

CONTRA COSTA COUNTY EDGE CITIES: Challenges for Urban Planning

Patrick S. McGovern

Abstract

This article reports on research on the role of land-use planning in the emergence of new urban centers, or "edge cities," in Contra Costa County, on the eastern periphery of the San Francisco Bay Area. Based on an examination of the development of four employment and commercial nodes in that county, this article examines the process of planning these new suburban centers, and the role of public land-use planners, local electorates concerned with growth, and traditional market players.

"Edge cities" has become a pervasive term in both the professional and popular literature of urban planning. Joel Garreau's work, *Edge City: Life on the New Frontier* (1991), which first popularized the term, used it to describe a wide range of urbanized centers, from new cities on suburban fringes to developments within existing cities. Although not all planners agree on the use of the term "edge cities," there is a growing consensus that significant new urban centers have appeared on the periphery of many metropolitan areas in the United States over the past decade. Many of those new centers have presented planners with a new urban form, as well as a new configuration of metropolitan economic activity and political power, which has challenged the way planners think about cities and metropolitan regions.

The analyses of this new phenomenon have run the full gamut, from Garreau's popular work in 1991 to specialized academic research by Gottdiener and Kephart (Kling 1991). Gottdiener and Kephart studied twenty one metropolitan counties in the U.S., and described the new phenomenon of deconcentration that resulted in the emergence of new polynucleated suburban regions throughout the country during the 1980s. They described those regions as increasingly independent from the core cities, but without major centers. That analysis, like Garreau's, claimed the appearance of the first totally new form of human settlement in centuries. Their description of new decentralized regions differed radically from Garreau's, as well as from traditional planning theory. Thus, while the importance of the phenomenon is sinking into a wide range of planning literature, its form and structure remain topics of wide disagreement.

Contra Costa County, on the eastern periphery of the San Francisco Bay Area, presents a case study of a complex of new urban centers, or edge cities, which do not fit the explanations of either the academic

community or the popular press. Contra Costa County contains four of Joel Garreau's edge cities: Walnut Creek, Concord, San Ramon, and a new development in an unincorporated pocket of the County adjacent to the Pleasant Hill Bay Area Rapid Transit (BART) Station. A fifth edge city, Pleasanton, is in an adjoining county, and connected to these four cities by an interstate highway, geography and economic activity. (See Figure 1.)

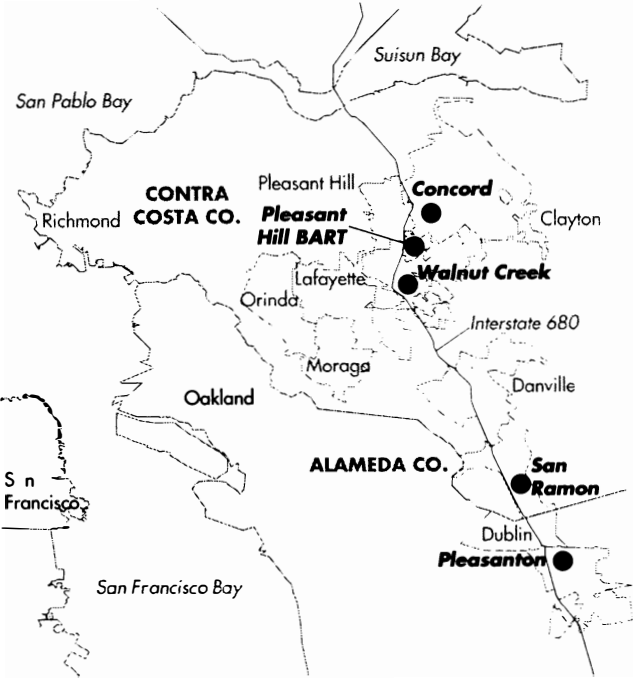
These centers are approximately thirty miles from the San Francisco Central Business District (CBD). Walnut Creek, Concord and Pleasant Hill are connected to San Francisco and Oakland by BART, the region's rapid transit system. Pleasanton is awaiting completion of a new BART extension. All the centers are connected to one other and the San Francisco-Oakland core by interstate highways. The high-rise, downtown urban centers at Walnut Creek, Concord and Pleasant Hill BART consist of six to ten story office towers around BART stations. These centers rent Class A office space, accommodating professional and corporate uses. Two sprawling campus developments at San Ramon and Pleasanton are composed of three to five story complexes, which house corporate headquarters and major back-office operations. The most successful, Bishop Ranch in San Ramon, has six million square feet of office space and has resulted in employment in San Ramon for almost 40,000 workers. Each center is in a community that experienced massive suburban residential growth in the 1960s and 1970s. In addition to residential and employment growth, these centers are quickly adding regional retail centers, as well as cultural, medical, and educational institutions. This string of five connected urban centers presents a case study of a series of well-integrated urban centers, with an urban level of density and diversity of uses, on the periphery of the Bay Area. This example challenges traditional suburban and metropolitan planning theory at several levels.

Challenges to Traditional Theories of Urban Form

The first challenge presented by the Contra Costa County edge cities case is that the location, density and physical characteristics of these centers cannot be explained by accepted theories of suburban or metropolitan form. The earliest explanations of the physical growth of metropolitan form assumed that cities grew from the center out, and that growth eventually resulted in a slowly thinning gradient of decreasing heights and densities. Recent scholars from Peter Muller (1981) to Kenneth Jackson (1985), continue to inform students of suburban history that several common factors characterized the physical aspects of suburban growth in U.S. metropolitan regions from 1850 through the 1980s. Those included initially higher peripheral growth rates in metropolitan regions undergoing suburbanization, with an eventual leveling of density differentials across the metropolitan area. The traditional pattern of suburban growth also included absolute population loss at

Figure 1

San Francisco Bay Area and Contra Costa Edge Cities



● Concentration of "Edge City" Office Space

Map by Edmund A. Egan and Rolf Pendall, 1993.

the core, and a decentralization of upper- and middle-income residential groups outside the core. Last, the pattern included increases in average work trip lengths historically.

