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Institute of Urban and Regional Development

DO GROWTH CONTROLS WORK?

A New Assessment

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ABSTRACT

Although local growth-control programs are much maligned by economists, there has not yet been a single comprehensive study of whether local growth-control programs actually work. This paper presents a partial evaluation of local growth controls as applied in seven mid-size California cities: Camarillo, Livermore, Lodi, Redlands, San Luis Obispo, Thousand Oaks, and Walnut Creek. To better identify the effects of local growth controls, each of the seven growth-control cities was statistically matched with an otherwise similar (and usually nearby) city which had not adopted growth controls. This paper reports on three aspects of local growth controls of interest to planners. The first -- and perhaps most basic aspect -- is whether, and by how much, local growth-control programs actually reduce local rates of population growth. Housing prices are a second aspect: how much, if at all, do local growth controls really increase the price of housing? Third, this paper examines the link between local growth controls and community fiscal health.

I. INTRODUCTION

Growth control is one of those subjects on which there is very little middle ground. On one side of the issue are economists who argue that local growth controls are generally exclusionary and almost always raise the price of housing (Fischel, 1990). On the other side of the issue are the millions of residents of fast-growing regions who see the control of growth and its side effects -- traffic congestion, declining environmental quality, and loss of traditional character -- as essential to maintaining their quality of life (Landis and Kroll, 1989).

As yet there is no consensus within the professional planning community as to which methods of growth control do or do not work. New growth-control programs have generally been assembled by "cutting and pasting" parts of programs already in place in other cities, whether or not those programs have actually achieved their intended results. As Deakin (1989) points out, there has not yet been a single evaluation of growth-control programs anywhere in the United States.

This paper presents a partial evaluation of local growth-control programs as implemented in seven mid-sized California cities. The question of how well local growth controls *actually work* can

be approached from any number of perspectives, depending on how one views the purpose and function of local growth controls. This paper reports on three aspects of local growth controls of interest to planners. The first -- and perhaps most basic aspect -- is whether, and by how much, local growth-control programs actually reduce local rates of population growth. Housing prices are a second aspect: how much, if at all, do local growth controls really increase the price of housing? Third, the link between local growth controls and community fiscal health is examined. This last issue is especially important to communities which rely on new development to pay for need infrastructure and public services.

These issues are particularly important in California because the question of how cities and counties should best plan for growth once again looms large on the state's policy agenda (Teitz, 1990). With California having added 10 million new residents between 1970 and 1990, and with many population forecasters predicting that the state will add another 10 million residents by 2010, policy-makers throughout California are searching for practical ways to plan, manage, and accommodate growth. These same policy-makers find themselves facing an electorate ever more frustrated with past failures to better manage growth, and ever more prone to using the initiative process to try to stop growth (Glickfeld, Graymer, and Morrison, 1988). At the same time, there is widespread concern that the careless pursuit of slow-growth policies will further push up California housing prices (already the most expensive in the nation) and encourage companies and businesses to leave California for lower-cost areas. Finally, policy-makers wonder whether California communities can afford slow growth, given the importance of new development in paying for essential infrastructure and services.

This paper presents selected comparisons between seven California cities that adopted stringent growth-control programs during the late 1970s and early 1980s, and six otherwise similar communities that did *not* adopt local growth controls. To provide the larger policy context, Part II of this paper summarizes the rise and extent of local growth management and control programs in California. Part III introduces the seven growth-control cities and their six non-growth-control counterparts. Part IV examines how stringently the various growth-control programs have been implemented, and how effective they have been at reducing population growth. Part V examines the housing price issue anew to determine when and why local growth-control programs contribute to higher housing prices. Part VI examines the fiscal and public service consequences of adopting stringent growth controls. Finally, Part VII offers suggestions for future local growth policies.

II. GROWTH CONTROL and GROWTH MANAGEMENT: The View from California

The terms growth control and growth management are often (and incorrectly) used to mean the same thing. Since this paper is primarily about growth-control programs, not growth-management programs, we begin by differentiating the two concepts. *Growth-control programs* significantly limit population growth, housing construction, and/or economic growth below levels that would otherwise be achieved in an unconstrained real estate market. Growth-control programs in California have been implemented primarily via population growth caps and residential building permit caps, as well as occasionally (and by law, temporarily) through the use of development moratoria. In a very few instances, local growth-control programs have involved limiting commercial development. A recent survey by Glickfeld and Levine (1990) revealed just how popular growth-control programs have become in California:

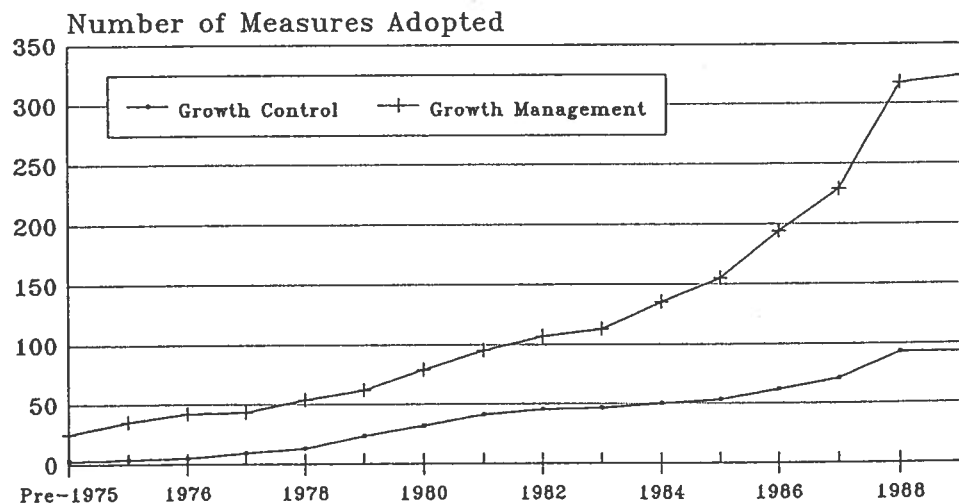
- The number of California cities and counties that have enacted formal growth-control measures¹ increased from only 3 in 1975, to 93 in 1988 (Figure 1 and Table 1). About half of the communities that have adopted growth-control measures have done so since 1984. Appendix A lists the California cities and counties that had adopted formal growth controls as of 1989.
- Residential building permit caps are the most popular form of growth control in California: since 1973, 43 cities and 7 counties have adopted such caps. As of 1989, more than ten percent of California's population lived in a city or county which had adopted some form of residential-growth cap.
- Population-growth limits are less popular than residential-growth caps, with 38 cities and 2 counties having implemented population-growth limits. (27 cities and counties have adopted both population growth and housing unit caps.) A much larger percentage of California cities (9.8 percent) than counties (3.5 percent) have tried to limit population growth.
- Population- and residential-growth-limits have been most popular in cities with population between 30,000 and 50,000.² Twenty percent of California cities with populations in this size range have adopted residential-growth caps. Another 15 percent of such cities have adopted population-growth caps. Growth caps are less popular with very small cities. Of cities with populations less than 10,000, only 7 percent and 5 percent, respectively, have adopted housing and population growth caps.
- Although citizen initiatives have been an effective method of bringing growth issues to public's attention, they have not been a particularly successful vehicle for enacting growth-control ordinances (Table 1).³ Altogether, only 28 percent of residential growth caps have been adopted directly through the initiative process. Forty percent of population growth caps have been adopted through the initiative process, and less than fifteen percent of commercial growth limitation measures have been adopted via initiative.

Table 1: Growth Control and Management Measures Adopted by California Cities and Counties as of 1989

	Measures Adopted		% of Govs. Adopting		% Adopted by Initiative
	<u>Cities</u>	<u>Counties</u>	<u>Cities</u>	<u>Counties</u>	
Growth Control Measures					
Population Growth Limits	38	2	9.8%	3.5%	40.0%
Housing Permit Limits	43	7	11.1%	12.3%	28.0%
Commercial Square Footage Limits	13	1	3.4%	1.8%	14.3%
Growth Management Measures					
Housing Infrastructure Requirements & Public Service Standards	112	17	29.0%	29.8%	10.9%
Residential Downzoning	106	15	27.5%	26.3%	8.3%
Commercial Infrastructure Requirements & Public Service Standards	92	16	23.8%	28.1%	11.1%
Commercial Downzoning	40	5	10.4%	8.8%	11.1%
Urban Limit Line or Greenbelt	56	23	14.5%	40.4%	5.1%

Source: Glickfeld and Levine (1990)

Figure 1: Cumulative Growth Management and Growth Control Measures Adopted by California Cities and Counties: 1975-89



Source: Glickfeld and Levine: 1990

Notes: see text for distinctions btwn. Growth Management and Growth Control

Growth-management programs, by contrast, seek to redistribute growth and development in ways that minimize negative environmental, social, and fiscal impacts, but not necessarily to reduce the overall amount and rate of growth. The primary tools of growth management are conventional zoning and subdivision regulations (including fees), annexation controls, and urban limit lines, as well as infrastructure service and timing requirements.⁴ Table 1 distinguishes those local policy tools that are primarily used for growth management from those used for growth control.

Growth-management programs are currently much more popular than growth-control programs. According to Glickfeld and Levine:

- More than 300 of California's 500 cities and counties have adopted some form of growth-management program. (By contrast, only 93 have experimented with growth-control programs).⁵ More than half of the cities and counties that have adopted growth-management measures have done so since 1985.
- As Figure 1 shows, growth-control and growth-management programs have *both* been getting more popular over time, with 1988 being the peak year for the adoption of growth-management and control programs. Eighty-eight cities and counties adopted growth-management programs in 1988, and 22 cities and counties adopted growth-control programs.
- Most jurisdictions have adopted multiple growth-management and control measures. The most common combinations of growth-management measures are residential infrastructure standards with commercial development infrastructure standards. Residential down-zoning has also been widely pursued in concert with other growth-management measures. Generally speaking, growth-control measures (population, housing, and commercial development caps) are *not* widely used in combination with growth-management measures.

The distinction between growth management and growth control is much clearer on paper than it is in the everyday world of development regulation. Growth-control policies inevitably involve elements of growth management, and vice versa. For example, most growth-control programs incorporate development rating systems to help select from among competing development proposals. Such point systems are usually designed to favor projects which are consistent with city growth-management policies.

On the other side of the coin, the cumulative effects of such growth-management policies as down-zoning may be to limit new development significantly. In such cases, growth-management policies function as *de facto* growth-control programs. This latter approach, using growth-management policies as a back-door way of limiting growth, is becoming increasingly popular. By tying discretionary development reviews to the achievement of off-site level of service standards, by disallowing annexations, and by comprehensively down-zoning lands intended for urban

development, cities have found that they can significantly limit population growth and development without adopting formal development caps.

One other distinction between growth-management and growth-control programs is worth making. Growth-control programs such as building permit caps or annexation limits can be and often are adopted independently of other land-use planning policies. That is, a city need not have a well thought out land-use planning process in order to implement a growth-control program. Growth-management programs, by contrast, rarely exist without a backdrop of good development planning.

III. CASE STUDIES IN GROWTH CONTROL

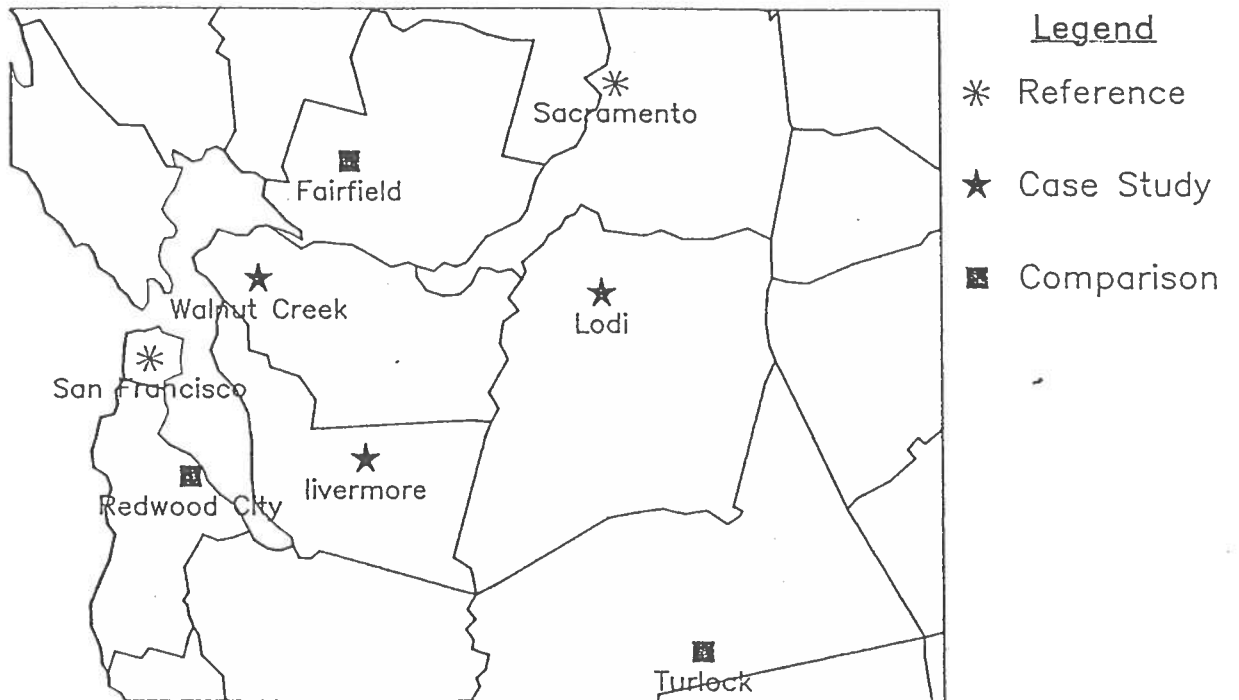
This study takes a fresh look at the effectiveness and effects of local growth-control programs in seven California cities: Camarillo, Livermore, Lodi, Redlands, San Luis Obispo, Thousand Oaks, and Walnut Creek. To better identify the effects of local growth controls, each of the seven growth-control cities was statistically matched with an otherwise similar (and usually nearby) city which had not adopted growth controls.⁶

The Growth-Control Cities

Four criteria were used to select the seven case-study cities. To insure that the selected growth-control cities could be successfully matched against non-growth-control cities, they had to be representative of other fast-growing California cities. This eliminated very small communities (those with populations less than 5,000) as well as very large cities such as Los Angeles or San Diego. Second, the types of growth-control ordinances enacted in the chosen cities had to be representative of approaches to growth control taken, or considered, in other cities. Third, the chosen cities had to be "hard core" in their approach to growth control: that is, they had to have adopted ordinances intended to *significantly restrict* new development. And fourth, the chosen cities had to have had more than five years of experience in implementing a growth-control ordinance. This last requirement is essential: it means that the programs have had time to take effect and to generate observable impacts. It also means that officials in each of the seven communities have gained enough experience in administering growth-control programs to understand their pros and cons.

