

UC Berkeley

IURD Reprint Series

Title

Who Cares for the Losers?

Permalink

<https://escholarship.org/uc/item/61v3w7zg>

Authors

Blakely, Edward J.

Sullivan, Susan

Publication Date

1989

Peer reviewed

Reprint 239

Reprinted from *Can California Be Competitive and Caring?*
Daniel J. B. Mitchell and Jane Wildhorn, Eds. University of
California, 1989.

Who Cares for the Losers?

Edward J. Blakely
&
Susan Sullivan

University of California at Berkeley

MONOGRAPH & RESEARCH SERIES 49

**CAN
CALIFORNIA
BE
COMPETITIVE
AND
CARING?**

EDITED BY DANIEL J. B. MITCHELL
AND JANE WILDHORN

**INSTITUTE OF
INDUSTRIAL
RELATIONS**

UNIVERSITY OF CALIFORNIA, LOS ANGELES

9/ WHO CARES FOR THE LOSERS?

Edward J. Blakely
Susan Sullivan

Introduction

California was known throughout the term of Governor Jerry Brown as "the state wrapped in a brown paper bag." While other states, notably North Carolina and Texas, sent their governors to California to recruit high tech firms, California ignored all forms of crass industrial proselytizing with remarkable arrogance and to the chagrin of the state's business leaders. Governor Brown reflected the Golden State's general attitudes toward industrial growth. To put it succinctly, new jobs and firms *must come to California* to enjoy what the Governor labeled as the state's "psychic income." After all, throughout the 1970s, California's computer industry was producing nearly 40 percent of the world's semiconductors and the state dominated most of the nation's other advanced technology and agriculture production statistics.

Moreover, there was little introspection or concern regarding the types of jobs being formed or the increasing vulnerability of the state's economy to competition for its primary manufacturing and agricultural products from Latin America, Mexico, and Brazil, or the rising competitive position of the Asian Pacific nations. In essence, Californians were convinced that the state had no real competitors for industrial growth and job creation.

Even during the Brown administration there were some warning signs regarding the state's competitive position and the declining capacity of California to meet the employment requirements of a rising minority population that did not fit the state's high tech scenario. However, the strength of consumer products manufacturing and the growth in personal services sectors were enough to offset many of these early warning signs. Nevertheless, all of the economic scenarios for the state indicated some declines in the "hand work" (manufacturing, food processing, etc.) areas, with dramatic increases in the "head work" (computer programming, sales and finance) occupations. Only a few academics considered this transformation in the economy to have disproportionate consequences for the minority segments of the population.¹

In the wake of the state's earlier lack of an organized approach to economic development there have been a number of recent well publicized economic recruitment "failures" that are embarrassing state policy makers. The loss of CMC to Austin, Texas; the loss of the Earthquake Center (to Buffalo, New York of all places!); and finally, the embarrassing fiasco of the state's inability to make an appropriate bid for the Super Collider or the semiconductor research center SEMITECH have created a new furor over the course of economic development for California. As a result, the state has embarked on an ambitious economic development program that is determined to restore its technology leadership and to create new jobs. This reawakening of state economic leadership is important, but it is even more important to see where it might be leading us with respect to both the types of economy it forms and the impact these changes will have on the population.

California's new aggressive economic development posture remains oriented toward the state's technological edge. New tech, high tech, and high touch (i.e., jobs requiring the use of high tech equipment such as computers as well as communication skills) dominate the economic development policy perspec-

tives. However, there is some uneasiness with this recent conversion to economic development, since it is already clear that minorities are underrepresented and underprepared for the changing state economic base.

The Scale of the New Economic Development Commitment

No one can say that California proceeds by half-measures when policy makers finally commit themselves to new approaches. The scale of California's recent conversion to overt economic development is staggering. State programs, combined with federal government transfers for economic development administered through the state, have grown fourfold since 1979. California is currently investing some \$30 billion in direct business development oriented activities.² This figure includes loans and other investments that should be recovered. The data from which these numbers are drawn does not include the indirect aid to schools and road systems that are increasingly viewed as important ingredients in economic development. It also excludes tax code exemptions from federal and state taxes, as well as a myriad of federal programs that go directly to cities and counties. Nor does the data consider federal job training or other loan and grant funds for farmers, veterans, and special groups. In short, the state is now deeply and directly involved in economic development. California is no longer passive with regard to its economic future. It is the character and direction of state action, combined with the marketplace responses, that create a new set of economic dynamics that affect all elements of the state's population.

The money spent on economic development is only one indicator of the state's new direct participation in economic development. Another illustration is the reorientation of the policy structure to assist in achieving economic development objectives. In the last three years, a vast array of new policy structures has emerged. These new structures include a state Economic Development Corporation, state overseas

offices, and several new state initiatives with advisory boards ranging from international trade to rural development. There is little doubt that California is now wrapped in a new cover. The issues that arose in the Brown administration still plague the state. That is, what is all of this for? It is conceivable that more economic development aimed at making the state increasingly competitive will lead to even greater employment and economic disparities than the previous nonpolicies. Therefore, this paper attempts to look at the problem of economic development from the inside out. That is, what kind of economy is economic development creating? Who is most likely to benefit from more economic development? Where is economic development going sectorally and geographically, and what difference does this make for minorities? The other issue this paper will address is: What form of economic development is required for those populations most in need?

The Scope of the Economic Development Agenda

California's work force is changing. It is already 43 percent female with over 25 percent of the work force composed of blacks and Latinos. The size of the minority work force has doubled since 1970 and there are estimates that the state's minority work force could rise to 45 percent by the turn of the century.³ If this is the work force of the future, how well is it prepared for the jobs of the future? Currently, about 39 percent of the state's manufacturing jobs are in the so-called high tech/high touch fields as shown in Table 1.

It is current state policy to increase the numbers of technology-based jobs to build more and better jobs and to improve the overall wealth of the state. This is, on its face, an intelligent strategy. Since California enjoys a comparative advantage as a high tech and defense contractor location, it makes sense to build an economic development scenario on these knowledge-intensive industries.

Table 1

Fastest Growing Manufacturing Sectors
in California, 1974-1984

Sector	Employment		% Change
	1974	1984	
Electric & electronic	223,264	360,745	61.58
Instruments & related	61,253	94,292	53.94
Machinery except electric	176,219	247,445	40.42
Printing & publishing	98,420	134,647	36.81
Furniture & fixture	47,767	62,422	30.68
Rubber & miscellaneous plastic	59,824	73,744	23.27
Apparel & other textiles	95,670	115,740	20.98
Petroleum & related products	16,021	18,071	12.80
Paper & allied products	35,413	37,434	5.71
Chemicals & allied	51,493	54,038	4.94
Fabricated metals	137,914	143,889	4.33
Food & kindred products	147,789	150,896	2.10

Source: U.S. Department of Commerce, Bureau of the Census,
County Business Patterns, 1974 and 1984.

The Research Data

Our research indicates that the rising majority work-age population of Hispanics and blacks is not a significant part of these increasingly high tech/high touch employment opportunities. In fact, minority males are increasing their concentrations in the areas of industrial decline. We examine information from the U.S. Equal Employment Opportunity Commission (EEOC), which covers employers of twenty or more people.⁴ We were able to obtain special runs of this data by industrial sector and race for California's three largest SMSAs (Standard Metropolitan Statistical Areas): Los Angeles, San Diego, and San Jose. We selected the largest SMSAs for analysis since they include a high proportion of the state's job growth as well as the largest proportion of the minority populations. In addition, this form of analysis gives a far better picture of the impact of job growth scenarios on particular populations than statewide aggregated data. While we feel the information obtained is indicative, we cannot claim that it is absolutely accurate in every dimension. The caveat with respect to the data is that it is from private employers only, and includes only those employers filing EEOC reports for the periods indicated. The data is somewhat uneven in coverage given the range of employer size and filing requirements, but it covers about 65 percent of all California employers in most sectors.

For our analysis we first constructed a table indicating the sectoral growth in relative terms for the years 1974, 1981, and 1984 for each of the three SMSAs. Based on these years, we performed further analysis to ascertain the relative position of minorities within the major industrial sectors and a more refined analysis of the relative concentration of minorities in high tech/high touch areas vs. the low tech areas of the economy in each of the selected SMSAs. Subsequent to the analysis of minority concentration by industry, we examined the occupational concentrations of minorities within the fastest

growing areas within each of the selected SMSAs. As a follow-up to the occupational analysis, we proceeded to explore what kinds of jobs are being lost in the state economy and the potential impact of this pattern on minorities in the selected SMSAs and the state. Finally, we explored the new geographic shift of manufacturing employment to ascertain the potential impact this may have on the state's changing ethnic mix.

Below we discuss the data for the Los Angeles, San Jose, and San Diego metropolitan areas. We find that the data highlights the potential problems of our increasingly technology- and knowledge-intensive economy.

Economic Development as Economic Segregation

The value of aggressive economic development is that it helps the community meet its employment goals for local residents. The rationale for engaging in any form of economic development according to state and local politicians is that "it creates local jobs." However, it is uncertain just how economic development achieves this feat. We examined the outcome of economic development for minorities rather than the input or political statements. If economic improvement is creating employment, then it should generate employment options and opportunities for all segments of the population to the same degree. Therefore, the following analysis looks at the patterns of sectoral concentrations of minorities by industrial sectors.

Los Angeles

Los Angeles is one of the fastest growing areas of the state in every respect. Our analysis of this megalopolis indicates that its industrial growth, whether planned or induced by other factors, is moving very rapidly toward the quaternary sectors of

finance, business services, and insurance (Table 2). These sectors are now highly automated and dependent upon advances in telecommunications and information sciences. Los Angeles is also experiencing some growth in the low tech area of apparel.

Figure 1 is designed to show the relative growth rates of major industrial categories against the concentration of minorities in these sectors. The figure shows that Hispanics (H) are highly concentrated in nondurables, transportation, and the higher growth services area. Blacks (B) are similarly arrayed, but with a higher concentration in the finance, insurance, and real estate (FIRE) area than Latinos. Asians (A) are in all of the areas. The smaller numbers of Asians may not be a very representative indicator in this portion of the analysis, because of their lower participation rates in the Los Angeles economy.