That theory, in turn, relied on earlier theory about urban form and growth. First expressed in Christaller's central place model (Christaller 1966), and later in the Park and Burgess concentric zone model (Park 1925), is the idea that metropolitan growth occurred from the center out. Those images of cities over time have become so embedded in planning and geographic scholarship that one has to first explain away those models to show something new is occurring. More varied models like Hoyt's sectoral analysis (Hoyt 1939), or Ullman and Harris' (Harris 1943) multiple-nuclei model, while offering more sophisticated approaches, still relied on a central metropolitan core, with decreasing densities as growth moved outward.

More recent scholarship, particularly theories of deconcentration, multinucleation and urban realms (Gottdiener 1991, Vance 1964, 1990) have sought alternatives to the centralized model. Those models continue to accept the dominance of the older central city, but conclude that suburban growth results in an undifferentiated polynucleated region, or a collection of fragmented nodes. Gottdiener's lengthy study of Suffolk County in the suburban New York City region in the late 1970s concluded that the physical urban form resulting from mature suburban growth was fragmented, undifferentiated, and polynucleated (Gottdiener 1977).

The Contra Costa County edge cities present an urban form that challenges these concepts. This new form consists of dense urban centers and employment centers in well defined nodes, separated from the central Bay Area cities of San Francisco and Oakland by twenty to thirty miles of quarter-acre residential development, including an unusual amount of protected open space. The appearance of employment centers in these communities has reduced the average work trip of many suburban residents, though the new pattern of cross commuting has made the extent of that change difficult to measure. While the already declining fortunes of Oakland suffered badly because of the shift in retail and office activity, the central core city of San Francisco has remained a vital residential community as well as a major regional cultural and financial center.

Whether described as "edge cities," independent polynucleated regions, or submetropolitan nodes, the new centers on the periphery have begun to break out of traditional planning patterns. Some have already matured, reaching "buildout," and have stopped growing, especially in residential communities. These new communities have achieved densities and floor area ratios in their employment and commercial cores that approach those of the core cities. This urbanization has occurred without leveling the regional differentials over the

twenty to thirty miles of urban grid between this edge and the center of the Bay Area, contrary to traditional theory. Last, evidence suggests that these new edge cities may well represent the centralization of new urban centers for the upper and middle classes, and a place for the consolidation of their political and economic interests.

Challenges to Growth Coalition Theory

The Contra Costa County case also challenges theory on the political economy of urban growth. The appearance of these centers in Contra Costa County has occurred neither as the result of chance nor immutable processes of regional growth. Rather, they represent an unusual active role of public planners in the process of building cities which departs from existing theory about growth coalitions and the political economy of urban growth.

Traditional explanations of urban growth coalitions are best exemplified by the work of John Mollenkopf (1983), who detailed the organization of urban growth coalitions of national political machines and developers to build both cities and political constituencies through the 1960s. Mollenkopf's model required both a national political machine providing direct benefits to local electorates, and a dominant role by corporate capital, to form the growth coalitions necessary to achieve significant urban growth. Logan and Molotch's work (1987) added the importance of local economic elites creating a "growth consensus" among the local electorate, and using local government to achieve growth. In both works, a careful reading or manipulation of local voters by politicians, as well as a dominant role by national corporate elites, were the usual prerequisites for urban growth. Planners did not play important roles in either analysis.

Gottdiener's Suffolk County study (1977) concluded that suburban growth resulted from manipulation of land use decisions by development and real estate interests, making it difficult to determine just what planners actually did. Gottdiener's study found an unsavory interplay between developers and local government, mirroring urban coalitions of capital and traditional political machines at the suburban level.

Economic analyses of regional urban growth, while breaking out of traditional growth coalition theory, explain suburban economic growth in terms of the dominant role of corporate capital in making locational decisions in undeveloped suburban regions. The analysis is based on traditional factors such as land rent, transportation infrastructure, and the availability of a skilled labor force (Cervero 1989, Stanback 1981, Dowall 1984).

Radical theories have characterized suburban growth as residential differentiation controlled by industrial capital to accommodate the differentiation of labor, to prevent the development of class consciousness and to stimulate consumption of various industrial products

(Harvey 1989, Walker 1981). Those theories also depend on a dominant role of corporate capital in making planning decisions.

Throughout this wide range of theory about urban and suburban growth, the recurrent themes include the idea that successful urban growth requires a traditional political organization or machine, careful control of the electorate, and a dominant role by developers, corporate capital or industry. These models all minimize the role of planners in shaping urban growth.

The Contra Costa County case departs from that pattern, and reveals a new role of public land-use planners in the building of edge cities. This research shows that land-use planners at county and city planning departments prepared comprehensive plans under new California general plan legislation in the early 1970s. Those plans were prepared with public participation. Local landowners were certainly part of the process. Local politicians were involved in the approval of the plans. But noticeably missing from the mix that one would expect under traditional theory was either regional or national political machines or a dominant role by national corporate capital or major developers at the early planning stages.

This research focuses on two examples, Walnut Creek, a high density transit-oriented development template, and San Ramon, a campus office park example. In these cases, planners and developers involved in the building of the centers reported that local planners prepared and aggressively enforced comprehensive general, specific or area plans to shape the form that emerged in these centers. Those plans preceded the identification of the major corporate tenants who later occupied those developments, and were the creation of local government without the intervention of national political machines or public funding (Dehaesus 1993, Cutler 1993, Oswald 1993, Binger 1993).