The seven case-study cities span all parts of urban California (Map 1). Walnut Creek and Livermore are located in the San Francisco Bay Area, the region widely regarded as the birthplace of growth control in California. Among growth-control cities, both cities are notable as innovators: Livermore was only the second city in California (after Petaluma) to formally restrict new

MAP 1: LOCATION OF THE CASE STUDY AND COMPARISON CITIES



development under the aegis of managed growth. More recently, Walnut Creek has pioneered the use of service standards to regulate commercial development.

Thousand Oaks, Camarillo, and Redlands are all located in the greater Los Angeles area. Thousand Oaks and Camarillo are both about forty miles north of downtown Los Angeles in Ventura County -- one of California's wealthiest and most environmentally conscious counties. Both cities were developed in the 1960s as bedroom suburbs for upper-income Los Angeles and San Fernando Valley commuters.

Redlands, a much older city, lies sixty miles east of downtown Los Angeles at the southwestern tip of San Bernardino County. Redland's recent growth has been fueled by "spill-over" housing demand priced out of more expensive Orange County and Los Angeles area neighborhoods. In this respect, Redlands is typical of other fast-growing cities in Riverside and San Bernardino Counties. With respect to growth control, however, Redlands is atypical: the city adopted its first growth-control ordinance in 1978 during a period in which most Southern California cities continued to welcome growth.

Lodi, the sixth case-study city, was the first city in California's Central Valley to try to control growth. Forty miles south of Sacramento and ten miles north of Stockton, Lodi has long enjoyed a reputation throughout the Central Valley for its excellent public services and unique mixture of urban sophistication and rural character. In recent years, that mix has been threatened by spill-over growth from the San Francisco Bay Area.

San Luis Obispo, the seventh case-study city, is typical of California's central coastal cities. Like Santa Cruz to the north and Santa Barbara to the south (two other slow-growth cities), San Luis Obispo's economy is based on a combination of tourism and regional health and education services. Because San Luis Obispo depends almost entirely on local rainfall and runoff for its water supply,⁷ residents and city officials have long been concerned about balancing population growth with long-term water supplies.

Developmentally, the seven growth-control cities have much in common. By California standards, all seven are of moderate size, ranging in population from 41,050 (San Luis Obispo) to 104,000 (Thousand Oaks).⁸ Except for San Luis Obispo, none of the seven are either the largest or smallest cities in their respective metropolitan regions. All seven experienced rapid population growth during the late 1970s, which, *in spite of attempts to control growth*, continued through the mid-1980s. With the exception of Walnut Creek, all seven are suburban in density and character. Five of the case-study cities -- Camarillo, Lodi, Redlands, San Luis Obispo, and Walnut Creek -- are

also public and social service centers of one type or another, incorporating major regional health care or educational facilities.

Except for racial composition (as of 1980, the populations of all seven case-study cities were overwhelmingly white), the case-study cities are demographically quite diverse. For example, as of 1980, residents of Walnut Creek, Thousand Oaks, and Lodi were older, wealthier, and better educated than residents of neighboring cities. Conversely, San Luis Obispo city residents were younger and less wealthy than residents of neighboring communities. Residents of Livermore and Camarillo were generally similar to residents of other nearby communities.

Alternate Approaches to Growth Control

There are significant commonalities between the growth-control policies of the seven growth-control cities. First, as noted above, all seven are what private developers might call "hard core" in their approach to growth control. Except for Lodi, all seven cities have enacted policies which directly limit the rate or amount of new development.⁹ Such policies go well beyond traditional zoning, annexation, or subdivision controls. Second, with the exception of Walnut Creek, which is still something of a newcomer to the business of growth control (having decided to limit development only in 1985), all of the case-study cities have had almost a decade of experience in administering growth-control systems. Finally and most importantly, growth controls were adopted in all seven cities either entirely or in part through the citizen initiative process.

Beyond these basic similarities, the seven communities differ somewhat in their specific approaches to growth control. Camarillo, Thousand Oaks, and Redlands utilize annual *housing caps*, limiting new residential building permits to 450, 500, and 450 units per year, respectively. In Livermore and San Luis Obispo, new development is restricted through a combination of population growth-rate *targets* and annual building permit caps. In Lodi, it is the location of development, not the rate of growth, that is controlled: until 1990 all annexations required the approval of a majority of the electorate. And in Walnut Creek, specific community level-of-service standards must be met before major new development projects can be approved. (In this sense, Lodi and Walnut Creek are examples of cities in which stringently applied growth-management measures effectively function as growth-control measures.)

Major aspects of each city's growth-control programs are summarized in Table 2 and below:

Livermore: Growth controls in Livermore are now almost 20 years old, and in their third generation. The city's first generation of growth control took hold in 1972. Upset by school overcrowding, inadequate water treatment facilities, and

Table 2: Local Growth Control Programs: The Case Studies at a Glance

<u>City</u>	<u>Growth Control Initiative/Program</u>	<u>Year Enacted</u>	<u>Growth/Development Limit</u>
Camarillo Thousand Oaks	Measure A	1981	Annual 450 units residential building permit cap
	Measure A	1980	Annual 500 units residential building permit cap
Livermore	Residential Development Plan (RDP) Housing Implementation Plan (HIP)	1976	Limit of 2% housing unit growth per year
		1987	Annual res. growth limit loosened to 1.5 - 3.5%; rate to be adjusted every 2-3 years
Lodi	Proposition A	1981	Annexation by referendum only; establish greenbelt
Redlands	Proposition R Measure N	1978	Annual 450 unit residential building permit cap
		1987	Annual 400 unit residential building permit cap
San Luis Obispo		1980	Annexation by referendum only (invalidated in 1984)
		1984	Annual res. growth limit of 2% per year during 1980s
Walnut Creek	Measure H	1985	Moratorium on most major development projects, pending attainment of traffic congestion standards

worsening air quality, Livermore residents enacted an open-ended moratorium on new residential development.

Four years and several lawsuits later, Livermore's moratorium gave way to a general plan amendment which limited housing unit growth to two percent per year. Known as the Residential Development Plan (RDP), the amendment was designed to match the rate and location of new development with the provision of public infrastructure.

In 1987, a citizens review committee concluded that the RDP process had become too complicated and time-consuming to administer, and was of questionable value. To provide greater flexibility, city officials replaced the RDP with a three-year Housing Implementation Program (HIP), which established yearly residential growth ceilings ranging from 1.5 percent to 3.5 percent.

Redlands: In 1978, Redlands became one of the first cities in Southern California to try to control growth by enacting Proposition R, a ballot measure limiting all forms of residential development to 450 units per year (including mobile homes). Redlands voters went back to the polls in 1987 to enact Measure N, which reduced the city's annual building permit cap from 450 to 400 units. Measure N also made it more difficult to rezone agricultural parcels for urban uses.

Thousand Oaks: Measure A was enacted by the voters of Thousand Oaks in April 1980 after three successive years of higher than expected population growth. Measure A capped new residential development at 150 units in 1980, at 750 in 1981, and at 500 thereafter until 1990. In 1990, the Thousand Oaks city council loosened the cap somewhat, raising the annual building permit limit to 650 through 1995.

San Luis Obispo: Like Livermore, the city of San Luis Obispo has gone through several phases of growth control. In 1980, residents voted to require that all subsequent annexations be approved by a majority of voters. When the courts overturned this ordinance as unconstitutional in 1984, San Luis Obispo voters enacted a 2 percent yearly cap on new housing construction.

Lodi: Concern over urban sprawl, the conversion of agricultural lands, and declining open-space prompted residents of Lodi to enact Measure A in 1981. Measure A designated a "greenbelt" area outside city limits within which non-agricultural development would be prohibited. To insure that Lodi could not expand into its greenbelt, Measure A required that all subsequent annexations be approved by a majority of city voters. This last provision was eventually struck down by the California Supreme Court in 1989 as an unconstitutional delegation of legislative authority.

Camarillo: Nineteen months after Thousand Oaks enacted Measure A to limit housing construction, voters in next-door Camarillo enacted their own Measure

A. Camarillo's Measure A was virtually identical to Thousand Oaks', the only major difference being the amount of the cap. The voters of Camarillo elected to limit new residential development in their city to 450 units per year, as compared with 500 units per year in nearby Thousand Oaks.

Walnut Creek: Walnut Creek was and is a victim of its own success. Once a sleepy suburb of San Francisco, by 1983 Walnut Creek had metamorphasized into a regional office center. As the city grew, its streets and residential neighborhoods became more and more congested. In 1985 the residents of Walnut Creek passed Measure H, perhaps the most sweeping growth-control ordinance ever adopted in a major California city. Measure H made all subsequent development approvals contingent upon the achievement of specific traffic congestion level-of-service standards. Measure H applied to all forms of development in the downtown area, not just residential construction.¹⁰

At the time of its passage, traffic congestion levels already exceeded the standards set forth in Measure H. As a result, the ordinance effectively functioned as a moratorium on all major commercial projects, and many residential ones.

The Comparison Cities

Recall that the first criteria for choosing the case-study cities was that they could be directly compared with otherwise similar communities *that had chosen not to adopt growth controls*. Three criteria were used to narrow down the list of potential comparison communities, and to match each growth-control city with an appropriate comparison city. First, each case-study and comparison community had to have experienced similar growth pressures prior to the adoption of growth control by the case-study community. Second, each case-study and comparison community had to be of similar size and development character, and, to the extent possible, have similar populations. Finally, each case-study and comparison community had to have purposely diverged in their respective approaches to growth. That is, the case-study community had to have chosen the path of growth control at about the same time that the comparison community was choosing not to control growth.

The selection of comparison communities involved a statistical technique known as cluster analysis as well as suggestions by informed observers of California growth and land-use policy. Four case-study and comparison communities proved fairly easy to identify: (1) Livermore and Fairfield; (2) Lodi and Turlock; (3) Walnut Creek and Redwood City; and (4) Redlands and Upland.

Except for one complication, Simi Valley was an obvious choice as a comparison community for Thousand Oaks and Camarillo. Unfortunately for this study (but perhaps fortunately for its

residents), in 1986 Simi Valley followed the lead of its neighbors by enacting its own growth-control ordinance. Thus the comparisons that follow between Thousand Oaks, Camarillo, and Simi Valley are for the period prior to 1987.

San Luis Obispo County serves as the comparison area for the City of San Luis Obispo. This match was made out of necessity, but also for interesting public policy reasons. On the necessity side, there is no other city within 100 miles of San Luis Obispo that is directly or indirectly comparable to it. On the public policy side, San Luis Obispo County and San Luis Obispo city have generally pursued *opposite* land-use and development policies: in the early 1980s, when residents of San Luis Obispo (city) decided to limit new development, elected officials in San Luis Obispo County (and its unincorporated communities) chose to loosen their own development policies. In effect, San Luis Obispo County elected to take the growth that the city of San Luis Obispo decided it no longer wanted.

The six comparison cities are similar to the case-study cities but they are not clones (see Table 3). As of 1980, the comparison cities were somewhat more racially diverse than the case-study cities; their populations were somewhat less wealthy than those of the growth-control cities; and they were not quite as highly educated. Population densities in three of the growth-control communities -- Lodi, Livermore, and Walnut Creek -- were considerably greater than in their respective comparison communities. On the other hand, population densities in Redlands, Camarillo, and Thousand Oaks were lower than in their respective comparison communities.

