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IS GROWTH CONTROL A PLANNING FAILURE?

Ted K. Bradshaw¹

The management of urban growth has recently taken a prime position in California policy as well as in the discussions of academics, planners, and policy analysts.² Growth management, however, is an ambiguous concept comprised of a diverse set of tools aimed at resolving or preventing a variety of urban dysfunctions. At one extreme, growth control has captured attention through highly publicized citizen campaigns to virtually stop local construction and to place population caps on local growth.³ These well-known growth controls are usually popular initiatives in defiance of local planning and governmental decision-making. At the other extreme, growth management can operate effectively as part of the normal planning and local governmental administrative process and, when working well, does not necessarily lead to citizen opposition or conflict. With few exceptions, growth controls aimed at effectively stopping growth are evidence of the failure of planning under what are often unrelenting growth pressures.

This paper seeks to explore the special way in which growth management activities are manifested in California counties and cities by presenting some results from empirical research on California's diverse growth management and control activities. By using the combination of several databases, the research aims to show the development of different growth control strategies and the policy issues the state must face as it addresses the planning issues that are involved with growth management. The paper concludes by discussing how planning in California must respond to major changes in the patterns of growth in order to avoid continuing conflict.

Conflict Over Rapid Growth in California

It is increasingly clear that growth control involves more than just slowing urban growth. It is, in fact, an attempt to preserve or capture the perceived benefits of a way of life with uncongested neighborhoods and adequate public services. As David Dubbink found in his study of two small growth-fighting communities, there is a "shared rhetoric about rural living that conceals quite divergent concepts and objectives."⁴ The same could be said for large urban areas. In fact, the more one looks at growth management strategies and objectives, the more it appears that there is not one growth control phenomenon, but many.

The rapid population growth which has almost always been a feature of California looks destined to continue as a major influence on the state's economy. Historically, California's population has doubled every 20 years since 1870, reaching 20 million in 1970.⁵ From 1970 to 1990 California added an additional 10 million persons, with most of the increase in a surge of growth in the 1980s after a relatively static 1970s decade. The most recent state projections are for a total

of 39 million persons by the year 2005.⁶ Many unknown factors will actually shape California's future growth rate, but a reasonable planning perspective is that California's population will grow by some 10 million persons within the next twenty years, more or less depending on actual economic and migratory events.

At the start of the 1990s, California appears to be entering a period of slower growth, and economic optimism is particularly low as evidenced by media attention on the state's problems.⁷ However, the slowing of the state's growth in the early 1990s is more likely caused by the national and global economic downturn and the decline in military purchases, rather than by problems of growth such as less affordable housing, traffic congestion, lengthened commute times, environmental degradation, land-use conflicts, fiscal problems in municipal government, or various social tensions.⁸ Consequently, because of the recession, some of the pressures to slow growth in California have been replaced with new efforts to stimulate economic growth. It is almost certain that as the economy rebounds, growth management will again become a top-priority issue.

The Growth Control Problem

The need for and causes of increased growth control activities in California have been widely discussed.⁹ There are a number of perspectives on what could be called the growth control problem and what to do about it. In most cases growth control is linked to planning and problems in the planning process.

Schiffman sees growth control efforts as an extension of traditional land use planning efforts starting with Euclidian zoning. Land use planning has more recently had to use new strategies to deal with broader pressures on land use such as environmental, social, fiscal, market, and economic pressures on communities. The failure of many jurisdictions to do capable planning, according to Schiffman, may be the source of some of the anti-growth sentiment evident in California's local areas. While most current efforts to limit growth have not been particularly innovative, the

availability of a large number of flexible techniques assures that the resulting conservation and development goals need not be mutually exclusive and that imaginative planning and innovative implementation strategies can combine to create an intelligent and responsive growth management process.¹⁰

Glickfeld and Levine conducted a survey of all local jurisdictions in California and documented the accelerating rate of enactment of growth control measures in virtually every region of the state. The vast majority of measures they studied were enacted by local governments through normal governing patterns rather than by ballot initiatives. Well publicized political initiatives were less common than strategic efforts by local communities to solve their problems through existing planning and governing processes. The Glickfeld and Levine study surprisingly found that there

was no relation between the *local* rate of growth and the propensity to enact growth control measures, but growth management efforts are the response to high *regional* rates of growth¹¹

A useful analysis by Landis shows that in spite of their intense publicity, most of the growth control measures "have been largely irrelevant to the management of urban growth and the maintenance of the quality of life."¹² Moreover, Landis argues that while the growth control measures enacted by the seven cities in his study imposed no great costs, they also offered few benefits. The measures, largely adopted through the initiative process, imposed significant restrictions on the allocation of development in their communities, but they did so at the expense of effective planning. Landis found that the most successful growth control policies functioned "together with, not in place of, other local planning and development policies— specifically those articulated in the community general plan."¹³ In cases where planning functions were displaced and court battles or complex administrative allocation procedures were established to allocate growth, the result was likely not to be a marked slowing of growth but a deterioration of community capacity to respond to infrastructure needs in a planned manner. For Landis, the use of growth control could lead to planning failure.

In other cases the blame is reversed. In the California Senate Urban Growth Policy Project's report, the recent flurry of growth management initiatives was purported to result from planning failure and the inability of government to meet needs:

How did California reach the point where the state's land use patterns are so out of balance with its transportation network, social and economic goals, and natural environment? The answer lies in the weaknesses of California's system of planning development, financing public services and facilities, and governing communities.¹⁴

Yet another variant on this problem is that strong growth control measures, especially ballot initiatives, may lead to stronger planning. For example, Glickfeld, Graymer, and Morrison noted that ballot measures, even those that fail, may push planning departments to respond with planning measures that achieve the same goals. Clearly, planning efforts can incorporate many of the objectives of public growth control movements, and in many parts of the state they have done so in time to defeat a ballot initiative.¹⁵ In other cases planning efforts have been strengthened to achieve the objectives of an initiative so that mandated limits are in fact not achieved. For the most part, this has happened in Santa Cruz, where the allowed number of building permits have not been issued due to strong planning efforts.

Regardless of whether growth control is a result of or a cause of inadequate planning, a close examination of the growth control process and data on community growth control measures leads to the conclusion that all growth control techniques are not equal to all others. For example, a strict building moratorium that restricts building permits to a certain annual number has much

more direct, measurable, and immediate effect on limiting potential growth than an urban limit line or a rezoning that expands an agricultural zone, regardless of how useful or appropriate the latter measures are for making urban areas more pleasant.

How Much is Growth Controlled in California?

The extent to which growth is controlled in California is debated. By one view, in spite of growth control, California growth has already exceeded the state's carrying capacity, adding the unmanageable total of 10 million new Californians to the population base between 1970 and 1990. By another view, California is the most litigious and contentious state in the nation, with more barriers to effective growth and economic development than any other state. California has also seen some of the most progressive and intensive efforts of any state to institute effective planning into local governments to provide adequate infrastructure and distribution of impacts. In order to discuss the question of how widespread growth control is in California, it is necessary to consider the variety of governmental actions defined as growth control or growth management, and the stringency of these measures.

