Title

Towards the Post-Industrial City: A Symposium on Structural Change, Urban Problems, and Local Policies in the Regions of Frankfurt and San Francisco

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Publication Date

1991-07-01

Peer reviewed

Working Paper 543

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Introduction by Peter Hall
and Ulrich Becker

July 1991

University of California at Berkeley
$6.50

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This paper is comprised of a series of talks given at the symposium "Towards the Post-Industrial City," held in San Francisco, November, 1989.

University of California at Berkeley
Institute of Urban and Regional Development

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INTRODUCTION

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Sustainable Growth Policies -- Are They Possible?

In the late 1980s, a common theme has emerged in the most highly-developed regions of the most advanced industrial countries of the world: the problem of handling explosive economic growth in an environmentally acceptable and socially equitable fashion. This theme is illustrated daily in conflicts over growth management both in urban cores and in the suburban fringes. In the cores, these conflicts center on large-scale renewal projects which threaten the traditional urban structure and impact on low-income inner-city residential neighborhoods. In the suburbs, they center on large-scale developments which generate decentralized nodes of employment, in turn leading to further suburban sprawl, environmental strain, and counterproductive consequences, among others.

It is perfectly logical that these regions should have developed exceptionally strong "green" movements. In Frankfurt am Main, this has produced a new "Red-Green" (SPD-Gruene) coalition on the city council. In San Francisco, where party politics are excluded from local government by state law, it has generated an informal grouping which has successfully carried strong growth-control ordinances. These two cities provide perhaps the best example in the contemporary world of what can be called "the movement for the greening of the city."

We thought that it is appropriate to hold a symposium, whose task should be to determine the causes and mechanisms of the economic structural change and its effects on the urban environments of Frankfurt and San Francisco. Based on this, we will analyze new approaches of growth-limiting strategies and policies for a regional structure based on multiple centers.

Participants

The symposium brings together four groups of experts who perceive the urban structural change from different viewpoints and who in part have an influential role in shaping this change. These are: elected officials, professionals, concerned citizens, and academic analysts.

Some Key Questions

Restructuring Trends in the Regions of San Francisco and Frankfurt

Two parallel demographic trends present a problem for future economic growth in the San Francisco Bay Area: the working-age population in the USA will fail to increase substantially, so that a general labor shortage can be expected by the 1990s. This shortage will not be compensated unless a sharp and unexpected increase in the younger immigrant population occurs locally and regionally. The "aging" of the population will have severe impacts on the regional economy in the San Francisco Bay Area as a decline in consumer goods consumption and a reduced demand for housing and personal services would result.

What is the effect of a changing demography on the regional labor supply and on the regional economic prospects?

Empirical studies have shown that above-average growth rates in the office industry occur generally in those West German metropolitan areas whose secondary sector is especially strong. This seems to support the thesis that tertiary sector growth in the major city centers is strongly related to the development of manufacturing and distribution industries in the surrounding areas -- and not, as commonly assumed, a consequence of the globalization of service functions alone.

What significance does the tertiary sector have for the economic development of San Francisco/Frankfurt and the Bay Area/Rhein Main Region? Does tertiarization of these cities/regions occur separately of the production?

Recent studies of economic change in metropolitan areas of Germany and the USA have maintained the hypothesis that service sector industries are promoting a process of spatial separation. According to this understanding, concentration persists in the central cities where service industries of global importance tend to congregate, while service industries oriented toward regional markets continue to suburbanize.

Which location requirements do the office users have in the city center of San Francisco/Frankfurt and in the suburban centers?

Does fragmentation take place as a result of the internationalization of the urban economy?

The relocation of corporate headquarters to the periphery of the metropolitan areas may be interpreted as a pioneer function for strengthening suburban competitiveness in the office space market. The reason for this is that large firms which move from a downtown location to the suburbs will entice a wide range of business services in the vicinity. If under these conditions downtown office space becomes too scarce and/or expensive, relocation to the suburbs could take on massive proportions -- transforming perhaps permanently the hierarchy of centers within the region.

What is the future of the downtown? Is the urban hierarchy in the Bay Area/ Rhein Main Region affected by the restructuring process? Which effects does the current technological and socioeconomic structural change have on the position of San Francisco/Frankfurt in the supra-regional hierarchy of centers in the USA/FRG?

Micro-Environmental Effects of the Restructuring and Expansion of Downtown and the Impacts on the Inner-City Neighborboods

What is the future of downtown on the micro-environmental level: light, air, green space, traffic?

Which effects does the tertiarization/office space expansion have on the labor market?

What are the causes and what is the extent of gentrification processes in San Francisco/Frankfurt? In which sectors of the housing market do impasses occur? Is there a new "housing emergency?" Which repercussions do these impasses have for the socioeconomic, spatial, and political development of both cities?

What are the patterns of urban renewal and its impact on the neighborhoods close to the urban core (i.e., Frankfurt's Bahnhofs-und Gutleutviertel, San Francisco's South of Market area)?

Are qualitatively new urban structures being created through the current restructuring in San Francisco/Frankfurt?

Range of Action for Local Policies and Planning Models

How does local planning react to changed socioeconomic and environmental conditions? What is the progress, what are the deficits?

To what extent are local planning decisions predetermined by "necessities" inherent to the political, economic, and ecological system? Does local planning have an independent range of action?

Who are the actual decision-makers of municipal planning? What portion of the overall urban development planning is performed particularly by the business community, by neighborhood groups, and by representatives of the "new urban elite"?

In which fields of municipal policy exist acute needs to act? What are the financial restrictions?

Does the socioeconomic restructuring of both cities demand new urban and ecological concepts, models, and local policies?

The Politics of Growth in San Francisco

Gerald D. Adams
Urban Planning Writer, *San Francisco Examiner*

Those who are preparing a city such as Frankfurt for rapid growth would do well to heed the experience of San Francisco, which in two recent decades has added the equivalent of 75 Transamerica Corp. pyramids (each over 600,000 square feet in size) to its office space.

Surely, growth can be accommodated with less political turmoil than it aroused in this 45-square-mile city at the tip of a peninsula.

In San Francisco, rapid growth has not only triggered divisiveness and political upheaval, but a voter rebellion. Voters, distrusting city planners' ability or willingness to protect the environment, ordained the most draconian land use restrictions of any major city in the United States. Subsequently, visionary planning has virtually been supplanted by civic preoccupation with conforming to those restrictions. And the division continues to this day.

Could this turmoil have been avoided? Might the resulting planning straitjacket have been made more flexible?

I believe so. What happened in San Francisco was that the local government repeatedly lost credibility with citizens. The latter, alarmed by skyrocketing rents and home prices, took matters into their own hands via the ballot box. Let us review a bit of recent history.

The warnings of popular unrest were obvious. Since 1971, San Francisco voters had increasingly declared their concerns about commercial over-development. Between 1971 and 1985, they defeated five ballot measures aimed at curbing highrise tower growth. But at each succeeding election, the margin of defeat had grown narrower.

As the slow-growthers' campaign literature testified, those voting for greater restrictions were motivated by the loss of favorite vistas, the darkening of streets and sky, worsening traffic, the disappearance of familiar landmarks, a growing imbalance of jobs over housing, and mounting fears of rising property prices and rents.

At the same time, the business community was having doubts about the wisdom of allowing too much leniency to office developers. In 1979, the Chamber of Commerce expressed its misgivings about overdevelopment in a study entitled the Bolles-Livingston report, which proposed reducing basic density ratio limits from 14 times lot size to 12 times the size of the lot (at the time they could be as high as 25:1 for a developer employing various bonus provisions of the planning code).

Back at City Hall, planners began to respond to the growing resentment. At one point they issued altruistic messages that seemed to hail the dawn of a new era of environmental awareness. The Planning Commission resolved that thenceforth no new downtown highrise development would be granted a permit without a public hearing. The Planning Department published a report entitled "Guiding Downtown Development," in which it called for reducing the size and scale of future buildings, and for preserving significant older structures. Gradually, the city began requiring developers to make contributions -- either monetarily or physically -- to housing, open space, and transportation in exchange for permits.

In 1980, the Planning Commission and Board of Supervisors voted to cancel the old developer space bonuses, but retained the 14:1 density limit (which would remain in effect for another five years). At the same time, their new legislation provided loopholes not only for developers of hotels and residences but wrote in specific exemptions for 17 different developments claiming grandfather status because of pre-existing applications.

Thus, to the public eye, major growth was to continue unabated. In some cases it would be perceived as permitting abuses of the very standards that were being proclaimed.

It had been years since any low-income residents had been thrown out of their dwellings in San Francisco by redevelopment, and one would have thought that negative publicity generated by previous examples would have ended the practice forever. Nevertheless, in 1982, the Planning Commission voted to allow a developer to convert a 17-unit apartment house in North Beach (a residential-commercial area outside the traditional Financial District) into offices. Although the majority of the commission argued that the prevailing zoning gave the developer such a right, the spectacle of elderly, low-income people being evicted for a speculative office development was strong stuff, particularly in that era of heightened social consciousness.

A year later, in 1983, with the approval of the mayor, the Planning Commission voted to permit construction of a 10-story condominium tower which would cast afternoon shadows on a Chinatown playground. A postage-stamp-sized park, the affected playground is one of only two public open spaces in Inner Chinatown, which for all its glamorous tourist-oriented image remains a densely populated, low-income neighborhood. The condominium tower has never been built, but the official decision to construct it was clearly at odds with the city's by-then official recognition of the need to protect sunlight.

Also in 1983, the Downtown Plan was published. Its goals, responding overwhelmingly to long-publicized environmental concerns, included the protection of historic architecture and sunshine, as well as the redirection of growth away from the traditional Financial District.

In their first acts to implement the Downtown Plan, the Planning Commission and Board of Supervisors in 1984 invoked a year-long moratorium on major downtown development. At the same time they granted exemptions from the moratorium for five major developments claiming grandfather status. One was a development sponsored by the fabulously wealthy Rockefeller family of New York.

In the same year, 1984, the Planning Department announced adjustments to the Downtown Plan which slightly shifted boundaries of a conservation zone to permit a highrise hotel tower to be constructed atop the Palace Hotel, the city's most historic inn. Some time after that circumvention was publicized, the tower proposal was quietly abandoned. Currently, the Sheraton-Palace Hotel's Japanese owners are refurbishing the institution within its historic envelope. Earlier, the developers had insisted that such remodeling would be financially unfeasible without the tower.

Again in 1984, the city government was seen as watering down its own growth restraints. In June, reacting to the Chinatown decision which would have shadowed the little children's playground, voters approved Proposition K, prohibiting major development from casting new shadows on city parks. It soon became evident, however, that the Board of Supervisors had written into the measure exemptions for three major developments.

In 1986, a succession of such favors were publicized by the San Francisco Examiner in a series of articles entitled *Inner Circles.* The series documented coincidences between the granting of lucrative planning code exemptions to developers and political contributions by those same developers to the mayor (who appoints members of the Planning Commission) and to certain members of the Board of Supervisors. In the space of three years, contributions totaled more than $1.75 million to individual campaigns and special civic funds.

One of the donor-beneficiaries, the Examiner reported, was an affiliate of the government of then-Philippine dictator Ferdinand Marcos. Another donor-beneficiary was the Rockefeller family.

Following publication of the series there occurred a shift in the city's political climate. In November of that year, ending 15 years of unsuccessful tries at controlling downtown growth by ballot, voters overwhelmingly passed Proposition M, which limited downtown development to the equivalent of one moderate-sized office tower per year. Elsewhere in the city, Proposition M imposed restrictions that forbade any new construction from altering the character of existing neighborhoods.

In the next mayoral election (1987), voters rejected the then-mayor's preferred candidate, a supervisor who had been identified in the *Inner Circles* series as supporting the reported planning exemptions as well as receiving the most money in political contributions from the named developers.

The effects of the Proposition M voter initiative of 1986 have yet to be measured. Certainly, its annual ration contest for space allocations has discouraged much development -- how much has not been tallied. It became effective at the time of a nationwide slump in the office market. Certainly it has added bureaucratic layers to the developmental approval process. Whatever the reason, office growth in San Francisco has proceeded since 1986 at a vastly more moderate rate than during the 1970s and early 1980s.

In residential neighborhoods, the spinoff of the rapid growth period followed by the reactive constraints of Proposition M is likewise difficult to assess. Housing prices and rents have continued to rise, but this is understandable in a land-locked, tightly zoned city in which demand is always likely to outweigh supply. One effect may be seen at the Planning Commission's weekly sessions, where commissioners debate late into the night over the means to enforce Proposition M's insistence that the residential character of neighborhoods be protected. These sessions are prolonged by citizens who debate projects that are often no more significant than proposals to enlarge existing single-family houses.