The Contra Costa Case Study

Using Walnut Creek and San Ramon as the most successful of the two templates that appeared in this region, the historical evolution of those centers began in the early to mid-1970s. The developers, with some consternation, and the planners, with some pride, point to the role of planning in shaping the development of employment centers in the region. Through the implementation of new general plan legislation in the early 1970s, planners in county and city planning offices were able to shape these centers, using both general plan designations and zoning restrictions.

In San Ramon, the County Community Development Department designated the Bishop Ranch site as an employment center in a 1958 area plan (Contra Costa County 1958). After an extensive population, economic and environmental inventory of the San Ramon Valley and its potential for growth in 1974, the County again designated the site

as a single use employment center in a 1977 area plan for the Valley (Contra Costa County 1974, 1977). San Ramon did not incorporate as a city until 1983, after the completion of most of Bishop Ranch (Geiger 1993).

In the clearest case of planners maintaining control of the new centers, the Sunset Development corporation, a successful residential developer, approached County planners in the late 1970s with a mixed-use development proposal for the Bishop Ranch site. Planners rejected the plan, and emphasized the designation of the site as a single-use employment node for the southern county. The developers changed their plans, and became one of the largest and most successful office park developers in the region (Oswald 1993, Dehaesus 1993).

Similarly, the County designated the unincorporated pocket of land around the Pleasant Hill BART station as a high density employment node with mixed residential and commercial uses in the 1970s. Litigation with surrounding cities delayed that development, but it finally took shape in the early 1990s. That designation was again enforced by county land-use planners, in the face of opposition from surrounding cities, and accomplished through lengthy litigation (Dehaesus 1993).

In Walnut Creek, city planners took a similar role. There a comprehensive downtown plan was prepared in the early 1970s that envisioned a high-rise office core around the new BART station as its major element, with mixed uses connecting to a revitalized older downtown (Walnut Creek 1975). Again, the city planning department insisted on conformity to those uses. Those planners successfully obtained design changes, reductions of floor area ratios, urban design amenities, and affordable housing concessions from major developers as the price for being a part of the new core (Binger 1993).

In all three settings, comprehensive plans and land-use controls were in effect prior to actual development, and their implementation by local government shaped these new centers. While they made compromises to attract development and new tax bases, planners in local government maintained control of the implementation of their comprehensive plans throughout the process.

Planners consistently determined the parameters of the container into which new edge development would fit. That container included location, permitted uses, density, design and infrastructure requirements. In the Walnut Creek case, that container also included obligations to create affordable housing.

With the passage of the Proposition 13 property tax limitation initiative in 1978, these plans became all the more attractive to local government, as they provided a lucrative tax base with little or no social service or infrastructure outlay, and the ability to create new projects

Contra Costa County Edge Cities, McGovern

that could be taxed at a higher rate. This fiscal element certainly played a part in the mix.

Yet, the planners alone were not able to create edge cities.

Developers, corporate tenants, and their financial supporters had reasons to locate in these centers, independent of local planning considerations. Corporate capital was continuing an exodus to suburban office parks in the Bay Area in the 1980s (Cervero 1989, Dowall 1984). Contra Costa County was an attractive location for headquarters complexes and back office space, because of cheaper Class A office space in these centers, more convenient commutes for both executives and employees who already lived in the area, the availability of a new BART system and new interstate highways, and the perceived availability of a non-unionized back office workforce (Cutler 1993).

Specific economic events also fell into place to make the mix work. The divestiture of AT&T into smaller companies created the need for that corporate giant to physically separate its new independent units—AT&T, Pacific Bell and PacTel. The area offered each of those new entities spatially separated locations in San Ramon, Pleasanton and the Pleasant Hill BART centers.

The Investment Tax Credit provisions of the Reagan Administration's economic stimulus package provided a one-time, virtually unlimited investment tax credit for equipment and facilities in the early 1980s. That resulted in a bonanza of new facilities containing new high-tech equipment, coinciding with the availability of the new IBM PC technology and new communications technologies resulting from the AT&T breakup. The momentum toward the edge was further fueled by the prevailing belief that low-rise, three to five story, sprawling buildings accommodated the needs of the new computer and communications equipment better than existing high-rise space in San Francisco (Oswald 1993).

Thus corporate capital, and the professional support firms in the downtown centers, needed the edge city locations to take advantage of the early 1980s economic growth in the region. Planners were able to shape that growth by having comprehensive land-use plans in place, and the local political support to implement those plans (Cutler 1993).

The role of planning in the original design and building of the centers was impressive. Planners assumed a new role in the relationship with traditional market players in implementing the plans. Planners not only took the lead role in the comprehensive planning of those new centers, but also in the implementation of those plans. While the execution of this new role of public planners in the planning and early implementation stages of these centers was an unparalleled success, real world limitations ultimately cut short the completion of many of the planned centers. Although the national economic downturn, the

slowing of the Bay Area real estate market, and an overbuilding of office space in the late 1980s all took their toll on these projects, the earliest limitations were political. The element that growth coalition theory insisted was necessary, tangible benefits for the voters (Mollenkopf 1983), became increasingly absent as these centers took shape. Either the priorities of local electorates shifted, or planners failed to read those needs. Whatever the etiology, once these centers appeared as high-rise, successful employment centers with increased traffic, environmental changes, and both transient and different social economic groups commuting in, the reaction of the residents—and voters—of these communities was swift and decisive (King 1991, 1993).