There is unfortunately no single comprehensive data source available on growth control measures in California. Two data sets in particular are broad enough to form the basis for this analysis of the different ways growth management techniques are used in California. The first was collected in 1988 as part of the annual survey of the status of general plan activities in all the state's cities and counties conducted by the Governor's Office of Planning and Research (OPR).¹⁶ The second data set comes from a survey of cities and counties conducted in November 1988 by the League of California Cities (LCC) with the California County Supervisor's Association. This survey instrument was detailed and complex, achieved a 100 percent county and 87 percent city response rate, and was done in conjunction with an analysis of growth control and management measures at the UCLA Extension Public Policy Program.¹⁷

The data from these two studies data were combined and formed into indices of growth control for cities and counties. One problem with the combined data, however, was that similar questions did not elicit similar responses from the cities interviewed. The overlap of these two surveys was low (in large part because the question wording was different), even though both surveys were nearly a census of the state's jurisdictions. For example, on five items which were similar on both surveys, only 27.1 percent of the jurisdictions reporting that they had a particular growth control technique on one survey also indicated that they had it on the other. In spite of the different response on a question-by-question basis, the items were positively correlated with each other and with other items which suggests that these data may be combined into indexes of growth management strategies. For a comparison of the five similar items, see Appendix 1.

The indices formed here are a type of "Guttman Scale" based on the increasing purposiveness and stringency of the growth management technique.¹⁸ This scaling technique is useful for identifying patterns that are cumulative rather than exclusive, ¹⁹ with each index indicating a higher level of intensity like a pyramid, with smaller numbers of communities scoring on the more intense levels. In terms of growth control, the data were grouped into three indices of increasing intensity made up of items such that most of the communities scoring on the higher scales also score on each lower one as well. The specific items for each index are listed in Appendix 2.

- 1. *Planning.* The first scale combined seven items on growth management planning and zoning activities aimed to manage growth in an orderly and effective way. Growth management in general plans, urban limit lines, and the use of rezoning is a typical part of the process, but is often not known as growth management unless there is some controversy. This is a widespread and useful base of traditional planning found in many communities, generally known more for "growth management" rather than "growth control." The objective of good planning is to use techniques such as these to manage growth effectively.
- 2. Contingency Strategies. If planned growth is not possible, a more focused set of techniques are possible. The second scale combined five items that involve the use of contingency or conditional strategies, such as achieving job-housing balance or permitting growth only if the transportation or infrastructure is capable of managing it. This midlevel intensity of growth management technique shows greater focus and specification on the issues of growth and its consequences.
- 3. Vetoing. The third and highest intensity is based on unconditional efforts aimed at vetoing or stopping growth through population controls or building moratoria. Virtually all communities with veto techniques also have implemented programs at the other two levels; in fact, the communities with these techniques have an average of four other growth management programs used in the other indices, compared to an average of less than two techniques total for communities without a veto strategy for growth control.

These indices build on the notion that growth control techniques within jurisdictions are used strategically and cumulatively, in spite of a few well-publicized voter initiatives that precipitously cap growth. This means that a particular technique is selected from among a variety of options based on the intensity of the growth problem being considered and the political environment at the time. It also means that growth control efforts are typically additive and that later efforts tend to refine and adjust earlier efforts. Typically, growth management techniques in most cities and counties are broad strokes by planners that get revised and adjusted in later efforts. At the extreme local level, citizen groups use an initiative process to place an absolute cap on population and or building permits because general plan strategies fail — revisions are too politically complex, slow, or ineffective.

The intensity of growth management in California can clearly be shown as a pyramid of cumulating intensity. At the base, growth management planning strategies are widespread, affecting at least half (254) of the 509 cities and counties in the state for which data were available. This level

of adoption is somewhat below the 72 percent adoption level reported by Glickfeld and Levin,²⁰ but above the 1991 report by the Office of Planning and Research, which found that just 27 percent of jurisdictions reported that they had "enacted a program to manage or control growth.^{"21} Differences in adoption rate are largely due to definition in the surveys and interpretation, since many of the successful attempts to manage growth by planning would not be called a growth management program in many places.

Figure 1

Strong veto	(>2)	45	XXXXX			
Veto	•	89	X0000000X			
Contingency		174	X0000000000000000			
Planning		254	x0000000000000000000000000000000000000			
Total		509 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx				

Extent of Growth Control in California, by Intensity

More explicit growth management programs, however, generate less ambiguity. About onethird of all California jurisdictions have growth management involving some form of contingency strategy that limits growth if certain conditions are not met. Direct growth limitation by limits on population or building permits (veto) is restricted to 89 jurisdictions, or 20 percent of the total number of cities and counties, and of these half (45) with more than one can be classified as the strong-veto communities. Not only do these communities have multiple-veto-type programs, which provide increased confidence that the data are correct, but they also have an average of four other types of growth management programs in place. All but one had at least one other program, two lacked a planning strategy, and only ten lacked a contingency strategy. This is strong evidence of the cumulative nature of growth management programs.²²

Map 1 shows the geographic location of the strongest growth management communities in California with two or more veto strategies. In addition, Napa, Santa Cruz, Ventura, Santa Barbara, San Bernardino, and San Mateo counties are also included with the same level of growth control. From these geographic distributions, it is clear that the types of growth control that are adopted reflect different local growth pressures. In general, hotspots of growth control are concentrated on the urban fringe of both the Los Angeles and San Francisco region, with a significant number of infill communities also being subject to strong growth control. New areas that have been only recently developed in San Bernardino and Riverside counties, for example, are not contested because newcomers have no history to protect. The older areas, especially those with large middle-class populations that are surrounded by growth, become most active to protect their way of life.

Growth control appears to be an issue in areas where three conditions are present. First, the area must be in or near considerable growth and growth pressure in terms of rate and total numbers. This threat can be either rapid development in the community enacting growth controls, or nearby development may simply threaten to spill over into the growth control community. For the most part, the communities with strong growth control measures are among the wealthier in their region, though being wealthy is not enough alone to produce growth control. In the San Francisco Bay Area, Belmont, Brisbane, Orinda, and Pleasant Hill used veto techniques to stop certain land uses they did not want in an otherwise fully developed community.

Second, the growth must exceed local capacity to handle it. The growth pressures are often from subdivision of open land on the edge of the municipality; however, there are many instances, especially in Los Angeles county, where the growth is due to infill and redevelopment. Much of the Ventura County growth management effort is the result of rapid growth and slow public response.

Third, a condition for growth control seems to be that the growth threatens something people feel strongly about, such as the environment or the historical culture of a community. It is no accident that a very high proportion of the growth control communities are either along the coast or in a fragile eco-climate such as Lake Tahoe or the Napa Valley. Agricultural land preservation is increasingly part of the growth control debate. Available data do not permit an analysis of these motives in contrast to congestion and other convenience issues; it is clear, however, that growth control and environmental protection go hand in hand.

Growth Control and the Failure of Planning

The problem of growth control is represented most clearly by the use of veto techniques as documented in the data presented above. The use of veto techniques is both a response to the failure of more traditional planning techniques and an indicator that the locality is no longer capable of planning for what it wants but is reduced to saying what cannot be done in the most basic terms. From the community perspective, dozens of case studies of community responses to excessive growth lead one to the conclusion that most of the vetoes given to growth are moderately reasonable responses in the face of excessive growth pressures from outside the community (e.g., growth of businesses and population in northern Los Angeles County). In many cases, voters have rejected growth control as being too severe, and they have voted against veto measures in order to allow the planning process to proceed. The problem of growth control does not seem to be the rate of growth alone nor an inherent inability of local planning to handle growth. Instead, local growth control veto strategies are a clear acknowledgement that local planning has failed due to excessive strain from outside pressures for which there is no mediating force.