Figure 2 goes more deeply into the high tech/low tech distinctions discussed earlier to ascertain how minorities in the Los Angeles SMSA are represented in these subsectors of the economy. As the figure indicates, there is a pattern of minority concentration into the areas of transportation, electronics, and finance. All three minority groups are represented at about the same levels in each of the high tech sectors. Hispanics are heavily concentrated in apparel, machinery, and transportation. On the other hand, there is a definite ethnic division of labor in Los Angeles with respect to the lower tech areas. The industrial concentration among blacks and Hispanics tends to be concentrated in the lower tech areas or in the slower growing areas of the Los Angeles technology-based economy. For instance, we note that blacks, Hispanics, and Asians are clustered in slow-growing technology areas such as transportation equipment (aircraft in Los Angeles) and in machinery. Hispanics are overrepresented in apparel. There is some representation of minorities in the high touch area of finance, but as we shall see later, minorities are primarily restricted to the lowest paying and most technologically vulnerable areas of

Table 2

Employment Change by Sector
for Los Angeles SMSA, 1974 to 1984

Basic Sectors

SIC	Sector	1974	1984	Percent Change
01-09	Agriculture	6706	11879	77.14
10-14	Mining	9835	22890	132.74
15-17	Construction	121596	114759	-5.62
14,15,32-39	Durable Mfg.	556894	570169	2.38
30-33,26-31	Nondurable Mfg.	267259	283572	8.10
40-49	Transportation	176868	190778	7.57
50-51	Wholesale	204158	252405	23.63
52-59	Retail	452028	555275	22.84
60-67	FIRE	176577	265114	45.04
70-89	Services	578521	926401	60.13
Total		2602460	3261145	25.31

High Tech/ High Touch

SIC	Sector	1974	1984	Percent Change
28	Chemical	25753	26037	1.10
29	Petroleum	8732	9068	3.85
35	Machinery	82887	74788	-9.77
36	Electric/Elect	88041	111478	26.62
37	Transp Equip	165327	167215	1.14
38	Instruments	24988	26718	6.92
60-62	Finance	71546	110381	54.28
63,64	Insurance	56278	66246	17.71
65	Real Estate	36147	49767	37.68

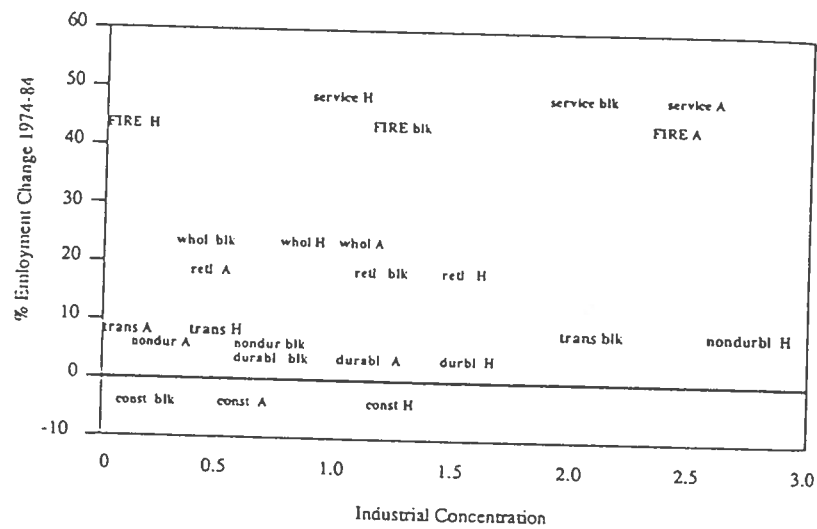
Low Tech

SIC	Sector	1974	1984	Percent Change
22	Textiles	8924	9009	.95
23	Apparel	71619	83540	16.85
26	Paper	15503	16997	9.64
31	Leather	6497	5800	-10.73
33	Metals	27779	22469	-19.12

Source: United States Department of Commerce: Bureau of Census:
County Business Patterns, 1974 and 1984.

Figure 1

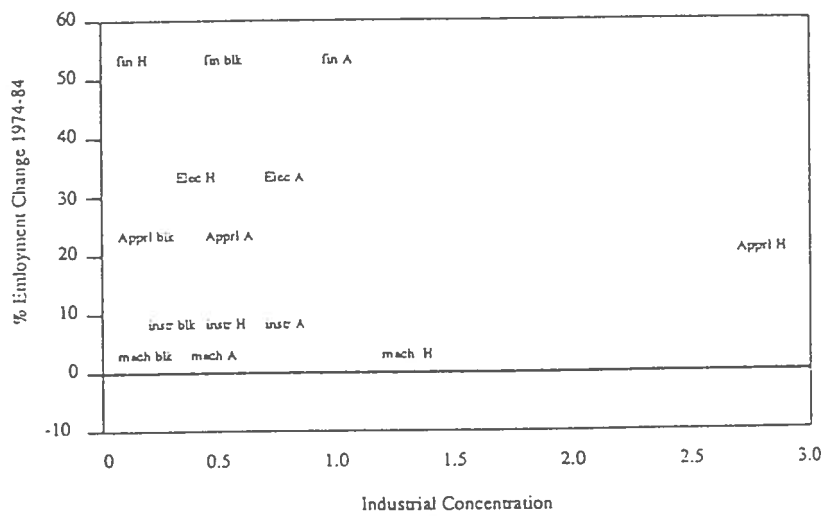
Los Angeles Minority Workers, 1984
Percent Job Changes vs. Concentration



Source: U.S. Equal Opportunity Commission, 1984 A = Asian, H = Hispanic, blk = black

Figure 2

Los Angeles Minority Workers, 1981
Percent Job Changes vs. Concentration



Source: U.S. Equal Opportunity Commission, 1984 A= Asian, H= Hispanic, blk=black

this sector. We infer from this data that the Los Angeles SMSA is showing a differential industrial pattern or ethnic division of labor. As a result, as the Los Angeles economy moves forward, it is creating a differential pattern of opportunity for many of its residents.

San Jose

The San Jose/Santa Clara County SMSA is more instructive with regard to the high tech option for minorities. Santa Clara County is the state's premier high tech manufacturing center. The durable goods manufacturing in Silicon Valley grew by 88 percent in the decade between 1974 and 1984, in spite of some economic downturns and increasing foreign competition (Table 3). The service sector, which is strongly linked, also saw spectacular growth. All low tech areas were in steep decline. Minorities are involved in all sectors of the San Jose economy. However, the pattern of involvement is different for each of the major groups as depicted in Figure 1.

Minorities are heavily involved in the lower tech areas of Silicon Valley's high tech economy. Figure 3 is intended to show how minorities are arrayed across the high tech segment of the San Jose economy. As the figure illustrates, minorities are generally well represented in most high tech sectors. When the data is inspected more carefully with regard to the growth rates (Figure 4), we see that minorities, except Asians, are not making appreciable progress into the more lucrative occupations within these growing firms. It is this lack of fit that requires some basic alterations in access, if minorities are to become participants.

San Diego

San Diego showed the most even sectoral growth over the decade, with almost all sectors growing more

Table 3

Employment Change by Sector
for San Jose SMSA, 1974 to 1984

Basic Sectors

SIC	Sector	1974	1984	Percent Change
01-09	Agriculture	1483	2509	69.18
10-14	Mining	744	314	-57.80
15-17	Construction	20818	29703	42.68
14,15,32-39	Durable Mfg.	133583	251325	88.17
30-33,26-31	Nondurable Mfg.	22910	23711	3.95
40-49	Transportation	15320	21492	40.29
50-51	Wholesale	19910	35020	75.99
52-59	Retail	67633	107028	58.25
60-67	FIRE	16884	29184	72.85
70-89	Services	78310	173462	121.51
Total		389630	709567	82.11

High Tech/ High Touch

SIC	Sector	1974	1984	Percent Change
28	Chemical	2248	3195	42.13
29	Petroleum	100	76	-24.00
35	Machinery	27895	73269	162.66
36	Electric/Elect	52860	103325	95.47
37	Transp Equip	25072	34869	39.08
38	Instruments	15079	22104	46.59
60-62	Finance	7507	12394	65.10
63,64	Insurance	3794	6684	74.86
65	Real Estate	4732	8259	74.51

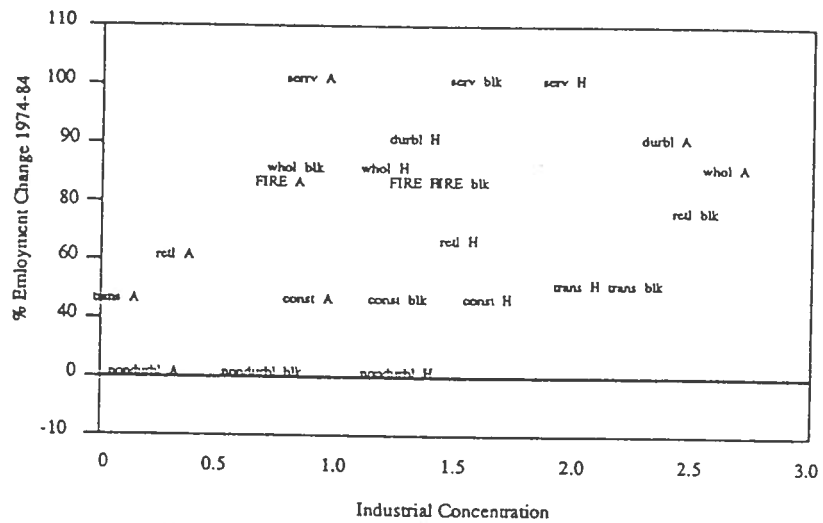
Low Tech

SIC	Sector	1974	1984	Percent Change
22	Textiles	1000	151	-84.90
23	Apparel	486	599	20.99
26	Paper	2002	2297	14.74
31	Leather	0	0	0
33	Metals	1577	882	-44.07

Source: United States Department of Commerce: Bureau of Census:
County Business Patterns, 1974 and 1984.