The composition of that electorate had become more homogeneous during the 1980s as these centers were being completed. The electorate in central and southern Contra Costa County, along with eastern Alameda County, became consistently higher-income, better educated, and more politically conservative. That affluent electorate was increasingly more concerned with family life and quality of life issues than regional issues. By the late 1980s, residents of this part of the County were primarily white, middle and upper class families. While middle class Hispanic and Asian suburbs appeared, poor people of any color generally remained in the west end of the County in the Richmond area, separated by hills into the East Bay core, contiguous with Oakland and Berkeley. Affordable housing and social diversity pressures from the central Bay Area received minimal attention in the development of these new centers.

A suburban environmental ethic also emerged among the local electorate during the 1980s. The attractiveness of the region to upper and middle income families increasingly included the environmental amenities of hillside views, open space and regional parks. The area became an example of greater desirability and increased property values resulting from environmental amenities (Logan and Molotch 1987, Plotkin 1987). Most development in the area took place in valleys, preserving ridge line views and open space. That factor helps to explain the location of employment centers in carefully defined, dense nodes on valley floors to minimize both environmental impacts and land consumption. That environmental ethic, and the planners' response of building dense urban centers, also helps explain the ultimate political reaction to those centers (Sayer 1993).

Planners and the market actors, busy building the new centers, either misread or ignored these factors, with catastrophic results for the developments.

The first result of that failure to gauge the local electorate was the passage of Measure H in Walnut Creek in 1985, which halted downtown growth, based on traffic congestion limitations. While the Walnut Creek growth limitations occurred at the beginning of a slowdown

Contra Costa County Edge Cities, McGovern

in demand for office space in the region, that political campaign was the most clearly framed voter response to downtown urbanization (King 1993, Munn 1993).

The reaction in other communities in the area was similar, although more subtle. In several cases, the regional decline in the market for office space slowed development simultaneously with the maturation of slow-growth political organizations, clouding the causal relationship of each to reductions in growth. For example, in San Ramon one third of the originally approved land in the Bishop Ranch development remains unbuilt from the mid 1980s (Oswald 1993). Environmentalist or slow growth councilmembers elected in 1992 now believe they have a mandate for more careful examination of the growth consequences of further development of all projects in the city (Blickenstaff 1993, Geiger 1993). The City of San Ramon has also shifted planned uses adjacent to that project, proposing a new pedestrian-oriented downtown directly across from the unbuilt parcels. While in the San Ramon case the timing of the political reaction to growth is less dramatic than Walnut Creek, the election of two slow-growth councilmembers, and an environmentalist County supervisor, remains a strong expression of voter sentiment on growth issues. (Geiger 1993).

The countywide reaction to growth has been slower and less consistent, but still follows the same pattern. Contra Costa County voters approved a County urban limit line in 1990. As a result of the 1992 election, Contra Costa County Board of Supervisors now includes a member from the San Ramon Valley elected on an environmental platform. These direct political actions to express voter discontent with urbanization were complemented by a panoply of Not-in-my-backyard (NIMBY) assaults on many specific projects at local government planning agencies using litigation (Geiger 1993, King 1991).

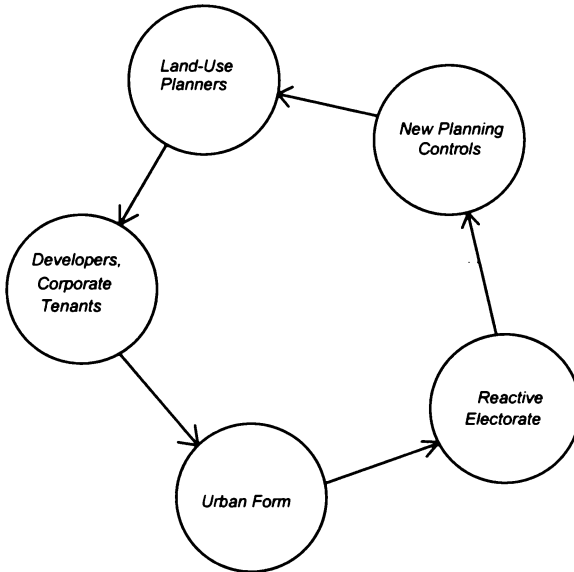
Elected officials in both Walnut Creek and San Ramon believe that local government now has a mandate to slow the urbanization put in motion in their communities, either directly or indirectly, by the earlier comprehensive plans of the County (Munn 1993, Blickenstaff 1993, Geiger 1993). Thus, the conservative suburban electorate has effectively asserted its interest in quality of life issues and environmental amenities. A direct result of those limitations on growth, employment centers development, and affordable housing, has been the geographic insulation of the area from the perceived social disintegration of the core cities. Those insular impulses came at the same time as regional pressures for urban limit lines, regional government, "fair share" affordable housing programs, school integration, and against the backdrop of increasing population and statewide economic growth. Thus, the evidence suggests that the local electorate consolidated their political and economic resources in Contra Costa County as a reaction to their perceptions of conditions elsewhere in the Bay Area.

The Process of Building Edge Cities

In an effort to derive some general conclusions from the Contra Costa County case, it is useful to organize the process which occurred with the diagram in Figure 2. That diagram identifies the following players in the creation of edge centers in this case, and the relationship of their roles.

Figure 2

The Planning Process in the Contra Costa County Case Study



Local Government Planners

The city building process in this Contra Costa County started with local government land-use planners at the top of the loop in Figure 2. Their role was critical because a balkanized collection of local governments exercised control over land use planning decisions, and still does. Any successful comprehensive planning had to come from those

agencies, or at the very least, receive their complete approval. In this case, the planners took the lead in the planning of edge cities.