In short, the logic of the growth control problem for California is this:

- 1. The proliferation of growth control by veto or strong contingency measures in local communities is evidence not simply of too much growth but of the failure of local planning to accommodate or protect the diverse interests affected by growth.
- 2. The failure of local planning, in turn, is not due to a lack of local will or competence, but to the failure of state/regional planning that makes local efforts futile.
- 3. This failure of state and regional planning is a consequence of being unable to deal with three things: a misunderstanding of the basic changes in patterns of global urbanization, an inability to join any long-term plan with resources to carry it out, and a lack of commitment to defend public interests over individual interests.

To respond to the challenge of the state planning vacuum requires leadership and vision to address these major problems and to lead California into the next century without the divisiveness of failed planning.

Solutions at the State and/or Regional Level

When local jurisdictions choose to veto growth, it is evidence of the failure of local planning. In general, this failure is not because planning staff is incompetent, lacks insight, or is in conflict with the community and its leaders. In many cases growth is the current consequence of bad plans made some time ago. In other cases it is the consequence of planning decisions made outside the jurisdiction. Regional economic trends over which the locality has no say may lead both to unexpected and unwanted growth patterns that have a major effect on the local community. Growth problems, also, are a result of hard-fought battles between growth and no-growth advocates, where there are legitimate local value differences. Planning does not necessarily resolve these problems, but it is the forum through which local conflicts can be mediated.

The lack of regional mechanisms for developing a long-term regional or state vision stand in contrast to local capacity. Don Benninghoven notes that problems that transcend city boundaries are very important to cities:

We already have a carefully developed system for guiding the future of *individ-ual cities*... What we lack, however, are similar mechanisms for developing the future of a *region*, for dealing with issues that transcend city boundaries. Counties can not provide the answer, since, with very few exceptions, they are preoccupied with fiscal survival, forced to make land use decisions based on revenue needs, rather than people's needs. What's more these problems extend well beyond county boundaries.²³

The state policy approach to this is what William Fulton calls "policy by neglect." He notes that "the question is not whether California should have a growth policy. It already does— by default."²⁴ Local governments with their strong home rule, he notes, do a good job of deciding "whether to throw up a new mini-mall along the Miracle Mile," but they fail completely at dealing with issues

of state and regional importance. As a consequence, the decision of coastal communities to limit growth and inland communities to welcome it has become state policy.

As Landis et al. point out, California must reestablish a coalition of far-sighted interests like the one that planned for growth throughout the first sixty years of the 20th century. The coalition they envision will not be the same "pro-growth coalition of old. It must be a 'good growth' coalition."²⁵ At least in the short term, such a coalition seems unlikely because there is no vision of what good growth would look like in California.

The Failures of State and Regional Planning

State and regional planning has significantly degenerated over the last 25 years in California. From a lofty start with major state planning efforts in the 1960s that led to the masterplan for higher education, the state water project, and the state freeway system, there has been little overall state planning since then. While the results of these previous planning efforts have not always been acknowledged as successes, the fact that they have stood for most of a quarter century and have become the backbone of several major systems that serve the state well is not an accident. California has not generated the broad-based and far-sighted plans to meet the needs of a vastly increased population for 25 years now, and as a consequence policy is unfocused and fragmented.²⁶

It should be noted that the state has attempted several more recent plans. In response to a state law requiring a state growth policy every four years, an urban plan was produced in the 1970s under Governor Jerry Brown, but it went nowhere. Most state departments have a strategic plan, but these are fragmented and uncoordinated. The Senate Urban Growth Policy Project²⁷ noted that all five of the state's planning elements are inadequate:

- Policies for conservation and development are unclear and sometimes in conflict;
- State and regional growth and infrastructure plans are narrowly focused and often work at cross purposes;
- Environmental laws allow individual communities to capture the economic benefits of development while ignoring the environmental consequences;
- Single purpose regional agencies can't resolve complex problems because of their narrow focus;
- Local general plans cannot cope with issues like transportation, air quality, jobs/housing balance, water supply, and solid waste that can't be limited to a single jurisdiction.

There is nothing in government today that looks like a strategy to accommodate 10 million new Californians within the next 20 years. In order to do so, three components must be set in place: (1) a new set of premises must lay a new foundation for urban growth, (2) the planning effort must be integrated with resources to implement it, and (3) the public good must be given priority in a proactive rather than defensive posture.

New Premises That Must be Included in a Growth Plan

A state plan is not viable unless it deals with a set of new basic trends that now undermine local planning and prevent construction of a broad vision. The future of our highly congested and developed 21st century cities should not be made on the mold of the old 19th century city. The basic premises for a state growth plan must be carefully evaluated, and at least eight of the old premises seem to be different now.

Global economic interdependence shapes regions more than the physical qualities of a place. The key is that local growth is dependent on the role of California in the global marketplace. Ideas and information are exchanged in this marketplace, and these flow through central cities to key regional hubs. Los Angeles is increasingly important as a global gateway to Pasadena, Holly-wood, San Diego, Orange County, and Santa Barbara. San Francisco is important because of high-technology growth in Silicon Valley and Berkeley, not vice versa. These regional networks have massive transportation and communications implications that developers understand better than planners.

Regional cities are no longer organized around centers but as interlocking grids. The reason that so many of the cities on the edge of major metropolitan areas are having transportation problems is that roads and other systems are designed as spokes on a wheel to bring the edge city into the center, whereas most travel actually goes in a decentralized grid-like pattern.²⁸ Planning that is center-oriented (still most transportation, communications, social, and administrative services) creates unnecessary bottlenecks.

Today, Chinitz reports that 62 percent of all workers have intra-suburban commutes,²⁹ and within households with two wage earners, it is rare that both commute to the central city, or for that matter, to the same suburb. This dispersed pattern of work-related travel remains very fluid as businesses and employees change work locations. Even the old large firms frequently move employees from one location to another, and among smaller firms, consolidations, splits, and bankruptcies make employment location more fluid than ever before. In face of this, the Proposition 13 tax advantage of not moving continues to reduce the possibility of residential location that minimizes commute distances.

Public transportation has failed. Much of the local planning effort in growing areas of California either neglects the transportation problem (which makes it worse) or assumes that the availability of public transportation will entice people out of their cars. While this may be true for a few people, the billions of dollars put into operating public transit have not reversed the continued decline in ridership or provided for much beyond commutes to central cities. Even

with commuting, since more people go in more dispersed directions rather than to city centers, an effective level of service will be hard to provide. In addition, most transit systems face an escalating problem of rapidly increasing labor and operating costs which go up more in proportion to the number of destinations served rather than the number of passengers. In short, public transit holds little promise unless it is substantially revitalized.

There is no short-run certainty that expanded public transit substantially reduces existing patterns of auto travel or leads to land use changes (e.g., higher residential densities or employment growth). Successes are limited to transit systems operating over very long time frames and in areas with very high congestion costs. (As an additional problem, pollution is increasingly recognized to be disproportionately caused by cold starts, which means that there is little air quality gain if people drive to the train.) This does not imply that it is best to construct new freeways or accept traffic congestion; nor is it a good idea to make travel in urban areas vastly more expensive, which will substantially reduce an area's economic competitiveness. In contrast, it may be possible to consider new ways to reduce pollution using alternative fuels or motors, increase road capacity through automation, and reorganize work.