Figure 3

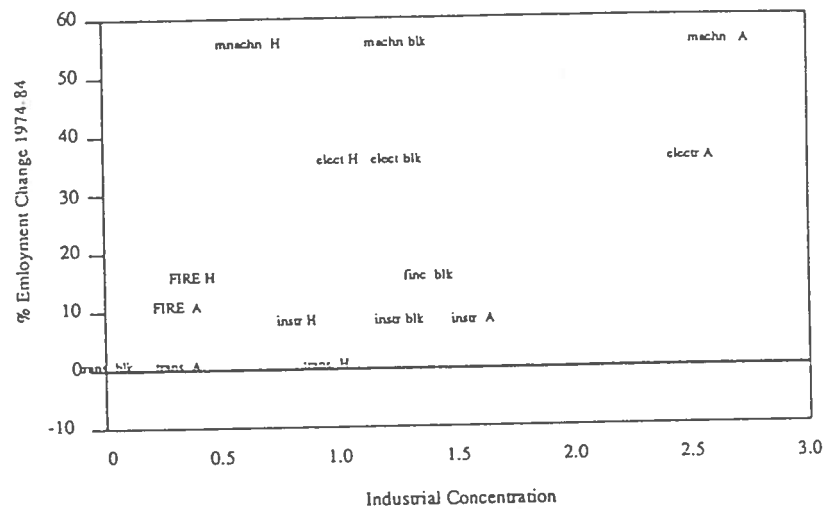
San Jose Minority Workers, 1984
Percent Job Changes vs. Concentration



Source: U.S. Equal Opportunity Commission, 1984 A = Asian, H = Hispanic, blk = black

Figure 4

San Jose Minority Workers, 1981
Percent Job Changes vs. Concentration



Source: U.S. Equal Opportunity Commission, 1984 A= Asian, H= Hispanic, blk=black

than 30 percent. However, even with the high sectoral growth indicated in Table 4, there is a pattern of ethnic divisions of labor. Blacks seem relatively underrepresented in retail and better represented in FIRE. Hispanics are represented in all sectors with slightly higher concentrations in the construction and durable goods area, as shown in Figure 5. The high tech/high touch areas in San Diego (Figure 6) show an interesting pattern. Quite unexpectedly, Hispanics and blacks are represented in the instruments sector. On the other hand, like the other SMSAs, Hispanics, blacks, and Asians are also more concentrated in the slower growing and/or declining areas like transportation equipment (i.e., aircraft) and machinery. It appears that minorities are doing better in the San Diego economy than in other parts of the state. There may be factors, such as better educational levels, that help to explain this encouraging result.

Summary

The above analysis provides a clear picture of an ethnic division of labor. Minorities are clustered in the most technologically vulnerable sectors of the economy. While there is minority representation in the advanced technology sectors, minority participation remains highly concentrated in areas that require physical rather than mental skills. This pattern is amplified when we examine the occupation distribution of the state's minority work force.

Economic Development as Occupational Separation

Another goal of economic development is to improve the income and job opportunities for the resident population. New jobs should mean new opportunities for the resident population.

In each of the studied SMSAs, the occupational division of labor is as important as the sectoral

Table 4

Employment Change by Sector
for the San Diego SMSA, 1974 to 1984

Basic Sectors

SIC	Sector	1974	1984	Percent Change
01-09	Agriculture	2396	5808	142.40
0-14	Mining	502	808	60.96
15-17	Construction	26181	39061	49.20
14,15,32-39	Durable Mfg.	62310	92655	48.70
30-33,26-31	Nondurable Mfg.	15603	21468	37.72
40-49	Transportation	21202	28298	33.47
50-51	Wholesale	17074	31396	83.88
52-59	Retail	90155	143119	58.75
60-67	FIRE	29202	50840	80.27
70-89	Services	90131	180284	100.02
Total		359294	605535	68.53

High Tech/ High Touch

SIC	Sector	1974	1984	Percent Change
28	Chemical	1104	1815	64.04
29	Petroleum	75	105	40.00
35	Machinery	10522	14895	41.22
36	Electric/Elect	12164	30157	147.92
37	Transp Equip	25659	25106	-2.16
38	Instruments	2819	9895	251.01
60-62	Finance	11131	20927	88.01
63,64	Insurance	6412	9992	55.83
65	Real Estate	9017	14159	57.03

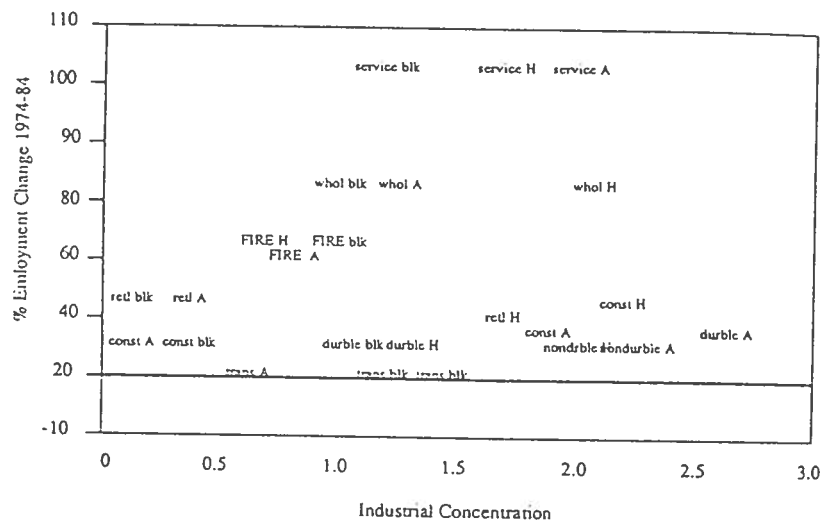
Low Tech

SIC	Sector	1974	1984	Percent Change
22	Textiles	750	650	-13.33
23	Apparel	3631	3164	-12.86
26	Paper	293	566	93.17
31	Leather	382	336	-12.04
33	Metals	665	552	-16.99

Source: United States Department of Commerce: Bureau of Census:
County Business Patterns, 1974 and 1984.

Figure 5

San Diego Minority Workers, 1984
Percent Job Changes vs. Concentration

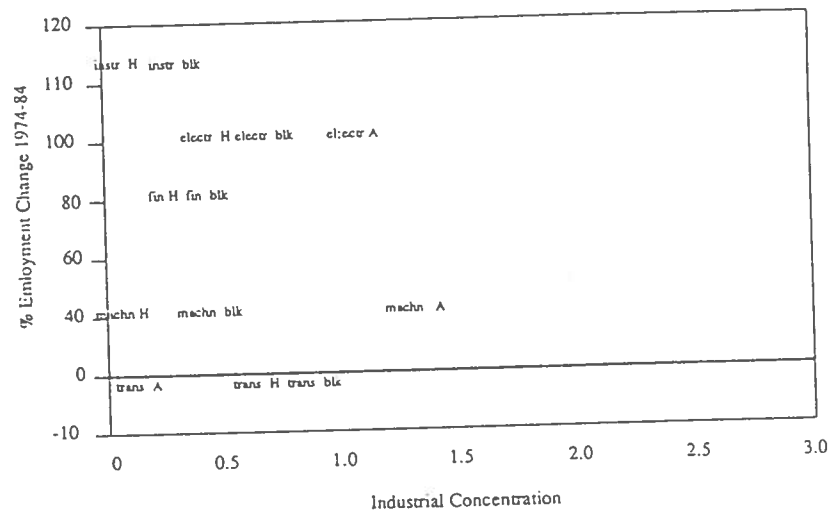


Source: U.S. Equal Opportunity Commission, 1984

A = Asian, H = Hispanic, blk = black

Figure 6

San Diego Minority Workers, 1981
Percent Job Changes vs. Concentration



Source: U.S. Equal Opportunity Commission, 1984 A=Asian, H=Hispanic, blk=black

divisions. Therefore, we examined the participation rates of minorities within the selected SMSAs in three major occupational groupings. We grouped all professional and managerial jobs into a single category. These are the "white collar" jobs, in our opinion. Our second grouping is composed of a consolidated "blue collar" group composed of all technicians, craftworkers, operatives, and laborers. Our last group is the "pink collar" group, comprised of service workers, clerical and office workers, and sales workers. To provide a framework for our subsequent analysis, we examine the participation rates for these categories for the selected SMSAs before looking at the concentration of minorities within these occupations. Finally, we provide a set of graphs that give a good picture of the occupational categories where minorities are concentrated among these occupational categories in the rapidly growing sectors of the economy. In each case, we examine the job patterns of minorities to determine how well-integrated they are in the local economy.⁵

Participation Rates

Participation rates in the Los Angeles area (Table 5) indicate some progress in the professional levels. However, the data also indicates a movement of blacks and Hispanics out of the technical/craft occupations into lower paying sales and clerical jobs. For example, Hispanics increased their representation in the professional categories by only a little over 2 percent, but increased their concentration in the technical craft area by nearly 10 percent and, in the sales and clerical service area, by over 8 percent. Blacks remained almost occupationally stagnant over the decade, with only modest gains in the professional groups.

When we examine the overall pattern of occupational participation rates in San Jose, we find increases in all occupational categories. The increase in Asian participation rates in the technical/craft

Table 5

Participation Rates for Employment
in the Private Sector in Selected SMSAs,
San Jose and Los Angeles 1974 and 1985
and San Diego, 1981-1985.