In the city's continuing obsession over growth conflicts, one unfortunate result is that its planners rarely if ever are given leave to plan boldly for the distant future. Even when contemplating the latest re-zoning proposals or the city's largest new developments, planning commissioners and supervisors tend to expend -- nay, exhaust -- their resources on adjudication and efforts to achieve compromises between opposing interest groups. Thus, visionary planning has been virtually supplanted by civic preoccupation with achieving consensus among warring interests.

If Frankfurt is contemplating a period of expansion, I would suggest that its leaders take note of the ways in which San Francisco planners began in 1971 to seek to control growth. I would further suggest that they examine why voters displayed a lack of confidence in planners' ability to do so. By learning from San Francisco's examples and by maintaining consistency and credibility, Frankfurt can avoid a great many problems as it prepares for the 21st century.

San Francisco's Downtown: Commerce and Environment

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In the image of a city, the center plays an important role. Centers rank among the most valued of environments. It is here that old and new clash the most. New functions displace old ones, one population group replaces another. Since the rediscovery of the Inner City in the early 1960s, the driving force has been the quest for extended growth.

In San Francisco, dramatic changes took place from the early 1960s, when the first high-rise buildings appeared, to the mid-1970s, when today's city emerged. A model of San Francisco built in 1935 as part of the New Deal's Work Creation Program has been updated at the Berkeley Simulation Laboratory. An animation film made of this model shows the dramatic changes that took place from early 1960, when the first high-rise building appeared, to 1975, when today's city emerged. A year-by-year animation was filmed of this fifteen-year period, and in the space of a few minutes we can see San Francisco literally transforming in front of our eyes. Looking back, the extended urban growth appeared unavoidable. But this rapid growth also ignored much of San Francisco's history and existing population.

These changes came under increasing protest by local neighborhood and environment groups. Six times during the last three decades, residents collected enough signatures to qualify public referenda. All six referenda asked the citizens to limit downtown development, to keep it from spreading into neighborhoods, to limit building size, to keep buildings from shading open spaces, and to limit the annual allowance of downtown development. The first three of these public initiatives were defeated. The last two referenda succeeded. In 1984, the majority of San Franciscans voted in favor of sunlight to parks, prohibiting high-rise buildings from shading city-owned open spaces. Two years later, San Franciscans voted 'yes' on an annual limit of one mid-sized office building per year.

Growing numbers of San Franciscans disliked the city's continuing transformation. "Manhattanization" became a word that was coined to describe the unwanted development of the financial district. The images of canyon-like streets and monotonous stone buildings reminded too many San Franciscans of places they had moved away from. Many had come to California to enjoy the openness of blue sky, the sun, views of the ocean, and the bay. On the other hand, there was no eagerness to follow the ever-widening suburban example of Los Angeles. Many people wanted to retain the image of a low but densely built city with colorful, individually decorated buildings that line steep streets and cluster around hilltops.

To preserve this urban environment, people spoke out at election time. A coalition of neighborhood groups and environmental interests came together in support of limited growth. For some time in the late 1960s, economic arguments were heard: downtown tax revenues are not paying for the services the City is rendering; neighborhoods are supporting downtown against their will. In my opinion, the economic argument was not as well presented as were the environmental concerns. Depending on who funded the economic studies, the results would be different. An economic study funded by San Franciscans for Reasonable Growth would give different results than a study funded by a downtown business group. The public was confused by the statistics and the argument. But the environmental concerns were easy to understand because they related to people's direct experiences. "Yes," people could say, "the city is getting uglier, the streets colder and windier, the many smaller decorative facades are being replaced by new tall buildings looking all alike."

The act that turned the tide was the demolition of the beautiful department store, The City of Paris, on the city's main square. A store with a history almost as old as the city itself, The City of Paris was named after a ship that served as a department store when much of the city was only made of tents and huts.

The list of demolished buildings is long. In 1979, a book was published called the "Splendid Survivors," which listed and rated all historically significant buildings that had survived fifteen years of intensive rebuilding in the 1960s and 1970s.

In 1979, work on a new plan for Downtown San Francisco was started. The year also marked the third referendum on downtown Growth, a so-called Proposition "O" intended to limit new downtown buildings to a maximum of twenty floors. This initiative was narrowly defeated.

I have dwelt on the downtown controversy in San Francisco to make sure you understand the context in which planning took place. San Francisco planners are seen as being daring in controlling development. This is not because they were more radical in other cities but, as I have tried to explain, they had to respond to a history of community concern. Interest in growth-related issues was generated by community groups and environmental groups, so that questions on "what makes a city livable?" needed to be answered. This required measurable data on livability so that laws could be drafted.

I will illustrate a few examples of this work on the San Francisco Downtown Plan. First, using the WPA model mentioned earlier, we prepared growth projections of development under the planning controls that existed in the late 1970s and early 1980s under planning controls. Future downtown development would have moved west across Montgomery Street and Kearny Street towards the famous Retail District around Union Square and also towards Chinatown.

The preservation of the retail district was widely supported, but four hotel towers were on the drawing board in the vicinity of Union Square. The hotel towers could have gone up to an allowable height of 240 feet. Contrary to what most people expect, San Francisco does not have a warm climate. Quite the contrary; the strong ocean wind and the fog makes most days of the year cold. Especially during the summer, temperatures rarely go up to 70 degrees. Strolling along a sidewalk or sitting on a bench can be uncomfortable unless it is sunny and sheltered. Sunlight is necessary for comfort. We measured the loss of sunlight to the retail streets and demonstrated how the district would have to be rezoned if sunlight were to be preserved in the future. Such a revision would have reduced the building height from 240 feet to 90 feet.

Sunlight became the issue in Chinatown, where 160-foot height limits permitted high-rise apartment towers adjacent to a small but highly-used playground.

We used fish-eye pictures to explain how many hours of sunlight would be lost if buildings indeed would go up to the permitted height. As a result of these studies, building heights in the retail district and in Chinatown were lowered. The same rationale was used to preserve the Tenderloin, another downtown neighborhood filled with people who were, if displaced, not likely to find affordable housing anywhere else in the city. Like their neighbours in Chinatown, the people who live here are not mobile; many of them are old and poor or have recently arrived here from South East Asia.

Now, where would future downtown development go? The South of Market district around the Transbay Bus Terminal is an area without any parks to shade and where few people live. Here no local opposition existed against accommodating the next ten million square feet of office space. With ten million square feet of the city's growth concentrated in one area, some streets would indeed change beyond recognition. Early on, we prepared simulations to demonstrate the effect of individual and cumulative development on the existing scale of the streets. We also simulated building designs that could mitigate the impact. The planners used our simulation in public communication with proponents and opponents of downtown development. They used simulation in developing the rationale for a new plan.

The simulations prepared in this laboratory aided the planning process. They provided a preview of a San Francisco in years to come. Many people could understand the images. They made a more educated discussion possible. It is virtually impossible to predict the consequences of development in a downtown area over time; simulations help, they trigger public discussion, they force all parties to address the issues related to the cumulative effects of growth. Only with such a public discussion was it possible for a plan to succeed in San Francisco.

San Francisco Bay Area Economy: Shifting Structure and Growth

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Introduction

The Bay Area's economy is undergoing significant structural and spatial tremors. The structural changes are the result of national and international economic conditions. Spatial changes are occurring due to differential land and labor costs that exist within Bay Area communities, and the changing definition of what constitutes the "Bay Area." This paper focuses on recent economic events in the Bay Area and looks at structural and spatial changes occurring today and those anticipated in the future. Job growth over the period 1972-1988 will be reviewed, and the evolution of high-technology industries in the Bay Area economy will be analyzed. A glimpse into the existing and future development problems of the emerging bioindustry in the Bay Area will be made. Structural changes in the regions' economy will be explained, including the implications of employment decentralization. An analysis follows focusing on growth expectations along with future structural and spatial changes. Lastly, discussion will focus on the failure of public planning as a management tool to anticipate change in this economy and its impact.

The Problem

Urbanization inherently creates conflict. Conflicts within the urban environment arise from change, but also because public planning, as a management tool, fails to anticipate structural and spatial changes within this environment due to economic dynamics. In the Bay Area, this failure is the fundamental cause of public discontent and may ultimately impair the future economic health of this region and its people. This myopia derives from the failure of the political institutional environment of public planning, as well as from the failure of many planners to understand the dynamics of economy, the forces that drive it, and how to successfully manipulate those forces through public policy. Too often, the debate focuses on growth as the cause of congestion, overcrowding, a deteriorating or underutilized infrastructure, and environmental degradation. Growth is not the problem per se, but rather bad planning, along with contradictory public policy and institutional conflict, create the conditions that cause the above. This paper cannot completely address the institutional conflicts and failures that relate to understanding the economy. However, it will focus on the implications of this failure on future growth within the San Francisco Bay Region. The problems and structural changes occurring in this region are not unique. They are probably occurring in related forms elsewhere.

Bay Area Economic Historical Profile

The Bay Area, as it exists today, consists of the nine counties that border on the San Francisco Bay. The economy has evolved from one of a central-city-type economy to that of an integrated and increasingly dispersed regional economy. Between 1972 and 1988, the Bay Area added 1.1 million new jobs to the economy.

Table 1 ranks the net contribution to growth over this period by industry sector.

Table 1

Rank of Industry Sector Contribution to Overall Economic Growth 1972-1988

Sector	Rank	Jobs Added
Services	1	420,500
Business Services		163,300
Health Services		71,000
Retail Trade	2	234,100
Manufacturing	3	155,000
Durable Goods		140,200
Finance, Insurance, and Real Estate	4	96,200
Government	5	67,500
Wholesale Trade	6	65,000
Construction	7	52,000
Transportation, Communications, and Utilities	8	19,000

Sources: ABAG and "Annual Planning Information," California Employment Development Department, 1972-1988.

What can be learned from this table? The most obvious fact is that almost two-thirds of the job growth occurred in three broad economic sectors in the Bay Area over the last 18 years.

A second broad economic fact is that more than one-half of the growth in services occurred in business and health services, and that more than 90 percent of the growth in manufacturing activity occurred in durable goods. What are the sectors producing business services and durable goods in the Bay Area economy? It is important to note that these sectors -- which are broad in definition may vary from region to region based upon the structural make-up of the localized economy. Definitions specific to the Bay Area economy are:

- **Business Services.** Probably one of the most broadly defined industry sectors in the economy. The primary business activities in the Bay Area are advertising, accounting, computer programming, and temporary employment agencies.

- **Durable Goods.** In the Bay Area, durable goods manufacturing consists primarily of three sectors: electronics and components, computers and scientific instruments, and communication equipment.

What Has Been the Impact of High-Technology Manufacturing on the Bay Area Economy?

High-technology manufacturing -- electronics, computers, scientific instruments, and communication equipment -- has had a major impact on Bay Area growth. More than 25 percent of total Bay Area employment growth can be attributed to this manufacturing and related activity between 1972 and 1988. The economic impact of these industries, however, is far more significant when viewed from the perspective of export-base earnings. This researcher estimates that about 35 percent of all export-base earnings are derived directly and indirectly from the high-technology sectors in the Bay Area. It is export-based earnings that contribute substantially to growth in Bay Area personal income.

A Problem of Definition

Although high-technology manufacturing is covered by the above industry sectors, a broader activity definition is needed to estimate the total impact of electronics-based production activity on the Bay Area economy. For example, the existing Standard Industrial Classification (SIC) system considers neither packaged software programming nor establishments that design integrated computer systems nor research and development laboratories as manufacturing activity. These types of activities are classified under business or engineering and research services.

Thus, the employment that is directly or indirectly related to the so-called high-technology sectors far exceeds that in those sectors defined as manufacturing. For example, as of 1988, of the estimated 225,000 jobs in business services in the Bay Area, nearly 32 percent (more than 71,000 jobs) are directly tied to the high-technology industry. In Santa Clara County, nearly 60 percent of business service employment is high-technology economic activity.

Was 1984 a Watershed for High-Technology Manufacturing Growth?

High-technology manufacturing in the Bay Area remains competitive and strong, but changes have occurred that will affect its overall contribution to the employment growth of the Bay Area. Although durable goods is used as an example, about 80 percent of the employment in this type of economic activity is concentrated in high-technology types of manufacturing industries.

Clearly, the year 1984 ended a historical era for growth in the "traditional" high-technology manufacturing industries in the Bay Area. The rapid growth of the 1970s continued into the early 1980s. But by 1985, it became apparent that major structural shifts in the industry were well underway which would affect future growth of the manufacturing component of the industry.