The Contra Costa County example suggests that government land-use planners used general plan elements and zoning designations to determine locations and uses for the new urban centers as early as the 1970s (Contra Costa County 1977, Walnut Creek 1975). Expanded general plan legislation had been passed in this period, to which planners responded with comprehensive general plans both at the county and city levels that included these new centers (Cutler 1993). The new urban centers were usually a part of a larger general plan, or in many cases, specific or area plans. Thus, public land-use planners took an early leadership role in shaping the new centers. They continued to implement their visions with aggressive enforcement.

The County planning role in the approval of the Bishop Ranch development in San Ramon and the Walnut Creek City Planning Department's control of development in its triangular shaped office core—the "Golden Triangle," both provide clear examples of planners orchestrating the implementation of comprehensive plans in the 1970s and 1980s.

By the early 1970s in Contra Costa County, both at the county level and in incorporated cities, government land-use planners moved beyond the traditional role of approving projects and enforcing zoning codes. Interdisciplinary teams of young planners in county and city planning departments assumed a dominant role in the drafting and enforcement of comprehensive plans for the creation of new urban centers in the region (Binger 1993, Cutler 1993, Dehaesus 1993). While those planners would later attribute the result to professionally executed plans in a less contentious time, the political and economic dimensions of this phenomenon certainly suggest political support for the plans.

The dominant role of planners, together with identifiable city and county communities of interest, and an expanding and suburbanizing economy, resulted in regional visions that actually became the framework for subsequent growth. This success not only indicates the political effectiveness of these planners, but also implies that the regional vision was sufficiently important to the communities to overcome the traditional fragmentation of local government. Thus, the government land-use planners earned a place at the top of the conceptual diagram, and were the force from which the remainder of the process flowed.

The Impact of Developers, Corporate Users, and Financial Institutions

The second node on the loop identifies the traditional private market actors in major development projects, including developers, the

national corporate tenants of these new centers, and their financial supporters.

In the Contra Costa County case, major developers first made contact with local planning departments, after the comprehensive plans were in place. In the late 1970s and early 1980s, the developers tested the restrictions of the new general plans. In many cases, developers made dramatic changes in uses, design, floor area ratios and public space amenities to obtain approval. These developers accommodated planners, and built a new urban form.

The successful developers then found corporate tenants to locate in these new centers. Those tenants included both national corporate office headquarters, back-office operations, and professional support firms, all of which wanted to locate at the edge for a panoply of economic and social reasons.

It is important to define the role of the market players carefully. While they accommodated the planners' regional visions to the extent of location, design and use, the kinds of jobs that came to these centers, the level of automobile traffic, the quality of the office space and the completion schedules for larger projects were controlled by developers and tenants, not planners. The second element of this process in Contra Costa County thus included an accommodation to a regional vision of urban form, but not a shift in the way new employers did business, or moved employees around the region. The second node on the diagram then includes both accommodation, as well as the realities of economic power.

Urban Form

The third node in the loop represents the outcome of compromise and accommodation by land-use planners and the market actors: a new urban form. That form was a result of the actions of the first two sets of players in the loop, but also a catalyst in stimulating the remaining players.

The urban form that resulted in Contra Costa County was an entirely new level of concentration, density and scale for the region. That form was designed to meet the needs of national corporate capital as well as new comprehensive planning visions of the cities and the county. It also created major traffic, lifestyle, and environmental changes. The planners and market actors did not accurately predict the impact of this new urban form on the residents, and voters, of the communities. The design and visual characteristics of these concentrated employment centers, with massive single-use corporate facilities or high-rise centers, not only changed the image of the urban core, but also intruded into the visual and social realities of previously exclusively residential enclaves. Massive physical development in what had been small towns a few years earlier was accompanied by traffic congestion,

air quality problems, loss of open space, and a variety of social changes.

The Reactive Electorate

The scale, density and speed of the new developments quickly made the urban form a political issue for the residents of these communities. That political response resulted in serious challenges to the comprehensive plans. Growth control measures passed in Walnut Creek by 1985, and countywide by 1990. The response of the electorate was effective and drastic, stopping the completion of the downtown core in Walnut Creek in mid stride, and later restricting future development in other communities.

Examples of this political reaction range from the passage of Measure H in Walnut Creek, halting downtown development, to the Contra Costa County urban limit line, to the election of slow-growth elected officials at city and county levels of government (Blickenstaff 1993).

The response of the electorate in this process was reactive. Rather than negotiating different kinds of growth, the political response stopped high-rise development completely in Walnut Creek, and made future completion of urban centers less likely in other communities. That response was expressed in two ways: first, through direct enactment of planning controls through the initiative process; and second, through election of public officials. The electorate also identified itself with suburban environmental issues, using "green" or "environmental" labels. Despite the trappings of environmentalism, the successes of that electorate were primarily in limiting growth. Voters did not want "green," more compact or socially diverse development, but simply an end to development (Blickenstaff 1993, Munn 1993).

As with many reactive political responses, the results disrupted the continuity of comprehensive planning. The Walnut Creek plan was stopped midway, resulting in a hodgepodge of incompatible lower density uses and strip centers stretching from the Golden Triangle to the traditional downtown. That collection of uses bears witness to the power of the electoral reaction to this process.

While the land-use planners overcame the historical balkanization of land-use control in California to draw and implement these comprehensive plans, that balkanized local government structure ultimately reasserted itself through the voice of a reactive electorate. The structural problem in maintaining political support for development of dense commercial centers is that the suburban electorate is always predominately residential users with different priorities (Walker 1981). Comparing this result to research on growth coalitions may well explain its failure in mid stride. Traditional growth coalition literature reminds planners of the need to provide the local residents tangible benefits (Mollenkopf 1983, Logan and Molotch 1987). In this case,

while planners successfully guided comprehensive plans through the political process, and were able to control developers, they failed to provide direct benefits to the most important segment of the community—the residential voters and users. As a result, the voter reaction to changes in their communities could not be controlled, thus radically altering the process of building edge cities.