Los Angeles	Occupations	Year	Total	Female	White	Hisp	Black
				Percent			
	Official/Prof	1974	100.0	18.6	88.1	4.3	3.1
		1985	100.0	33.6	77.0	7.1	5.9
	Tech/Crft/Lbr	1974	100.0	22.1	59.7	26.1	11.1
		1985	100.0	27.6	44.9	35.9	11.6
	Sales/Clrk/Ser	1974	100.0	63.0	73.1	12.2	10.4
		1985	100.0	65.0	57.3	20.3	14.2
	Total	1974	100.0	36.4	70.6	16.4	9.1
		1985	100.0	43.4	58.6	21.9	11.0

San Jose*	Occupations	Year	Total	Female	White	Hisp	Asian
				Percent			
	Official/Prof	1974	100.0	14.5	90.6	3.1	4.6
		1985	100.0	28.4	80.8	4.1	12.2
	Tech/Crft/Lbr	1974	100.0	35.4	70.2	20.0	4.6
		1985	100.0	37.8	52.1	19.7	21.7
	Sales/Clrk/Ser	1974	100.0	66.2	81.6	10.1	3.5
		1985	100.0	67.9	68.8	15.5	8.3
	Total	1974	100.0	38.1	79.8	11.9	4.3
		1985	100.0	42.0	68.2	12.2	14.3

*Too few Blacks to develop this statistic

San Diego	Occupations	Year	Total	Female	White	Hisp	Black
				Percent			
	Official/Prof	1974	100.0	28.4	87.6	4.8	2.5
		1985	100.0	34.6	86.5	4.8	2.9
	Tech/Crft/Lbr	1974	100.0	28.2	62.4	21.1	6.6
		1985	100.0	31.7	60.7	19.6	7.3
	Sales/Clrk/Ser	1974	100.0	66.8	75.4	12.4	6.8
		1985	100.0	66.0	69.0	14.2	10.5
	Total	1974	100.0	43.5	74.0	13.5	5.6
		1985	100.0	47.2	71.2	13.1	7.4

category is more than coincidental. Large increases in Asian immigration, combined with the presence of Japanese and other Asian firms in the area, account for much of this improvement. Hispanics show little progress in participation rates in any category; in fact this ethnic group has actually lost ground in San Jose, in spite of or perhaps because of the high tech, high paced economy. Blacks are too small a participation group to be counted for the ten-year interval.

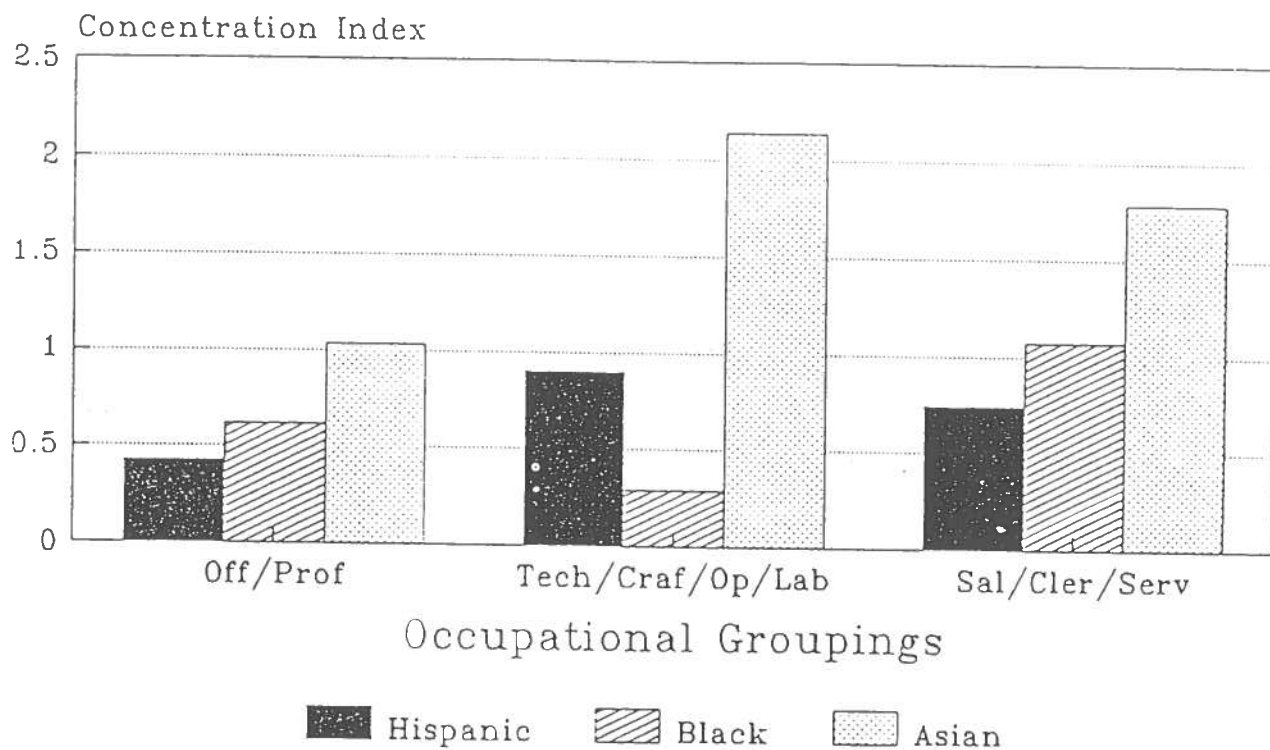
The San Diego participation rate shows little or no progress for any of the minority groups for the period studied. This seems strange in light of the rapid growth of the San Diego economy.

We now turn to the concentration of minorities within the growth areas for each of the selected SMSAs. We examine banking and electronics in each SMSA because these are the fastest growing fields in these areas and in the state. We selected a third growth area for each SMSA which we identified as one of the lead economic development target sectors in that SMSA's economy. We examined both the participation rates and concentration of each minority group within these growing economic areas (see Appendix B). The data helps us understand the degree of occupational segregation within the growth fields.

Los Angeles

As we discussed previously, Los Angeles is becoming a financial and insurance capital. Minority concentration in banking gives us some indication of how minorities are spread within this growth area. As Figure 7 indicates, Asians are better represented in all categories of employment. Their representation in the technician area, along with the high participation rates, gives them a dominant occupational position in this sector of the Los Angeles economy. Blacks and Hispanics are underrepresented except for blacks in the clerical/sales/services area.

Figure 7. Los Angeles Minority Workers, 1981, Occupational Concentration Indexes, Banking



In the transportation equipment subsector, which includes aircraft, a leading sector for Los Angeles, Asians are slightly underrepresented in the professional areas. Blacks and Hispanics are very poorly represented in this category. On the other hand, blacks and Hispanics are well-represented in the technical areas, even though their participation is low. Blacks and Hispanics are filtering into the lower paid sales/clerical/service areas (Figure 8). Finally, in electronics, Asians are again not a large portion of the work force, but they are well-represented in professional areas, with both blacks and Hispanics highly represented in the craft or blue collar occupations. Blacks hold their fair share of the clerical jobs in the electronics field (Figure 9).

San Jose

Latino occupational distribution has remained stagnant in the higher level occupations and declining in the lower paying categories in San Jose. Clearly, the decline in agriculture in San Jose, combined with technology improvements, have marginalized much of the Hispanic work force.

Blacks are making better progress than other minorities in Silicon Valley in the banking industry, as shown in Figure 10. However, black participation rates in San Jose are very low. Hispanics are largely concentrated in the lower paying sales, clerical, and service occupations in banking.

The electronics area follows the participation rate pattern, with Asians finding opportunities in both professional and technical areas (Figure 11). Hispanics and blacks are concentrated in the technician areas, with blacks well-represented in the clerical area as well.

Finally, in the machinery area (Figure 12), Asians show a pattern very similar to the one in electronics. Blacks and Hispanics are much better represented in this "heavy" industry category among technicians. This is the very area that is subject to

Figure 8. Los Angeles Minority Workers, 1981, Occupational Concentration Indexes, Transportation Equipment

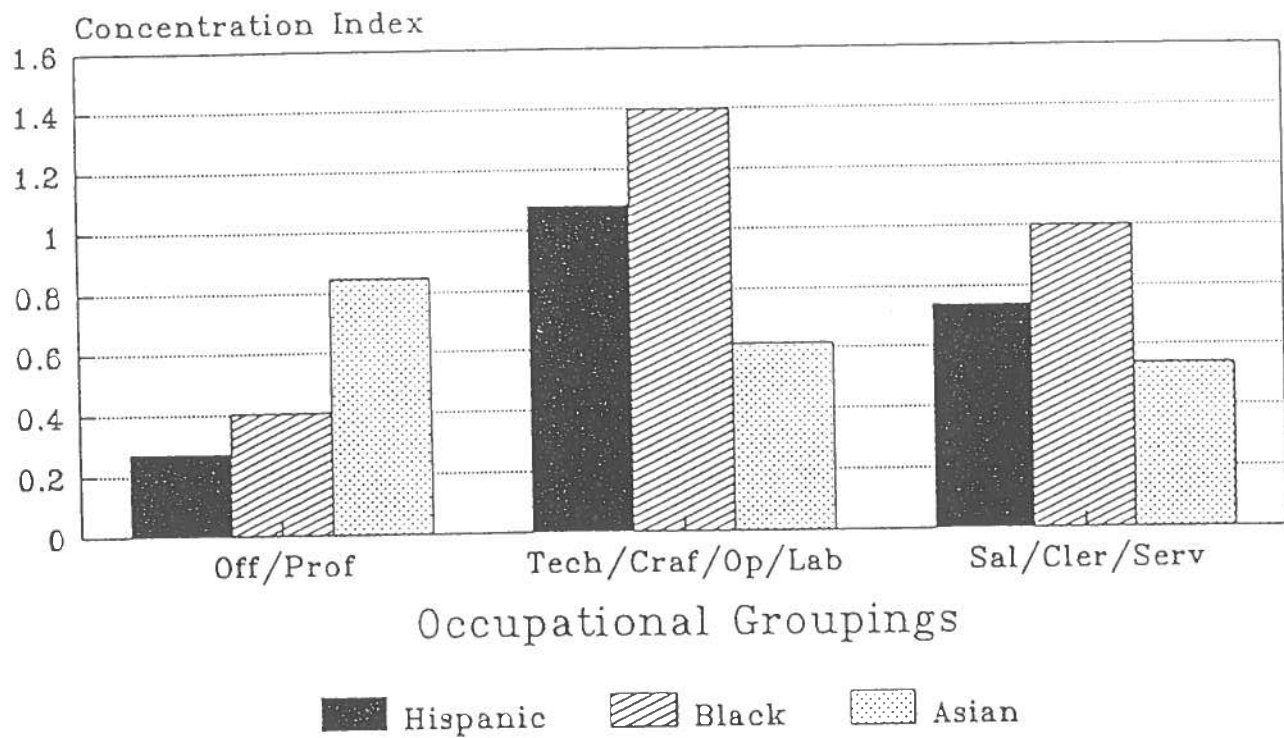


Figure 9. Los Angeles Minority Workers, 1981, Occupational Concentration Indexes,
Electric and Electronic
Concentration Index