IV. DO GROWTH CAPS REALLY SLOW GROWTH?

There are many ways to measure the effectiveness of local growth-control ordinances. The simplest, and for many of the citizens who vote to enact growth controls probably the best indicator of program success, is how well a particular growth-control measure actually slows growth and/or development.

Population Growth Rates with and without Growth Controls

Statewide, locally administered growth controls have had little effect on population growth rates (Glickfeld and Levine, 1990).¹¹ This is because there are still so many jurisdictions willing and able to accommodate development displaced from slow-growth cities and counties.

Nor have growth controls been especially stringent at the local level. Comparing the seven growth-control communities with their respective pro-growth comparison communities reveals that

Table 3: Selected Comparisons Between Growth Control and Non-Growth Control Communities

City	Persons per Square Mile	Population			%Population Change		Median Age 1980	Population Percent White 1980	Average Household Size 1980	Percent Completed College 1980	Median Household Income 1980		
		1970	1980	1989	1970-80							1980-89	
					1970-80	1980-89						1970-80	1980-89
Livermore Fairfield	3,663 2,152	37,703 44,146	48,349 58,099	56,800 76,100	28.2% 31.6%	17.5% 31.0%	28.6 25.3	91.6% 74.1%	2.97 2.97	22.6% 11.6%	\$24,960 \$17,975		
Lodi Turlock*	4,193 3,651	28,691 13,992	35,221 26,287	49,200 39,700	22.8% 87.9%	39.7% 51.0%	33.7 28.2	90.3% 90.7%	2.46 2.59	11.0% 15.9%	\$16,031 \$14,710		
Walnut Creek Redwood City	3,251 1,631	38,989 55,539	54,033 54,951	62,600 61,600	38.6% -1.1%	15.9% 12.1%	39.6 32.3	94.5% 87.8%	2.26 2.37	37.5% 18.6%	\$24,813 \$21,829		
Redlands Upland	1,974 3,453	36,414 32,551	43,619 47,647	59,800 63,900	19.8% 46.4%	37.1% 34.1%	30.3 30.6	85.2% 90.5%	2.68 2.69	27.0% 22.3%	\$14,770 \$21,714		
San Luis Obispo San Luis Obispo Count	3,849 47	28,036 105,690	34,252 155,434	41,050 211,900	22.2% 47.1%	19.8% 36.3%	25.1 29.9	92.4% 90.5%	2.37 2.51	30.1% 19.0%	\$13,112 \$14,805		
Camarillo* Thousand Oaks Simi Valley	2,123 1,705 2,981	19,219 35,953 56,676	37,797 77,072 77,500	48,300 104,400 99,800	96.7% 114.4% 36.7%	27.8% 35.5% 28.8%	32.9 29.8 25.9	90.8% 93.4%	2.80 2.97 3.50	29.6% 14.1%	\$24,046 \$26,925 \$26,554		

Sources: City and County Databook, 1972, 1985; California Department of Finance

Notes: * Camarillo and Turlock were not incorporated in 1970; population estimates are for Census-designated places.

the various growth-control measures have only slightly restrained population growth and housing development (see Table 4). For example:

- Thousand Oaks and Camarillo began limiting new home construction in 1980 and 1981, respectively. Yet during the next five years, the populations of these two communities grew at annual rates of 3.1 percent and 4.2 percent. By comparison, over the same period, the population of Simi Valley (still a pro-growth city) grew at an average annual rate of 2.2 percent.
- By contrast, Livermore's population cap *did* slow the city's rate of population growth. Between 1980 and 1985, Livermore's population increased at an average annual rate of 1.9 percent. Over the same period, the population of pro-growth Fairfield increased at an average annual rate of 3.0 percent.
- Lodi's annexation limits, adopted in 1981, also served to slow down the rate of population growth. Between 1980 and 1985, Lodi grew at an average annual rate of 2.9 percent. This rate was lower than Turlock's growth rate during the same period (4.2 percent), but higher than the state growth rate. During the second half of the 1980s, however, Lodi's population growth rate began to catch up with Turlock's.
- In spite of its annual 450-unit housing cap (enacted in 1978), throughout the 1980s, Redlands added population at a faster rate than did pro-growth Upland.
- Thanks to its combination of annexation controls and population caps, the city of San Luis Obispo grew at a much slower rate during the 1980s than did the rest of San Luis Obispo County.
- Walnut Creek's population grew faster than did Redwood City's both before and after the passage of Measure H. Throughout the 1980s, however, both cities grew at a slower rate than did the nine-county San Francisco Bay Area.

Measuring Housing Shortfalls

Another way of evaluating growth-control stringency is to estimate the total number of housing units that would have been constructed were it not for the imposition of growth controls. We call this estimate the *yearly housing unit production shortfall*. It is calculated by comparing the actual number of new housing units produced in a growth-control city with the number of housing units that would have been produced based on that city's historical share of regional or county growth. Yearly deficits and surpluses are then summed to yield an accumulated housing unit shortfall. In essence, the accumulated housing unit shortfall measures a particular community's unwillingness to accept its "statistical" fair share of regional or county growth.

All else being equal, one might expect growth-control cities to have accumulated fairly large housing unit shortfalls. But as Figure 2 shows, this isn't always so:

Table 4: City Population Growth Rates and Growth Shares Under Growth Control

<u>Growth Control City and Comparison City</u>	<u>Year Controls Adopted</u>	<u>Average Yearly Population Growth</u>		<u>Avg. Yearly Pct. Growth Rates</u>		<u>Share of County or Reg. Population Growth</u>	
		<u>1980-85</u>	<u>1980-89</u>	<u>1980-85</u>	<u>1980-89</u>	<u>1980-85</u>	<u>1980-89</u>
Camarillo	1981	1,251	1,167	3.1%	2.8%	0.92%	0.81%
Thousand Oaks	1980	3,506	3,036	4.2%	3.4%	2.59%	2.11%
Simi Valley	1986	1,800	2,478	2.2%	2.8%	1.33%	1.72%
Livermore	1976	970	939	1.9%	1.8%	1.38%	1.23%
Fairfield		1,540	2,000	2.5%	3.0%	2.19%	2.61%
Lodi	1981	1,066	1,553	2.9%	3.8%	5.73%	7.17%
Turlock		1,193	1,490	4.2%	4.7%	6.41%	6.88%
Redlands	1978	1,316	1,798	2.9%	3.6%	2.22%	2.27%
Upland		1,351	1,806	2.7%	3.3%	2.27%	2.28%
San Luis Obispo	1982	570	755	1.6%	2.0%	10.17%	11.93%
San Luis Obispo County		5,573	6,274	3.4%	3.5%	89.78%	99.06%
Walnut Creek	1985	768	949	1.4%	1.6%	1.09%	1.24%
Redwood City		570	739	1.0%	1.3%	0.81%	0.97%

Notes:

* the Bay Area region includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo
Santa Clara, Solano, and Sonoma Counties

** the North Los Angeles region includes Los Angeles and Ventura Counties

*** Riverside-San Bernadino region includes Riverside and San Bernadino Counties

**** includes San Joaquin and Stanislaus Counties

Source: California Department of Finance

FIGURE 2:

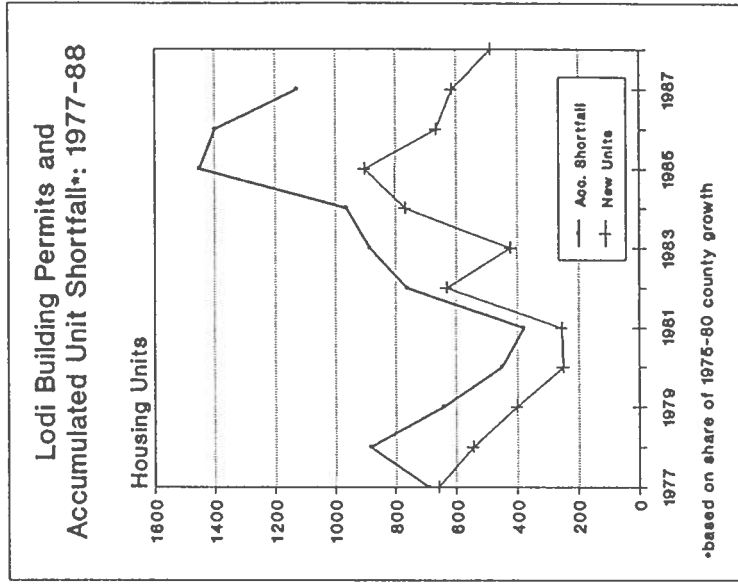
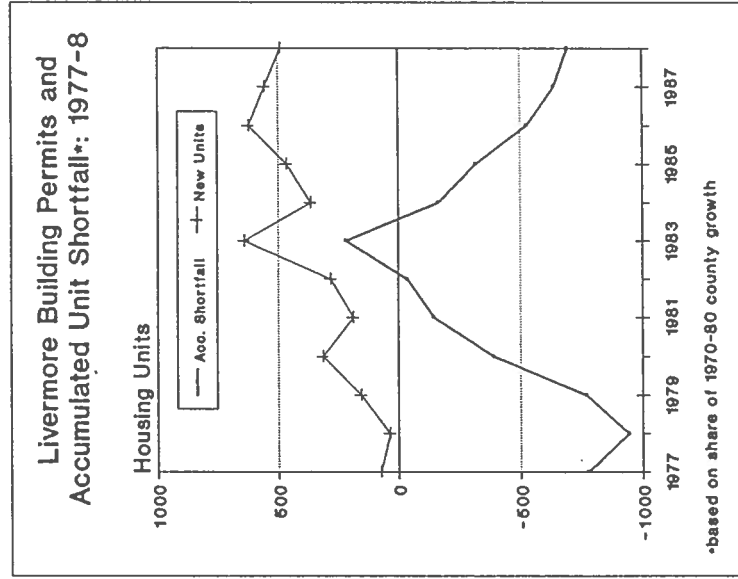
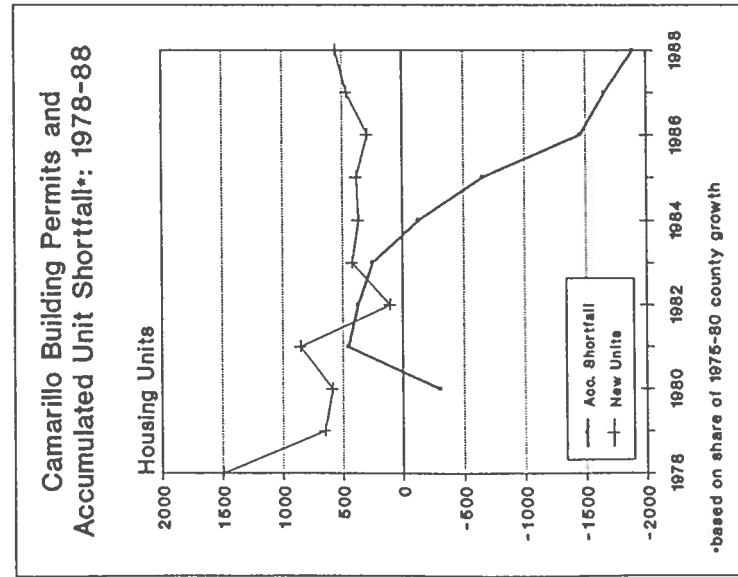
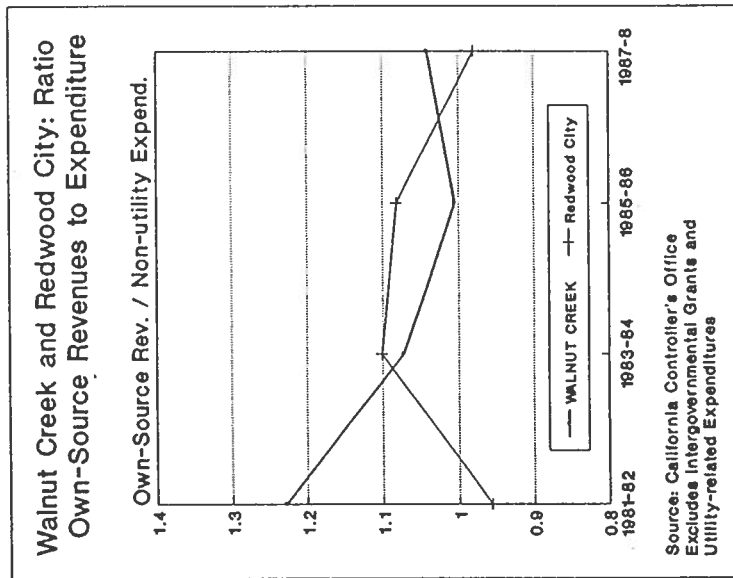
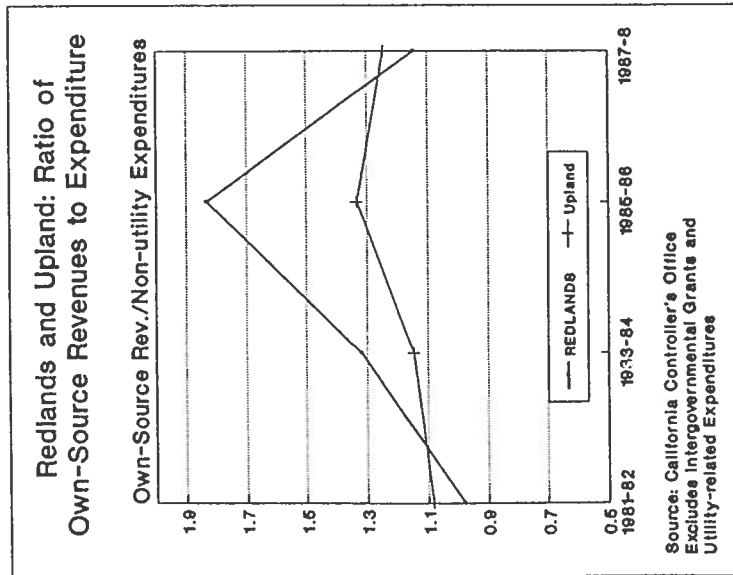


FIGURE 2: (Continued)



- In the five years following the imposition of their annual housing caps, Camarillo and Thousand Oaks accumulated housing shortfalls of 1,500 units and 2,500 units, respectively. That is, housing production levels in Camarillo and Thousand Oaks were 1,500 units and 2,500 units below what they would have been had pre-growth-control construction levels continued. At least in Camarillo and Thousand Oaks, the imposition of housing caps did lead to significant reductions in the rate of new home construction.
- This was not the case in Livermore, where the number of housing units built in the five years after adoption of the RDP was only 100 less than what would have been built in the absence of growth controls.
- In San Luis Obispo, comparative rates of housing construction actually increased after the imposition of growth controls. Overall, it is estimated that roughly 200 more housing units were built in the five years following the 1981 adoption of local growth controls than might otherwise have been constructed.
- In the five years following the adoption of Measure A (which limited new annexations), Lodi homebuilders generated a comparative surplus of about 1,400 housing units.