New Planning Controls

The last node in this process is the institutionalization of the electorate's stated preferences. A set of new planning controls, growth limitations, and zoning restrictions followed the urbanization of these centers. Measure H in Walnut Creek, the Ridgeline Ordinance in San Ramon, and the Contra Costa County Urban Limit Line are all examples.

Whether tied to traffic, density, heights, or uses, those new controls resulted in more low density, automobile-oriented uses for residents of the communities. Class A office space complexes have been typically surrounded by newer strip shopping centers, recreational facilities, and smaller office buildings housing professional services for the residents of the communities after growth control. The new controls have also resulted in the protection of open space and wilderness areas in these communities.

As a result, a more fragmented, and case specific, set of planning controls has replaced the comprehensive plans for urbanization, redirecting priorities to providing services for the residents and the protection of open space. Gradual modification of general plans, zoning and abandonment of comprehensive plans by astute planning officials and local governments has occurred in response to the mobilization of the electorate.

Within the process, these reactions to past visions have then become the new vision for the next generation. The current quagmire of complex and overlapping local general plans, specific plans, subdivision approvals, planned unit development approvals, specific environmental regulations and NIMBY disputes, seems more a set of complex limitations than a new regional vision. If the emerging vision succumbs to this tangle of fragmented, negative limitations, it will bode badly for both the future of local control of land-use planning, and for the legitimacy of local government.

Whether a vision, or whether legitimate or not, these new limitations will be in place when the next wave of economic development occurs, providing a framework for the planners to organize that development. The emergence of a new regional vision to adjust or replace the old one remains to be seen.

Implications for Urban Form Theory

After two decades of planning and building, the new urban centers in Contra Costa County defy both traditional and modern theories of metropolitan urban form. While they may not have reached their planned level of development, these centers each contain several million feet of office space, tens of thousands of employees, and concentrated complexes of high-rise or campus office centers. Those employment centers have in turn attracted many of the uses associated with cities: complete regional retail centers, regional cultural centers, entertainment, fine restaurants, major medical centers, and a new state university campus.

Thus, each of the five communities contains a major urban center. Yet each of those centers is twenty to thirty miles from the traditional center of the Bay Area. That relationship of urban form within the region is the reverse of what traditional theory leads one to expect. That theory was largely the result of the American historical experience of housing and transportation infrastructure following industrial expansion for most of the century. Jobs and industry would appear in the central city and spur residential growth and new transportation systems (Burgess 1925, Christaller 1966, Harris and Ullman 1945, Warner 1962).

In the Contra Costa County case, the relationship of urban form within the region is not only turned upside down, but the sequence of events has also been reversed. Jobs and industry have largely followed residential growth and available transportation infrastructure. The location of many of the office centers in Bishop Ranch and Walnut Creek resulted from studies of employees' home locations (Oswald 1993, Whyte 1988). A major factor in the selection of these particular suburban communities was the existence of either interstate highways or BART. The intervention of public land-use planners with comprehensive plans for these new centers then organized that growth into concentrated urban centers.

The first glimpse of a pattern of metropolitan urban form which emerges from the Contra Costa County case study is of a decentralizing region, where major centers of economic growth move to the edge, and follow existing residential growth and transportation infrastructure. The threshold requirements for the appearance of this new urban form in this case was that employees live in the region, and have a way to get to work. In this case, once that set of thresholds was met, the quality of the urban form resulted from the ability of land-use planners to position themselves in advance of the growth, to write workable comprehensive plans, and to maintain the political support to enforce those plans. Thus, this case study suggests a new set of economic factors, a new sequence of events, and a crucial role for land-use planners.

A New Growth Coalition?

The development of the new centers in Contra Costa County both challenges and confirms elements of traditional growth coalition theory.

The interest groups in this case study appear to have shifted from the traditional cast of national political organizations and business elites. The new mix includes professional planners in local government and developers and corporate tenants willing to accommodate to comprehensive planning. The process in this case represents a greater role for professional planning both in government and in the private sector. Professional planners created comprehensive plans with greater insulation from traditional urban political organizations, and corporate developers and tenants made decisions based on economic considerations rather than alliances with urban political machines. While the process was obviously both profit driven and accountable to local politics, the role of planning was clearly a major factor.

The Contra Costa County experience confirmed one element of traditional growth coalition theory in its failure to read the interests and political effectiveness of local residents on growth issues. Traditional growth coalition theory would explain that failure with the requirement that the electorate receive tangible benefits from growth to be expected to support it. Nevertheless, it is important to note the differences between the Contra Costa County electorate of the 1980s and the traditional urban electorate of Mollenkopf's studies of San Francisco and Boston (1983). The suburban electorate is more difficult to gauge, because it has developed a pattern of organizing effectively around single issues, rather than consistent platforms. That is particularly true in the case of growth (Plotkin 1987, Fischel 1985). While it should have been clear what suburban voters expected from growth in terms of urban conveniences, public services and environmental amenities, the single issue quality of suburban politics in these communities would have made delivery of those benefits difficult for the most sophisticated politician. The equivalent of ward healers or union halls simple do not exist in the fragmented Contra Costa County political scene. The suburban politician would have a much tougher time delivering benefits than her urban counterpart (Geiger 1993, King 1991).