In the early period of growth, the Bay Area benefitted from competitive advantages, and industry concentrated in this area. By 1980, these advantages were eroding because of natural economic conditions. That is, cost and technology considerations no longer required centralized locations in the Bay Area. Hence, new industries and the expansion of production activity became less concentrated in the Bay Area and developed elsewhere in the United States and throughout the world. The early 1980s was also a period of bad collective management decisions on the part of U.S. firms, particularly in the semi-conductor industry with respect to assumptions about supply and demand. The recession of 1985-1986 in the industry was not so much a demand-driven recession as it was supply-driven recession. There was simply too much world-wide capacity for specific types of semi-conductor products. Those firms that did well during this recession were producers of very specialized high-technology products. The total size of the market for these specialized products was small enough to prevent larger predatory firms from entering the market because the product technology was changing rapidly.

Small and mid-sized firms that focus on specialized product technology in rapidly changing markets are given a competitive advantage over the larger, more bureaucratized firms at the cutting edge of new markets. Big companies move slowly into specialized markets primarily because the decision-making process is not well suited to rapid change.

What does all of this mean? High-technology manufacturing remains strong both in the Bay Area and world-wide. The demand for this type of evolving technology is well-assured. But this industry is highly competitive; market shares of the total production will change rapidly.

The assumption of many that the Bay Area would continue to command the lion's share of growth is simply not correct; nor is it consistent with well-established economic principles on location and market share. Therefore, expect a trend in slower growth in many of these "glamour industries" for a long time. However, this is not a negative event.

Increased competitiveness and instability in market share will stimulate engineering, marketing, and production activities in areas of new products. The Bay Area has the engineering, technical, and venture-capital expertise that is well-suited to a market that is unstable or changing. The rule is:

don't assume market stability. The negative side of this change is that employment in these high-paying industries will not grow at the levels of the historical past.

Bioindustry: An Emerging Industry with Substantial Barriers to Market Growth

The dynamics of a healthy economy require continuous evolution of its industries. Attention is now being drawn to an emerging industry -- the bioindustry -- as a potential new industry in the evolution of the Bay Area economy. In 1987, the estimated number of jobs in the Bay Area bioindustry exceeded 19,000. This is a conservative estimate because the survey only covered firms with fifty or more employees. Several facts were learned from this analysis. First, the bioindustry can be divided into two fundamental components: biotechnology and materials technology. Biotechnology firms focus on the biochemical and genetic structure of organisms to produce a product; biomaterials firms use physics and engineering to produce products that service the needs of the biotechnology companies. In the Bay Area, there is a clear synergy between these two sectors of the bioindustry. Of the two types of production structures in the bioindustry, the materials technology firms have the greatest employment potential. Biotechnology firms have substantial market entry barriers; biomaterials firms don't.

Many of the biotechnology firms in the Bay Area are subsidiaries of large multinational corporations. Of the biotechnology firms surveyed in 1987, 41 percent were subsidiaries of multinational corporations and 55 percent had marketing, licensing, joint venture, royalty, and rights agreements with multinational corporations. This diffusion of ownership and contractual arrangements will tend to influence expansion and investment decisions in terms of locations in the Bay Area. Firms with global markets and corporate decision-making centers that are located elsewhere tend to think globally when it comes to locational decisions. Therefore, don't expect biotechnology firms to replace electronics or computers companies in terms of economic impacts on the Bay Area economy.

Overall Structural Changes in the Bay Area Economy

The overall trend of economic growth over the period 1972-1988 in the Bay Area points downwards. Table 2 illustrates the point. Even within these slower long-term growth trends, individual years could generate substantial growth. The recovery from the 1985-1986 semi-conductor recession resulted in robust growth in 1987 in the Bay Area, adding about 69,000 new jobs. In 1988, given the strength of the national economy, the Bay Area economy added about 76,000 jobs, with almost 40 percent of this growth occurring in Santa Clara County. This reflects healthy economic growth. Therefore, the overall slowdown in 1985-1988 should not be viewed as recessionary type of growth.

However, the electronics and computer recession did have a marginal impact on the Bay Area economy. Between 1985 and 1986, the Bay Area economy added only 18,000 jobs, while the annual average over the historical period 1972-1988 was 67,200 jobs annually.

Table 2

Overall Annualized Job Growth Trends in San Francisco Bay Area

1972-1988	1972-1980	1980-1988	1980-1985	1985-1988
67,200/yr.	81,000/yr.	3,400/yr.	3,300/yr.	3,500/yr.

Sources: ABAG and "Annual Planning Information," California Employment Development.

Some have argued that high technology is diversified and hence the impact of a recession in electronics or an eroding market base will not significantly affect the Bay Area economy. Although it is unwise to extrapolate too broadly about what happened in 1985-1986 in terms of the regional economic impacts of the electronics and computer recession, some facts can be drawn. First, any slowdown in economic growth in Santa Clara County affects overall Bay Area growth. Two pieces of information supports this statement. In one study (Brady, December 1986) of the relationship between the economy of Santa Clara County and the Bay Area economy as a whole, a statistical dependency was shown to exist between the two. This means that a high statistical correlation (0.97) exists between the behavior of the employment changes in Santa Clara and the entire region.

The economic growth numbers for 1985-1986 are also presented as evidence. An analysis of the impacts of the 1985-1986 recession indicated that, in addition to Santa Clara County, Alameda was hit hardest by the recession, followed by San Mateo County, San Francisco County, and Sonoma County. More than 70 percent of the jobs in the Bay Area are in these affected counties. Nevertheless, this shows the importance of a healthy high-technology electronics-based industry to the overall economic health of the Bay Area.

Now, obviously all sectors in these counties were not affected by the 1985-1986 high-tech recession, but enough jobs were affected to reduce growth in all of the above counties. High-tech industries do affect the region's economic health substantially. There are, however, general structural shifts in the overall economy affecting overall growth.

These structural changes are the result of two primary factors. One is the relative aging of the Bay Area economic structure and the overall integration of the types of economic activity performed here into a larger world-wide market. This doesn't mean to imply that the Bay Area economy has lost its competitive edge. Rather it says more about the economic development of other economies. A second critical factor is that job growth is being affected by shifting demographics, slowing the growth in the labor supply. ABAG has done an extensive analysis of the growth in labor force. If we look at the historical growth in labor supply between 1972 and 1988, the curve slopes into a downward direction.

Table 3

Annualized Growth in Civilian Labor Supply Between 1972 and 1988

1972-1988	1972-1980	1980-1988	1980-1985	1985-1988
71,400	78,600	57,100	54,200	60,000

Sources: ABAG, 1970 and 1980 Censuses.

Table 3 shows that the overall growth in labor force was highest in the 1970s and has declined over this period even though labor force participation has risen. In the Bay Area, overall labor force participation was 64 percent of the population between the ages 15-75 in 1980. In 1985, ABAG estimated the participation rate for all Bay Area counties at 65.9 percent of the above age group.

The forecast for 1990 indicates a labor force participation rate of 67.8 percent of the 15-75 age group. This analysis indicates that, under the most optimistic scenario, overall participation will begin to level off at around 71 percent of the working age population and begin to fall. The decline in overall participation is primarily associated to population aging. Therefore, demographics are forcing a slowdown in labor supply growth which will affect short-term labor costs, if demand remains high. The 1990s probably will be a period of labor shortages and inflationary pressures on wage and salary compensation. Although a recession and accelerated investments in labor-reducing technology would alter the timing of such a scenario, it is not likely to affect the long-term trend. A change in national immigration policies might.

What Industry Sectors have Contributed to Short-Term Growth between 1985 and 1988?

During the last three years, there has been a short-term shift in the growth sectors in the Bay Area economy. Retail trade employment increase, which grew at a brisk pace of nearly 17,300 jobs annually between 1980 and 1985, slowed substantially during the 1985-1988 period to about 10,000 new jobs annually. Real growth in retail sales also performed poorly over this period when viewed in an historical context. Although empirical statistical analysis has not verified a preliminary conclusion, it is our opinion that housing costs, accumulated debt, and stagnation in wage and salary growth are beginning to affect disposable income and hence our consumption behavior.

Table 4 presents the percentage of job growth attributed to the overall job growth in the Bay Area between 1985 and 1988. Absent from the growth sectors is manufacturing activity, and clearly the lion's share goes to service employment growth.

Table 4

Percentage Distribution of Job Growth in Bay Area 1985-1988

Sector	Percentage
Construction	3%
Wholesale Trade	3%
Retail Trade	19%
F.I.R.E.	7%
Services	55%
Government	13%
Total	151,700

Note: Manufacturing, Transportation, Communication, and Utilities and Agriculture showed negative growth during this period.

Sources: ABAG and "Annual Planning Information," EDD.

A Look at Business Service Job Growth

Business Services during 1985-1988 took the lion's share of total service employment growth. It accounted for 44 percent of total service growth. Of the service sectors, business services exhibits a higher than average income distribution for the jobs in the economic activity. Our research has indicated that nearly 48 percent of the jobs in this sector historically fell in the managerial/professional category. Growth in business services is viewed far more positively than growth in retail employment, which tends to generate lots of low-income-wage jobs.

More than two-thirds of the job growth in business services occurred in three Bay Area counties: Santa Clara (33 percent), San Francisco (19 percent) and Alameda (17 percent). Of the 225,000 estimated jobs in Business Services in the Bay Area in 1988, 81 percent of the jobs were located in three broad economic classifications. These are Personnel Supply Services (SIC 736), Computer and Data Processing Services (SIC 739), and Miscellaneous Business Services (SIC 739). Miscellaneous Business Service Activity in the Bay Area is predominated by Research and Development Laboratories (SIC 7391) and Management, Consulting, and Public Relations Services (SIC

7392). The 1972 SIC Office of Budget and Management Manual is used to classified these sectors. Therefore, the most recent manual (issued in 1987) many not have the same classification. A cross-reference might be needed.

Table 5 shows the distribution of these industry activities in 1980 and 1988.

Table 5

Distribution of Bay Area Economic Activity within the Business Services Sector

	1980	1988
SIC 736 (Personnel Services)	27%	24%
SIC 737 (Computer Programming)	13%	17%
SIC 739 (Miscellaneous Business Services)	41%	40%
Total Business Service Jobs	131,700	225,100

Source: ABAG.

The above table illustrates the linkages in the Bay Area between high-technology manufacturing industries and business services. In 1980, about 17,000 people were employed in computer processing services in the Bay Area. By 1988 that number had jumped to 38,000. It is useful to look at the growth in computer programming in perspective with total Bay Area job growth and business service job growth. Between 1980 and 1988, the Bay Area job base grew by 18.8 percent; business service employment jumped by 69.4 percent, and employment in computer programming skyrocketed by 123.5 percent.

Miscellaneous Business Services also is affected by high-technology manufacturing. Of the estimated 28,000 jobs in Miscellaneous Business Services in Santa Clara County, about 10,000 or more are affected directly by the high-technology industry in the county.

Management and Public Relations (SIC 7392) -- which is part of Miscellaneous Business Services -- grew during the 1980-1988 period, but not at the rate of computer programming or the overall growth rate in business services. In 1980, about 16,000 people worked in this sector. By 1988, the number had grown to about 26,000. San Francisco had the highest concentration of this occupation in 1988, with about 8,500 people working. Santa Clara followed with about 5,500 individual employed in management and public relations businesses.

One final note on the relationship between business service employment and manufacturing activity in the Bay Area. It is clear that a direct relationship exists between the growth in computer programming employment and the presence of electronics-based manufacturing and research activity in the Bay Area. Certainly, a closer look at such activities as management and public relations in counties like Santa Clara and San Francisco might show a statistical relationship between these activities and manufacturing. Increasingly, manufacturing activity has become technology-intensive. Traditional types of support activities which were in-house functions are being shifted to smaller firms or businesses that may support the manufacturing activity through research, marketing, or other activities that change the classification of employment without affecting the aggregate output of a manufacturing facility.

A recent study by the Federal Reserve Bank of Chicago (October 1989, Manufacturing's Changeover to Services in the Great Lakes Economy) appears to support this conclusion with respect to the midwest. The study suggests that manufacturing's share of labor income remained relatively constant between 1967 and 1987 when service jobs previously counted in manufacturing are added back to manufacturing labor income. Even given the above analysis, no doubt the Bay Area has lost traditional manufacturing activity to more competitive regions of the world. This has resulted in a loss of jobs and output. At the same time, new economic activity has arisen. For instance, computer programmers have replaced machinists. But because of an industry classification system which places a programmer in a "service job" and the machinist in a "manufacturing job," we have assumed that the gain was not as significant as the loss.