Behind the Limited Stringency of Local Growth Controls

Clearly, the types of growth-control measures adopted in many California cities and counties have not been all that effective at curtailing growth. Why not? What accounts for such wide variations in the stringency of local growth controls?

The answer to this question is two-fold. First, except in Walnut Creek and Thousand Oaks,¹² the control measures adopted in the case-study cities were really not as restrictive as they seemed. This is because they were developed after, and in response to, a few brief years of extraordinary and somewhat atypical population growth.

Consider the case of Camarillo: in the ten years prior to the adoption of Measure A, Camarillo added an average of 1,800 new residents per year. Evaluated against this ten-year population growth rate, Camarillo's annual cap of 450 units per year presented only a slight constraint on new home production. By three-year historical standards, however, Camarillo's growth cap presented much more of a constraint. The situation was similar in Redlands, where, measured against longer-term growth trends, the city's 450-unit annual development cap presented only a moderate limit on residential development. Thus, in cities such as Redlands, Livermore, San Luis Obispo, and Camarillo, the primary long-term effect of growth controls has been to equalize rates of development over time, to reduce building activity during boom years (usually periods of low interest rates), and to re-distribute it to otherwise lean years.

A second reason why growth-control ordinances have failed to limit development is that they are often full of loopholes -- often by design. Most housing caps purposely exempt affordable housing projects and housing constructed by individual lot owners.¹³ Less frequently, projects are exempted from growth controls through the discretion of local public officials. In Thousand Oaks, developers can carry over unused building allotments into later years -- creating the possibility that annual development limits may occasionally be exceeded. Just about every growth-control ordinance contains so-called "grandfather" provisions, exempting projects already fairly far along the development pipeline. Finally, several of the case-study cities have been required to grant exemptions as part of litigation settlements. In short, the way in which a particular growth-control measure is administered is often a more important determinant of its ultimate restrictiveness than any specific growth limit it contains.

In some cities, growth-control ordinances are not based on yearly caps at all. Lodi's Measure A, for example, limits annexations, not building activity. In fact, as documented below, Measure A, in concert with other Lodi policies, actually seems to have promoted new home construction.

V. GROWTH CONTROLS and HOUSING PRICES

To date, most of the debate over growth controls has focused on a single question: how much, if at all, do growth controls raise the price of housing? Economic theory suggests that local growth controls may increase housing prices in three ways (Dowall, 1984). The first way is to raise the direct costs of construction through unnecessary subdivision and/or development requirements. A second way is by limiting the supply of new housing, thereby allowing home-sellers and builders to act as monopolists and charge higher prices. A third way is by encouraging builders to shift to larger, more expensive, and more profitable homes (Landis, 1986). Growth controls may also generate ripple effects in neighboring communities, as growth displaced from the controlled community spills over into adjacent areas. Empirical studies of the price effects of local growth controls -- most of them done in California using housing-sales data from the late 1970s and early 1980s -- suggest that controls can add as little as 2 percent or as much as 35 percent to the price of housing, depending on the community and the severity of the restrictions (Fischel, 1990).¹⁴

Housing Price Trends in the Case Studies and Comparison Cities

Data on home-price trends in the seven case-study communities paint a very different picture than that suggested by economic theory or by previous empirical studies. Considered on a year-by-year basis during the period between 1980 and 1987, and without reference to the size,

age, or neighborhood locations of specific homes, *median single-family home prices did not rise any faster or to higher levels in the seven case-study communities than in their counterpart pro-growth cities*. Indeed, by the end of the 1980s, housing was more affordable in some of the growth-control cities than in their corresponding comparison cities. These comparisons are based on median single-family home prices as compiled from the DAMAR real estate tracking service, and are presented graphically in Figure 3. Among the more interesting findings:

- Median single-family home prices in the growth-control cities of Camarillo and Thousand Oaks -- although high by California standards -- did not increase any faster than in Simi Valley, a pro-growth community until 1986.
- Despite its history of controlled growth, Livermore has long been one of the San Francisco Bay Area's more affordable suburbs. And although home prices in Livermore did rise between 1980 and 1989, this rate of price appreciation was significantly less than that in nearby Fairfield, a pro-growth community. Moreover, relative to the rest of the San Francisco Bay Area, Livermore housing was actually more affordable in 1988 than in 1980.
- Median home prices in Redlands, a growth-control city, have increased at a slower rate than in the similar pro-growth city of Upland, or than in the San Bernardino-Riverside area as a whole.
- Lodi has long been one of the most prestigious and affordable residential communities in the Central Valley. Although Lodi started limiting growth in 1981, it continued to remain affordable until 1987 when homebuyers from the San Francisco Bay Area began moving en masse to California's Central Valley and bidding up home prices.
- Since 1982, single-family home prices in slow-growth San Luis Obispo have risen more slowly than in Pismo Beach, Grover City, and Morro Bay, three nearby pro-growth cities.

It needs to be emphasized that these results are based on an analysis of median home sales prices for all single-family homes in a community, including both new and existing homes. It is quite possible that growth controls have affected new homes and existing homes differently, or that growth controls push up prices in some neighborhoods but not others. Nonetheless, the overall results speak for themselves: home prices need not be systematically higher -- or increase faster -- in growth-control cities than in pro-growth cities.

Explaining the Results

Although reassuring to growth-control advocates, these results are clearly at odds with the results of past studies. Moreover, they also seem to contravene economic common sense: restricting supply in the face of steady or high demand must necessarily results in higher prices.

FIGURE 3:

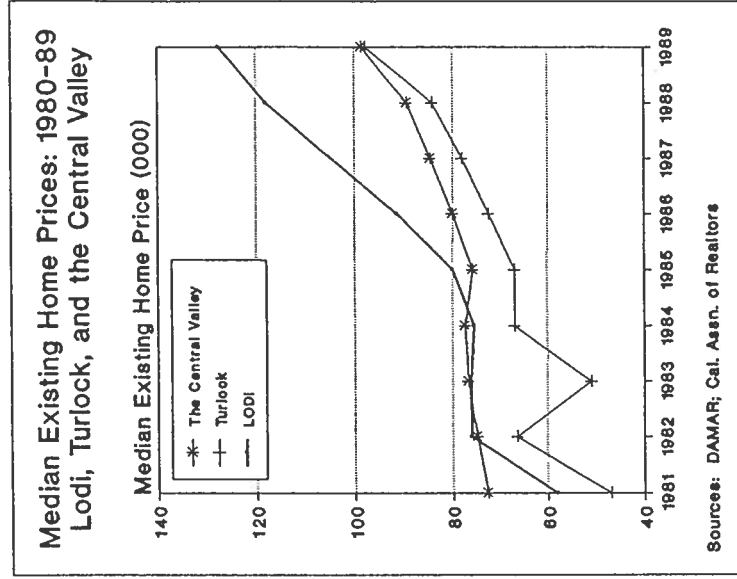
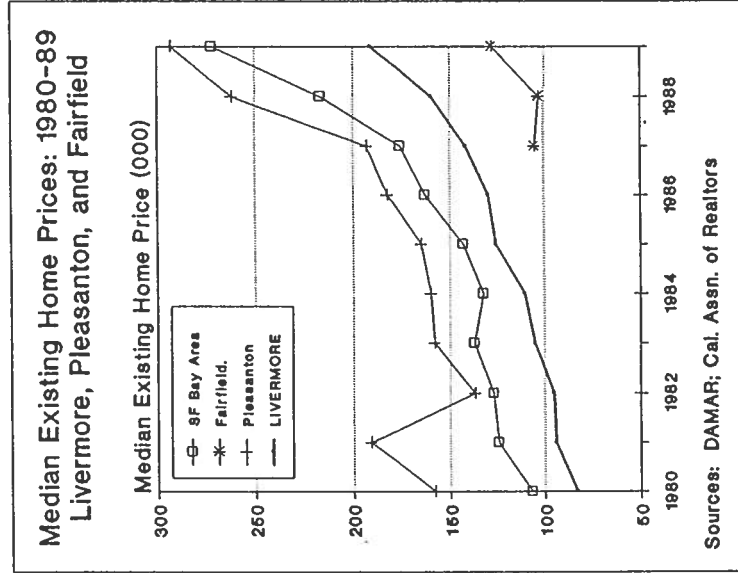
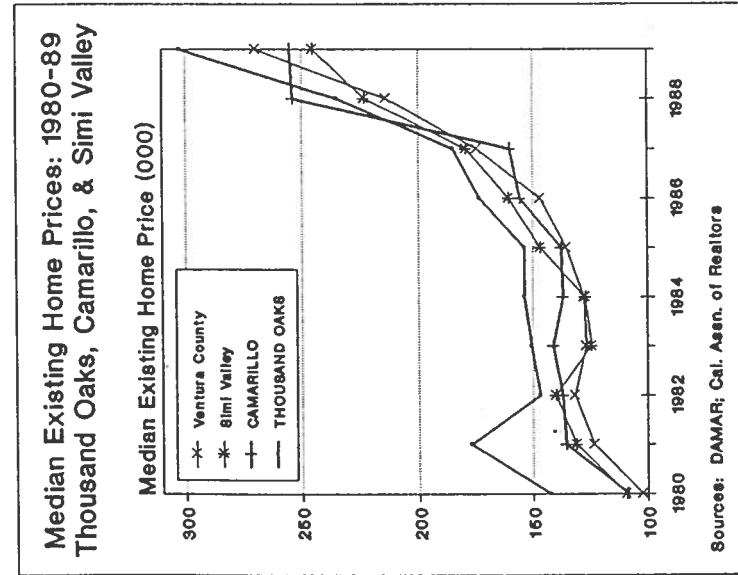
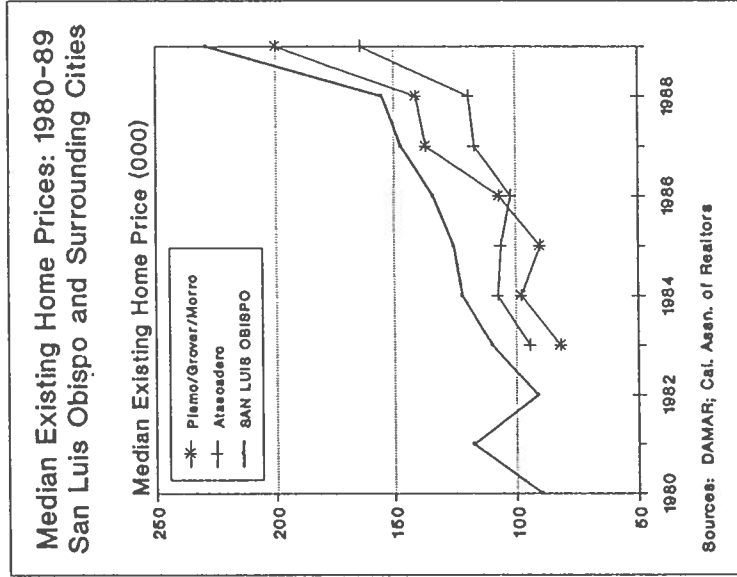
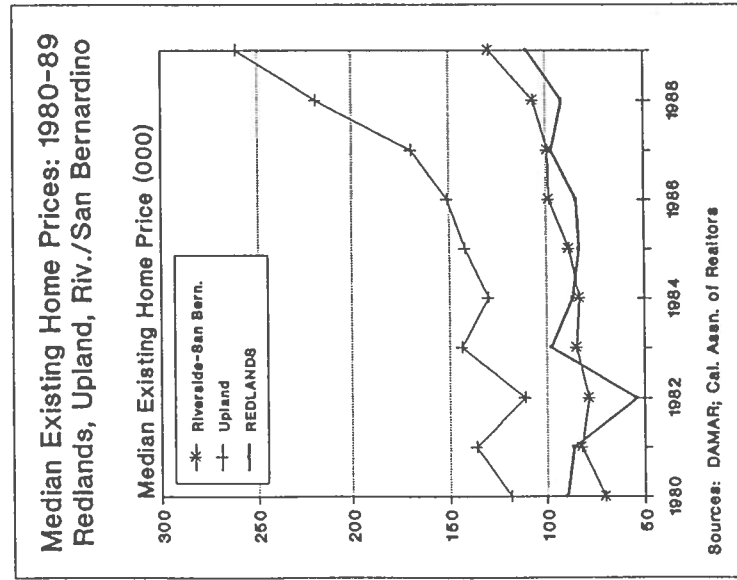


FIGURE 3: (Continued)



There can be only three reasons why housing prices should not be systematically higher in growth-control cities than in otherwise similar pro-growth cities. The first reason is that the controls, as implemented, might not really be all that effective. As noted in the previous section, although the controls implemented in the case-study communities have limited growth *somewhat*, their cumulative effect on population and housing growth has been quite small. Instead, they have served primarily to regularize the development cycle by smoothing out the normal peaks and valleys which characterize real estate development and construction.