Land use allocations do not effectively integrate housing, work, and shopping so as to reduce dependence on cars. The urban-village design movement which promotes car-free development including high-density housing, bike trails, and close proximity to transit stations and convenience shopping has been widely acknowledged as a solution. These ideas are at their fullest in integrated new towns that propose up to 100,000 houses with close access to shopping centers and industrial parks. At a smaller scale, pedestrian pockets as a form of urban neighborhood expansion have been proposed. The problem is that these plans make the assumption that better access will lead to great reductions in auto travel, but there is no evidence that they work.

Most urban villages are models of the 19th century city that somehow are supposed to solve the problems of the 21st century metropolis. While there is a great need to avoid the sprawl pattern of the 20th century Los Angeles-style city, the answer is probably not to be found in townhouses clustered around a mini-mart and trolley stop. As Hall points out, the increasingly random pattern of cross-trips that characterize modern California will soon make much of the attraction of public rail transit inadequate. On the other hand, high-speed rail may be the answer for mid-distance trips such as between San Francisco and Los Angeles.³⁰

Modern land use is no longer centralized in one place. Fishman suggests that the root of the problem is the lack of a center in urban areas, a trend also discussed by many analysts. This means more than that people do not go there any more; they go elsewhere. For example, the urban community is increasingly independent of urban location. People find their community in many different places, and they must get to each of these places somehow. Fishman suggests that people live in three overlapping networks of household, consumption, and production. These

networks each have their own spatial logic. Day-care centers and schools are distributed near kids; shopping centers where there is good access and wealthy shoppers; and large firms locate where workers and materials have good access, and environmental problems can be mitigated. While these networks overlapped in the old city, in the new they form "a post-modern post-urban collage."³¹ Moreover, the new collage has increasingly independent networks for the two spouses whose work makes it possible. Thus, the modern city is growing increasingly and irreversibly dispersed at the same time that the proponents of urban-village design want to bring it back in so people can get places on busses or trollies.

Even if people can get some places in the new city using efficient public transit, poor design leaves the most frequently visited places outside the possibility of good public access. For example, suburban shopping malls (except in some major foreign cities such as Toronto and Stockholm) still are without really central transit service. If public transit really is a goal, the first place to start is not the residential village as a source of riders, but the destination for riders, such as the shopping mall and suburban office park. The typical shopping mall, if served by transit at all, has a stop on the outside edge of the parking lot. Why not have the transit stop underground in the center of the mall? People would then have a place to go once they get on the bus or train, either to shop or to their mall shop jobs. Why not put transit stops down the center of work places instead of at inconvenient street intersections? Why not locate day-care centers where people work rather than in neighborhoods? Better land use planning for the post-urban city must accommodate and link the diversity of uses and locations of modern families with the fluidity of a rapidly changing social system. Only then will public transit be more widely used.

Mega-Developers replace small contractors. Land development has become so costly and complicated that the large mega-developers are providing major shares of new housing. They alone have the ability to pay the development fees, provide the infrastructure, and not suffer financial ruin because of long delays. As a consequence, major chunks of land are developed simultaneously with some level of effort to build in diversity. One developer not only develops the infrastructure for a development, but also controls style and often limits market and function within the development. The need for considerable up-front investment means that the projects need to be built in large chunks, in contrast to older development that added fewer houses at a time. While there is no returning to the past, the mega-developer now runs the show.

Employment increasingly follows population sprawl. Much of the planning literature is based on the concept that people move close to where the jobs are, whereas it is increasingly clear that the opposite is true. First ex-urban escapees and commuters become self-employed, then larger firms follow. For example, in the 1970s a large number of Silicon Valley employees moved over the hill to Santa Cruz. Gradually these people created and attracted firms and branch plants

to employ them. The same is true in many of the outlying suburban areas of California, such as central Contra Costa County, which have been the major areas of job growth in the Bay Area.

Class- and racial-based communities are increasingly isolated from one another. New communities are increasingly fenced and gated, for security and prestige reasons. The planning premises of open communities are increasingly challenged by communities that post gates and guards. Edward Blakely claims that as many as 300,000 Californians live in gated communities already, a phenomenon called "forting up." The trend toward guarded and protected communities is the result of the fear that frightened and insecure middle-class people feel in the increasingly unsettled urban environment.³² New towns are part of the effort to create more exclusive communities —an important variable in development of suburbs during the post-World War II period.

Another force promoting the creation of new towns is the effort to avoid local growth opposition created by massive development within the political jurisdiction of existing communities. By starting from scratch, there is no city council, and only the county needs to agree to the plans. A flurry of new towns are currently under development or proposed in the Central Valley, development which will add thousands of new houses outside existing city limits. While most of the new towns have plans for residential, commercial, and industrial land uses, with some attempt to provide new "affordable" housing, the emphasis is on relative exclusivity, security, and, by default, homogeneity.

Policies are not integrated. Opportunities for improving the well-being of an urban region in the global marketplace depend on well-integrated policies in an increasingly wide set of spheres, including housing, transportation, infrastructure, social welfare, education, industrial land development, and natural resources. The economics of these policy arenas are critical for the overall wellbeing of the region. It is interesting that the Growth Management Consensus Project sponsored by the Center for California Studies at California State University, Sacramento, was able to reach agreement on a number of key issues, the first of which was that the "state should adopt internally consistent, coordinated, and integrated policies to direct California's growth related decisions in eight interrelated areas: agricultural and natural resources protection; conservation and development; air quality; transportation; affordable housing; economic development; physical and social infrastructure; and social equity."³³ Throughout the report, evidence was lacking of significant progress on defining the parameters of each of these policy areas as they affect growth. The fragmentation and lack of policy integration may be increasingly characteristic of the California policy environment.³⁴

In short, local planning fails when stretched by rapid growth because there are no regional and statewide solutions to at least these eight evolving urban growth issues over which local areas have virtually no control. The local planning approach lacks the ability to plan when the key premises of the local plan are in fact questionable.

A Plan Must Integrate Vision and Resources

The second major problem of planning in modern California is that visions are limited to outlining the problems, and that resources are not linked to implementation of visions. California is at an important juncture, according to several important interpreters of recent developments. For example, the California Council for Environmental and Economic Balance created a "growth leadership proposal" which represented the work of a coalition of interests interested in "creating a vision for an urban renaissance and constructing a path of policies and procedures which will enable Californians to transform this vision into reality."³⁵

A good vision is not enough. Increasingly the ability to implement, and especially to fund projects, is not connected to the desirability of development. As Dean Misczynski reminds us, planning decisions are increasingly made on the basis of anticipated short-term revenue consequences,³⁶ rather than on the basis of good community form and function, and increasingly these decisions are bad for neighboring communities and long-term regional stability.

Even growth management policies fail to integrate vision and fiscal reality. Most of the focus has been on the high costs of development and the way local governments now compete with each other for revenue-generating developments such as auto malls, regional shopping centers, and hotels. This competition often results in numerous concessions given to developers, ultimately causing the desired development to generate insufficient revenues to cover long-term costs, especially in a recessionary period.³⁷ The problem is that the total economic costs of growth are hard to evaluate and assess. A major tension in urban areas is whether existing area residents should bear the burden of both infrastructure and other economic externalities.