Changing Spatial Distribution of Employment between 1972 and 1988

The distribution of overall employment has shifted dramatically over the last 18 years. This shift reflects the decentralization of jobs due to cost and information-technology considerations. Cost contributed to decentralization because of differential land, labor, and transportation opportunity, and real costs within the region. Information technology considerations have reduced the need for centralization of administrative and operational services since these services are not critical to central decision-making. Central organizational functions should only represent those activities that are critical to overall strategic planning and operational decisions. Because of the above considerations, the Bay Area economy is far more spatially integrated today than in 1972 as an economic unit. Table 6 illustrates the overall decentralization of job growth among counties in the Bay Area between 1972 and 1988.

Table 6

Decentralization of Employment in the Bay Area Economy 1972-1988

County	Employment Share 1972	Employment Share 1988
Alameda	23.1%	19.7%
Contra Costa	7.8	9.4
Marin	2.7	3.2
Napa	1.3	1.4
San Francisco	25.1	19.9
San Mateo	10.7	10.2
Santa Clara	22.9	28.3
Solano	2.9	3.3
Sonoma	3.4	4.6

Source: ABAG.

Santa Clara County is the only county in the Bay Area with over 20 percent share of total employment in 1972 to increase its share over this period. The primary reason for this rise comes from electronics and computer-manufacturing activity. In 1972, manufacturing in Santa Clara County accounted for 40 percent of the Bay Area's total manufacturing employment. By 1988, 55 percent of Bay Area manufacturing was concentrated in Santa Clara County. Santa Clara County is the "economic engine" that pulls the Bay Area economy.

San Francisco still remains the cultural and financial center of the Bay Area, but its importance as the business and economic center has decreased significantly. This decentralization of activity has been occurring for the last fifteen or more years. Table 7 focuses on several major employment activities that characterize the role of San Francisco's economy within the Bay Area's economy. These activities are: Finance, Insurance and Real Estate (SIC 60-67), Business Services (SIC 73), Legal Services (SIC 81), and Miscellaneous Services (SIC 89). The classification Miscellaneous Services is important in San Francisco because it contains architectural and engineering firms. The table shows that the trend of employment concentration in these sectors has been decentralization. The number, however, merely reflects the economic reality that information, decision access, and specialization of labor in the traditional industries that agglomerated in San Francisco (in the past) no longer need to or can afford the opportunity and real costs associated with concentrating business functions not related to strategic planning or central management functions.

San Francisco will become less and less the primary center of secondary and support office employment because information access no longer needs to centralize. This is not true, however, for much of the computer, electronics, scientific instruments, and software industries located primarily in Southern Alameda and San Mateo Counties and Northern Santa Clara County in the Bay Area. These firms tend to agglomerate substantially close to each other. Information needs, raw materials, specialized engineering, and marketing activities create gravitation forces that concentrate high-technology industries. Land cost, transportation access, and labor availability are centrifugal forces that force the decentralization of these industries. But we will not see the same type of decentralization in the high-tech industries that have been seen in the office-related sectors.

Table 7

San Francisco's Share of the Bay Area's Employment in Selected Sectors

	1964	1970	1976	1980	1986	1989
Finance Insurance and Real Estate	58%	56%	52%	44%	43%	41%
Business Services, Legal Services, and Miscellaneous Services	40%	42%	37%	33%	29%	27%

Note: 1989 are estimates

Source: County Business Patterns, U.S. Department of Commerce, 1964-1987.

Income Trends in the Bay Area Economy

Average household income in the Bay Area increased from $26,300 in 1980 to $44,600 in 1988, according to estimates made by ABAG. This was a 69 percent increase in household income over this period. Factoring in inflation reveals a somewhat different picture of income growth in the Bay Area. Given inflation, real household income increased by 14 percent between 1980 and 1988. This represents a reasonable real growth rate. But average household income growth disguises the contributing factors to growth in income. For example, between 1980 and 1988, inflation-adjusted wages and salaries increased by 6.4 percent between 1980 and 1988. So household income had to increase by some other fashion than through traditional pay raises. The answer is in increased workers in households. ABAG estimates that increased labor force participation in Bay Area households contributed to about 43 percent of the real growth in income over this period. Table 8 shows the contribution to total growth in household income in the Bay Area. A major economic problem looming on the horizon is that labor force growth is beginning to level off. If real wages continue to increase at a slow pace, then household income growth will begin to slow. This is the trend. Real wages per employee still are far below the level they were at in 1972.

Table 8

Contribution to Growth in Bay Area Household Income 1980-1988

Real Growth in Wages and Salaries	45%
Increased Workers in Households	43%
Growth in Investment Type Income	12%

Source: ABAG.

In wage and salary growth, the combined factors of the onslaught of a highly competitive international market of the 1980s and the destructive inflation of the late 1970s have left Bay Area workers with real incomes below that of 1972. However, there is some room for optimism. Table 9 shows the real wage and salaries per employee in the Bay Area in 1987 inflation-adjusted dollars.

The Bay Area has recovered from the negative real income growth of the 1972-1980 period. The trend is toward recapturing "our purchasing power of almost twenty years ago." Research indicates that, if trends continue, average real wages in the Bay Area, will reach the 1972 level by 1992. The reason for this slow pace in real growth is not clear. One partial explanation is in the growth in lower-paying jobs relative to higher paying jobs. Another is the low rise in wages in the 1980s. Another might be an increase in not only lower-paying jobs, but the entry of lower-skilled workers who have less ability to compete.

Table 9

Real Wage and Salary Income Per Employee in Bay Area 1987 Constant $

1972	$28,691
1980	25,123
1985	25,486
1986	26,239
1987 (Estimate)	26,498
1988 (Forecast)	26,900
1989	27,200
1990	27,800

Sources: Bureau of Economic Analysis, U.S. Department of Commerce (1972-1987); ABAG (1988-1990).

The Failure of Public Policy to Anticipate Economic Change

Some will view the decentralization of employment and economic activity in the Bay Area with nostalgic eyes and look back to the time when the Bay Area was a place of centralized employment centers and suburban living areas. But more realistically, the change in the spatial distribution should be viewed with a sense that the economy adjusted, as noted earlier, to changes in markets and industry structure. Given the way public policy has failed to make the needed investments in road and public rail infrastructure, think of a scenario in which San Francisco County would have 100,000 more jobs than it has today. The transportation infrastructure would be even more stressed, and probably unable to handle the traffic load.

The possible result of such a constrained growth scenario would be the loss of jobs and income to the residents of the region. Decentralization of employment was, in fact, a positive response of the economy to these policy constraints. Positive in the sense that the regional economy adapted to the constraints placed upon it by land and transportation policies. The public policy problem that is faced today is many-faceted. For example, planners did help develop a rapid transit system with the goal of maintaining high-density, centralized employment centers, such as the City of San Francisco. They failed, however, to anticipate that rising land costs and shifts in the labor supply due to residential growth patterns would (naturally) decentralize employment patterns, and effectively reduce the important role (both environmentally and from an energy consumption perspective) of the existing fixed-rail regional transportation system.

Public policy has generally been unable to successfully anticipate economic and demographic change with corresponding impacts on infrastructure. Institutional mechanisms that manage growth do not respond in a systematic way to growth in the United States. Housing, land-use, and transportation planning do not function in a coordinated fashion, primarily because the resources needed to solve a problem are not systematically applied at the same time. It is likely that the nature of a democratic decision process inherently creates these management inefficiencies. Public policies generally *respond to* market-place decisions. And too often the response prompts management strategies that are no longer relevant to the economic decisions made today which are affecting the spatial distribution of growth.

The unfortunate truth is that the public policies and the planning mechanisms that are designed to manage growth are structured to respond to some past economic or demographic event. It is apparent that tension will exist between public policies designed to solve problems, citizen perceptions of what is needed, and the way the economic decision process responds to public policy constraints and citizens' perceptions. These may be inherent institutional flaws of a democratic system or they may be simply represent flaws in the theory and practice of growth management and the way planners anticipate spatial and temporal change in the urban environment.

Conclusion

There are some broad conclusions that can be drawn. Clearly, the economy has done well over the period 1972-1988, but there are structural changes in the Bay Area economy that are affecting job and wage growth. The Bay Area economy is far more spatially integrated today than fifteen years ago. The organizational structure of office employment no longer requires centralized economic locations that have implications for transportation and land use. High-technology industries produce the greatest wealth in the region's economy, but are increasingly subject to the forces of national and international competition.

Of increasing concern is that of a public over-confidence that past economic success in the Bay Area economy somehow guarantees future economic growth. History has taught us that those who follow such a path enter the world of decline and decay. Increasingly, we must become conscious that our economic future is not guaranteed. The cost of housing, indecision and bickering among public officials on critical planning issues, and a paralysis in both the public and private sectors with respect to a vision of the future and of the means to get there are clearly major problems that we must address.

The future is not something that happens; it is created. And maintaining a strong and competitive economic environments is of critical concern to all of our futures.

Restructuring Trends in the San Francisco and Frankfurt Regions

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I. Frankfurt's Basic Situation

Frankfurt's economic situation is characterized by a strong tendency towards "tertiarization;" that is to say, the direction of a society oriented towards services with special emphasis on the credit business. The percentage of those employed in the secondary sector sank from 30 percent in 1970 to 23.4 percent in 1987. A great many of the remaining jobs in industry are "office jobs" in central offices. The emergent "information society" is evident by the growing number of jobs in the information and communication sector, the increased demand for good technical equipment in office buildings, amd the increased requirements for space per office worker (now averaging over 30 qm).

Not unlike San Francisco, Frankfurt is an economic and business metropolis, not a political one. Its ability to compete as a location for businesses is thus the decisive factor in the city's future. The Internal European Market will set new standards in this respect when it is initiated in 1993. Until now, Frankfurt has profited by its central location in the Federal Republic, which is, seen in the context of the European Community, actually at the geographical edge of things. This could change again in Frankfurt's favor if the Eastern European economies actually do open up.

Within the region itself, one of Frankfurt's main problems is its very small city area (about 250 km^2, about 620,000 residents). There are about 90 jobs in the city per 100 residents, which means that about 260,000 people commute every day.

The Rhine-Main region with its population of approximately 2.3 billion must, however, be considered as an economic unit. There are as yet hardly any efficient structures integrating the city and its environs in a common "metropolitan consciousness." The planners with overall authority have until now attempted to draw limits -- both to the increasing agglomeration problems and to Frankfurt's dominating position -- by practising a policy of strict limitation of new building land. In particular, it was hoped that structurally weak areas would profit from such a policy. Since, however, Frankfurt must compete with other European metropolises such as Paris, Milan, and London, this strategy turned out not only to be useless to the structurally weak areas, but also harmful to Frankfurt as a business location.

The provision of living space involves acute problems. The causes are increased demands for larger and better-located living space as well as an influx of immigrants -- not least emigrants and evacuees from the former Democratic Republic and the rest of Eastern Europe -- combined with high construction and rental costs resulting from the space limitations. Thankfully, the city has not yet experienced any serious ecological or social conflicts -- not even with its 20 percent foreign population. Nevertheless, the increasing difficulty of communicating the requirements and results of economic growth to the citizens, especially when displacement is involved, is becoming apparent.

II. The Goal: "Location Optimization"

Location optimization means the city is to become an optimal business location as a center of economic activity, in particular on an EC scale. In addition to classical location factors like space availability and infrastructure, this means avoiding social and ecological conflicts, as well as providing living space and green urban areas. Location optimization also demands a richly diversified mixture of business branches and thus stronger qualification levels for the jobs offered. This is an important reason why a certain number of non-office jobs will have to be retained. In this sense, secondary schools and scientific institutions are also elements of location optimization.

Of course there are numerous conflicts inherent in these various goals. The most important thing is not to forget that location optimization as described must preclude a crass one-sidedness, and that the real challenge consists in the difficult process of weighing up essentials all the way down the road.

Our thinking will have to be based on a positive future for the metropolis as a form of human settlement with a tendency towards continuing conurbation. The essential elements are the advantages of close contact between decisive business units and a diversified job market. In addition, a further spatial expansion of the job market is on the way, fueled by the introduction of fast new long-distance railroad lines which will be used for commuter transportation. The introduction of new telecommunication technologies will, on the other hand, have only negligible effects on these centralizing tendencies in the foreseeable future.

It is not really a matter of passing abstract value judgments on these developments. A metropolis like Frankfurt -- or rather an economic region like Rhine-Main -- has no choice but to swim with the tide. The region's economic health, its financial basis for social and ecological development, depends on its ability to remain competitive as a European business location. This, in turn, will depend to a considerable extent on whether comparable economic metropolises pursue similar strategies in order to master their own futures.

Businesses' location requirements will be very important here. The decisive element will be the extent to which businesses are prepared to support "mutable" location solutions to the conflicts inherent in different goals.

III. Political Strategies for Frankfurt

1. The primary principle must be: dare to be a metropolis! This will require above all more "metropolis consciousness" in the region. It means provincial rivalry will have to become a thing of the past. It also means a conscious symbiosis between the city and its environs.