Second, there may be adequate spill-over opportunities in other nearby communities, so that growth displaced from one city can easily and costlessly be accommodated in nearby or adjacent communities. If such spill-over opportunities were widely available, and if the housing stock in the controlled community was not particularly distinctive, then home prices in the controlled community might not rise at all. The importance of spill-over opportunities is keenly evident in home-price comparisons between slow-growth Thousand Oaks and nearby pro-growth Simi Valley. Although Thousand Oaks capped new home construction at 500 units per year in 1981, home prices in Thousand Oaks and Simi Valley rose at roughly the same rates throughout the first half of the 1980s. Not until 1986, when Simi Valley adopted its own building permit cap (in part to stem spill-over growth from Thousand Oaks), did home prices in Thousand Oaks start rising at a faster rate than in surrounding communities. In other words, only when the "breathing room" provided by Simi Valley disappeared did housing prices in Thousand Oaks begin to rise rapidly.

Formal versus Ad Hoc Growth Controls

A third reason why housing prices might not increase faster in growth-control cities than in comparable pro-growth cities is that the price effects of localized growth controls may be quite small in relation to other, region-wide forces which are acting to raise or depress housing prices. Such factors might include changing interest rates, extraordinary job growth, or, as documented below, region-wide housing supply constraints.

At first glance the idea of region-wide housing limits doesn't seem to quite square with reality. Thus far, the only California counties to enact formal, comprehensive, county-wide growth controls are Ventura, Napa, and Santa Cruz.¹⁵

Yet formal growth controls of the types discussed throughout this paper are only one of the methods California cities and counties have at their disposal for limiting growth. Cities and counties can refuse requests to rezone developable land from one use to another, thereby limiting the intensity and supply of new development. Cities can refuse to annex vacant land supplies needed

to accommodate growth. Cities and community groups can pressure developers to reduce project densities. Cities and utility districts can refuse to extend utility services to developing areas, thereby limiting their development potential. The fact is, cities and counties can *and do* use all of these methods, both formally and informally, to restrict growth and development.

What is most significant about these practices is that they occur all the time, and as frequently in cities that have pro-growth reputations as in cities that have reputations for being anti-development. For example, of the 443 California cities and counties that responded to a survey of growth controls undertaken by Glickfeld and Levine, 27.3 percent have undertaken systematic and comprehensive down-zoning efforts. Another 29.3 percent require documentation of adequate service levels prior to the granting of a residential building permit. And 17.9 percent have implemented urban limit lines. None of these programs show up in statewide surveys as being growth-control programs, yet cumulatively they have as great an impact on the rate and location of new development as do more formal growth controls.

Some of these practices are pursued after careful, open, and deliberate planning. Many others, however, are pursued in an ad hoc fashion, as a series of seemingly independent decisions on individual development projects. They are ad hoc only in the sense that they do not conform to a clearly articulated growth-management program. Individually, such practices rarely seem anti-growth or arbitrary. Cumulatively, however, they can have a *region-wide* effect on the supply of housing. Nor is the problem of ad hoc growth controls limited to California. A recent report by the Advisory Commission on Regulatory Barriers to Affordable Housing concluded that such ad hoc policies, widely labeled as NIMBYism ("Not In My Back Yard"), were the single greatest threat to the national supply of affordable housing.

A Simple Model of Housing Shortfalls

No one in California keeps track of the number of housing units lost through the application of ad hoc growth controls; that number can only be estimated from secondary data. To do so, we developed a simple numerical model of county and regional housing shortfalls (see Table 5). The model compares the measured change in the number of housing units for the period 1980-87 with the number of additional units required to meet the housing needs associated with local employment growth. Comparisons are reported on a county-by-county basis for selected major metropolitan areas. The underlying presumption of this model is that housing-unit growth in a county or metropolitan area should match employment growth, after adjusting for changes in household

**TABLE 5: Housing Unit Shortfalls for Selected California Counties and Metropolitan Areas:
1980-87**

METRO AREA and County	Housing Unit Growth: 1980-87			Labor Participation	Adjusted Shortfall	Percent Shortfall
	Actual	Required(1)	Difference	Adjustment Factor		
GREATER LOS ANGELES	124,628	351,597	(226,969)	0.84	(191,595)	1.54
Los Angeles	56,482	83,279	(26,797)	0.86	(23,165)	0.41
Orange	24,663	115,956	(91,293)	0.76	(69,327)	2.81
Riverside	17,597	78,962	(61,365)	0.85	(52,416)	2.98
San Bernardino	21,681	97,074	(75,393)	0.83	(62,763)	2.89
Ventura	4,205	52,322	(48,117)	0.78	(37,682)	8.96
INNER SF BAY AREA	32,139	82,468	(50,329)	0.81	(40,720)	1.27
Alameda	9,327	12,063	(2,736)	0.84	(2,285)	0.24
Contra Costa	8,432	47,968	(39,536)	0.82	(32,248)	3.82
San Francisco	2,442	(2,611)	5,053	0.88	4,428	-1.81
Santa Clara	7,636	35,604	(27,968)	0.75	(21,040)	2.76
San Mateo	3,018	5,753	(2,735)	0.81	(2,216)	0.73
Marin	1,284	4,525	(3,241)	0.74	(2,386)	1.86
SAN DIEGO COUNTY	30,609	162,838	(132,229)	0.78	(103,189)	3.37
SACRAMENTO AREA	17,729	93,812	(76,083)	0.84	(64,135)	3.62
Sacramento	10,191	50,923	(40,732)	0.83	(33,694)	3.31
San Joaquin	2,978	18,286	(15,308)	0.89	(13,610)	4.57
Yolo	1,468	9,406	(7,938)	0.85	(6,742)	4.59
Placer	3,092	18,062	(14,970)	0.81	(12,168)	3.94
NAPA-SOLANO-SONOMA	7,638	59,008	(51,370)	0.77	(39,772)	5.21
Napa	527	4,624	(4,097)	0.84	(3,435)	6.52
Solano	3,209	23,248	(20,039)	0.76	(15,216)	4.74
Sonoma	3,902	32,578	(28,676)	0.76	(21,845)	5.60
STANISLAUS-MERCED	4,994	20,570	(15,576)	0.83	(12,957)	2.59
Stanislaus	3,938	16,564	(12,626)	0.84	(10,633)	2.70
Merced	1,056	4,440	(3,384)	0.81	(2,754)	2.61
MONTEREY-SANTA CRUZ	3,058	25,207	(22,149)	0.79	(17,538)	5.74
Monterey	1,718	8,449	(6,731)	0.80	(5,412)	3.15
Santa Cruz	1,340	18,020	(16,680)	0.79	(13,169)	9.83
STATE of CALIFORNIA	251,515	943,976	(692,461)	0.80	(553,969)	

*Notes: 1. Required housing units computed assuming equivalent jobs-housing growth ratios
as during 1970-80; adjusted for changes in household size.*

*Sources: California Dept. of Finance; County Business Patterns; U.S. Census;
Bureau of Labor Statistics*

size and household labor force participation. The model neither distinguishes between single-family and multi-family units nor between owner and renter-occupied units.

The model results are reported in short form for selected urban counties in Table 5. The first column lists the net change in the number of housing units by county between 1980 and 1987. The second column lists the number of additional housing units required to balance county-wide employment growth after accounting for changes in average household size. The third column is the difference between these two numbers, or gross housing-unit shortfall. The fourth column is a labor force participation rate adjustment factor, which accounts for the fact that the number of workers per household has been increasing over time; thus, fewer housing units are needed to accommodate the same number of workers. The fifth column adjusts the gross shortfall by the labor force participation rate factor to yield an adjusted housing-unit shortfall estimate.

In the fifth and final column, the adjusted housing-unit shortfall is expressed as a percentage of the total housing stock in each county. Positive percentages mean that county housing production has failed to keep pace with county employment growth; negative numbers and percentages mean that housing unit growth has led employment growth. Statewide, housing production lagged demand by more than half a million units during the 1980-87 period.

The model results for specific California counties and metropolitan areas and counties are also quite revealing:

- As might be expected, housing production significantly lagged job growth in several counties well known for their slow-growth sentiment: Marin, Napa, Santa Barbara, San Luis Obispo, Santa Cruz, and Ventura.¹⁶
- Housing production *also* lagged job growth in several counties well-known (until recently) for their pro-growth policies: Riverside, San Bernardino, Contra Costa, San Joaquin, Sacramento, Solano, and San Diego.
- Housing production kept pace with employment growth in two counties widely noted for their anti-growth sentiment: San Francisco and San Mateo.

There are only two reasons why housing growth would lag job growth at the county or metropolitan level. In the first case, a rapid expansion of a county or metropolitan economy might *temporarily* leave housing production behind. This was certainly true during the 1984-86 period, as homebuilders and homebuyers throughout California struggled to keep pace with booming regional economies. In the second case, a combination of formal and informal growth controls could serve to *permanently* limit housing production. To what extent are these housing shortages the result of

ad hoc versus formal growth controls? Without further data, it is impossible to say. What is possible to say is that except for a few central coast counties, the growth-limiting effects of purely local growth controls have been quite small.

These results help explain why California home prices increased so dramatically during the 1980s. Throughout California, but especially in the state's coastal markets, housing supply failed to keep pace with housing demand. And the greater the absolute housing shortfall, the greater the upward pressure on home prices. Above all, Table 5 indicates that the problem of insufficient housing production was (and still is) systemic throughout California, and not limited to cities and counties that have enacted formal growth controls. What is pushing up California housing prices are region- or county-wide housing shortages. Compared to such regional shortfalls, the growth-limiting effects of local growth-control programs are but a drop in the bucket.

These findings should not be viewed as an exoneration of local growth-control programs, however. To the extent that such programs contribute to regional housing shortfalls, they directly contribute to rising housing prices and declining affordability.

VI. GROWTH CONTROLS and LOCAL FISCAL HEALTH

Growth and the Fiscal Treadmill

Economists oppose growth controls because of concerns over higher housing prices. Many city managers and municipal finance officers oppose growth controls because of fears that slower growth will translate into reduced public revenues. Local dependence on the property tax as a source of revenue for California cities and counties has been steadily decreasing since the 1977 passage of Proposition 13 (which limited tax assessment and tax rates). In place of property taxes, local governments have turned to user and impact fees, developer exactions, and sales tax revenue. As many California cities and counties have discovered, the easiest way to raise needed revenue has been to encourage certain types of growth and development.

Growth adds to municipal revenues in two ways. First, because of inflation, tax assessments on new development projects are much higher than on existing development. Thus, over time, more and more of the revenue base for local government in California has been shifted toward new development. Second, through formal systems of exactions, impact fees, and development agreements, cities have been able to require developers to build and/or pay for infrastructure improvements as a condition of development approval.

By the early 1980s, the once radical idea that new development should be the primary funding source for all new capital infrastructure (as well as additional public services) had become the conventional wisdom throughout California. In city after city, "making growth pay its own way" and "pay as you grow" became the watchwords of local development policy. For many city officials, sound development policy meant finding the right balance between the costs of servicing new development and the revenues and improvements generated by new development.

The emphasis on the fiscal impacts of growth began to crowd out other concerns; development was approved when it made fiscal sense, denied when it was insufficiently profitable. Small residential developments (which were perceived to cost more to service than they generated through fees) were discouraged, while retail and office projects (which generated additional tax revenues or cost less to service) were encouraged. By the mid-1980s, most growing communities in California were involved with what had come to be pejoratively known as "cash-box zoning" and "fiscal zoning."

The combined effect of these trends has been to force many communities onto a sort of "pay as you grow" fiscal treadmill. In order to finish planned infrastructure or provide needed services, they must continue to grow, since it is development that generates needed revenues. On the other hand, new growth simply adds to the demand for infrastructure improvements and adequate public services -- demands which must then be funded through additional development.