Teitz reminds us that the rapid growth of California during the pro-growth years was sustained by the population at large, not the growing population only. The necessary urban infrastructure —including highway access, water, sewers, schools, and many other components— was paid for by the national government through bonded indebtedness and general fund tax revenues. Here was a case of infrastructure without much planning, however.³⁸ Increasingly, publicly funded programs have ended, and communities assess a wide variety of project exactions to defray some of the costs, including development impact fees, dedication requirements, mitigation fees, utility connection fees, buy-in charges, linkage fees, and school fees. Real estate and community groups, however, oppose these fee schedules, and even when reasonable in light of community needs, they lead to claims that they cause exceedingly high housing costs and the exodus of major employers (e.g., in San Diego a "web of development review and planning regulations, fees, new environmental restrictions, sales tax and business license hikes were imposed by local government, leading some employers to bid San Diego 'Adios'."³⁹)

It is also true that effective strategies to link development with favored transit options must be built with all the access in place when it starts. The notion seems evidently misguided that after

development takes place in the outer communities of a region, then the public transit will be extended to reach it. By the time BART or other lines are extended to mesh with existing urban land uses, the areas are so built up around auto use that conversion is very limited. (Some infill construction should be encouraged, however, as a transit-based residential development study by the Institute of Urban and Regional Development shows.)⁴⁰ The resources to establish initially transit access is mandatory to assuring the long-term use of that mode of transportation. This has been the key to whatever transit success has been achieved in Toronto or many Swedish communities.

A State Plan Must Promote the Public Good

The ability to veto is much greater than the ability to build a vision. Local areas have gained a substantial veto over the infrastructure that will benefit the state or region as a whole. The lack of a good public agenda leads to a situation that Peter Hall has described as a

> mass beggar-thy-neighbor policy, in which each locality attempts to pass on growth and its burdens to the next place down the line. And, if communities react by trying to tax development, the result will almost certainly be to shrink the supply of affordable housing for newcomers and old-time residents alike.⁴¹

This is manifested in two ways. Much has been said about NIMBYism and the prevailing ability of local areas to reject regional projects because of perceived negative local consequences. Many of the consequences of growth have been aggravated by the inability of planners to site necessary facilities such as waste disposal, transit lines, or low-income housing.

Secondly, a pervasive barrier to the effective solution of regional development patterns is the defense of absolute local government rights at the expense of the public good. This has become a serious source of paralysis for both planning and policy. For developers and administrators alike, the lack of a clear path to siting of public good land uses has led to unconscionable legal delays and expenses. Consequently, it seems essential that a long term agenda for a well planned and growing California be established. This is not as impossible as it may seem, because if the public good is given precedence over local vetoes, some very attractive building blocks can be utilized to both accommodate growth and to preserve local well-being. These opportunities include:

- Conservation can virtually eliminate the need for major capital expenditures for additional capacity in water, electricity, fuels, waste disposal, sewage, and selected land uses. In spite of the huge increase in California's population during the 1980s, no major new electrical generation plants were needed, in large part due to conservation and dispersed technologies.⁴² Recycling and low-flush toilets are showing similar promise in reducing the waste stream.
- 2. New housing technologies promise to reduce dramatically construction costs and increase energy efficiency to the point that virtually no heating or air conditioning is needed. These technologies involve panel construction at factory sites and super-

insulated walls and ceilings with ventilation through a heat exchanger. Affordability and quality may be available to more people than ever before.

- 3. On the other hand, the ability of new development to pay for all incremental development costs may be reaching its limit. The unequal tax burden faced by new homeowners under Proposition 13, for example, is combined with development fees that cover everything from schools to freeway overpasses. While the cost tends to reduce development to the few who can pay for it, many of the benefits of growth are shared by the community as a whole, including increasing the value of existing homes. If these fees were reduced, the potential for better planning would be greatly increased. In return for reduced development fees, the community as a whole could demand greater long-term control over where development locates.
- 4. The design for the growing edge of urban areas can be changed from the concentric ring model to a new more flexible urban form. In the past, semi-isolated areas would develop that integrated housing, jobs, and shopping. Today, the major urban areas grow at their edges with relatively low density and massive dispersed shopping centers, with industrial parks and office centers to follow. These heavily used areas are generally placed for better freeway access, but they are surrounded by a plethora of very low-density housing. In the future, the urban form needs to be organized so that areas with the highest density have the most central access. Instead of freeways that serve only cars and trucks, new access corridors need to be developed that support multi-mode (cars, high-speed trains, easy airport connections, etc.) uses, and commercial and industrial uses need to be organized around these links. Residential areas should be placed outside the high-density areas where they do the least environmental harm.⁴³
- 5. Finally, there is widespread agreement that urban growth should not compromise the environment. Perhaps the largest challenge is to identify in advance habitats which are of particular value and to hinder development therein. For example, prime agricultural land and wetlands in the Central Valley can be protected,⁴⁴ while channeling growth to less valuable areas. The risk of development should be reduced with greater habitat preservation as a tradeoff.⁴⁵

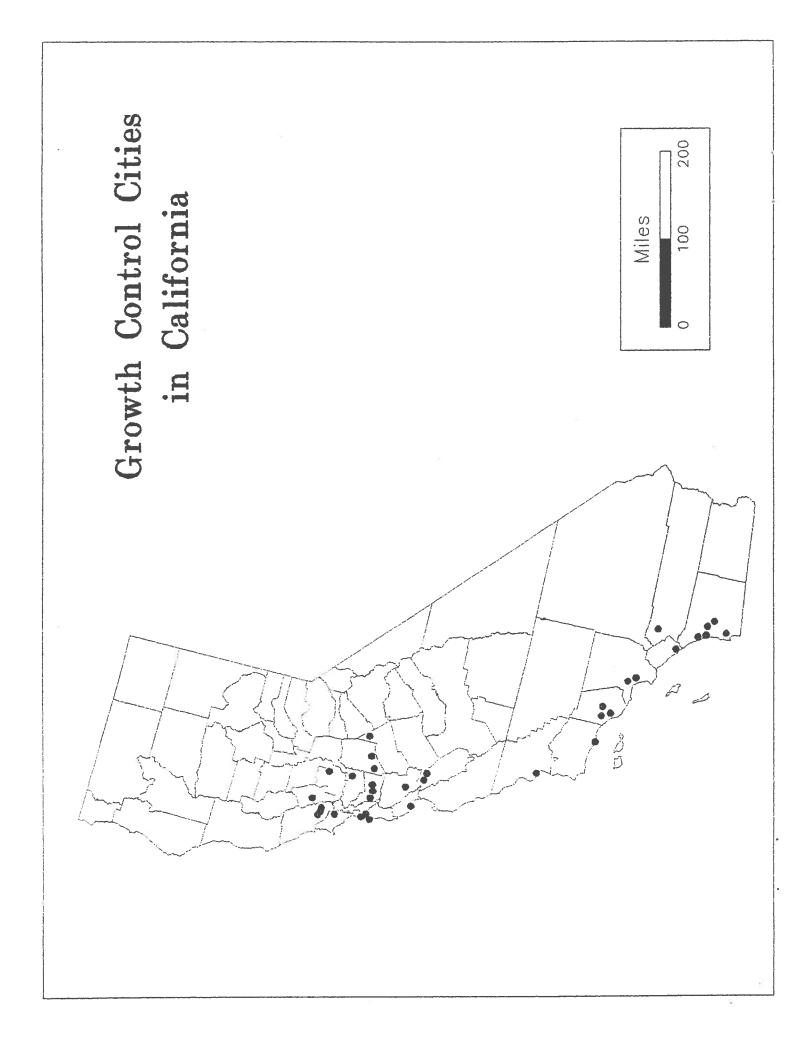
It is important to note that in many parts of California urban growth proceeds into areas of prime farm land or wetlands largely because that land is next in the path of development. Thereafter, regulations to protect the land are utilized to stop undesired uses on a parcel-by-parcel basis. We lack, however, a concrete vision for the future that will be proactive instead of restrictive, that will provide alternative long-range plans that both protect the most important lands and organize regional growth so that it is equally viable. Growth scenarios such as this are feasible using Geographical Information Systems (GIS) analysis, which provides computer-based, map-based analysis of existing geographic data and alternative land uses.⁴⁶