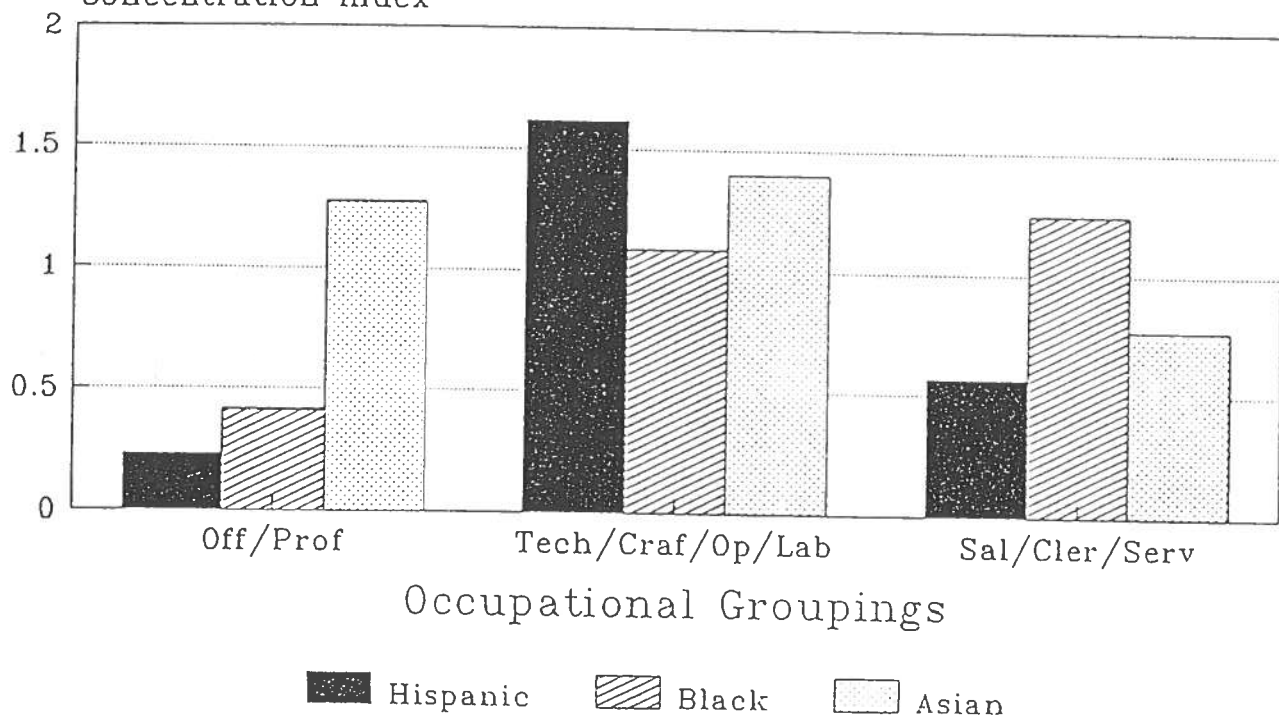


Figure 10. San Jose Minority Workers, 1981, Occupational Concentration Indexes,
Banking

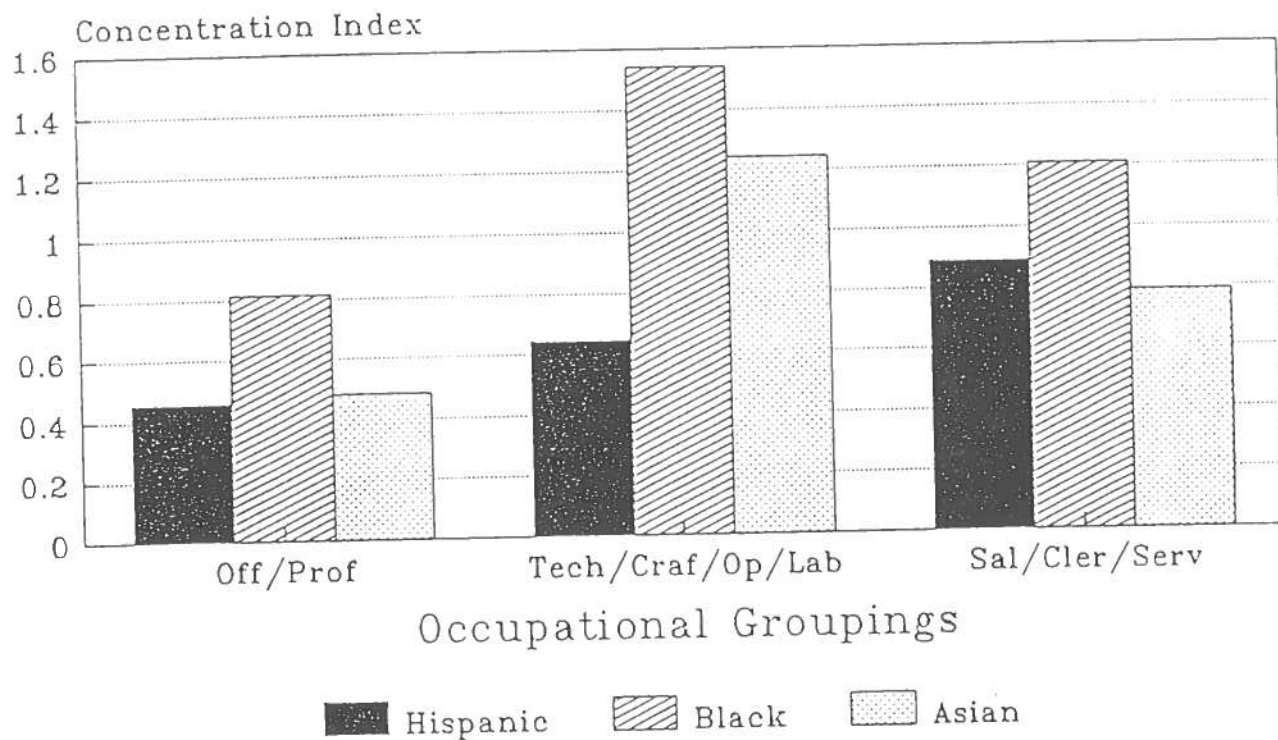


Figure 11. San Jose Minority Workers, 1981, Occupational Concentration Indexes,
Electric and Electronic
Concentration Index

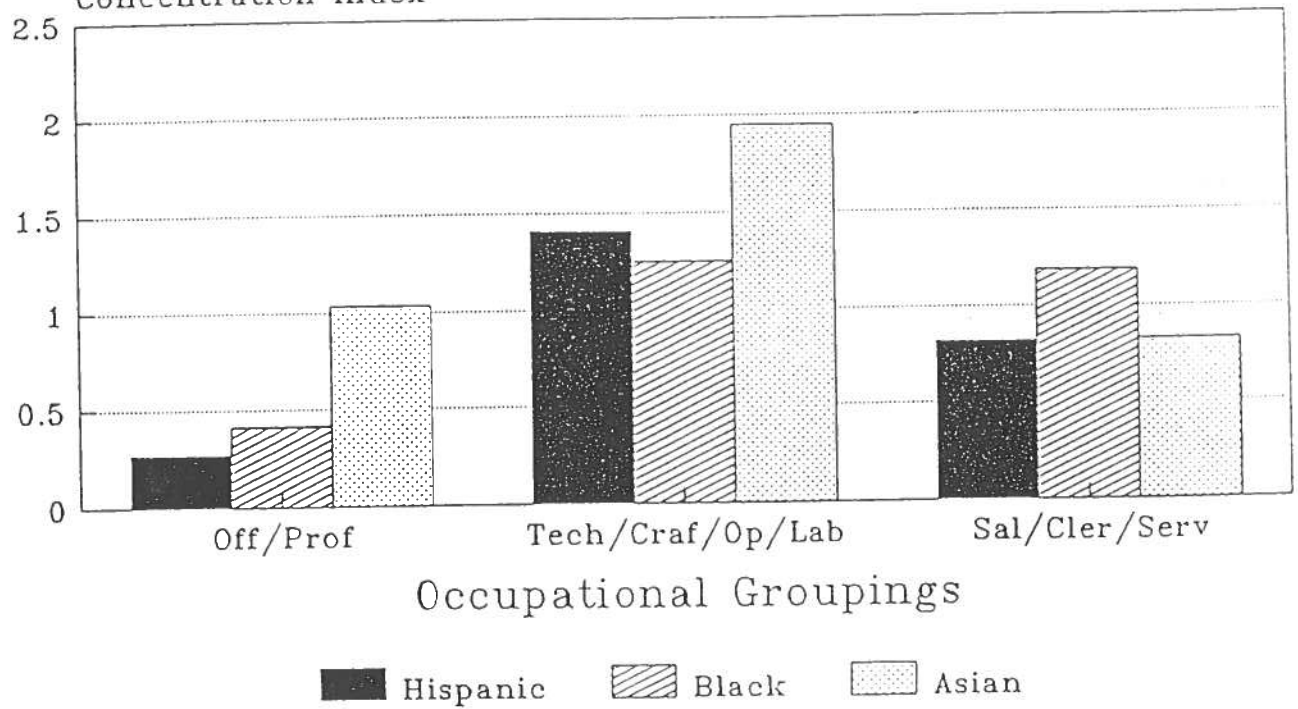
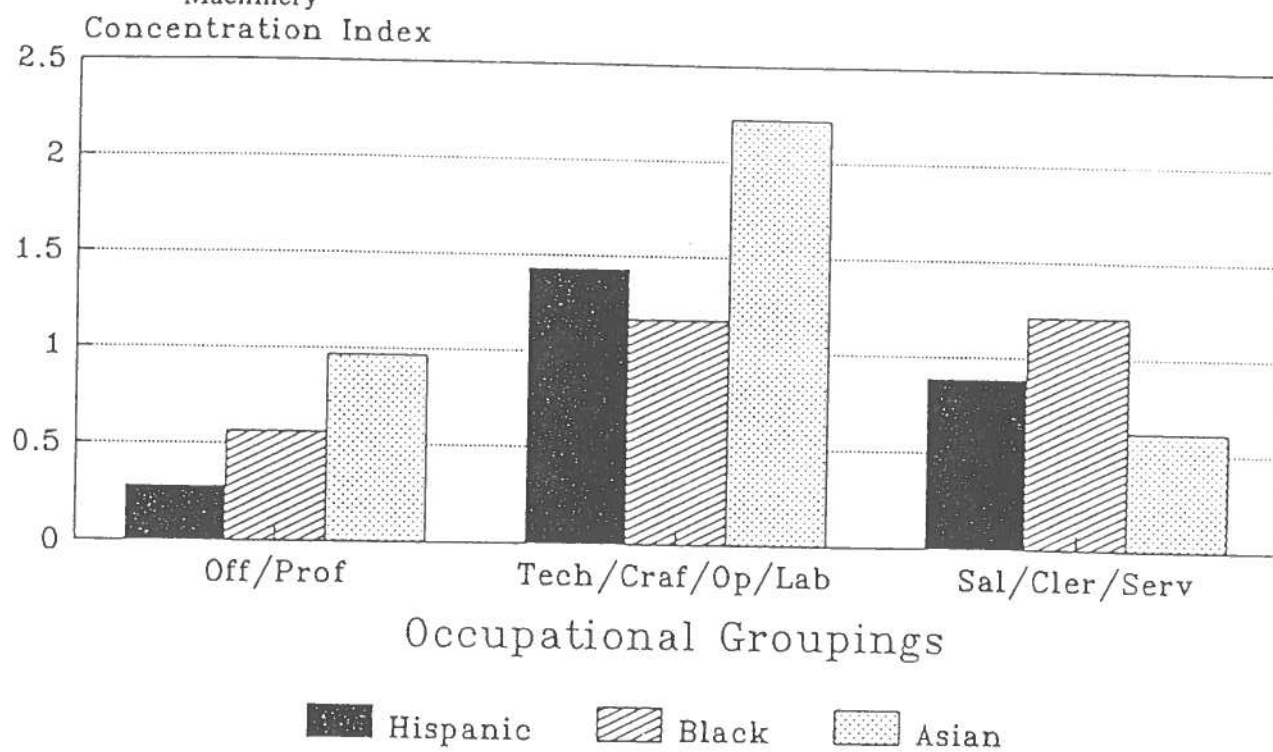