Thus, the growth process in this example indicates a greater role of professional planners. In this case, planners were able to assume those roles in smaller, fragmented, local governments. That role replaced the national political machines in traditional urban growth coalitions. The political ineffectiveness of those planners in the battles which their plans ignited suggests that long-term, successful, comprehensively-planned growth requires an element of political expertise that was lacking among the planners in this case.

This case suggests an alternative model to traditional growth theory. The ultimate success of this new mix of professional planners, developers and corporate tenants in executing comprehensive plans indicates that planners may still have something to learn from traditional growth coalitions before setting out to build cities.

An Ongoing Process?

This particular case reveals a process which challenges both urban form and growth coalition ideas. If one assumes that this process is an ongoing, participatory process, and will repeat itself in some replication of what we have seen occur here, it suggests some lessons for suburban planning. While the final result may be disappointing, what occurred in Contra Costa County was a participatory process in which both planners and residents had a significant role in determining the shape of growth.

Planners can take comfort in the emergence of a pattern of double loop learning (Schön 1971, Friedman 1987), where the suburban electorate learned to influence the future form of the community in response to new problems, where planners learned how to achieve more effective comprehensive planning, and where private developers and corporate tenants learned to read suburban politics and make positive use of comprehensive planning.

While any application of this model would only extend to suburban contexts, and only to those which have a general plan and initiative process as in California, it may provide the crude outlines of a suburban planning process which could reappear in the building of edge cities.

This model suggests that the interaction of planners, developers and the informed electorate in the creation of new centers is a long-term process. First, national and regional economic cycles clearly dictate the willingness of capital to invest in suburban development. Those cycles can take decades. Second, the planning process adds an additional time constraint, particularly the California General Plan legislation that requires twenty year plans, often taking several years to write and approve. In addition, the usual requirement of Environmental Impact Reports and other regulatory compliance devices may add years to the planning timeline at the early stages of development. Third, major developers may work with time frames extending from five to twenty years for major projects. These elements may then work together with other economic and political externalities to further lengthen the time to plan and develop a new center. Working through the writing, approval and implementation of a comprehensive plan for an edge city in California may well take a generation.

Stepping back from the generalization of the process for theoretical analysis, it is also important to realize that this process occurred nei-

ther in discrete functional nodes nor easily defined historical periods. Even a region as small and well-defined as Contra Costa County had many overlapping visions, many plans in various stages of completion, and many edge cities in different stages of growth. Thus, the diagram is intended to present the sequence of the most significant events in the process of creating, and defining the limits of, edge cities in Contra Costa County.

Further Research

If the process in the Contra Costa County case describes the sequence of and time frame for suburban growth, perhaps it also explains the current surprise of both local residents and planning professionals at finding new cities on the periphery. Those edge cities may well be the fulfillment of a previous generation's vision of suburban form. A historical analysis of the Contra Costa County case might well ask whether proactive local government and a working class electorate of twenty years ago envisioned the creation of new cities in the region to provide employment and meet urban needs in the suburbs. One might also ask if that was a revolt against metropolitan planning which imposed the one dimensional "bedroom community" on the suburbs in the 1950s and 1960s. Perhaps the "Ozzie and Harriet" nuclear family was just as frantic about moving urban amenities and conveniences to their communities as current "environmentalist" suburbanites are about controlling the rapid urbanization that resulted.

Politically, the decision to turn inward to urbanize the suburb rather than to expand connections to the core cities may have represented a decision to stave off regional pressures for social equity and environmental regulation. If indeed it was a revolt against 1950s metropolitan planning, it may well have been fueled by a desire to accumulate political and economic power on the edge to avoid regional social equity and environmental responsibilities coming from increasingly desperate central cities. That would have been particularly true in this county, where the central city was Richmond, which was quickly deindustrializing and becoming visibly impoverished.

The emergence of comprehensive plans for edge cities in the early 1970s generally correlates with shifts in federal urban funding, and political power to the suburbs and newer cities of the South and West under the Nixon Administration (Mollenkopf 1983). Thus, this model might well detail the political mobilization of the white suburban middle class in the 1970s, in response to decades of central city urban policy by previous Democratic coalitions.

Conclusion

The Contra Costa County case suggests that explaining the appearance of edge cities requires understanding the complex web of local government land-use controls, the political emergence of suburban

America in the 1970s, and the decentralization of economic activity in most metropolitan areas in the United States. Those factors help make sense of the appearance of a set of clearly defined urban centers in this region over two decades. In this particular case, the early role of public land-use planners is unexpectedly effective, both in the scope of the planning role and in the success of its implementation. Equally impressive is the failure of those local government officials to read the mood of the residents, and voters, in their local communities. While those planners claim that success was the result of the passage of new general plan legislation, the less controversial role of planners in that time, and the happenstance of the BART extension, that does not explain why the Contra Costa example was paralleled at the same time by similar development in most metropolitan regions in the United States. Any overall explanation of the appearance of similar edge city complexes throughout the United States must include national political shifts and economic readjustments.

The Contra Costa County case study offers one set of parameters which I have generalized and placed in sequence for purposes of further analysis. Further work on this study, and additional case studies, will certainly be necessary to compare the Contra Costa County experience to that of the many other edge cities which appeared at the same time. This is but a single case, and others are needed to place it in the context of a more comprehensive explanation of this important phenomenon.