Conclusion

California will certainly recover from the current recession and continue its pattern of rapid growth. The Center for the Continuing Study of the California economy has projected a growth of 6 million in population and 3 million jobs in the 1990s,⁴⁷ and growth will again become

a major problem for local communities and the state. In spite of the concerns over the business climate and threats of firms moving out of state, many California firms are in an ideal position to replace lost workers and to expand as the global economy increases.

The key question will be whether the growth associated with the pending expansion is going to be gracefully accommodated or if it will set off another wave of capricious anti-growth initiatives. Any successful growth management effort will require vision and leadership that takes a proactive stance on the major issues currently causing local planning failures. This does not require new levels of government; existing state organizations are able within their existing mandates to forge a viable vision for the 21st century that will guide the reallocation of state resources and the redirection of state policies so that local areas do not bear the entire weight of poorly planned growth. It would be a serious mistake to create new organizations prior to a clear vision of how the state should resolve its major planning challenges. In order to implement any conceivable plan, governmental responsibilities will have to be reallocated, but this should be done in response to the plan, not as a precondition. Stronger statewide visions that deal with the changing place of California in the global economy, new urban technologies, and the changing structure of land use preferences can provide local planning and adequate base for managing growth and change.



Appendix 1

COMPARISON OF RESPONSES TO SIMILAR ITEMS IN OPR AND LCC DATA SETS

The comparison of the data from two surveys conducted at about the same time and asking more or less the same people in each jurisdiction about similar growth management techniques should have resulted in nearly identical responses. However, when the results on five questionnaire items about the same growth management strategy are examined, there are puzzling differences in both the number of jurisdictions reporting that strategy and how particular strategies are reported. A spot check of several jurisdictions suggests that the response variation is a result of differences in questionnaire wording and interpretation of particular strategies, rather than a systematic unreliability of either data set. Interestingly, the results of both data sets are published and, as far as we know, no jurisdictions have tried to correct their results. Thus, without doing another survey, the best strategy is to evaluate closely the results of these two surveys and combine them into general indices rather than relying on one or the other.

Five strategy definitions were more or less equivalent in both data sets (population limits, annual limits on building permits, urban boundaries, growth management in the general plan, and development contingent on transportation and infrastructure). As can be seen from Table 1, similar questions produced quite different results, due in part to slight differences in question-naire wording.

Table 1

Comparison of Response to Similar growth Management Survey Items Number of Communities indicating use of technique in LCC and OPR Surveys							
	Response	Response Different					
Item from survey	Same	LCC Only	OPR only				
Growth Management in General Plan	n 19	30	70				
Urban Boundaries	32	47	22	×			
Depend on Traffic	18	111	24				
Population Limits	11	28	7				
Limits on Building Permits	33	17	11				

The unfortunate difference in wording is largely responsible for the different responses from the same jurisdictions. The questions compared are as follows:

• The LCC asked if jurisdictions had "adopted a general plan growth management element or are currently developing such an element," while the OPR survey asked if the "jurisdiction's

general plans contain policies for growth management." Positive responses were given by 49 jurisdictions to the LCC question, and by 89 to the OPR question, with only 19 responding positively to both.

- The LCC asked if they had "established an urban limit line or greenbelt, other than the boundaries of the city, beyond which residential, commercial and/or industrial development is not currently permitted." The OPR survey only asked if they had "adopted growth management measures which established urban boundaries."
- The item linking growth to infrastructure was the most different in the two surveys; the LCC survey asked if the city had "a measure which specifically requires adequate service levels (i.e., road capacity, traffic congestion) or capacity (i.e., water, sewers, etc.) prior to or as a condition of approvial of a residential development." The OPR survey asked for "measures which make development contingent upon transportation or traffic improvements that maintain a specified level of service."
- Population limits also had a different wording; the LCC data asked about measures that "establish a population growth limit or restricts the level of population growth for a given time frame (i.e., annual basis)," whereas the OPR data are for "measures which limit population to a specified level."
- Finally, the two questionnaires asked if the jurisdictions "restricted the total number of permitted residential building permits in a given time frame (i.e., annual basis)," while the OPR asked if they had a "growth management measure which places an annual limit on building permits."

In sum, for the five items compared, the strongest level of agreement was among jurisdictions with reported limits on building permits, where the number that responded the same (33) exceeded the combined number of jurisdictions which responded to only one of the surveys (17 plus 11 = 28). The greatest difference occurred on the two rather different questions about linking development to traffic (see question wording above) with only 18 jurisdictions responding positively to both surveys, whereas a total of 135 jurisdictions responded positively to just one question. Overall, for four of the five questions the League of Cities (LCC) questionnaire garnered significantly higher use of particular growth management techniques than the Office of Planning and Research (OPR) questionnaire. However, when the OPR survey had a more generally worded question, respondents indicated greater use of the measure than the LCC quesionnaire— this is shown on the general plan question where responses to the OPR question substantially exceeded that of the LCC. In general, a close examination of the questions shows that the LCC questionnaire used items that were much broader and more suggestive than the OPR questions- for example, the LCC asked about measures that establish a population growth limit or restricts the level of population growth for a given time frame (ie, annual basis), whereas the OPR question only asked about measures that limited population to a specified level.

Clearly, the data are not perfect, but they are reliable for these purposes because they tap a variety of issues of growth management rather than identical components.

Appendix 2

QUESTIONNAIRE ITEMS IN GROWTH CONTROL SCALES

1. *Planning* Index: Items related to planning processes to contain growth within certain boundaries and to meet defined land use criteria

- Adopted a general plan growth management element or are currently developing such an element (LCC).
- Jurisdiction's general plans contain policies for growth management (OPR).
- Established an urban limit line or greenbelt, other than the boundaries of the city, beyond which residential, commercial, and/or industrial development is not currently permitted (LCC).
- Adopted growth management measures which established urban boundaries (OPR).
- Reduced the permitted residential density by general plan amendment or rezoning (LCC).
- Redesignated or rezoned land previously designated for residential development to agriculture or open space (i.e., hillside or ridge preservation) (LCC).
- Does your city have a measure which redesignated or rezoned land previously designated for commercial and /or industrial development? (LCC).

2. *Contingency* Index: Items where growth is contingent or conditional based on achievement of or limited by certain criteria.

