All non-MEP	11 256	5 101	45.5 39.5	0 60	0 22.5	48 63
	-00		33.3		22.2	
*No MEP on this campus.				rnia State University		
					3	

^{*}No MEP on this campus.



References

Landis, Raymond B. Handbook on Improving the Retention and Graduation of Minorities in Engineering. New York: The National Action Council for Minorities in Engineering, 1985.

-- "A Model Retention Program," Chapter 2 in Raymond B. Landis, editor, Handbook on Improving the Retention and Graduation of Minorities in Engineering. New York: The National Action Council for Minorities in Engineering, 1985, pp. 7-12.

Penick, Benson E., and Morning, Carole. "Retention of Minority Engineering Students." Report on the 1981-82 NACME Retention Research Program. New

York: The National Action Council for Minorities in Engineering, 1983.

Retention of Minority Students in Engineering. A Report of the Retention Task Force, Committee on Minorities in Engineering. Washington, D.C.: National Academy of Sciences, 1977.

Treisman, Uri. "A Model Academic Support System," Chapter 8 in Raymond B. Landis, editor, Handbook on Improving the Retention and Graduation of Minorities in Ingineering. New York: The National Action Council for Minorities in Engineering, 1985, pp. 55-66.

CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

THE California Postsecondary Education Commission is a citizen board established in 1974 by the Legislature and Governor to coordinate the efforts of California's colleges and universities and to provide independent, non-partisan policy analysis and recommendations to the Governor and Legislature.

Members of the Commission

The Commission consists of 15 members. Nine represent the general public, with three each appointed for six-year terms by the Governor, the Senate Rules Committee, and the Speaker of the Assembly. The other six represent the major segments of postsecondary education in California.

As of March 1987, the Commissioners representing the general public are:

Seth P. Brunner, Sacramento
C. Thomas Dean, Long Beach, Chairperson
Seymour M. Farber, M.D., San Francisco
Cruz Reynoso, Los Angeles
Lowell J. Paige, El Macero
Roger C. Pettitt, Los Angeles
Sharon N. Skog, Mountain View, Vice Chairperson
Thomas E. Stang, Los Angeles
Stephen P. Teale, M.D., Mokelumne Hill

Representatives of the segments are:

Yori Wada, San Francisco; representing the Regents of the University of California

Claudia H. Hampton, Los Angeles; representing the Trustees of the California State University

Arthur H. Margosian, Fresno: representing the Board of Governors of the California Community Colleges

Donald A. Henricksen, San Marino: representing California's independent colleges and universities

Harry Wugalter, Thousand Oaks: representing the Council for Private Postsecondary Educational Institutions

Angie Papadakis, Palos Verdes; representing the California State Board of Education

Functions of the Commission

The Commission is charged by the Legislature and Governor to "assure the effective utilization of public postsecondary education resources, thereby eliminating waste and unnecessary duplication, and to promote diversity, innovation, and responsiveness to student and societal needs."

To this end, the Commission conducts independent reviews of matters affecting the 2,600 institutions of postsecondary education in California, including Community Colleges, four-year colleges, universities, and professional and occupational schools.

As an advisory planning and coordinating body, the Commission does not administer or govern any institutions, nor does it approve, authorize, or accredit any of them. Instead, it cooperates with other state agencies and non-governmental groups that perform these functions, while operating as an independent board with its own staff and its own specific duties of evaluation, coordination, and planning,

Operation of the Commission

The Commission holds regular meetings throughout the year at which it debates and takes action on staff studies and takes positions on proposed legislation affecting education beyond the high school in California. By law, the Commission's meetings are open to the public. Requests to address the Commission may be made by writing the Commission in advance or by submitting a request prior to the start of a meeting.

The Commission's day-to-day work is carried out by its staff in Sacramento, under the guidance of its executive director, William H. Pickens, who is appointed by the Commission.

The Commission issues some 30 to 40 reports each year on major issues confronting California postsecondary education. Recent reports are listed on the back cover.

Further information about the Commission, its meetings, its staff, and its publications may be obtained from the Commission offices at 1020 Twelfth Street, Third Floor, Sacramento, CA 98514-3985: telephone (916) 445-7933.



RETENTION OF STUDENTS IN ENGINEERING

California Postsecondary Education Commission Report 86-33

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Post-secondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 98514-3985; telephone (916) 445-7933.

Other recent reports of the Commission include:

- 86-16 Purposes and Effects of Student Financial Aid: The Second of Two Background Papers on Student Financial Aids Issues and Options Prepared for the California Postsecondary Education Commission, May 1986 (May 1986)
- 86-17 Director's Report, May 1986: Enrollment Trends in California Higher Education, 1980-1985 (May 1986)
- 86-18 California Postsecondary Education Commission News, Number 1 [Inaugural issue of the Commission's periodic newsletter] (June 1986)
- 86-19 Analysis of the State University's Criteria for Approving Permanent Upper-Division and Graduate Off-Campus Centers: A Report to the Governor and Legislature in Response to Senate Bills 785, 1060, and 1103 (1985) (June 1986)
- 86-20 Annual Report on Program Review Activities 1984-85: The Tenth in a Series of Reports to the Legislature and Governor on Program Review by Commission Staff and California's Public Colleges and Universities (June 1986)
- 86-21 Eligibility for Institutional Participation in the Cal Grant Program: A Report to the Legislature and Governor in Response to Senate Bill 362 (Chapter 772, Statutes of 1985) (June 1986)
- 86-22 Transforming Data into Information: Improving Student Performance Reporting: A Staff Report to the California Postsecondary Education Commission (June 1986)
- 86-23 Comments from the Community: Working Papers and Testimony Before the ACR 3 Committee on Educational Opportunities and Services for Stu-

dents with Disabilities in California (July 1986)

- 86-24 California Colleges and Universities, 1986: A Guide to Degree-Granting Institutions and to Degree and Certificate Programs (September 1986)
- 86-25 California College-Going Rates, 1985 Update: The Ninth in a Series of Reports on New Freshman Enrollment at California's Colleges and Universities by Recent Graduates of California High Schools (September 1986)
- 86-26 Supplemental Report on Academic Salaries, 1985-86: Faculty Salaries in the California Community Colleges: Selected Administrative Salaries at the University of California and the California State University (September 1986)
- 86-27 Special-Action Admission at California's Public Universities: Recommendations for Strengthening an Alternative Route to Success at the University of California and the California State University (September 1986)
- 86-28 Appropriations in the 1986-87 State Budget for the Public Segments of Higher Education; Proposition 61 and Its Potential Impact on Public Postsecondary Education: Two Reports by Staff of the California Postsecondary Education Commission. (September 1986)
- 86-29 Clarifying the State's Role in Guaranteeing Student Loans: A Report to the Legislature and Governor in Response to Assembly Bill 756 (Chapter 1379, Statues of 1985) (December 1986)
- 86-30 Conflicts in State Policies Governing Undergraduate Enrollment at California's Public Universities: An Analysis in Response to Language in the Supplemental Report of the 1985 Budget Act (December 1986)
- 86-31 Student Financial Aid in California: To Close the Widening Gyre (December 1986)
- 86-32 Effects of the Mandatory Statewide Fee on California Community College Enrollments: A Staff Report to the California Postsecondary Education Commission (December 1936)