2. The continuing demand for more office space must be met, in particular in Frankfurt's inner city area. In view of limited lot space, this will mean that some new high-rises will have to be built.

3. The demand for living space will have to be met. This problem cannot be solved within Frankfurt's city limits alone. Cooperation with the surrounding areas is necessary. More importantly, and more likely to succeed than trying to preserve existing living space within the city, is to offer alternatives to those who have been displaced (often by high prices). Even in parts of the city where the desired functional mixture can be achieved, living space prices and quality will definitely be a cut above current levels.

4. Sufficient space for manufacturing enterprises, as well as for supply and disposal facilities and services, will have to be assured in future. This is true above all in cases of relocation out of problematical urban areas. Here, cooperation with surrounding areas will be of key importance. For "psychological" reasons Frankfurt itself should, however, retain a share of these less desirable installations and functions within its own territory.

5. An affordable and intact transportation network must be assured to serve the entire region whereby the present degree of mobility and accessibility can be maintained, although not necessarily by means of automobiles.

6. On the whole, the restrictions of new building land in the region will have to be carefully loosened up. Obviously, conflicts are going to arise from the friction between this and the requirement for sufficient undeveloped and open areas. Such decisions must above all take into account precise climatic data as well as recreational value. All in all, the necessary reserves have probably not been exhausted. In this context, the question of whether the metropolis Frankfurt am Main really has to include farmland must be allowed.

7. Daring to be a metropolis in this sense will also mean careful consideration of what should be preserved and what we can do without. Structural preservation for its own sake is usually tantamount to a renunciation of progress. The decisive task will be to keep the drawbacks of growth from overshadowing its advantages.

Developing Downtown San Francisco: Myths and Realities

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Peter Hall questioned the regional context of the San Francisco downtown plan, and it's obviously pretty simple: the plan assumes we can handle any growth we want to take place. Also, it assumes that we don't handle growth only one way or another. Nowhere does it say there should be limits, real limits; it is, therefore, an entrepreneurial process and it is based on the fragmented nature of the region. It's probably why in this day and age the citizens groups do more to initiate anything in terms of regional planning and development than anybody else who is in the government.

Let me start off my brief talk by setting a context for what I want to say about pressures from an expanding downtown. It will probably, if it does nothing else, tell you the point of view from which I look at things. I write every now and then what I call whole world truths, and here is one: land economics is what you believe and it is what you believe that counts. If you believe that you must build on small pieces of land and if you believe that buildings must be built under a certain height then it will be economically beneficial to do that. If you do not believe that you are limited to small parcels and unlimited height then it won't be economical to do that. The key word here is belief and that's pretty much what land economics is about. For longer than I care to remember, developers and their architects (and even more often land economists) have been telling me that in order to build efficiently and economically it is necessary to have large parcels of land so that large and presumably efficient floors can be built in their buildings. Height, I am told, is necessary in order to get enough space in the buildings to pay for the cost of the land -- not just because big corporations want to be in big buildings. It has to do with economics, and things pencilling in, and with images.

I have always thought that the last was nonsense and didn't know why the public should have to put up with private egos. Then, not too long ago, I was in Tokyo's most intensely built up shopping areas. I saw a lot of buildings, most of them new, on small lots as narrow as twenty-five feet wide. They were often only ten stories high, certainly modest by today's standards. I saw apartment buildings, offices, hotels, and even a department store -- and none of them terribly high all in those small, small lots.

So why did some Japanese build that way? Did they know nothing of economics? Were they ignorant? Not at all. Maybe, I thought, all of those small parcels were separately owned and no one would give them up because owning land was really important, and the government had not yet figured out a way to make it easy to get all the small pieces. And possibly the small plots assembled into large parcels for a few owners. There may have been tough height laws, but in other areas I had seen some new, large buildings that were a lot higher and wider than ten stories and twenty-five feet. In any case, there were dozens of modest-scale buildings. My belief is that the Japanese in that area knew that there were limits to what was allowed and so they lived within the limits. Everything, including economics, adjusted to what was perceived as real. By the way, all those buildings with all those entrances, along with the diversity that is possible with more buildings rather than fewer, helped to make for very lively streets.

Washington, D.C., has always managed to live with very strict height limits. No one seriously believes the height limits can be changed. Prices and economics and land uses have adjusted. Certainly, developers do all kinds of things just outside of Washington, D.C.; in fact, they've built some pretty terrible stuff. But, if the governments outside of the city had said, "No, no way, you must build under eight stories," you know they would have found a way to do that.

A major developer in Boston once told me, "You know what it is, don't you? It's expectations." He could have said it's greed. What it is is simple. If there's a rule or a norm or a habit that says the most you can do with a piece of land is such and such and if everyone believes that rule and that it can't or shouldn't be changed, then people and prices adjust and that's that. If, on the other hand, people think that they can get more out of a rule change or some special consideration that others don't have, and make more money in the process, then they will insist that it's uneconomical to develop under the rules. Worse yet, some of them even come to believe it, and have developed big economic theories about it. And the ultimate threat is that if the rules do not get changed or bent to let the developers do what they need to do, they'll go somewhere else. Therefore people get scared, believe them, and change the rules. But if the developers believed that they had to build on small lots and only to a certain height, then it *would* be economic.

With that as a background, let us go into the impact on downtown San Francisco. If elected officials are more fearful of losing new development to someplace else or of losing some of what they already have -- and that's a constant, if very often unjustified, threat -- and if pressures from neighborhoods adjacent to downtown are not equal to the threat of economic loss, then they will permit expansion. The question then becomes, "where?" And I will examine that question in a moment. If elected officials say "No, we will not change the boundaries. No, we will not let any development into adjacent inner city neighborhoods," and if everyone understood and believed that, then development would go elsewhere. It would go to the fringe -- and I don't mean the fringe of corporate San Francisco. I mean the fringe of the metropolitan area. That would, or might, create some very real problems that we must deal with, or try to deal with, or other people must try to deal with. Unless it is handled, the growth might go to Oakland or San Jose. Neither one of which might be so bad. But actually, of course, the events will not follow either of those two scenarios -- life is never so clean, never so clear -- but will follow both of them. If, that is, the development doesn't go to another area all together. The net increase might go somewhere else. That also might not be the worst thing in the world.

The point is, development will go to a combination of places, and it will be incremental and shifting in nature. Let's look at the possibilities for a developer: you could build more; that's the first possibility, in a sense, begging the question of what the effect of development might be. Or you could build more intensely within the downtown. And that could well happen. When the pressures get going, the ability to cave in is immense. The traffic impacts on inner city neighborhoods could pose great problems for the adjacent neighborhoods, and unless properly handled by transit, going to work may be more difficult than some people think. In addition, there would be pressures for higher densities in those adjacent neighborhoods. There would be constant pressures to expand into neighboring places.

At that point, you would begin to get questions. For instance, people still reel from the notion that people voted for sunlight in parks. But if development is to get more intense, you can bet that people will begin to ask: is it really important to have sun on them all the time? Is it really important to have sun on all of one sidewalk from eleven to one? Or can it be in pieces, or should it be individually thought of? That is, development will go into the area of discretion rather than law. Because developers can apply pressure to change discretion. Is it really important, they could say to the public, not to have winds over over eight miles an hour in San Francisco? Is it really important? Come on! We can live with that. That will be the nature of the pressure. And that is the alternative of building more intensely.

On the other hand, there could be changes on the surrounding areas instead. In that case, each area must be looked at individually in terms of the nature of each. For example, one could look at the Tenderloin. What sorts of pressures are likely to be felt on the Tenderloin? I would expect strong continued pressures for expansion of the downtown into that area. The people are poor. The buildings are old. Thus, if there were enough pressures, there could be many reasons to accelerate code enforcement with a vengeance in that area. But in the Tenderloin there have been fairly strong neighborhood organizations and some special interest groups that are concerned with those people. Nevertheless, it is a very vulnerable area; partly because downtown is expanding out that way, but partly because the Western Addition area is also moving in on them. It is in danger of being sqeezed out. Nob Hill, on the other hand, is too rich and too high, so it can withstand the pressures. Hans

Blumenfeld's observations about height with wealth are absolutely true in San Francisco: height and wealth can withstand downtown pressures.

The next target is Chinatown. In Chinatown, constant threats of expansion from the downtown will occur. There are all sorts of laws on displacement which are ignored. More than any other area, it is the slowest waiting game in town. It is an area willing, prepared, to explode. If they don't get them with earthquake standards, somebody will get them with arson.

Next, the target is North Beach. There, there are constant pressures fueled by tourism; it is vulnerable to some changes on Broadway right now but it is also fairly strong in resisting.

Finally, there is the South of Market area. That is where there has been a push for development, since there is still a lot of space there for new development. But there are also people who live there, and they are probably least organized of any area mentioned thus far. They are thought of as problem people, more so than people in other places, and increasingly so in the last ten to fifteen years.

Nevertheless, there *are* areas which might accommodate expansion, and that may teach us something. One interesting area is north along the waterfront. Not out on the water but along the waterfront, towards the Levi Strauss development. One could build with much more intensity, but not necessarily the height. Another area is south along the southern waterfront. These areas for possible development within the greater metropolitan area of San Francisco may not be a solution for questions of growth, but they may imply something. And that is that all of these suggestions are lineal in nature. And they are not in areas of prime contention where there are people with whom to contend along travel routes.

In that regard, we used to make fun of Soria y Mata, and his concept of the lineal city, but he may have more to teach us than we know. In fact, there is one place that has put the lineal concept into operation in order to save other areas and to make the whole city work, with transit and so on. That place is Curitiba, Brazil. A million and a half people all decided to make transit work and to have high density corridors along it. And it is not so bad. Of course, in the Bay Area, it is still possible to develop elsewhere. But not in a way that won't hurt the open and agricultural areas of the Bay Area. And although I don't have a high chance of hope for that, I believe it is important.

Demography, Economy, and Commercial Real Estate in the San Francisco Bay Area

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The economy and demographics of the San Francisco Bay Area are inextricable from trends in the nine-county San Francisco Bay Area (including Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties). The San Francisco Bay Area has a population of 5.9 million and an employment base of 2.9 million, representing 20 percent of California's population and 23 percent of the state's employment base. The city of San Francisco has a population of 732,000 and 567,000 jobs. Thus, while it only accounts for about 12 percent of the region's population, 20 percent of the region's jobs are located there.

Over the past two decades, the geographic distribution of population and employment within the region has changed, and the patterns of growth have shifted over time. The forces that operate to create these shifts are complex and variable. Growth in the region is determined not only by its internal economic strength and its attractive physical environment, but also by national and international economic conditions and by demographic factors which in turn have been affected by four decades of political events. The recent history of the San Francisco Bay Area reflects the region's underlying economic strength and also points to the forces likely to affect the region in the coming decade.

Population Growth and Redistribution

Population growth patterns in the San Francisco Bay Area have shifted during the past decade and are likely to shift again in the 1990s. During the 1970s, population growth occurred in a typical pattern of suburbanization. San Francisco lost population, as did the older central cities of Oakland (Alameda County) and Richmond (Contra Costa County). The 1980s saw a reversal of this trend. Regionwide, population growth accelerated from an annual rate of 1.1 percent in the 1970s to 1.4 percent annually in the 1980s. However, the rate of growth slowed in many suburban counties, while in the central cities patterns of slow or negative growth reversed during the 1980s, with San Francisco and Oakland adding population.

These shifting patterns of growth are a response to two important demographic factors: the changing age structure of the region's population, and the increased rate of immigration into the region. In the period from 1970 to 1980, the fastest growing age cohorts were those in the younger half of the labor force, as the post-war baby boomers entered the work place. This was also a period of rising female participation in the labor force and a period in which many younger women postponed child-rearing. All of these factors, combined with very high interest rates in the early 1980s, made central-city apartment living relatively more attractive than it had been in the recent past. At the same time, growth in demand for suburban homes slowed relative to the growth in demand in the 1970s.

Foreign immigration has been another force shaping how much, and where, growth has occurred in the San Francisco Bay Area in the 1980s. The increase in the rate of growth in population in the San Francisco Bay Area in the 1980s appears to be largely due to foreign immigration. Recently released data by the Bureau of the Census suggests that Hispanic and Asian ethnic groups accounted for 80 to 90 percent of the population growth in the region between 1980 and 1985. These population groups tend to locate first in central-city areas and may later move to more suburban locations as they become economically established in the region.