Assessing Community Fiscal Health

What happens to communities that have tried to get off the fiscal treadmill and have tried to slow their rate of development? Has their fiscal health suffered as a result? In other words, does growth control affect a community's ability to pay for needed public services and infrastructure?

This analysis is a comparison of community fiscal health between six of the seven growth-control cities, and five of the six non-growth-control communities. Budgetary information for each city was obtained from the California State Controllers Office and covers the 1980-88 period.¹⁷

Assessing a community's fiscal health is not as straightforward as it might seem. Unlike private companies, cities are rarely subject to detailed audits. This means that published city budgets are little more than prospective guidelines as to how money is to be raised or spent; these budgets are not as restrictive as they might seem.

Comparing Revenue and Expenditure Growth

In the short run, growth controls create a wedge between revenue and expenditure growth. On the revenue side, growth controls slow the rate of development, and thus slow the growth of the property tax base. In the absence of other revenue increases, this can lead to a reduction in overall municipal revenue growth. At the same time, growth controls do little to alleviate the short-term demand for public services. As a result, slow-growth cities may find it more difficult to fund obligatory city services.¹⁸

To determine whether growth-control cities face greater fiscal hardships, we divided local own-source revenues by local expenditures for each city and year. Local own-source revenues include all revenues except intergovernmental grants, municipal utility income, and revenues from bond-financing. Local expenditures include all expenditures except those for municipally-owned utilities. As a measure of community fiscal health, the ratio of own-source revenues to expenditures should generally exceed 1.0, and either be level or increase over time. A long-term ratio value less than 1.0 means that a community is unable to pay for locally incurred expenditures with locally generated revenues. Or, to put it another way, a community has become overly dependent on external sources of funding. A rising ratio of revenues-to-expenditures means that own-source revenues have risen faster than expenditures; a falling ratio indicates that expenditures are growing faster than revenues.

Figure 4 presents revenue and expenditure comparisons for the various case-study and comparison cities for the period between 1981 and 1988. Throughout this period, the ratio of own-source revenues to expenditures exceeded only one in all of the communities studied except for Turlock, Fairfield, and Simi Valley. When compared on a case-by-case basis, the various growth-control communities slightly outperformed their respective pro-growth counterparts. That is, revenue growth outpaced expenditure growth by a greater margin in the slow-growth cities than in the pro-growth cities. This is particularly true for Livermore (as compared to Fairfield), Lodi (as compared to Turlock), and Camarillo (as compared to Simi Valley). It is somewhat less true for Redlands (as compared to Upland) and Thousand Oaks (also compared to Simi Valley).

The one exception to this generalization is Walnut Creek, where the ratio of revenues to expenditures slipped from above that of Redwood City in the early 1980s to below that of Redwood City in the mid-1980s. Significantly, Walnut Creek's comparative decline was for a period of accelerated commercial growth, prior to the adoption of Measure H. In more recent years -- since the adoption of Measure H -- Walnut Creek's performance has improved.

FIGURE 4:

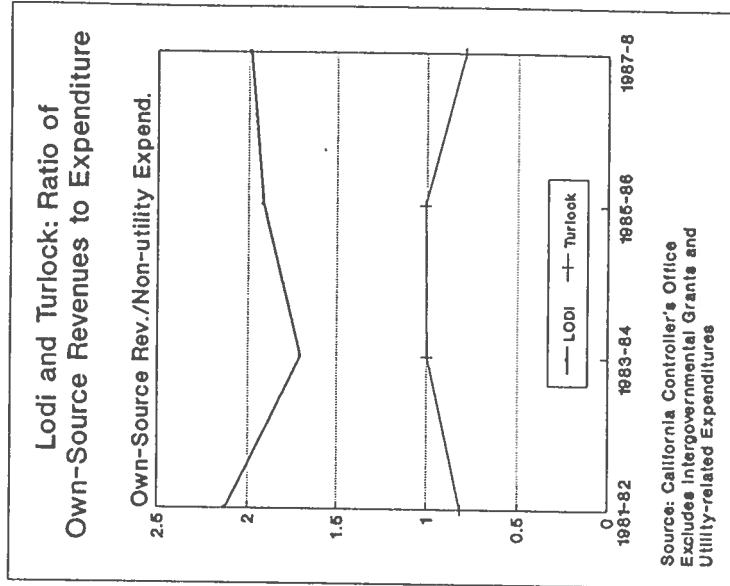
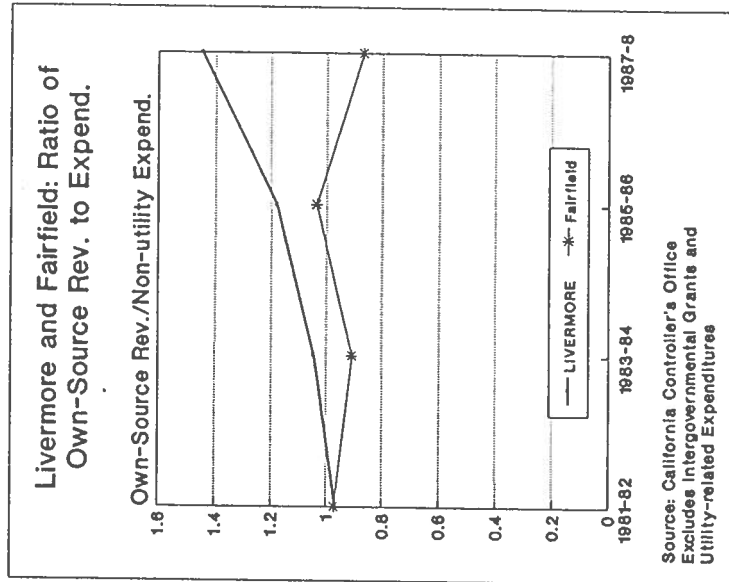
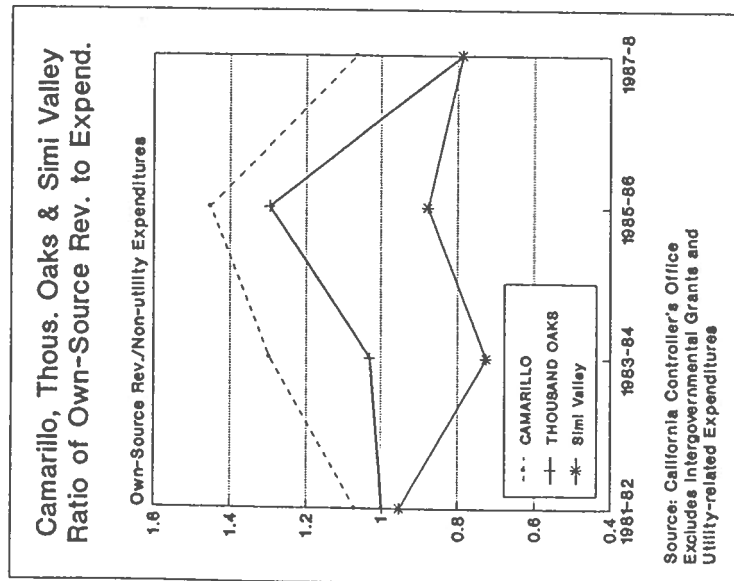
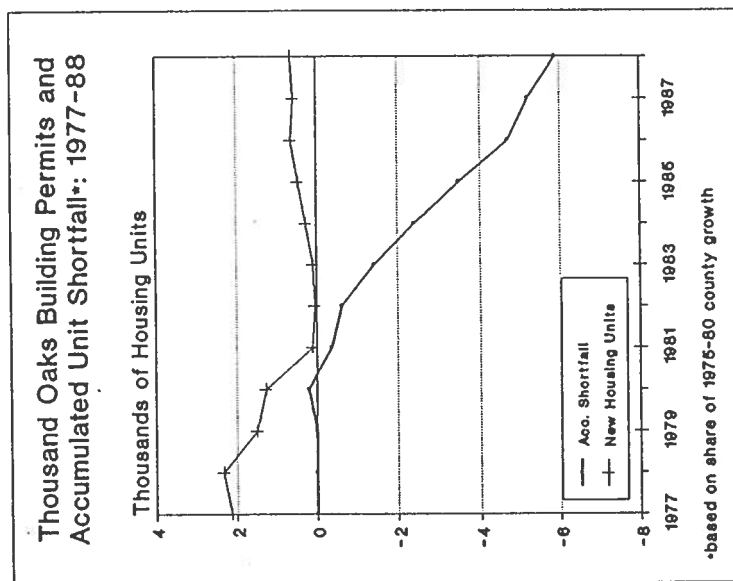
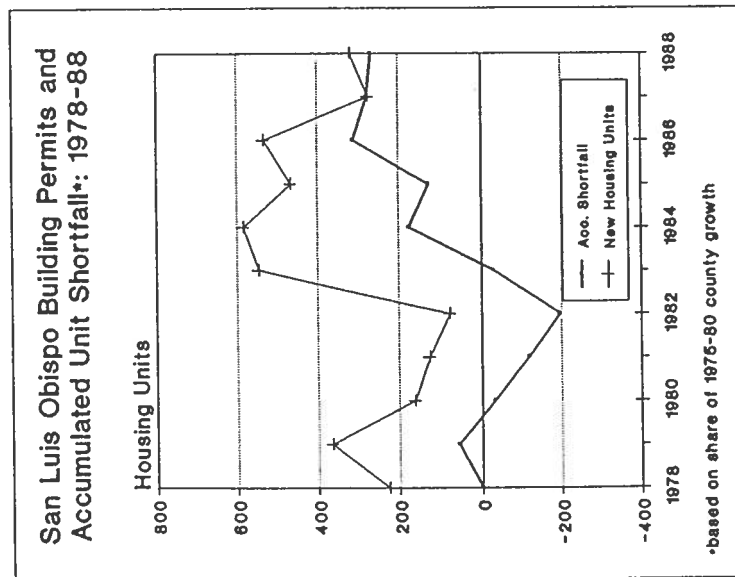


FIGURE 4: (Continued)



Assessed Valuation Trends

As noted above, Proposition 13 created a permanent (and growing) wedge between tax-assessed valuation and market valuation, thereby skewing traditional measures of tax capacity such as per capita assessed property valuation. This particular problem aside, per capita assessed valuation remains a reasonably useful gauge of community fiscal health. All else being equal, a decline in per capita assessed valuation indicates that the demand for city services and infrastructure, as manifest through population growth, is increasing faster than the taxable property base. Communities in which per capita assessed valuation is declining need to look for other, non-tax revenue sources.

The question of how, if at all, growth controls affect assessed valuation and per capita assessed valuation is really an empirical one. On one side of the argument, growth controls which reduce the rate of development (and thereby reduce the rate of growth of the property tax base) may adversely affect a city's fiscal capacity. Conversely, to the extent that growth controls also slow the rate of population growth, they could conceivably lead to an increase in per capita assessed valuation.

Throughout the 1980s, per capita assessed valuation rose in both the case-study communities and their pro-growth counterparts (see Figure 5). Significantly, the rate of increase in per capita assessed valuation was generally greater for the slow-growth cities than for their pro-growth counterparts. There are two reasons why this might be so. First, by limiting the supply of new development, growth controls make the remaining supply more valuable. This in turn increases assessed valuation. Second, by explicitly limiting residential development but not commercial development, the majority of growth-control ordinances encourage the long-term substitution of commercial development for residential development. And since commercial projects usually generate higher assessments per increment of population growth than residential projects, this form of substitution generally benefits city treasuries.

Per Capita Debt Trends

By slowing the pace of development, growth controls limit the financial leverage cities have over developers. In particular, developers may be less willing to build or finance large capital projects for cities unless they can be assured of a long-term development entitlement -- the types of assurances yearly growth caps make impossible. Thus, cities that enact growth controls may, over time, find themselves assuming an ever larger share of their infrastructure development and maintenance costs.