Figure 12. San Jose Minority Workers, 1981, Occupational Concentration Indexes,
Machinery



technological change or major reductions in the industry's size.

San Diego

The San Diego banking industry provides an interesting picture with respect to occupational distribution. None of the minority groups does very well in the professional category. Blacks, with low participation rates, show very high concentration in the technical area and in the clerical fields in San Diego (Figure 13).

Transportation equipment (aircraft) shows that blacks, again, with very low participation rates, are well-represented in the technical and clerical areas (Figure 14). Hispanics have low concentrations in all of these categories. Both blacks and Hispanics have very low participation rates in banking.

Blacks and Asians are better represented in the electronics area as technicians (Figure 15). Blacks are also well-represented in the clerical area. Asians are again concentrated in the technical areas. None of the minorities is well-represented in the professional areas.

Summary

The data represents an ethnic division of labor. Minorities, except for Asians, are not making it into the high tech/high touch areas. With the exception of low-paying clerical and service areas, there is little indication that minorities have now or will have the opportunity to make it into the fast-growing, knowledge-intensive high tech/high touch areas.

Economic Development as a Mismatch Between People and Jobs

California has never been a heavy industry state. However, World War II and the immediate postwar

Figure 13. San Diego Minority Workers, 1981, Occupational Concentration Indexes,
Banking
Concentration Index

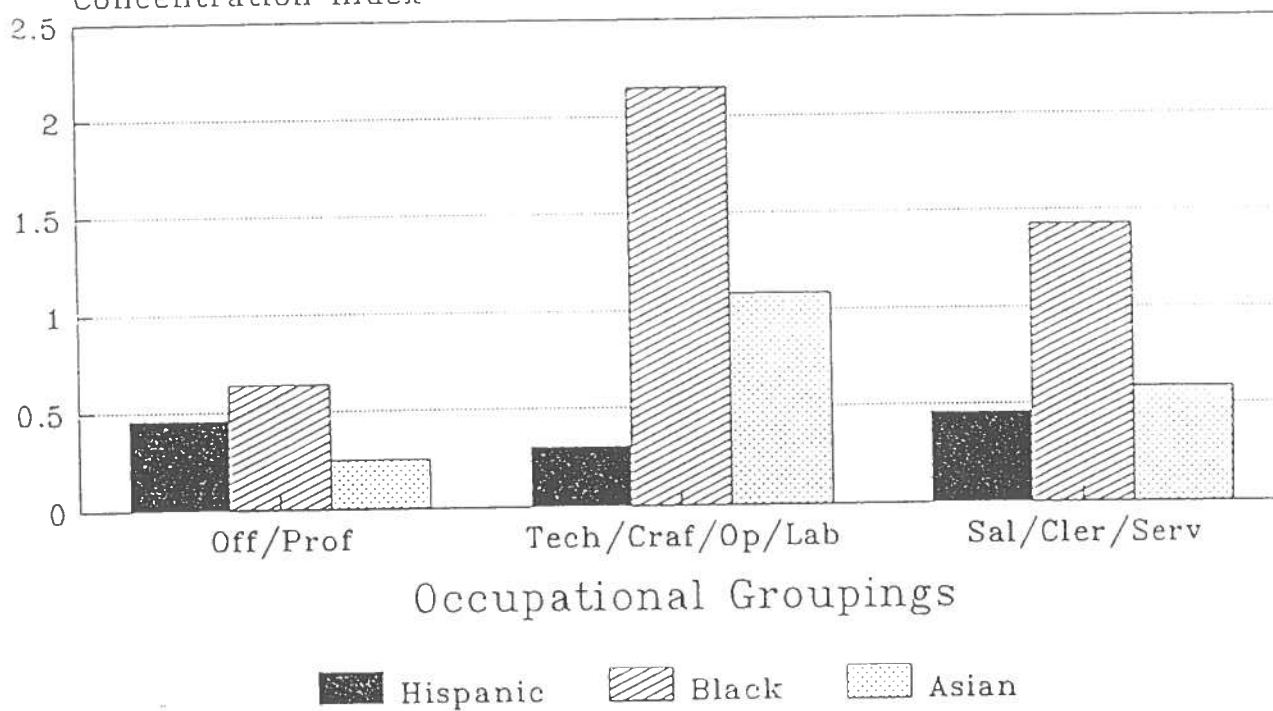


Figure 14. San Diego Minority Workers, 1981, Occupational Concentration Indexes, Transportation Equipment

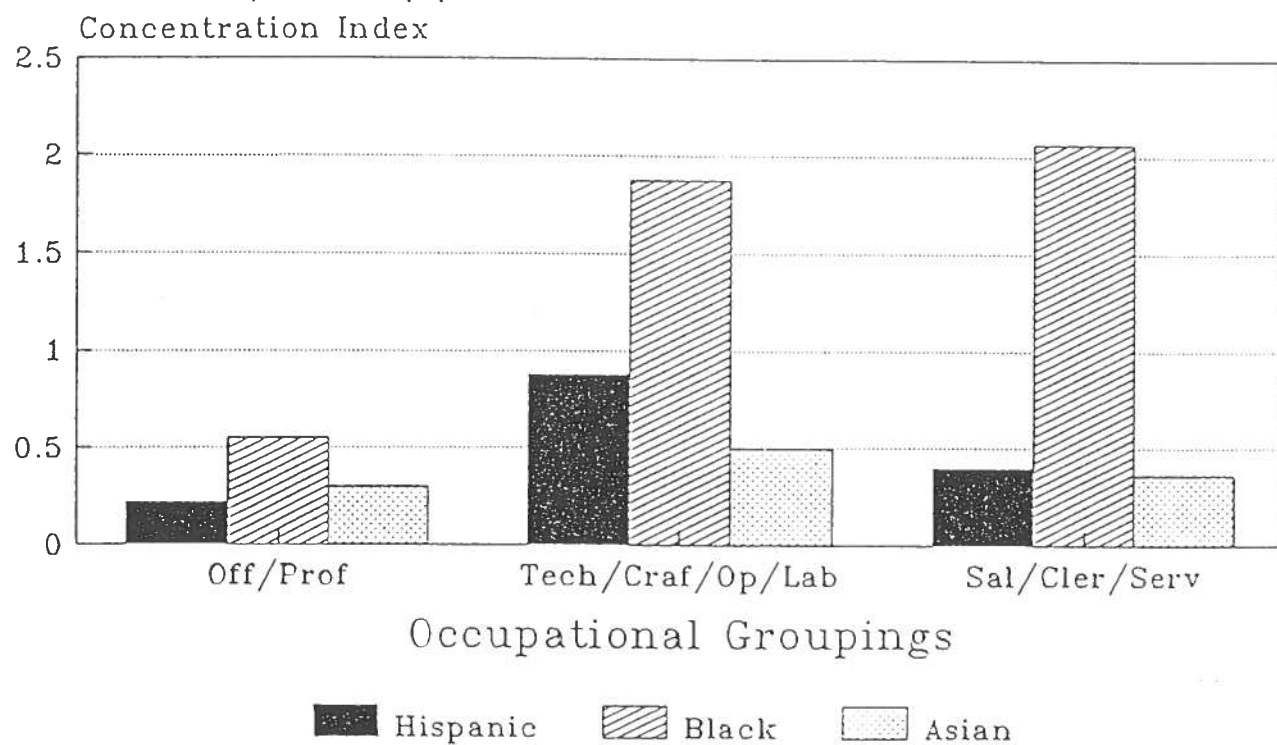
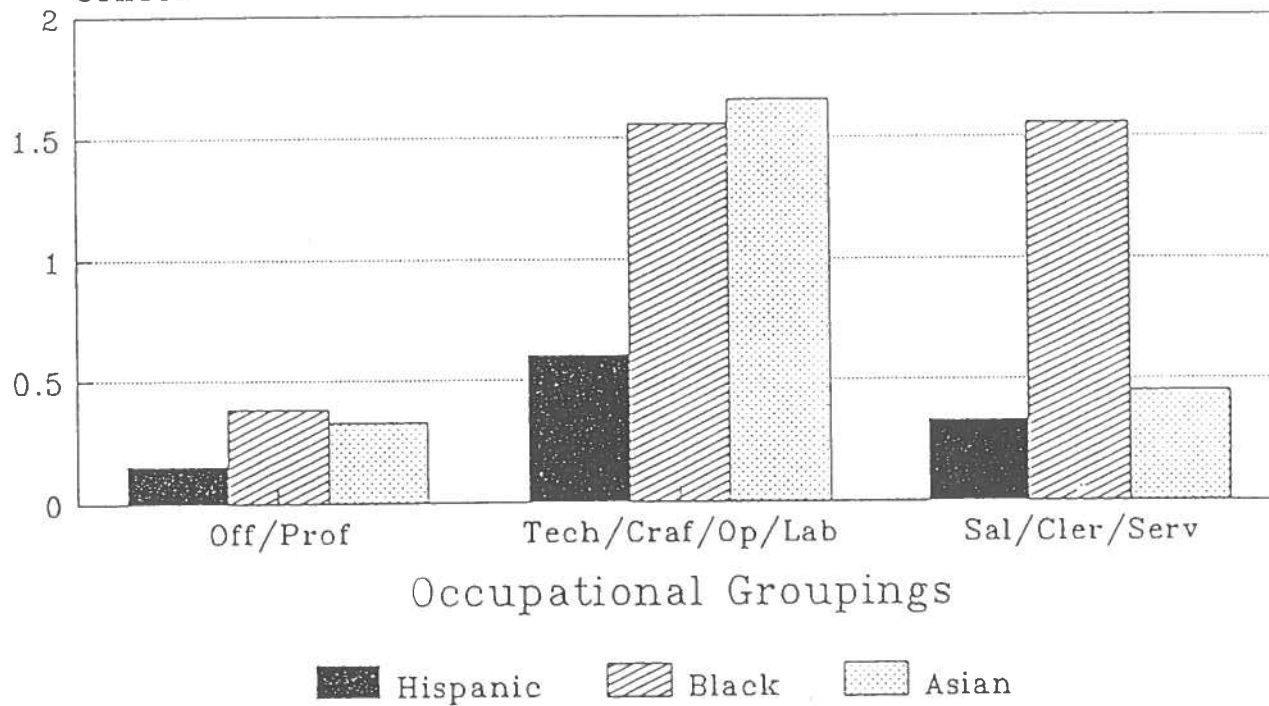