Demographic trends suggest that the region's patterns of urbanization are likely to shift again in the 1990s. Over the coming decade, the fastest growing age cohorts will be segments of the labor force in their middle earning years (the 35- to 55-year-old age cohorts). In addition, the rate of participation of women in the labor force will continue to increase, but at a slower rate. Workers in these age brackets are likely to be seeking single-family homes, often outside of central-city areas. Migration statistics provide evidence that these age cohorts are already shifting away from the major employment centers, such as San Francisco and Santa Clara County, to outlying suburban areas. For example, over 9,000 people between 30 and 64 years of age moved out of San Francisco between 1988 and 1989, and Santa Clara County lost over 7,000 in these age categories, while a net of about 6,000 moved into Contra Costa County and over 5,000 into Solano County.

In sum, the Bay Area will be facing a changing labor force in the 1990s. It will be older and more ethnically diverse, and the more experienced workers will be dispersed away from employment centers.

Shifts in the Composition and Location of Employment

In the 1970s, employment growth in the region averaged 3.9 percent annually, a rate far exceeding that of population growth. Since 1980, the rate of growth in employment has slowed to an annual average of 2 percent, while population growth rates have risen, bringing the two closer together. Again, demographics have played an important role in narrowing the gap between employment and population growth. The baby boomer effects on growth of the labor force have tapered off, bringing population and employment growth into closer balance.

Regionwide, a number of concerns have been raised about the strength of the Bay Area's economy. These arise from several factors. First, the overall rate of growth has slowed sharply, especially compared to the state as a whole. While the Bay Area's rate of employment growth closely tracked that of the state through the mid-1980s, in the period of 1985-1987 regionwide employment growth dropped to 1.5 percent annually, while statewide growth increased from a rate of 2.1 percent annually from 1980-85 to an annual rate of 3.1 percent. In addition, several major changes occurred in the region's key economic sectors in the 1980s. The region lost strength in the finance and insurance sectors, with the greatest losses occurring in the city of San Francisco. The region also lost much of its heavy industry during the first half of the 1980s. While high-tech employment growth counterbalanced this loss, this segment of the economy experienced a recession in 1985 and 1986 that accounted for much of the region's slowdown in employment growth.

Despite these recent trends, the economy appears to have an underlying resilience that suggests that employment growth will continue in the future. San Francisco's weak performance in the past few years is often compared to the strong comeback of Los Angeles County. However, it is important to note that growth in Los Angeles is indeed a comeback from a period in the early 1980s when employment grew at less than 1 percent annually. Employment growth in Los Angeles County far exceeded Bay Area rates in 1986 and 1987, but in 1988 was again below the rate of growth experienced in the San Francisco Bay Area. Furthermore, Bay Area unemployment rates have remained 1 to 2 percentage points below statewide rates, even in periods when the region's overall rate of employment growth was relatively poor.

Not only the composition but the distribution of employment in the Bay Area has changed dramatically. In the 1970s the South Bay (Santa Clara County) dominated employment growth, accounting for 42 percent of the total increase in jobs during the decade. The San Francisco MSA (San Francisco, Marin, and San Mateo) was also a major player, accounting for 28 percent of the region's employment growth. Since 1980, however, the largest share of growth has occurred in the East Bay (Alameda County). The East Bay accounted for 37 percent of employment growth in the 1980s, compared to only 20 percent in the 1970s. This shift is particularly striking because the East Bay was heavily hit by losses of manufacturing activity in the recession of the early 1980s. Recent growth has been largely in office-based sectors. As a result of these differential growth rates by region, the South Bay now accounts for over half of all manufacturing employment in the region, compared to 30 percent in the early 1970s, while the East Bay's share of finance, insurance, and real estate employment has risen from 21 percent in 1972 to over 25 percent in the late 1980s. The San Francisco MSA has become less dominant in all sectors over this period. Nevertheless, it still accounts for more than half of the region's employment in finance, insurance, and real estate, a key office sector.

Building Activity and Real Estate Markets

One of the most noticeable patterns of growth in the 1980s had been the heavy expansion of office and industrial stock and the much slower growth of housing stock. While population growth was accelerating and employment growth slowing, office space was being added at a rate of about 12 percent annually and housing stock crept up by only 1 percent annually. The increase in office stock has been especially dramatic in the suburbs, although San Francisco's growth in stock has also far outpaced the demand for space. While San Francisco's office stock increased by over 40 percent in the 1980s, stock in other parts of the Bay Area more than doubled, leading San Francisco's share of the office market to drop from 60 percent in 1980 to under 40 percent in 1988.

Housing stock has grown most rapidly in more distant suburban areas and in housing markets peripheral to the San Francisco Bay Area. As a result, home prices rose more rapidly in the San Francisco Bay Area than in the state as a whole. Neighboring areas, with home prices far below Bay Area levels, are now attracting workers commuting to Bay Area employment centers.

Concerns for the 1990s

The San Francisco Bay Area is a dynamic region that has changed dramatically in response to a wide range of pressures. Several critical forces will affect the region in the 1990s. The most immediately visible issue is traffic. Because the adult population has been growing faster than the population as a whole and because, geographically, people and jobs are becoming more and more dispersed, traffic levels are increasing at a rate far greater than either population or employment growth. Traffic congestion levels are likely to affect where people live and where employers move in the next decade.

Less visible but of at least equal importance is the changing age structure of the labor force. Experienced workers are likely to be in good supply in the 1990s, but labor shortages will emerge in entry-level jobs at both trained and untrained levels. This is likely to lead to further restructuring of the region's economy, with an emphasis on growth in sectors reliant on high degrees of training.

Shortages of educated but less experienced workers combined with high housing prices will shift more back-office employers to outer suburbs such as Solano County or out of the region entirely.

The strength of high-tech manufacturing sectors will also shape the region geographically. If these sectors have another decade of strong growth, the South Bay may demonstrate not only continued dominance in manufacturing but also an expansion in its share of the region's office activities and trade. A weakening of high-tech sectors could shift attention towards growth in the East and North Bay areas, where transportation networks and housing supply continue to offer a greater range of opportunities for firms dependent on an affordable and accessible labor force.

Finally, both the institutional structure and public attitudes have contributed to current problems in the region and make resolution of those problems difficult. Questions of housing affordability, labor force composition and quality, transportation flows, and other infrastructure needs cannot be addressed on a city-by-city basis. There has been a growing recognition that many of these problems must be addressed through regional planning or state-level action. Yet decisions continue to be made largely at the local level, and voters who in surveys show an eagerness to reach solutions regionwide at the ballot box tend to vote for local self-interests regardless of the regional consequences. If this trend continues, it will be difficult to resolve the critical development issues facing the region in the 1990s.

The Frankfurt Office Market

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Frankfurt is the principal commercial and banking center in West Germany. It is a relatively small city of only 620,000 inhabitants but -- and this is one of its major problems -- almost 560,000 employees. The statistic says that 9 out of 10 Frankfurt citizens are actually working (including the 60,000 employees in the public services). This employment density creates some great problems in the city, including:

- extreme traffic density
- high number of commuters (approximately 230,000)
- shortage of residential space
- corresponding depopulation

However, it also emphasizes the close integration with the surrounding communities and Frankfurt's central importance for the Rhine-Main area.

Frankfurt ranks fifth in the world for advertising in terms of billings and is the location of the principal West German Stock Exchange, the Central Bank, and the largest exhibition center. The city has the natural advantage of being located in the center of the German road and rail system and has the largest airport in mainland Europe.

The total stock of office space on the Frankfurt market comprises more than 8 million square meters of space, which are used by approximately 320,000 office employees. Over the last few years, the annual increase amounted to approximately 2.5 percent net, which in total figures is 200,000 square meters per year. Another 40,000 square meters per year are replaced -- i.e., demolished and redeveloped.

After the development boom of the early 1970s and the following economical recession (oil shock) which led to a stagnation in the office space occupancy from the middle of 1974 to the end of 1976, Frankfurt had a vacancy rate of 11 percent. In total numbers, this is approximately 700,000 square meters of vacant offices. This was unprecedented in post-war Frankfurt, and most developers had no experience in dealing with such a market.

Although office rents had quadrupled from 1968 to 1974 (from 8 to 32 DM/qm per month), there was sufficient demand -- and even a wide public support -- for new office developments. During this time the planning authorities were very generous and more than supportive. A developer would get a bonus on the plot ratio if he could acquire a larger site. This was an incentive to demolish a vast number of older buildings, especially in the West End. A major result of this uncontrolled development policy was the sensitization of the residents in the most affected areas, mainly the West End, who were complaining about the destruction of their neighborhood.

One important problem was that only a small group of undercapitalized private developers controlled the Frankfurt market. Most of these developers came from other businesses and had no great experience in commercial development. However, they could acquire large sites through financial backing from the banks and start the development of immense office buildings.

Banks, however, are like institutions which lend umbrellas, as long as the sun shines. When it starts to rain, they collect all the umbrellas. During 1975 and 1976 it was raining all the time. Before the boom, one could raise finance for up to 100 percent of the value of the property at 6 percent fixed interest for 30 years. During the boom you could finance up to 120 percent of the value or the purchase price. Now: *rien ne va plus*. The crisis came so fast that many developments could not be finished -- not even weather-protected.

In defense of the investors, banks, and developers, one has to say that the major institutions like the Chamber of Commerce and Industry and the City Council were of the opinion that the existing office space would cover the demand until the late l990s. This general opinion was based on the current market situation at that time. Therefore, in the second half of the 1970s no larger speculative office developments were started.

At the same time, the planning policy of the city became more and more restrictive in the most sought-after areas (banking district and West End). With the establishment of the present state conservation of residential use, the downgrading in plot ratio, and site coverage, the possibilities for further office development in the most attractive areas was strongly limited. The large amount of vacant office space was taken up by 1981.

At once, those development sites, which had no planning problems and could be acquired quite cheaply now, were being developed. Therefore, the vacancy rate, which in 1982 was already at 2.6 percent, increased again to 3.6 percent in 1983, and many developers and banks were expecting another crisis. The continuing economical upswing, especially in the service industry and financial services, now encountered an empty property market.

The daydream of all developers is a nice corner site at the best location, already demolished, with no planning problems, full development rights, the consent of all neighbors, no ecological problems, and commercial use. This all at a reasonable price. Well, you can only dream of it. In reality things are different. From the purchase of a property to its final development, several years of planning and site-assembling period can be anticipated in most cases, even if there are no major neighbor rights or pollution problems involved. In addition, the planning and development authorities have turned into anti-development authorities and delay or inflate the costs of most developments.

In the background of all this is chaotic non-existent city planning operating on an extremely expansive economic growth and a confusing legal position. The developers themselves do not know all the laws of the building code of Hesse -- or the corresponding laws of the other states -- the federal building laws, the relevant technical norms, and the many other important rules and regulations. If you want to be cynical, you could say that the enormous costs of public building projects are probably caused by the attempt to build according to all their own rules and regulations.

The Frankfurt market is unique within the Federal Republic of Germany, since its major demand for office space comes from its banking and other financial services. These companies insist on central locations very close to each other and a few focus points -- such as the LZB or the Stock Exchange -- to allow for multiple communications and necessary personal contacts.

The financial services industry, with its concentration on a small part of the city, occupies at present approximately 20 percent of the total stock of office space: i.e., 1,500,000 square meters, with almost 60,000 employees. According to the forecast of some of the larger banks, the expansion for the coming years will be around 3 percent for staff and 3.5 percent for office space per annum. This would mean a demand for approximately 50,000 square meters of new space plus the redevelopment of an additional 10,000 square meters for replacement of old space. This adds to an annual demand of 60,000 square meters of offices which are acceptable in regard to location, quality, and size for the banking industry.

To explain the pressure on the banking district, one has to realize that at present only 10,000 square meters of prime office space is available in the banking district and the West End. The planned projects over the next five years amount to only 225,000 square meters, whereas the financial industry alone requires approximately 300,000 square meters in this period. It is, therefore, inevitable that the financial industry expells other businesses from the banking district and the West End, and also expands its location to other areas of the city -- mainly down Mainzer Landstrasse and into City West -- even if a few more high-rise buildings would be allowed.

The problems of the Frankfurt market are reflected by the extremely low vacancy rate of only 1.2 percent. This is an average supply for six months, whereas even at the outskirts of the city it will take at least two years to build a new office building, provided all planning problems have been sorted out. In the city center you have to calculate for site assembling, demolition, planning, and approval over much longer periods. In some cases they were longer than 10 years. The costs involved can be imagined.

DEVELOPMENT OF RENTS AND PROPERTY VALUES

The lowest rents over the last 15 years were paid in 1977. At this time, even in the Banking District, the rack rent had dropped from 32 DM/square meter in 1974 to 20 DM/square meter. Six years later, the top rent was back at 30 DM/square meter, and was since then pushed forward to almost 75 DM/square meter (approximately 40 square feet triple net p.a.). To explain how this increase in rents influences the site values, I would like to give the following example:

The fundamental facts for the determination of site values are the size and type of permissible development, the construction hard and soft costs, the required yield, and the achievable net rent. In 1979, at a rack rent of 25 DM/square meter, which also means 300 DM/square meter per year, construction costs of 2,500 DM/square meter, and an initial return of 7 percent, a site value of 1,000 DM per square meter plot ratio can be calculated. At a plot ratio of 2, the land is worth 2,000 DM/square meter; at a plot ratio of 3, 3,000 DM/square meter, and so on.