FIGURE 5:

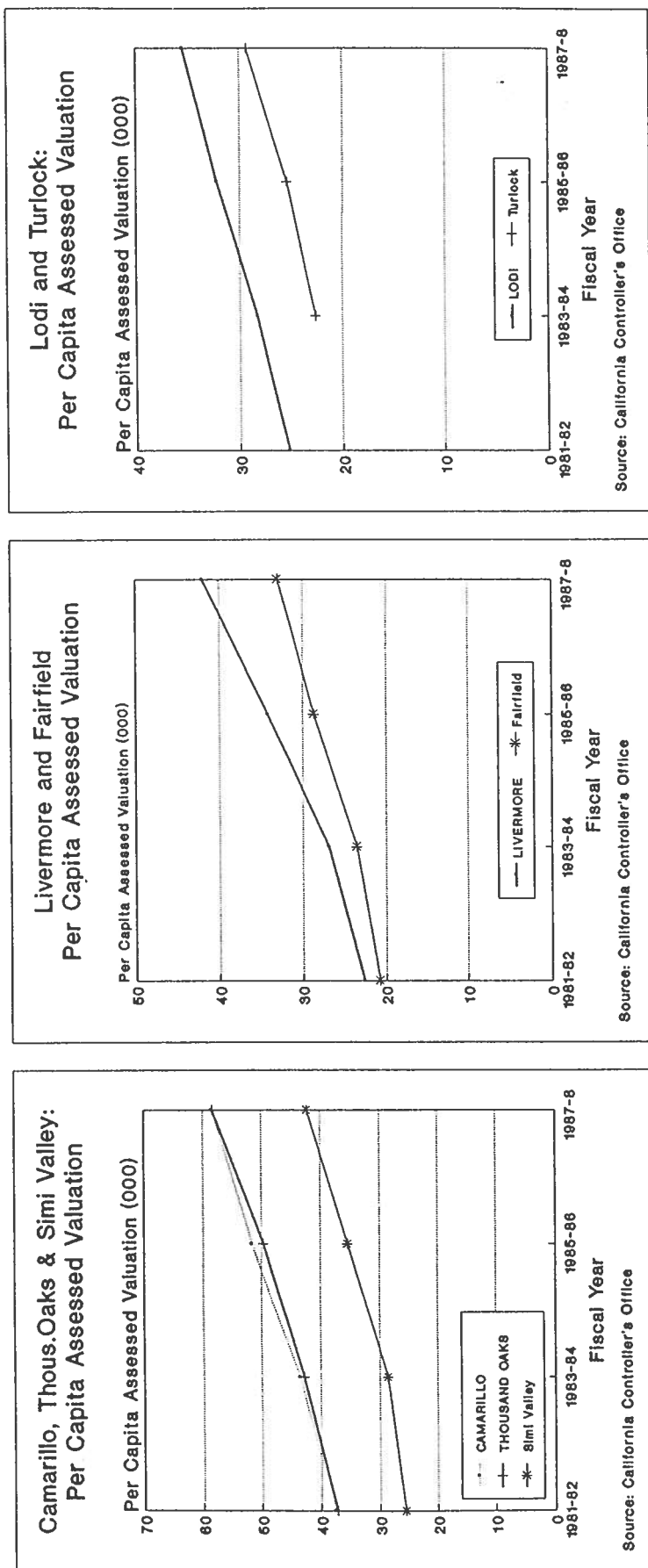
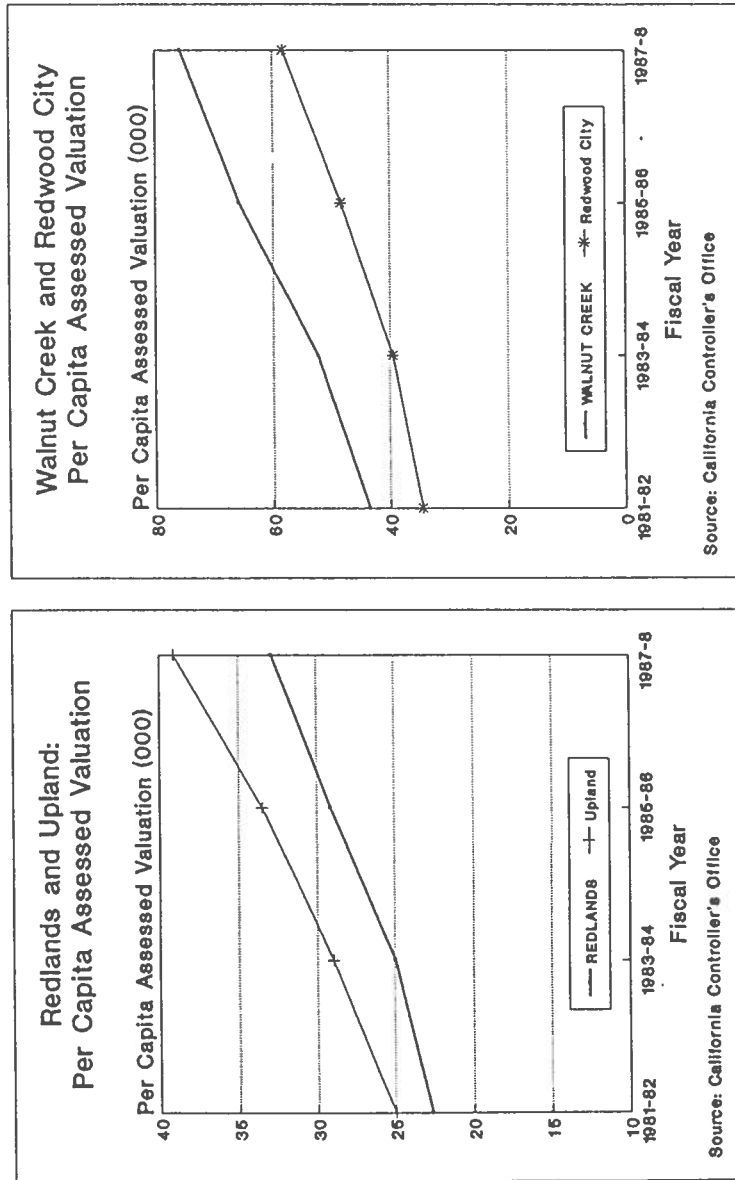


FIGURE 5: (Continued)



Cities finance new infrastructure through the issuance of debt, usually in the forms of general obligation (GO) bonds, revenue bonds, or other public purpose bonds. Measured on a per capita basis, the amount of outstanding debt normally rises and falls as cities build or renovate their capital facilities. Unlike other measures, per capita debt levels can be easily compared between cities. High per capita debt levels are not bad, per se, provided that a city has the financial capability to meet its debt service, and that the capital is well used. Debt levels may jump upward as a city takes on a new debt obligation, but over time they should trend downward as old obligations are retired. A pattern of rising per capita debt levels over an extended period of time usually indicates poor fiscal or capital management.

Generally speaking, per capita debt obligations declined during the 1980s, both for the various growth-control cities and for the corresponding pro-growth cities (see Figure 6). That is, per capita debt levels and trends do not appear to be a function of local growth policy. The one exception to this was in Redlands, which floated a \$25 million bond issue in 1986 to purchase and preserve orange groves threatened by development. Regardless of their positions on growth, California cities chose not to take on new debt obligations at the same time that they continued to retire old obligations.

Summary

In summary, growth controls do not appear to have adversely affected the fiscal positions of the communities that have adopted them. Growth controls do not appear to reduce a community's revenue base, or the rate of growth of that base. If anything, the rate of growth in the property tax base has been greater among growth-control cities (as represented by the six case-study communities) than among comparable pro-growth communities. Nor have growth-control ordinances imposed a greater debt burden on the cities that have adopted them.

Overall, it appears that growth-control communities have been better able to manage spending than their pro-growth counterparts while not suffering undue revenue declines. This does not necessarily mean that growth control is good for city budgets, however. What is more likely is that city finances are in better shape in those communities with traditions of good government, good management, good planning, and higher levels of citizen involvement -- exactly the types of communities most likely to try to control growth.

FIGURE 6:

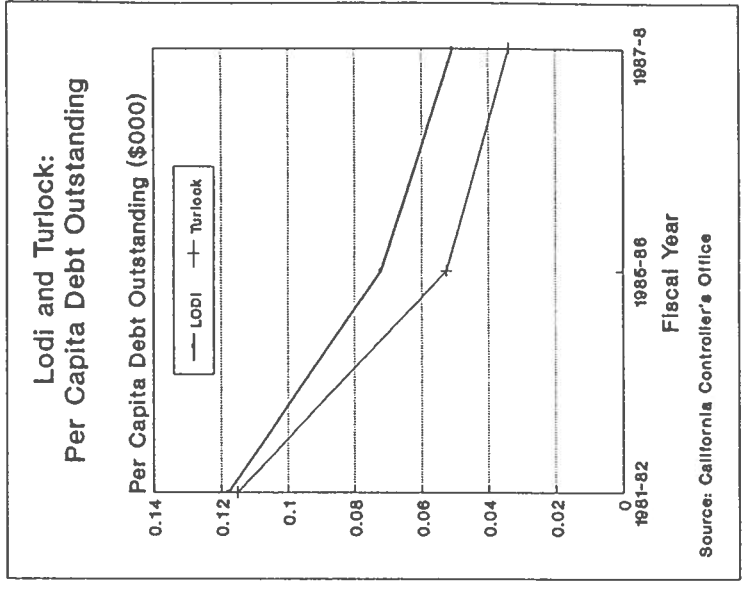
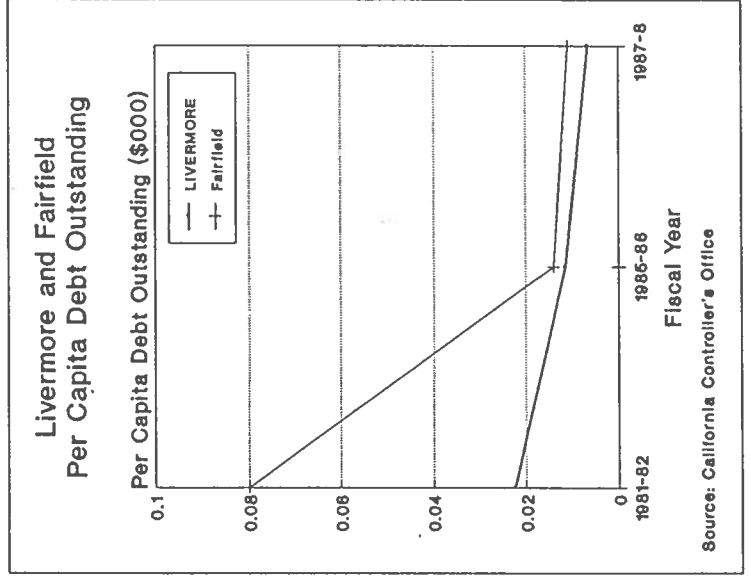
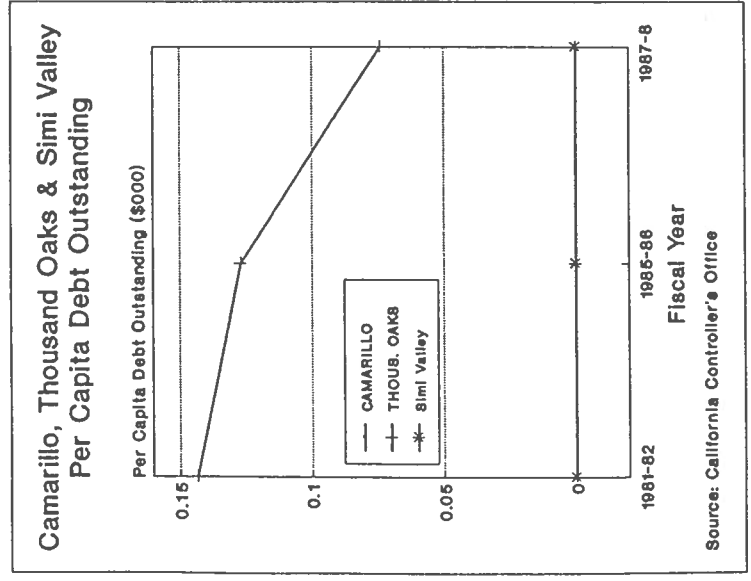
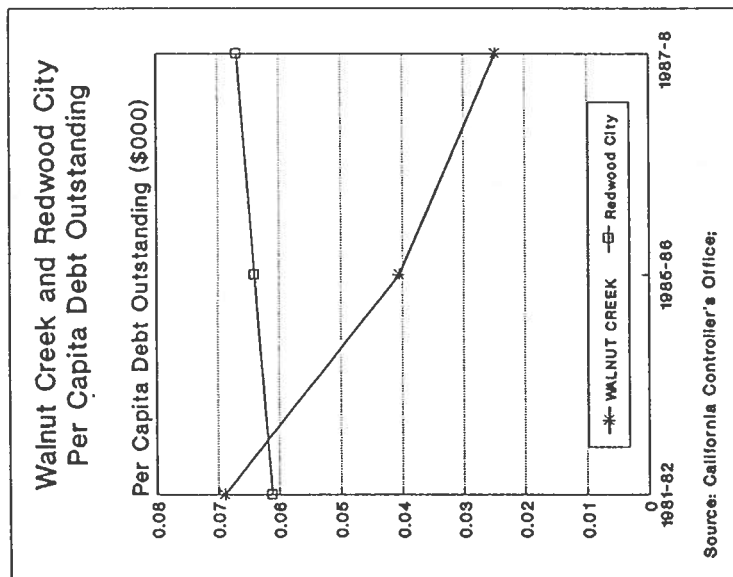
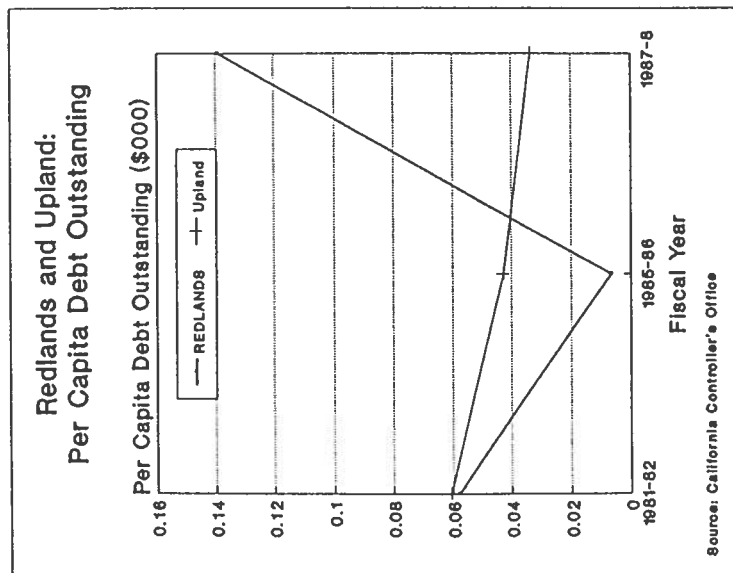


FIGURE 6: (Continued)



II. CONCLUSION: TOWARD "GOOD" GROWTH CONTROL

The various dimensions of this analysis lead to a single surprising conclusion: viewed over a ten-year period, local growth-control programs -- of the types adopted in seven mid-sized California cities during the early 1980s -- have been generally irrelevant to the proper management of urban growth.