- A measure which specifically required adequate service levels (i.e., roar capacity traffic congestion) or capacity (i.e., water, sewers, etc.) prior to or as a condition of approval of a residential development (LCC).
- Measures which make development contingent upon transportation or traffic improvements that maintain a specified level of service (OPR).
- Does your city have a measure that specifically requires adequate service levels (i.e., roar capacity traffic congestion) or capacity (i.e., water, sewers, etc.) prior to or as a condition of approval of a commercial and/or industrial development (LCC)?
- Has your city enacted a policy or ordinance which specifies a desired or required ratio of the number of housing units per the number of jobs within a given area or within the entire city?
- Growth management measures which rank proposed projects based on specific development criteria. (OPR).

3. Veto Index: Items covering building or population caps on population with the objective of controlling growth. These are concrete means by which communities can clearly veto growth above a certain rate.

- Establish a population growth limit or restricts the level of population growth for a given time frame (i.e., annual basis) (LCC).
- Measures which limit population to a specified level (OPR).
- Restricted the total number of permitted residential building permits in a given time frame (i.e. annual basis) (LCC).
- Growth management measure which places an annual limit on building permits (OPR).
- Adopted temporary building moratoriums (OPR).

NOTES

¹I appreciate the assistance of Edward Blakely, who shared in the early discussion of this paper, and Kelvin Willoughby, who helped prepare both data and bibliography.

²See, for example, Deakin (1989).

³See Landis and Kroll (1989).

⁴Dubbink (1984).

⁵Bradshaw (1980).

⁶California Department of Finance (1991). Other population estimates vary due to different assumptions about migration. County projections have tended to be extensions of short-term trends rather than the results of long-term growth models.

⁷See, for example, "Tragic California," *The Economist*, May 23, 1992: 18-19.

⁸Landis et al. (1991); Levy and Arnold (1992).

⁹Deakin 1989); Benninghoven (1989).

¹⁰Schiffman (1990).

¹¹Glickfeld and Levine (1990).

¹²Landis (1992b): 93.

¹³Ibid: 94.

¹⁴Sanders (1989).

¹⁵Glickfeld Graymer, and Morrison (1987): 136.

¹⁶Office of Planning and Research (1988).

¹⁷Glickfeld and Levine, ibid.

- ¹⁸Guttman scaling was developed in Psychology and has been little used in planning. The scale is based on cumulative intensities. In a good scale, all who score at level two are also at level one, and all at level three score at both level one and two, etc.
- ¹⁹The approach used here differs from other common analytical strategies. Glickfeld and Levin in their analysis of the League of California Cities data used factor analysis to identify six types of "control" over aspects of growth. The use of factor analysis produces indices that are statistically independent of each other —implying that jurisdictions that adopt one of the measures in an index are likely to adopt others of the same type, but *not* measures of a different type. This does not make sense for policy measures that are clearly cumulative.

²⁰Glickfeld and Levine, ibid.

²¹Office of Planning and Research (1991): 2.

²²While these data do not show that planning precedes growth veto techniques over time, support for this interpretation is given by the increased intensity of growth control initiatives in the late 1980s compared to earlier planning efforts. See Glickfeld, Graymer, and Morrison, ibid.

²³Benninghoven, ibid.

²⁴Fulton (1992).

²⁵Landis et al., ibid: 45.

²⁶See, for example, Karen Smith Thiel's analysis of California's incoherent and uncoordinated children's service delivery system, "Providing Services to Children in Need," Thiel (1989).

²⁷Sanders (1991).

²⁸See Cervero (1986) and Garreau (1991).

²⁹Chinitz (1990).

³⁰See Hall (1991) and Hall, Leavitt, and Vaca (1992).

³¹Fishman (1990).

³²See Schreiner (1992).
³³Center for California Studies (1992).
³⁴Bradshaw (1987).
³⁵California Council for Environmental and Economic Balance (1991): 1.
³⁶Misczynski (1986)..
³⁷Stone and Marinek (1991): 6.
³⁸Teitz (1990).
³⁹Raferty (1991): 24.
⁴⁰See Bernick, Hall, and Schaevitz (1992).
⁴¹Hall, ibid.

⁴²Summerton and Bradshaw (1991).

⁴³Blakely and Bradshaw (1991).

⁴⁴It should be noted that the American Farmland Trust found that the land in LAFCO spheres of influence around Valley cities was half prime and half of lesser quality (American Farmland Trust, 1989).

⁴⁵Jensen, Torn, and Harte (1990).

⁴⁶Landis (1992a).

⁴⁷Ibid., note 8.

REFERENCES

- Alexander, Nancy. 1989. 15 Ways to Make Growth Management Work. Western City 65(5): 14-17.
 - American Farmland Trust. 1989. Risks, Challenges, and Opportunities: Agriculture, Resources, and Growth in a Changing Central Valley. San Francisco.
 - Benninghoven, Don. 1989. "Growth Legislation: Long-Term Solution vs. Galloping Ad-hocism." Western City 65(5), February: 2.
 - Bernick, Michael Peter Hall, and Robert Schaevitz. 1992. New Planning Strategies for Transit Based Hous, ing in Northern California. Working Paper No. 582, Berkeley: Institute of Urban and Regional Development, August.
 - Blakely, Edward J. 1990. "The Valley: Room for Whom?", in *Confluence of Change: The Great Central Valley*. Proceeding of Symposium, Sacramento, May 3. Davis, California: University of California Agricultural Issues Center.
 - Blakely, Edward J., and Ted K. Bradshaw. 1991. "Room for Whom," in *People Pressures: California's Central Valley*, Harold O. Carter and Julie Spezia, eds., Davis: University of California Agricultural Issues Center: 1-12.
 - Bradshaw, Ted K. 1987. "The Possibility of Political Response to Demographic and Economic Change," in *The Capacity to Respond: California Political Institutions Face Change*, Ted K. Bradshaw and Charles Bell, eds., Berkeley: University of California Institute of Governmental Studies Press.
 - ____. 1980. "Trying Out the Future." Wilson Quarterly 4 (Summer): 66-82.
 - Bradshaw, Ted, and Edward Blakely. 1981. Resources of Recent Migrants to Rural Areas for Economic Development: Policy Implications. Berkeley: University of California Cooperative Extension.
 - Brown, H. Jones, Robyn Swain Phillips, and Neal A. Roberts. 1981. "Land Markets at the Urban Fringe." JAPA (April): 131-144.
 - Brower, D. J., D. R. Godschalk, and D. R. Porter, eds. 1989. Understanding Growth Management: Critical Issues and a Research Agenda. Urban Land Institute.
 - California Council for Environmental and Economic Balance. 1991. California's Urban Renaissance. San Francisco, February.
 - California Department of Finance. 1991. "Interim Population Projections for California State and Counties 1990-2005, Report 91-P1." Sacramento, April.
 - California Office of Planning and Research. 1991. 1991 Local Government Growth Management Survey. Sacramento, September.
 - Center for California Studies. 1992. "Summary of Findings: Growth Management Consensus Project." Sacramento, California State University (mimeograph), January 5: 2.

- Center for Continuing Study of the California Economy. 1989. California Economic Growth, Special Edition November 1989. Palo Alto, California: Center for Continuing Study of the California Economy.
- Cervero, Robert. 1986. Suburban Gridlock. Piscataway, New Jersey: Rutgers University, Center for Urban Policy Research.
- Chinitz, Benjamin. 1990. "Growth Management: Good for the Town, Bad for the Nation?" Journal of the American Planning Association 56(1): 3-8.
- Deakin, Elizabeth A. 1989. "Growth Management: Past, Present, Future." Western City 65(5), May: 3-7.