Ten years later, the rack rent became 75 DM/square meter -- an increase of 300 percent. Has the site value also tripled? Certainly not. Construction costs may have doubled because of higher qualities, but the initial return has fallen to 5 percent. At a net rent of 900 DM/square meter p.a., the site value is now 11,000 DM per square meter plot ratio, or 22,000 DM at a plot ratio of 2. In this case, the property value has risen by 1,100 percent. Some of the new high-rise developments have plot ratios of more than 10, and therefore land values of more than 100,000 DM/square meter.

Property values do not rise linearly with the plot ratio. The above *figures* are meant to give an idea of the basic problems. In practice, it is more complicated to assess property values.

CONFLICT OF COMMERCIAL OR RESIDENTIAL DEVELOPMENT

The rack rent for *flats* is today where the rack rent for offices was 10 years ago: at 25 DM/square meter. Therefore, the site value of a residential property is only a fraction of the value of a commercial property. This is not likely to change, since residential rents cannot rise as fast and as high as commercial rents in a tight market. Clearly, then, the financial incentive to develop residential buildings is not very strong, snf the greater management problems and the limitation of the rent laws are not even considered.

The shortage of residential space, namely family flats, has however a very strong negative impact on Frankfurt's future, not only socially or cultural but also economically. An even higher employment density would lead to a higher traffic density, as well as more commuters, more environment problems, and certainly higher rents for residential use. As you know, rents are paid from income. Therefore, salaries have to go up with the rents or Frankfurt will again be unattractive for the many desperately-wanted office employees. Both options are negative for the city's business community, and it is therefore in the best interest of Frankfurt's companies to provide as many housing opportunities as possible in the future.

In addition, it is an important part of our building regulations to provide parking space according to the use and size of the development. In case it is not possible to provide the required parking spaces, the developer may discharge this duty, and the city will then provide the parking spaces not more than 500 meters away.

A comparable rule could be implemented for commercial buildings in regard to residential space. According to the type and size of a commercial building, the developer or property owner would have the obligation to built a certain amount of residential space, or, in case this is not possible, he may discharge this duty and the city will then build or pay for the required space not more than 500 meters away.

This levy on commercial property would of course result in a loss of value for these sites and probably only makes sense in dense conurbation areas of the larger cities where flats are scarce. Therefore, each community should have the right to set its own specific rules according to its special circumstances . A policy like this would also effect another very important and in my view positive aspect. It would lead to a mixture of all aspects of life in a close neighborhood. Planning failures of the past like "de-centralized office parks" on one hand and satellite sleeping cities on the other would be avoided.

But how, in a city like Frankfurt, can there be a balanced relation between residential and all non-residential (office, commercial, industrial, sport, cultural, traffic, natural) space? This is indeed the basic question for all city planning.

City planning in general is the key issue to many problems not only in Frankfurt. It was and is virtually non-existent, providing only views on certain parts of the city in reaction to market developments. The previous administration focused primarily on commercial development; the present administration seems to care only for residential. It is essential, however, that *all* aspects are considered, and that the citizens of Frankfurt can live and work in a human environment.

Attempting Growth Control in the San Francisco Bay Area

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The San Francisco Bay Region is a highly interdependent economic region. Growth management efforts occur at the local level in the region because it has no real area-wide land use planning body. These efforts, particularly in San Francisco, are causing growth to be dispersed into suburban communities which have traditionally been bedroom suburbs.

This pattern of growth is damaging to the environment. It occurs at densities which discourage the use of public transit, consume valuable agricultural land, increase automobile congestion, and exacerbate air pollution problems. Within San Francisco, the fervor to control growth exceeds the tools available to achieve the task. As a result, San Francisco now has a body of regulations which inadvertently discourage the very kind of development which growth control advocates want to occur.

Origins and Consequences of San Francisco Growth Controls

The near passages of Proposition O in 1979 and the Downtown Plan were two of the most sophisticated attempts at growth control to date. They prompted the business community and City Hall to ally with growth control activists to prepare a new growth management plan. However, the changing nature of the office market in the 1980s brought on unprecedented and unanticipated office development in the beginning of that decade, causing the coalition to fall apart.

As a result, a new Downtown Plan was adopted which basically allowed office growth to occur as long as adverse impacts were mitigated. In addition, a citywide growth management system was imposed which rationed permits for new office space irrespective of whether all negative impacts are mitigated. Proposition M was voted on in 1986.

However, the conditions which created the unprecedented rate of office development ceased to exist by the end of the decade, so the combination of the Downtown Plan and Proposition M had in effect "solved" a problem that had disappeared. In addition, attempts to retain back-office employees and attract new small- and medium-sized businesses were hampered by the city's inability to produce a dependable supply of inexpensive office space.

Who Governs San Francisco?

The coalition which put Dianne Feinstein in office focused on means, or inputs, while the coalition which elected Art Agnos emphasizes ends, or outputs. The transition marked a shift in power from the business community and the more conservative neighborhoods on the northern and western sides of the city, to minorities and more liberal neighborhoods on the eastern and southern sides of the city.

The new governing coalition was more focused on the use of government to intervene and manage the economy in order to insure that socioeconomic needs of the poor and powerless were met, than it was on the need to provide a positive climate for growth to continue.

The business community did not speak with a unified voice, since building owners, developers, major office tenants, and small businesses each had different interests. This is one reason Proposition M passed. However, the Agnos political coalition also showed signs of fragmentation, with upwardly mobile minorities seeking housing and job opportunities that were indirectly opposed by upper-middle-class, predominantly white, neighborhood activists who opposed growth.

This period was marked by relative governmental paralysis. It may have been caused by inadequate planning tools combined with political conflicts over the basic purpose of local government. What remains to be seen is whether this will not only discourage growth in the city, but influence the economic viability of the entire region as well.

Factors Influencing Growth

Factors beyond the region's control have a significant impact on growth patterns. However, local understanding of the nature of growth, and willingness to sacrifice for future generations, are the key to determining the future of the Bay region.

Conclusion

Both preserving and enhancing the quality of life of the Bay region are essential for sustaining a healthy economy. It is the task of local government to work with the private sector to monitor growth trends and problems. Only if adequate feedback mechanisms can be developed will we be able to manage growth so as to preserve the quality of life, and therefore preserve the "goose which laid the golden egg."

Growth Limits and the Neighborhoods

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About two years ago, when I had a Loeb fellowship at the Graduate School of Design at Harvard, I wrote a paper on the history of growth management efforts in the Bay Area, specifically in San Francisco. I looked at growth starting in the 1950s and the kind of planning that went on then, as well as the community response. And I was fascinated to hear Allan's world truth: "Land economics is what you believe and it is what you believe that counts." That sort of expectation is really what drives things. And another rule that I think I've learned to understand and to work with is a new version of the golden rule: those who have the gold make the rules. In San Francisco for many years those were the developers; the people who decided the land economics. Their expectations became the law. Their expectations became the new planning codes of the new zoning. And in the fifties and sixties I think that was very true.

I grew up just south of Boston; I moved here in 1974, lived in Berkeley for a year, and moved to San Francisco in 1975. There I started to see a change, and I think it was, as Allan said, not as a result of enlightened government policy, but as a result of pressure from community groups in neighborhoods and city-wide. It was an effort, a successful effort both in San Francisco and in Boston, to stop freeways; particularly the sort of large, elevated freeways like the kind that collapsed in the last earthquake. It was the beginning of sort of an urban-environmental movement in this city that questioned the assumptions that were made about moving people on these kinds of freeways, when they went through particularly low-income and middle-income neighborhoods, and whether that was really the best way to go. Out of that came what was first termed an anti-growth movement; now we like to think of it as a growth-management effort.

In 1971 and 1972 in San Francisco there were ballot initiatives to enforce strict height limits (I think the first one was 80 feet and 160 feet), and those didn't pass. Nevertheless, the first one got somewhere around 35 percent of the vote, the second one got 42 or 43 percent. There was a gap of a few years from that initiative in 1973 to the first on I got involved with in 1979. But I think that what happened was people began to question the basic assumptions of growth; that is, that all growth is good. And they also questioned the notion that, as Allan said, if you don't allow growth to happen here, people will take their money elsewhere. Development will go someplace else, and someone else will ger rich from that growth, get the jobs, and get the taxes. However, people who had some economic background began to question that and said now wait a minute: when you allow this kind of unlimited growth in downtown San Francisco what are the impacts? What does it cost the city in services? What do those people pay back in taxes? What impact does it have on the housing market?

The area that I was most interested in was the housing/jobs balance, or imbalance. When you build a million-square-foot building in downtown and you have somewhere between three and four thousand workers going to work in that building every day that weren't there the year before, where do those people live? If somewhere around a third or a half of them move to San Francisco because of that job, and we build enough housing to house those people, then in theory there is no real impact. But we have a history in San Francisco of not building much new housing each year, so as you bring more and more people in here to live, and you don't keep up with housing production, it's very understandable that rents go up to among the highest rents in the country. That's what we have in San Francisco and have had for quite a few years.

In the 1980s, I was directly involved in the Tenderloin; I was the director of a community advocacy and planning group from 1982 until 1987. Just before I started in 1980, there was a plan to build not one but three luxury hotels: a Ramada, a Holiday Inn, and an expansion of a Hilton. It involved about a quarter of a billion dollars worth of development and somewhere in the neighborhood of twenty-three hundred new hotel rooms. When the neighborhood group that I later became the director of decided to oppose that, they did two things. They went out and organized in a sort of standard Saul Alinsky organizing style -- which means you get a lot of people to show up at public meetings and demand that the government be responsible. But the other thing they did, which I think was very wise, was to begin to do economic studies. They began to point out that if you allow this much development, it will impact ten thousand people who live in the hotel rooms and the small apartments, and if those people can't live there anymore you're going to have two problems to deal with. One is the problem of homelessness in the city, and the other is that the people you need economically for your entry level jobs won't be able to live here anymore. And increasingly they won't be able to live anywhere else in San Francisco. They may be able to move right now to Berkeley, Oakland, and Richmond, but if this keeps going there will be no place left nearby for them to live. So it is important to take a neighborhood like the Tenderloin and preserve it and balance the needs of expansion from the downtown with the need to preserve affordable housing. Not just because these people deserve it, or have a right to it, but because the city's economy needs it. We need to have places for people who are going to go into these entry level jobs to live nearby. If we don't have that, we're not going to able to continue the economic growth in the long term that we've been enjoying.

This argument is being made increasingly now around the state of California and throughout the country. When I was in Boston the local chief executive officers of all the major corporations in the Route 128 high-tech area in and around Boston said the biggest stumbling block to the continued growth of the economy in Massachusetts was the lack of affordable housing. Several years ago, in California, the California Business Round Table said the same thing. The biggest threat to business in California was not environmental laws or environmentalists. It wasn't the California Environmental Quality Act. It wasn't taxes that were being levied by local communities. It was the lack of affordable housing.

It is the same problem that the universities have. How do you attract people if you're in Berkeley or San Francisco or the East Coast, and you have professors whom you're only paying forty, fifty, sixty, seventy thousand dollars a year, if the income you need to buy the medium-priced home in San Francisco is ninety thousand a year? If you go into a bank and you want to borrow the money to buy a two hundred and fifty to three hundred thousand dollar home, you have to be making over ninety thousand dollars a year or they will not make you a loan. And so for businesses that are trying to attract people to whom they pay less than ninety thousand dollars a year, or universities, or anyone else, this is a major problem for the regional economy.

Going back to the downtown plan, I think it is a plan for accommodation of growth, and it included some obvious lessons that we learned in the early 70s and the mid-70s. The plan addressed questions such as how do we make these buildings more attractive and a little less detrimental to the environment so they don't create quite as much wind at the base? And, where is the next best place to put them? The area that was picked in the downtown plan was an area just South of Market by the Transbay Terminal. There was a mention in there, though, of a limit, buried in the introduction. It said that at this time we don't think that there is a need to limit growth. We think if the downtown plan is adopted it will solve the problems. If we are wrong, if it doesn't solve the problems, then later on we will revisit this issue of limited growth, but first we want to try the downtown plan.