REFERENCES

- Binger, Gary, Executive Director, Association of Bay Area Governments. Interview by author, Oakland, California, March 31, 1993.
- Blickenstaff, Jim, San Ramon City Councilmember. Interview by author, San Ramon, California, July 23, 1993.
- Cervero, Robert. 1989. *America's Suburban Centers*. Boston: Unwin Hyman.
- _____. 1986. *Suburban Gridlock*. New Brunswick: Rutgers University Press.
- Christaller, Walter. 1966. *Central Places in Southern Germany*. Translated by Carlisle W. Baskin. Englewood Cliffs: Prentice Hall.
- Contra Costa County Community Development Department. 1991. *Contra Costa County General Plan: 1990-2005*. Martinez: Contra Costa County Community Development Department.
- Contra Costa County Planning Department, 1974. "Population Characteristics for the San Ramon Valley Planning Area." Martinez: Contra Costa County Community Development Department.
- _____. 1977. *San Ramon Valley Area General Plan*. Martinez: Contra Costa County Community Development Department.

Berkeley Planning Journal

- Contra Costa County Planning Department. 1958. *San Ramon Valley: Planning Area 9*. Martinez: Contra Costa County Community Development Department.
- Cutler, James, Contra Costa County Community Development Department. Interview by author, Martinez, California, August 6, 1993.
- Dehaesus, Anthony, former Contra Costa County Planning Director. Interview by author, Walnut Creek, California, July 20, 1993.
- Dowall, David. 1984. *The Suburban Squeeze*. Berkeley: University of California Press.
- Fischel, William A. 1985. *The Economics of Zoning Laws: A Property Rights Approach to American Land Use Controls*. Baltimore: Johns Hopkins University Press.
- Fishman, Robert. 1987. *Bourgeois Utopias: The Rise and Fall of Suburbia*. New York: Basic Books.
- Friedman, John. 1987. *Planning in the Public Domain: From Knowledge to Action*. Princeton: Princeton University Press.
- Garreau, Joel. 1991. *Edge City: Life on the New Frontier*. New York: Doubleday.
- Geiger, Tom. 1993. "San Ramon Wrestles with Growth, Identity," *San Ramon Valley Times*, July 5, 1993.
- Gottdiener, Mark. 1977. *Planned Sprawl*. Beverly Hills: Sage.
- Gottdiener, M. and George Kephart. 1991. "The multinucleated region: a comparative analysis," in Kling, editor, *Postsuburban California*. Berkeley: University of California Press.
- Harris, Chauncy D. and Edward L. Ullman. 1945. "The nature of cities." *The Annals of the American Academy of Political and Social Sciences* 242: 7-17.
- Harvey, David. 1989. *The Urban Experience*. Baltimore, Johns Hopkins University Press.
- Howard, Ebenezer. 1898. *Tomorrow: A Peaceful Path to Real Reform*. London.
- Hoyt, Homer. 1939. *The Structure and Growth of Residential Neighborhoods in American Cities*. Washington: Federal Housing Administration.
- Jackson, Kenneth T. 1985. *Crabgrass Frontier: The Suburbanization of the United States*. New York: Oxford University Press.
- King, John, San Francisco Chronicle writer. Interview by author, San Francisco, California, March 24, 1993.
- _____. 1991. "Special Report: Suburban Upheaval." *Contra Costa Times*, March 18, 1991.
- Kling, Rob, et. al., ed. 1991. *Postsuburban California: The Transformation of Orange County since World War II*. Berkeley: University of California Press.
- Logan, John R. and Harvey L. Molotch. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley: University of California Press.

Contra Costa County Edge Cities, McGovern

- Mollenkopf, John H. 1983. *The Contested City*. Princeton: Princeton University Press.
- Muller, Peter O. 1981. *Contemporary Suburban American*. Englewood Cliffs: Prentice Hall.
- Munn, Evelyn, Walnut Creek City Councilwoman. Interview by author, Walnut Creek, California, July 22, 1993.
- Oswald, Peter, Sunset Development Company. Interview by author, San Ramon, California, March 23, 1993.
- Park, Robert E., Ernest W. Burgess, et. al. 1925. *The City*. Chicago: University of Chicago Press.
- Plotkin, Sidney. 1987. *Keep Out: The Struggle for Land Use Control*. Berkeley: University of California Press.
- San Ramon City Planning Department. 1986. *San Ramon General Plan*. San Ramon: San Ramon City Planning Department.
- Sayer, James. Greenbelt Alliance. Interview by author, San Francisco, California, March 17, 1993.
- Schneider, Mark. 1989. *The Competitive City: The Political Economy of Suburbia*. Pittsburgh: University of Pittsburgh Press.
- Schön, Donald A. 1971. *Beyond the Stable State*. New York: Random House.
- Scott, Mel. 1985. *The San Francisco Bay Area*. Berkeley: University of California Press.
- Southworth, Michael and Owens, Peter M. 1993. "The Evolving Metropolis: Studies of Community, Neighborhood, and Street Form." *Journal of American Planning Association*. Summer 1993.
- Vance, James E. 1990. *The Continuing City: Urban Morphology in Western Civilization*. Baltimore: Johns Hopkins University Press.
- _____. 1964. *Geography and Urban Evolution in the San Francisco Bay Area*. Berkeley: Institute of Governmental Studies.
- Walker, Richard. 1981. "A theory of suburbanization: capitalism and the construction of urban space in the United States," in Dear and Scott, editors, *Urbanization and Urban Planning in a Capitalist Society*. New York: Methuen.
- Walnut Creek Planning Department. 1968. *Development Distribution Simulation Study*. Walnut Creek: Walnut Creek Community Development Department.
- Walnut Creek Community Development Department. 1975. *Proposed Core Area Plan*. Walnut Creek: Walnut Creek Community Development Department.
- _____. 1989. *1989 General Plan*. Walnut Creek: Walnut Creek Community Development Department.
- Warner, Sam Bass, Jr. 1962. *Streetcar Suburbs*. Cambridge: Harvard University Press.
- Whyte, William H. 1988. *City, Rediscovering the Center*. New York: Doubleday.