DeGrove, John M. 1984. Land, Growth and Politics. Chicago: Planners Press.

- Detwiler, Peter M., and Steven Sanders. 1991. Growth Management and Public Finance. Occasional Paper No. 2, Sacramento: Center for California Studies.
- Dubbink, David. 1984. "I'll have my Town Medium Rural, Please." American Planning Association Journal (Autumn): 406.
- Feldman, David. 1987. The Sociology of Growth Control. Mimeograph. Grossmont-Cuyamaca Community College District.

Fishman, Robert. 1990. "America's New City: Megalopolis Unbound." *The Wilson Quarterly* 14(1), Winter: 25-45.

Fulton, William. 1992. "Policy by Neglect." California Republic (March): 23-24.

Garreau, Joel. 1991. Edge City. New York: Doubleday.

- Gilliam, Harold. 1989. "Creative Ways to Check Wanton Growth." San Francisco Chronicle (30 August).
- Glickfeld, Madeline, and Ned Levine. 1990. New Land Use Regulation Revolution. Los Angeles: University of California Extension, 1990.
- Glickfeld, Madeline, LeRoy Graymer. and Kerry. Morrison. 1987. "Trends in Local Growth Control Ballot Measures in California." UCLA Journal of Environmental Law and Policy 6(2): 111-158.
- Governor's Office, Office of Planning and Research. 1989. Jurisdictions with Growth Management Measures. The California Planners 1989 Book of Lists. Sacramento: State of California, January.
- Hadwiger, D. 1989a. "The Initiative and California's Slow-Growth Movement." Western City 65(5): 18-19.
- _____. 1989b. "The Initiative Comes to Town: California Cities and Citizen-Sponsored Ballot Measures." Western City 65(10): 60-65.
- Hall, Peter. 1991. "Managing Growth in the World's Cities." Berkeley Planning Journal 6: 19-35.
- Hall, Peter, Dan Leavitt, and Erin Vaca. 1992. *High Speed Trains for California: Strategic Choice: Comparison of Technologies and Choice of Route*. Working Paper No. 564, Berkeley: Institute of Urban and Regional Development, June.

- Heimlich, Ralph E. 1989. "Metropolitan Agriculture: Farming in the City's Shadow." Journal of the American Planning Association 55(4): 457-466.
- Jensen, Deborah B., Margaret Torn, and John Harte. 1990. In Our Own Hands: A Strategy for Conserving Biological Diversity in California. Berkeley: University of California, California Policy Seminar.
- Keaton, Diane. 1989. "Survival of the Fattest." California Farmer 15 (April): 8-9, 26-28.
- King, Leslie, and Glenn Harris. 1989. "Local Responses to Rapid Rural Growth." Journal of the American Planning Association 55(2): 181-191.
- Kroll, C. A., D. Amenta, and G. Goldman. 1990. "Real Estate Markets in the Central Valley." Central Valley Brief. Davis, California: University of California Agricultural Issues Center.
- Landis, John. 1992a. Bass II: A New Generation of Metropolitan Simulation Models. Working Paper No. 573, Berkeley: University of California, Institute of Urban and Regional Development, April.
- Landis, John. 1992b. "Do Growth Controls Work?" Berkeley: University of California, California Policy Seminar,.
- Landis, John, et al. 1991. California Real Estate Investment Opportunities in the 1990s: Is California Still a Good Place to Invest? Reprint 93, Berkeley: University of California, Institute of Business and Economic Research, September 1991.
- Landis, John, and Cynthia Kroll. 1989. "The Southern California Growth War," in *California Policy Choices* 5, John J. Kirlin and Donald R. Winkler, eds, Los Angeles: University of Southern California: 123-164.)
- Lemann, Nicholas. 1989. "Stressed Out in Suburbia." The Atlantic Monthly 264(5).
- Levy, Steven, and Robert Arnold. 1992. *The Outlook for the California Economy*. Palo Alto: Center for the Continuing Study of the California Economy, May.
- Luten, Daniel B. 1963. "How Dense Can People Be?" Sierra Club Bulletin (December). Sierra Club Reprint Series, Number 7. San Francisco: Sierra Club.
- Martin, Linda. 1989. "Small Cities, Big Dreams." Western City 65(5): 20-23.
- McLeod, R. G. 1989. "Jobs Expected To Draw Millions to State in '90s." San Francisco Chronicle (Tuesday, 5 December): 1, 4.
- Misczynski, Dean. 1986. "The Fiscalizaiton of Land Use." In *California Policy Choices* 3, John Kirlin and Donald R. Winkler, eds., Los Angeles: University of Southern California: 73-106.
- Office of Planning and Research. 1991. "1991 Local Government Growth Management Survey." Sacramento, September.
- Office of Planning and Research. 1988. The California Planner's Book of Lists. Sacramento.
- Raftery, Miriam. 1991. "Growth Controls Blamed for Housing Crisis." *California Real Estate Journal*, November 15: 24, 36.

- Reese, Michael, and Jennifer Foote. 1989. "California: American Dream, American Nightmare." Newsweek, July 31: 23-29.
- Ross, C. George. 1975. *The Urbanization of Rural California*. Special Report 11. The Center for Real Estate and Urban Economics, Institute of Urban and Regional Development. Berkeley: University of California.
- Sanders, Steve. 1991. "Prosperity, Equity, and Environmental Quality: Meeting the Challenge of California's Growth." Sacramento, Senate Office of Research, July: 2-3.
- Sanders, Steve. 1989. Does California Need a Policy to Manage Urban Growth? Sacramento, Senate Office of Research, 1989: 28.
- Schiffman, Irving. 1990. Alternative Techniques for Managing Growth. Berkeley: Institute of Governmental Studies Press, 1990: 20.
- Tim Schreiner. 1992. "Suburban Communities Forting Up." San Francisco Chronicle, September 21: 1.
- Senate Urban Growth Policy Project. Prosperity, Equity, and Environmental Quality: Meeting the Challenge of California's Growth. Sacramento, Senate Office of Research, July.
- Statistical Abstracts of the United States. 1979-1989.
- Stone, Katherine E., and Robert H. Freilich. 1989. "Writing a Defensible Growth Ordinance." Western City 65(5): 8-13.
- Stone, Katherine E., and Dennis Martinek. 1991. "The Economic Consequences of Unmanaged Growth." Western City, November 1991: 6-9.
- Summerton, Jane, and Ted K. Bradshaw. 1991. "Towards a Dispersed Energy System: Challenges to the Grid." *Energy Policy*, January/February: 24-34.
- Michael B. Teitz. 1990. "California Growth: Hard Questions, Few Answers." In *California Policy Choices* 6, John J. Kirlin and Donald R. Winkler, eds, Los Angeles: University of Southern California: 59.
- Teitz, Michael B., and Philip Shapira. 1989. "Growth and Turbulence in the California Economy," in *Deindustrialization and Regional Economic Transformation*, Lloyd Rodwin and Hidehiko Sazanami, eds., Winchester, Mass.: Unwin and Hyman: 81-103, 280-281.
- Thiel, Karen Smith. 1989. "Providing Services to Children in Need," in *California Policy Choices*, Volume 5, John J. Kirlin and Donald R. Winkler, eds., Los Angeles: University of Southern California: 81-98.
- Thompson, M., and M. Witko. 1989. *Matrix of Land Use Planning Measures, 1971-1988.* Los Angeles: California Association of Realtors.

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