Those of us in the community in 1979 formed a group called San Franciscans for Reasonable Growth. And we argued in 1979 the need to control not just height, but height and bulk, because height is not always the issue. You can design very attractive tall buildings and you can design buildings that fit in architecturally and don't create the wind tunnels at the bottom. But the annual square footage each year is important; so too is whether or not the area and the city and downtown can carry that much extra capacity for development. In 1979 we went away from just limiting growth to some strict height, to looking at both height and bulk; that is, the amount of development that took place each year. We lost that election with about 46 percent of the vote. We came back a year later with some ideas that would mitigate growth, one of which was called a tandem housing requirement. The developer building office space had to contribute so much money per square foot towards housing to alleviate this housing/jobs imbalance problem. The city took that and adopted it in a much more watered down form than we proposed, but they did adopt that in the early 1980s. They also adopted a transit fee, a fee for child care, for art, and for open space; now a developer pays somewhere in the neighborhood of twelve, thirteen, fourteen dollars a square foot for those kinds of amenities and those kinds of fees.

But it's still good to question how much growth a particular area, the downtown, can support and how much the infrastructure can. We continued to argue in the 1983 election, and successfully in 1986, that there needs to be a limit. The half million square foot a year number we picked is not a magic number. It was based on the fact that the city, in response to our request for a ballot initiative on the downtown plan, adopted a million square foot a year annual limit. But they had grandfathered in about seven or eight projects before they put in the limit, which meant that the limit wouldn't take effect for about eight years. So what we said is that they could take what they've already grandfathered and spread it over the next ten years. It is about a half a million square feet a year. So to make it a real million square foot a year annual limit, you'd have to set a new limit for new construction at a half a million square feet a year -- that's where the number came from.

The other convenient part about that number is that it was roughly the equivalent of the Transamerica Pyramid. So when people made the argument that we were no-growth, or anti-growth, we could say with a straight face that if our initiative had passed in 1986 there would be 14 more Transamerica Pyramids built between then and the year 2000. To characterize that as no-growth is ridiculous. Now if you understand geometry, you realize that a triangular building at a half a million square feet is much taller than a building if it has straight sides. So there's a little deception in the Transamerica Pyramid equivalent. But it made the point that we were not talking about no-growth. And from the Tenderloin to the city of San Francisco to the region, those of us involved in the issue, with a few exceptions, have not said that you can stop growth. You can't do that. And if you try, you'll fail. There will be ways that people will figure out to do that. They will go to the extreme areas, the outlying areas, where people still think that growth is the best thing that could happen to them. They'll do all kinds of other things to have growth take place. So the question is, what is the carrying capacity of the area you're talking about, whether it's a neighborhood like the Tenderloin or the downtown area of San Francisco? Where else can you accommodate growth; where does it make the most sense? There has to be some discussion about an annual limit, I believe, or you are not going to get very far. You have to set the expectations someplace that is a little more reasonable than it has been set in the past. We are fortunate in that we won the 1986 election; a local politician who was very supportive of that was elected mayor two years ago and has continued to support that approach to growth and development in the downtown area.

I would just end by saying that I think that in looking at these issues there are a number of similarities in Germany. A couple of months ago when Senator Nagle, the Housing Senator for the Red and Green Coalition in Berlin, was here for the opening of the IBA exhibit (an international competition for the redesigning of Berlin), I saw a slide show about Berlin. I was shocked to see that in the fifties and sixties there was the same kind of large-scale development and the same urban renewal going on in Berlin that we saw here and across this country. I was growing up and learning about urban development, and I always thought that Europe had learned the lessons that we failed to learn here in the fifties and sixties and seventies. It was depressing to see that in fact the same ideas -- the same type of development -- was allowed in Berlin and, I'm sure, in Frankfurt and in other places that we thought was unique to America, due to the stupidity and short-sightedness of our planners and our developers. However, I was encouraged by my conversations with Senator Nagle about the Red and Green Coalition in Berlin and throughout Germany.

I think, as I explained to some Japanese planners a couple of months ago, that we probably have in San Francisco the closest thing to a Red and Green Coalition running the government that I can imagine. Most of the people in the kinds of jobs that I am in are people who used to be community activists and are now in a position of some influence on city policy. Maybe by your standards we would not be considered a Red and Green government, because we still have some pro-business and entrepreneurial people in the government and they are not completely community-based people, but I think that there is a second level that I've become aware of in the last year or so. That is that once we have the laws in place, particularly in the housing area to protect residential hotels and single-room-occupancy hotels from conversion, and neighborhoods from commercial zoning, we have to be vigilant. There are developers out there who will take a risk; they will break the law because they know doing that that there's almost no chance of them getting caught.

I filed a complaint against the owner of the building where I used to live, not too far from here, in 1984 with the zoning administration. They had taken a building that was all residential, and had gotten us all to move out because they had to do substantial rehabilitation for seismic safety. That was a just cause for eviction. They had orders saying they had to do this work. And so they moved us all out. They did substantial renovation to the building and they reopened it as commercial offices in a area where it is illegal above the ground floor to have commercial use. There are architects in there, and lawyers, and people who are called food stylists (whatever that is). There is a little demonstration kitchen where I used to live. They broke the law. And the developers were very clear about this; they went to the building department and they showed them plans and the plans said residential and showed kitchens and bathrooms. Well, the kitchens were tiny little kitchens for the office and the bathrooms had to be in there anyway.

I filed a complaint in 1984 and I screamed and yelled for years and said you cannot let these people go on blatantly breaking the law. And it took four years to get the zoning administration to file a law suit against the owner of that building, and that law suit is still in the courts. The owner is still renting those rooms out as commercial office property, meanwhile, and will probably continue to do so for quite a while because he is a lawyer. He knew exactly what he was doing. He broke the law. He knows how to stretch this process out. We're also seeing that in the Tenderloin; people are breaking the residential hotel conversion ordinance right now, in buildings not too far from here. They are collecting commercial rents and they will continue to collect those. Lawsuits were filed two years ago. There was a contempt hearing for one of them. But the fines are so low that it makes sense to break the law, pay the fines, and keep breaking the law.

The only thing I can say that I am hopeful about is that now that I'm in this job, I hope that in a year or two from now when these people walk down the street and run into me they can say very nasty things to me because some of them or some of their friends will have gone to jail. Because I think the laws that we pass -- whether they be zoning or housing laws -- aren't worth anything if they're not enforced. And I've become very cynical about politicians over the years; I think many politicians turn to their friends and political supporters who contribute money and do these kinds of conversions and say, "We're passing these laws, but don't worry, they won't be enforced." And so they are able to get the best of both worlds. We, their constituents, think they've done the right thing, they've solved the problem by passing a law, but they have told the people who are breaking laws right now not to worry because they're not going to be enforced. And people continue to do exactly what they were doing before the law passed and feel that they will get away with it.

So I think that there is one level that we deal with which is planning, zoning, and housing laws, and there is a second, much more difficult and subtle level that we have to operate on which is making sure when we pass those laws that they are enforced. When people break those laws they should pay a very heavy financial fine and I think a few of them, as an example, should go to jail. They should be treated just as if they went out and shot someone in my neighborhood and hurt them. When they destroy thousands of units of affordable housing, thus creating homelessness in the city, they should go to jail for breaking the law.

Competition in a Changing World

Kent O. Sims
President
San Francisco Economic Development Corporation

The San Francisco Economic Development Corporation assumes that San Francisco should be a world-class international city, providing leadership and support for the metropolitan Bay Area, and meeting the needs of its residents. We believe that the way to realize this goal is by building a strong competitive economy.

Competitiveness means having a full range of choice among available activities, and is measured by comparing the local economy to alternative locations. If San Francisco is a world-class city, then being competitive means we must rank with the best, whether in business, the arts, or human services. We are interested in what happens in other successful cities, not because we necessarily want to be like those cities, but because failure to be competitive with them narrows the range of local choice.

In recent years, internal and external pressures have slowed our city's economic momentum, producing a growing sense that we may no longer be on the cutting edge of economic opportunity. Local concern has been reinforced by a stream of articles in the national press chronicling a "fading star" image for San Francisco, making, as Newsweek put it, "The City That Knows How" look like "The City That Knew How."

San Francisco's current economic performance in areas such as employment, per capita income, and wealth is strong by traditional measures. However, the loss of competitiveness in specific business lines, and as a general business location, are matters of immediate concern.

Situation and Background

For nearly a century, San Francisco was the only major city in the Western United States. As such, it was the manufacturing, distribution, and trade center of the West, as well as the seat of government administration, services, and cultural activities. In the post-World War II period, other regional centers of economic activity matured; Central Valley cities became part of our regional economy, and the Bay Area became the fourth-largest metropolitan market in the country.

Many of the changes occurring in San Francisco are typical of mature cities throughout the United States. These include:

- loss of middle-income jobs as manufacturing, distribution, and back-office operations migrate to the suburbs;
- growth of high-income management and professional jobs, and low-income service jobs, as central-city administrative and services industries expand;
- conversion of factories and warehouses to office space, as the city accommodates its new economic base;
- social conflicts, as the city prioritizes public services to meet the needs of now-dominant high- and low-income groups, instead of the formerly dominant middle-income groups;
- traffic and parking problems as development of the regional transportation system lags behind growth in the size and distribution of the commuter labor force;
- problems in public education as the school system adapts to the city's new demographic profile;
- fiscal problems as adjustments in public services and the tax structure lag behind changes in the economic base.

These developments are closely tied to San Francisco's transition from the self-contained dominant city of the western United States to the more specialized hub of an interdependent metropolitan economy -- the nation's fourth-largest metropolitan market.

Economic Climate

In the post-World War II period, market forces have moved San Francisco's economy toward areas of comparative advantage. The city's economic roles, capital stock, and labor force have changed markedly in this period. Residents have reacted to these developments with initiatives to alter both the direction and the pace of change. Since market forces operate through private businesses, these initiatives most often were directed at the business community. Over time, the cumulative effect of such initiatives has been a progressively more inhospitable climate for business.

San Francisco's inhospitable attitude toward business in recent years is an outgrowth of limited understanding of the transition to a metropolitan economy. The major adjustments required to make this transition often have been identified as discrete economic and social problems. Public policies designed to address current problems on this basis can end up thwarting, rather than promoting, transition to an economic base that will sustain prosperity in a changing world.

The economic climate exerts a negative influence on business activity in several ways, including:

- inadequate planning and leadership to maintain the City's competitive position in a changing world;
- an unstable and unpredictable environment for making business decisions;
- high business costs, relative to competing business locations;
- constraints on the supply and availability of materials for production.

Roles for San Francisco

There are certain roles in which San Francisco has a comparative advantage within the metropolitan Bay Area. Having an advantage in specific roles does not mean activity involved in these roles will occur exclusively in San Francisco, or that San Francisco will not or should not be involved in other types of activity. The roles projected for San Francisco are areas in which the city can swim with the tide rather than against it. If San Francisco fails to perform these roles effectively for the metropolitan area, they will be taken up by other cities and counties.

Developing a strong economic base requires retaining, attracting, and fostering the kinds of economic activity in which the city has a comparative advantage. The San Francisco Economic Development Corporation identifies three clusters of roles in which San Francisco has a comparative advantage in the Bay Area by virtue of infrastructure and environmental attributes.

Arts & Culture

- Center for visual & performing arts;
- Education & specialty center;
- Sports & recreation.

Services

- Communications, media, & publishing center;
- Corporate headquarters;
- Design center;
- Destination location for convention and pleasure travel;
- Finance, insurance, & real estate;
- Food & beverage industry center;
- Medical/bioscience research;
- Non-profit organization headquarters;
- Professions;
- State and federal administration;
- Entry point for foreign companies.

Trade

- Southeast Asia entry point;
- Prestige retail;
- Wholesale trade.

Constraints

The major adjustments demanded by the transition from a self-contained municipal economy to the central city for the nation's fourth-largest metropolitan market have been incorrectly identified as discrete economic and social problems. Policies designed to address current problems on this basis tend to thwart, rather than promote, transition to an economic base that can sustain prosperity in a changing world. The by-product of an ad hoc approach to economic policy has been a deterioration in the overall business climate.

In developing our roles in the metropolitan economy, San Francisco faces six major constraints:

- the dominance of single-issue politics in shaping our city's public policies;
- a shortage of widely embraced business and government leaders;
- local media that lack the stature to unite the Bay Area and project its strength outside the region;
- the poor level of performance and high dropout rate in the San Francisco Unified School District;
- the failure to develop a regional transportation system in line with growth and changes in regional transportation needs.

Directions and Programs

A better public understanding of the present business climate and its consequences for the welfare of the city is essential to improve San Francisco's economic climate. The process for addressing the opportunities and problems include:

- establishment of competitiveness as the standard of economic performance;
- placement of current city problems in the context of transition to a metropolitan economy;
- identification of appropriate roles for San Francisco within the metropolitan economy;
- encouragement of specialization in roles for which the city has a comparative advantage.