- Because they have not substantially limited growth or development, local growth-control programs have had only a minimal effect on local housing markets. In fact, housing prices remain lower in some growth-control or slow-growth cities than in nearby pro-growth cities.
- Slow-growth communities enjoy slightly better fiscal health than pro-growth communities. This difference, however, is probably due to the observation that growth-control programs have been somewhat more likely to have been enacted in cities with competent planning and management.

In the long run, in fact, careless growth control may be much worse than no growth control. In too many of the communities that have adopted them, local growth-control programs have come to replace, not augment, sound planning practices. In such cities, the function of the planning commission and of development-related departments has changed from one of developing effective plans for dealing with growth and its impacts to one of simply administering a permit allocation system. Where local growth-control measures were originally intended to be one of several approaches to managing development, in many cities they have instead become the only approach.

Learning from Lodi and Thousand Oaks

One of the differences between good growth-control policies and ineffective growth-control policies is that good growth policies function together with, not in place of, other local planning and development policies -- specifically those articulated in the community general plan. The value of growth controls as part of a coordinated growth-planning program is evident from the successes realized in two of the seven case-study communities, Lodi and Thousand Oaks.

Lodi's Measure A

Until 1989, Lodi's approach to controlling growth -- requiring that all annexations, no matter how minor, be approved by the electorate -- was one of the strictest and most unusual in the state. Unlike growth-control programs enacted in other cities, Lodi's Measure A regulated *where* growth should occur, not how much should occur. The specific goal of Measure A was to redirect growth

away from prime agricultural lands and openspace at the city's boundary, and toward previously passed-over infill sites.

Over an eight-year period, Lodi's limit on annexation proved to be virtually airtight: of the 23 annexation proposals brought to the electorate, only 2 were approved by the electorate. Unlike most Central Valley cities during the 1980s, Lodi stopped growing outward. Instead, it grew *inward*. Not only did Lodi's population growth rate increase, but its share of county population growth also increased. Measure A also served to slow the outward movement of commercial and retail activity. As a result, Lodi's downtown, unlike so many other downtowns in the Central Valley, has remained an economically viable and vibrant place.

This re-direction of outward growth pressure was not accomplished solely through the administration of Measure A. Shortly after the passage of Measure A, the Lodi Planning Department revised its development fee structure and discretionary review process to make it easier for developers proposing infill development.¹⁹ Equally important, the city continued to aggressively pursue the development objectives laid down in the Lodi General Plan.

Measure A has produced some adverse impacts. Some residential development that would have occurred in Lodi has spilled over into unincorporated areas of San Joaquin County -- along Lodi's northern and southern edges. Residents of the subdivisions in these unincorporated areas are able to take advantage of most city services, particularly the city's superior school system, while paying much lower property taxes.²⁰

Ultimately, Measure A proved to be a victim of its own success. Because Lodi was able to better manage its growth and development than its neighbors, it was able to maintain its high quality of life. This only served to make the city more attractive to potential residents, further adding to growth pressures. In August of 1989, Lodi's Measure A was struck down by the California Supreme Court.

Thousand Oaks

Thousand Oaks is the largest suburban community in Ventura County, a county known for its wealth and concerns with environmental issues. In 1980, the citizens of Thousand Oaks enacted their own Measure A, limiting residential building permits to 500 per year. In the ten years that Measure A has been in place, Thousand Oaks has continued to grow. Significantly, however, this growth has not overburdened city services, sprawled into environmentally sensitive areas, or substantially altered Thousand Oaks' suburban character. At the same time that it has grown, the

city has been able to substantially increase the supply of moderately affordable housing, as well as undertake several major civic improvements.

How has Thousand Oaks managed to accomplish these things? In part, they can be attributed to the city's wealth, and to the willingness of local residents to spend tax dollars on desired services. But they are also due, in part, to the careful administration of Thousand Oaks' growth-control program. One key features of Thousand Oaks' growth-control program is that unused permit allotments are automatically returned to the city for discretionary allocation. Rather than have such allotments disappear, city planners use them to reward developers who provide affordable housing or higher quality projects. A second key feature of the Thousand Oaks program is that the point system used to evaluate competing projects explicitly favors projects with affordable housing. Equally significant, Thousand Oaks' growth-control program is administered in a way that supplements, rather than replaces, what was already a very strong planning process. Even before the 1980 passage of Measure A, Thousand Oaks planners had prepared and were implementing a long-term capital improvements plan. Finally, Measure A is administered in a manner which buttresses very strong existing subdivision ordinances.

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NOTES

¹Including population caps, housing unit caps, and commercial development caps.

²Based on 1980 population.

³Making the link between growth-control initiatives and growth-control ordinances is not as easy as it might seem. Relatively few growth-control ordinances have been adopted directly via initiative (see Table 1), and the majority of growth-control initiatives have failed at the ballot box (Glickfeld and Graymer, 1988). At the same time, many failed growth-control initiatives have prompted the subsequent adoption of growth-control and management measures through the legislative process. In this sense, the majority of growth-control initiatives have probably been successful in prompting a change in public policy, although perhaps not always in precisely the way the initiative writers would have wanted.

⁴For a comprehensive list and discussion of approaches to growth management in California, see Irving Schiffman, *Alternative Techniques for Managing Growth*, Institute of Governmental Studies, University of California at Berkeley, 1989.

⁵This includes residential and commercial infrastructure requirements and public service standards, comprehensive residential downzoning, and specific commercial location requirements.

⁶The technique of comparing outcomes between statistically matched cases -- one of which has undergone treatment or intervention, the other which has not -- is known as quasi-experimental design (see Willemain, 1980). It is widely used in medical research to compare the efficacy of certain treatments. It is also widely used in social science research to evaluate the effects of particular policy interventions.

⁷In contrast to the San Francisco Bay Area, the Los Angeles Basin, and San Diego County, which import most of their water from the Sierra Nevada mountains and the Colorado River.

⁸1989 population estimates were assembled from the California Department of Finance.

⁹Lodi's Measure A requires that all annexation be approved by a majority vote of the citizenry. Although this is not "hard core" growth control on its face, the pattern of referenda results has been quite clear: over a 9-year period, only 1 of 23 annexation proposals was approved.

¹⁰In 1991, Measure H was overturned by the California Supreme Court, because it conflicted with provisions of Walnut Creek's General Plan -- at least the version of the general plan in effect when the ordinance was adopted. Anticipating this decision, Walnut Creek updated its general plan in 1988 to specifically include the provisions of Measure H. As a result, the key provisions of Measure H continue to remain in place.

¹¹The one exception to this is along the central coast of California, where cities and counties from San Mateo County in the north to Ventura County in the south, have effectively and comprehensively turned off the growth tap.

¹²The extreme stringency of Walnut Creek's Measure H is a function of how the ordinance was implemented. Thousand Oaks' Measure A (which limited new home construction to 500 units per year) was adopted after ten years of growth during which time the city's population more than doubled.

¹³For example, Glickfeld and Levine (1990) found that 44.2 percent of the communities that have adopted local growth-control programs also provide density bonuses for the development of affordable housing. Moreover, those communities that are the most stringent in their attempts to control development are also the most active in their attempts to foster the development of affordable housing. This dichotomy between discouraging market rate development and encouraging the development of so-called "affordable" housing is an attempt by local governments to ameliorate the inflationary pressures inherent in local growth controls.

¹⁴As Schwartz and Zorn (1988) have pointed out, many of these studies have been characterized by methodological flaws which render their conclusions open to interpretation.

¹⁵A variety of countywide residential growth limits were on the ballot in Riverside, San Diego, and Orange Counties in 1988; however, all such proposals were defeated (Landis and Kroll).

¹⁶Counties labeled as slow-growth either have themselves implemented a significant number of growth-control measures or include a significant number of cities that have implemented growth-control measures; as reported in Glickfeld and Levine (1990).

¹⁷The California Controllers Office tracks the following revenue, expenditure, and debt categories for cities:

1. Revenue Accounts: taxes, special benefit assessments, licenses and permits, fines and forfeitures, uses of money, intergovernmental grants, and service charges, among others
2. Expenditure Accounts
3. Debt Accounts: general obligation debt, revenue bond debt, special assessment and obligation debt

This analysis does not include comparisons of San Luis Obispo with San Luis Obispo County. Under California law, cities and counties have substantially different service mandates and revenue options.

¹⁸In the long run, growth controls may also allow cities to reduce their expenditures.

¹⁹In fact, infill development proved to be so popular in Lodi, that it quickly outstripped available infrastructure capacity. In time, resident concern shifted from being focused solely on outward expansion, to include rising congestion and over-crowding in existing neighborhoods. Responding to such concerns, and to the prohibitive cost of upgrading existing infrastructure, in 1987, the city of Lodi substantially down-zoned many infill neighborhoods.

²⁰While it may be argued that such "free-rider" behavior is the result of inappropriate county growth management policy, this problem does point out the need to coordinate growth-control programs between adjacent governmental entities.

APPENDIX A: California Cities and County Growth Control Measures: 1989

<i>Cities</i>	<u>Annual</u>	<u>1989</u>	<u>Annual</u>	<u>1989</u>	<u>Annual Office or</u>
	<u>Housing Cap</u>	<u>Population</u>	<u>Population Cap</u>	<u>Population</u>	<u>Industrial Space Cap</u>
	San Diego	1,086,600	Oceanside	117,600	Avalon
	Riverside	209,700	Simi Valley	99,800	Cupertino
	Pasadena	132,200	Escondido	99,000	Del Mar
	Oceanside	117,600	Santa Barbara	79,500	Gilroy
	Thousand Oaks	104,400	Monterey Park	64,600	Imperial
	Simi Valley	99,800	Vista	61,700	Palo Alto
	Escondido	99,000	Redlands	59,800	Pasadena
	Monterey Park	64,600	Napa	57,900	San Francisco
	Vista	61,700	Livermore	56,800	San Jose
	Corona	61,000	Pleasanton	52,000	San Luis Obispo
	Redlands	59,800	Santa Cruz	49,800	San Rafael
	Pleasanton	52,000	Camarillo	48,300	South Lake Tahoe
	Union City	49,900	Novato	47,500	Sunnyvale
	Santa Cruz	49,800	Davis	44,250	Vernon
	Camarillo	48,300	San Luis Obispo	41,050	
	Novato	47,500	Manteca	39,650	
	San Luis Obispo	41,050	San Clemente	39,100	
	Manteca	39,650	Hemet	33,350	
	San Clemente	39,100	Pleasant Hill	31,750	
	Seaside	36,700	Gilroy	29,550	
	Rohnert Park	33,350	Norco	25,200	
	Gilroy	29,550	Belmont	25,000	
	Tracy	29,400	Maywood	24,650	
	Belmont	25,000	San Juan Capistrano	24,500	
	San Juan Capistrano	24,500	Santa Paula	24,000	
	Santa Paula	24,000	Morgan Hill	23,800	
	Morgan Hill	23,800	South Lake Tahoe	22,050	
	South Lake Tahoe	22,050	Hollister	18,100	
	South Lake Tahoe	22,050	Fillmore	11,200	
	Hollister	18,100	Dixon	10,750	
	Fillmore	11,200	Morro Bay	10,150	
	Dixon	10,750	Half Moon Bay	8,825	
	Morro Bay	10,150	Sonoma	7,950	
	Half Moon Bay	8,825	Ojai	7,900	
	Sonoma	7,950	Brentwood	6,825	
	Ojai	7,900	Escalon	4,130	
	Brentwood	6,825	Avalon	2,490	
	Cotati	5,175	San Juan Battista	1,640	
	Escalon	4,130			
	Avalon	2,490			
	San Juan Battista	1,640			
	Colma	710			

Continued on next page

APPENDIX A (Continued): California Cities and County Growth Control Measures: 1989

<i>Counties</i>	<u>Annual</u>	<u>1989</u>	<u>Annual</u>	<u>1989</u>
	<u>Housing Cap</u>	<u>Population</u>	<u>Population Cap</u>	<u>Population</u>
SAN LUIS OBISPO		88,600	SANTA CRUZ	130,500
SANTA BARBARA		160,100	NAPA	37,150
NAPA		37,150		
SAN MATEO		56,100		
SANTA CRUZ		130,500		
VENTURA		93,600		

Source: Glickfeld and Levine (1990)