Figure 15. San Diego Minority Workers, 1981, Occupational Concentration Indexes,
Electric and Electronic
Concentration Index



boom created a manufacturing industrial base. This manufacturing base was heavily populated by blacks coming from the South during the war, and later by Mexican immigrants crossing the border into agri-industry (all aspects of food production). These industrial firms were artificial implants to California. However, they thrived as the population increased. In a parallel fashion, California agriculture spawned a canning industry that remained strong until overseas competition and new technologies marginalized much of this industry. These twin production processes created a demand for a manufacturing labor force.

California has an industrial or manual labor force. This labor force is predominantly concentrated, as our previous data shows, in areas of slow growth or decline. To some extent, economic development activities are based either on creating new jobs for this labor force, or identifying firms that can utilize the skill associated with the human resources available. There is very little evidence that current economic development policies at the state or local level are being shaped by the human resource base.

It is increasingly evident that the minority labor force has not made the transition to the new high tech economic development scenarios. They are located in those low tech sectors described earlier. The net result of the shift in economic activity has been job shedding or plant closures and reduction in many of the same counties with high concentrations of minorities. Table 6 illustrates the dilemma. As the table clearly depicts, high rates of unemployment exist for minorities in all of the major SMSAs. Moreover, plants are closing, and the minority (black and Hispanic) work force, which is highly concentrated in the technician and labor fields in these older industries, is subject to the greatest proportion of the job shedding and export of employment opportunities.

The absorption rate, we would argue, between high tech job growth and minority employment opportunities is either too slow or nonexistent in these metropolitan areas.

Table 6

Unemployment Rates for Largest California SMSAs,
1975 and 1985 Counties;
Black and Hispanic Unemployment 1975 and 1985;
and Job Losses per 1,000, 1980-85.

SMSAs	Unemployment Rate		1985 Unemployment Rate		Job Loss/10
	1975	1985	Blacks	Hispanics	
Anaheim-Santa Ana/Orange Co.	9.0	4.4	7.8	11.2	20
Los Angeles/Long Beach	9.7	7.0	12.3	9.5	20
Riverside/San Bernardino	9.7	8.0	11.4	8.4	27
Oakland/San Francisco	10.1	6.6	10.5	8.2	43
Santa Clara	9.5	5.9	6.9	9.4	21
San Diego	10.4	5.3	14.2	9.0	22
State	9.9	7.2	12.1	10.9	22

Source: California Economic Development Department, Employment Data and Research Division, 400D, Monthly Labor Force Data 1975 and 1985; and Blakely and Shapira, Plant Closure Study, 1985.

Economic Competition as Spatial Discrimination

Economic development competition is not limited to national competition or, in essence, the United States vs. the world. State economic competition is also part of the new internal competitiveness scenario. Moreover, local/community *chauvinism* with respect to economic development competition has reached an all-time high. Cities armed with federal, state, and local funds are now engaged in a vicious competition within the state to attract new industries. This intrastate competition is spawned by the local government financing structures that place a new premium on taxable property and sales tax revenues. Proposition 13 has created an ugly, perhaps unproductive competition for new firms as well as for new jobs. As a result, communities are bidding against one another to attract existing firms to new localities within the state.

While the major employment centers remain viable in California, there is increasing evidence that employers are on the move. Employers who once favored city locations are moving to distant suburbs and even nonmetropolitan areas. To some extent, this represents an important and healthy decentralization and deconcentration of the congested metro systems. On the other hand, the movement of employment to new locales presents new economic development dilemmas for state policy makers.

Increasingly, the new locales are less racially integrated, with fewer minorities than the metropolitan capitals. Moreover, these new locations are too distant from the urbanized areas for many minorities to reach. Table 7 suggests that much of the new population growth and employment growth for the state will occur in areas with small minority populations, or at least with small black or Hispanic populations.

If, as the Bank of America predicts, nonmetropolitan job growth continues, then we will have a spatial division of labor added to the ethnic and occupational division discussed in the earlier sections

Table 7

Top 15 Counties in Percent Growth
in Manufacturing Jobs

COUNTY	RANK	Manufacturing in (000) jobs		
		1982	1986	GROWTH RATE
TRINITY	1	.32	.55	71.9%
PLACER	2	3.10	5.20	67.7
LAKE	3	.18	.30	66.7
AMADOR	4	.80	1.28	60.0
MARIPOSA	5	.10	.15	50.0
SISKIYOU	6	1.10	1.65	50.0
SAN LUIS OBISPO	7	3.35	4.80	43.3
SACRAMENTO	8	18.90	26.10	38.1
NEVADA	9	1.68	2.32	38.1
NAPA	10	3.50	4.80	37.1
EL DORADO	11	1.10	1.50	36.4
COLUSA	12	.30	.40	33.3
BUTTE	13	3.75	4.95	32.0
TUOLUMNE	14	.60	.78	30.0
SAN BENITO	15	1.45	1.88	29.7

Source: Center for the Continuing Study of the California Economy, 1987.

of this paper.⁶ As jobs move away from the inner city, the need for economic development increases, and the useful tools diminish.

An Argument for a New Approach to Economic Development

In summary, the argument we have outlined is relatively straightforward, that is, that the economic development scenarios that are oriented to increasing the state's technology edge may create new social dilemmas. The data we have compiled is incomplete; however, it provides some interesting clues. We suggest that there is strong evidence that the state's labor markets are becoming increasingly segmented and segregated. Jobs are moving away from minorities because of technological shifts as well as deliberate attempts by industrialists to find less ethnically diverse environments.

The question that arises is: What can the state do about this situation and at the same time remain competitive? First, it is important to understand the dimensions of the problem. It is not merely an issue of worker retraining or better school preparation. These measures may help, but will not meet the challenge by themselves. Second, the geographic dimensions of the job shift are as important as the occupational segregation. We could end up with a balkanized and occupationally segregated state. That is, minorities might be the dominant population of employees in selected occupations and sectors of the economy increasingly segregated from the "mainstream" job structure, even in metropolitan areas. This form of industrial segregation can only breed discontent when the pattern is so clear and the prospects for change so bleak. Moreover, the only jobs for which minorities are qualified are on the move overseas and to rural areas. This creates a spatial division of labor, reinforcing the occupational and sectoral segregation described earlier. This would tend to increase racial friction and reduce the

incentives of minority young people to seek employment in new sectors, simply because the job opportunities are too distant physically and psychologically from their communities.

In sum, we see three reinforcing divisions of labor. First, there is a *sectoral* division of labor where minorities are concentrated in the sectors of the economy that are growing slowly or declining and moving out of the country. Second, there is an *occupational* division of labor across sectors and within them. Minorities are most highly concentrated in the technical areas, with Asians beginning to move into professional positions in electronics and banking. The prospects for Asians appear appreciably brighter than for other groups as the high tech economy develops. Also, minority females are apparently obtaining opportunities in the clerical areas within the faster growing sectors. Finally, there is a *spatial* division of labor. New jobs are seeking new venues, both within the metropolitan suburbs that are predominantly white, and in nonmetropolitan areas that have small minority populations. In essence, when there are jobs for which minorities are qualified, they cannot easily reach them. Even if many minorities could reach the new employment areas, the cost of transportation and the strain on family life due to relatively low wages and poor promotional prospects would make this option a poor choice.

The courses of action open to policy makers may be limited, but they do exist. There are several important measures the state can and should take to at least equalize the economic "playing field" for the minority--soon to be majority--work force. These include:

1. *Education as direct infrastructure for economic development.* We propose that the state use some of the \$3 billion currently budgeted for economic development to link the state education system to economic development projects. Among the proposals that the state should consider is a new "urban cooperative technology education program and apprenticeship plan" for high school and junior high

school students in metropolitan areas. Under this scheme, school districts could enter into educational contracts with high technology employers to provide on-the-job education for high school students via a cooperative education format. Students would be allowed to spend up to three full days per week on a designated work site for up to two semesters of their high school education. Employers would be required to provide an educational experience for the students and to pay minimum wages. Districts would provide occupational counselors to work with employers and students to develop and monitor the program as well as assist students in job placement. Another aspect of the program would be summer apprenticeships for junior high school students, using a career or job try-out approach combined with summer school classes.

Finally, under this proposal we suggest that the state Department of Education experiment with a "teacher summer technology industry placement program." The goal of this program would be to place high school and junior high school teachers as summer employees in high tech firms, irrespective of their discipline areas. "Summer placement" teachers would work in the selected firms as regular employees and rotate through divisions of the firms to gain insight into their requirements.

In addition, there should be direct attempts to place research and scientific facilities of the University of California in metropolitan areas near the underrepresented populations. For example, new research facilities in electronics, engineering, biotechnology, and related fields should be located in off-campus settings in the inner city. This would have the dual impact of restoring jobs to the areas and attracting new knowledge-intensive employers to these areas.

2. *State assistance in the development of specific technology-oriented magnet infrastructure for metropolitan areas.* We propose that the state take the same aggressive posture it used in creating the state's higher education and water systems in the allocation of resources to promote certain forms of economic

development. The type of magnet infrastructure we are suggesting would include the development of teleports, research labs, and other technology-inducing infrastructure in metropolitan areas. We suggest that the state develop an urban technology development program similar to the federal urban development action grant (UDAG). This program would aim at placing technology facilities in metropolitan areas through the development of inner city technology or science parks and the like. As a major component of this approach, the state should require local hiring goals to be incorporated into these grants.

3. *The state should promote regional economic and employment planning through the existing councils of government.* We believe that the jobs dilemma can only be solved across large regional areas. Regional planning efforts should start with the population rather than the industrial sectors. Regional economic planning based on human resource requirements can lead to a better integration of the work/skills, transportation, and education requirements than starting from the top down or leaving it to chance.

4. *Employment and training programs, particularly the state job panel and JTPA and all other state training programs should be placed under the control of the state's Department of Commerce and at the local level administered by the city or county economic development agency.* The current situation that fragments employment and training from economic development reduces the capacity of both. Combining the resources of both these organizations would increase the possibilities of incorporating minority employment and training into new projects. Currently, employment and training activities are frequently preparing people for careers that are declining and in occupations that have poor career prospects. By combining these agencies, it would be possible to better target employment resources to new jobs and to use the leverage of local economic development funds to meet local employment goals.

5. *There should be state legislation that prevents localities from using state or local redevelopment funds to subsidize the move of a firm based in California to a new location within the state.*

The movement of firms away from minority populations is partially funded by state subsidies via redevelopment activities. This shifting of firms is expensive in both human resource and financial terms. As sewers, roads, and other infrastructures are extended into far suburbs, the cost in transportation, air pollution, and agricultural production is increasing. Moreover, as jobs grow in these areas, commutes across suburbs increase, creating additional problems for an already beleaguered central node oriented transportation system.

Finally, the loss of human resources that occurs as jobs relocate will eventually lead to deeper division in the society and retard the state's economic growth potentials.

Summary

We believe that California's robust and growing economy can provide more opportunities for more of its citizens. The data we have examined indicates that there are real gaps between the promises of California's economic development policies and the results for a significant proportion of the state's work force. Californians are increasingly divided by the industrial sector, via occupational divisions by sex and race. In addition, jobs that fit the minority human resources are moving physically away from the population that needs the jobs.

The remedy for this complicated set of problems will require a number of different interventions. We think the direction of technology's growth cannot and should not be altered. We are not proposing that old jobs be saved so minorities can fill them. Rather, our proposal is for the state to intervene by using its economic development leadership to create an environment that will make it both practical and

useful to absorb this population into the new technologies as they emerge. Our proposals are modest with respect to new tools. However, the policy mechanisms we suggest can have long-term impact if applied consistently, over a long period, to shape the economic destiny of all California's citizens.

Notes

1. See, for example, Anna Lee Saxenian, "The Urban Contradictions of Silicon Valley: Regional Growth and Restructuring the Semiconductor Industry," in *Sunbelt/Snowbelt: Urban Development and Regional Restructuring*, ed. W. Tabb and L. Sawyer (New York: Oxford University Press, 1984); and Ann Markusen and Peter Hall, *Silicon Landscapes* (London: Allen and Unwin, 1982).
2. The data for this citation was provided by the California Department of Commerce, Office of Economic Research for the 1987-88 budget year (see Appendix A).
3. These estimates come from data reported in *California Tomorrow*, Winter 1987, and from "California Growth Projection," *Center for the Continuing Study of the California Economy*, 1987.
4. Data for most of this paper is based on special data processing from the "Job Patterns for Minorities and Women," U.S. Equal Employment Opportunity Commission, 1985.
5. Calculation of the concentration indices is as follows: No. of each minority employed (Blk, His, Asians) per sector/total employment sector divided by no. minorities (Blk, His, Asians), all sectors/total employment, all sectors. For example, concentration indices for Asians in the finance sector =

$$\frac{\text{No. Asians in FIN}}{\text{Total employed in FIN}}$$

$$\frac{\text{No. Asians employed}}{\text{Total employed}}$$

6. The Bank of America, *Economic and Business Outlook*, February/March 1988, projects that nonmetropolitan business employment will increase due to lower housing and building costs.

Appendix A

Table A-1. California's Economic Development
Activity, 1987-1988

Direct

Department of Commerce	30 Billion
------------------------	------------

Tourism

Business Services

Loan Guarantees

Administered Federal Programs

Other State Departments	65 Million
-------------------------	------------

Business Related Funding	1.5 Billion
--------------------------	-------------

Federal Grants	600 Million
----------------	-------------

Tax Exempt Bonds	2 Billion
------------------	-----------

Indirect

Transportation Support	3 Billion
------------------------	-----------

Water Resources	159 Million
-----------------	-------------

Education (k-12)	16 Billion
------------------	------------

Higher Education	5 Billion
------------------	-----------

Appendix A, con't.

Table A-2. Loans and Loan Guarantees from Federal
and State Sources

Federal

Direct

Federal Community Loans (75% of total direct)	539.6 Million
---	---------------

Guaranteed Loans

Small Business Loan Guarantees	328.5 Million
--------------------------------	---------------

Farmers Home Administration	136.3 Million
-----------------------------	---------------

State

Department of Commerce Local Direct Loans	3.2 Million
---	-------------

Office of Small Business Loans	31.8 Million
--------------------------------	--------------

Export Finance	10.0 Million
----------------	--------------

California Innovation Development Loans	2.0 Million
---	-------------

Appendix A, con't

Table A-3. California Tax Code Exemptions
for Economic Development (Represents half of
known tax revenue loss)

Personal Income Taxes	465 Million
Corporate Income Taxes	316.6 Million
Sales and Use Taxes	101.1 Million
Local Property Taxes	655.6 Million

Total	1542.3 Million
-------	----------------

(Represents half of the tax revenue loss or about 10 percent of the
total tax revenues)

Appendix B

Table B-1. Participation Rates of Surveyed Employees
in Selected Sectors, by Sex and Race/Ethnic Group:
Los Angeles SMSA, 1981

SIC 36-Electric and Electronic

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	14.2	81.6	4.9	4.6	8.3
Tech/Craft/Oper/Laborers	100.0	54.5	43.8	34.3	12.1	9.1
Sales/Clerk/Service	100.0	72.8	68.6	12.1	13.8	5.0

SIC 37-Transportation Equipment

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	11.6	83.5	5.8	4.5	5.5
Tech/Craft/Oper/Laborers	100.0	16.2	57.2	22.9	15.5	4.0
Sales/Clerk/Service	100.0	23.2	68.2	15.7	11.1	3.5

SIC 60-Banking

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	52.2	76.9	9.1	6.8	6.7
Tech/Craft/Oper/Laborers	100.0	50.7	50.4	19.1	3.2	13.9
Sales/Clerk/Service	100.0	73.0	61.6	15.7	11.9	11.6

Source: United States Equal Opportunity Commission: Job Patterns of
Minorities and Women in the Private Sector, 1981.

Appendix B, con't.

Table B-2. Participation Rates of Surveyed Employees
in Selected Sectors, by Sex and Race/Ethnic Group:
San Jose SMSA, 1981

SIC 36-Electric and Electronic

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	23.1	83.3	3.8	2.7	9.9
Tech/Craft/Oper/Laborers	100.0	46.8	51.5	19.3	5.6	22.9
Sales/Clrk/Service	100.0	74.7	77.0	11.9	5.8	6.3

SIC 37-Transportation Equipment

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	18.8	82.9	3.7	2.0	10.6
Tech/Craft/Oper/Laborers	100.0	52.0	54.4	19.0	6.0	20.0
Sales/Clrk/Service	100.0	71.4	74.1	11.1	5.7	8.5

SIC 60-Banking

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	56.6	84.2	6.2	3.9	5.0
Tech/Craft/Oper/Laborers	100.0	72.7	71.1	8.7	7.4	12.8
Sales/Clrk/Service	100.0	87.0	73.6	12.0	5.8	8.1

Source: United States Equal Opportunity Commission: Job Patterns of
Minorities and Women in the Private Sector, 1981.

Appendix B, con't.

Table B-3. Participation Rates of Surveyed Employees
in Selected Sectors, by Sex and Race/Ethnic Group:
San Diego SMSA, 1981

SIC 36-Electric and Electronic

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	11.6	90.5	3.5	1.8	3.1
Tech/Craft/Oper/Laborers	100.0	41.2	60.8	15.5	7.3	15.7
Sales/Clrk/Service	100.0	64.3	79.2	8.5	7.3	4.3

SIC 37-Transportation Equipment

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	8.6	88.5	5.5	2.6	2.8
Tech/Craft/Oper/Laborers	100.0	8.5	63.6	22.4	8.8	4.7
Sales/Clrk/Service	100.0	64.9	75.8	10.2	9.7	3.4

SIC 60-Banking

Occupation	Total	Female	White	Hisp	Black	Asian
Officials/Professionals	100.0	55.4	88.3	11.8	3.0	2.4
Tech/Craft/Oper/Laborers	100.0	76.3	71.3	7.8	10.1	10.3
Sales/Clrk/Service	100.0	89.9	75.8	11.7	6.7	5.6

Source: United States Equal Opportunity Commission: Job Patterns of
Minorities and Women in the Private Sector, 1981.

