

**Market Opportunities and Barriers to
Transit-Based Development in California**

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Working Paper
UCTC No. 223

**The University of California
Transportation Center**
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1. Introduction

Urban rail transit continues to expand in Los Angeles, Sacramento, San Diego, and the San Francisco Bay Area as these areas seek to improve regional mobility, reduce air pollution, and restructure urban growth. Transit, of course, only produces mobility and environmental benefits if people switch from cars to trains and buses. Many factors, however, are eroding transit's ridership base, including rapid suburbanization, much of it focused on highway corridors. Nationwide, transit ridership fell from 6.4 percent of all commute trips in 1980 to 5.3 percent in 1990 (Pisarski, 1992). While transit trips rose in absolute numbers in California between 1980 and 1990 (one of the few states where this was the case), transit's share of commute trips dropped in all metropolitan areas: greater Los Angeles— 5.4 percent to 4.8 percent; San Francisco Bay Area— 11.9 percent to 10 percent; San Diego— 3.7 percent to 3.6 percent; and Sacramento —3.7 percent to 2.5 percent.

Given that billions of dollars have already been invested in urban rail transit in California and billions more are in the pipelines, these trends are worrisome. California policymakers must respond creatively to reverse transit's downward decline. One option is to create attractive living, working, and shopping environments around stations. Recent research shows residents living near rail stations in California are about five times more likely to commute by rail transit as those living away from rail transit (Cervero, 1993).

This report investigates the market opportunities and barriers to transit-based development in California. A combination of field research, informant interviews, and literature surveys were used in identifying market opportunities and barriers. Particular attention has been placed on the opportunities for focusing housing development near rail stations, as well as the barriers that stand in the way. Since housing construction around rail stations has been fairly sluggish in recent years and in many settings non-existent, barriers and deterrents appear to be far greater than opportunities. Accordingly, more attention is given in this report to factors that have retarded housing development to date, and how they might be overcome.

2. Background: Transit-Based Development in California

Interest in clustering housing and commercial development around rail transit stations has gained momentum in recent years. Rail transit agencies like the Bay Area Rapid Transit (BART) District and San Diego's Metropolitan Transit Development Board (MTDB) see an opportunity to jointly develop land holdings around stations, including park-and-ride lots, in association with private real-estate devel-

opers, hopefully earning lease income and generating new patronage in the process. In recent years, BART has worked with local redevelopment authorities in developing land around several stations; to date, joint development deals have led to the construction of mid-rise housing and mixed-use complexes on land near the El Cerrito del Norte and Pleasant Hill BART stations. Rising land values and pressures for affordable housing have prompted BART and local redevelopment agencies to seriously consider converting parts of their vast inventory of park-and-ride lots and open parcels to mid-rise housing. These projects may be harbingers of "transit villages" at other BART stations, as was envisaged when BART was originally conceived over 40 years ago (Johnston and Tracy, 1983).

Plenty of building activity can also be found around other rail stations in California as well. In Mountain View, several multi-family projects near the CalTrain station are planned, including an apartment complex with 700 units at the Old Mill Shopping Center. Santa Clara County's light rail stations have attracted several "trandominium" housing projects that rely on rail proximity as an important market tool. As part of Santa Clara County's Housing Initiative Program, plans are underway to eventually build over 13,700 units of moderate-density housing (at 12 to 40 dwelling units per acre) near light rail stations. San Diego has already seen a flurry of apartment construction along the new El Cajon extension, including more than 500 modern apartment units recently built adjacent to the La Mesa-Amaya Station.

Developers are not being strong-armed into building these transit-based projects. All are willing participants, seeing an opportunity to fill a new market niche— providing moderately priced housing with superb regional accessibility. Local governments have also emerged as important players in promoting transit-based development in California. The cities of Hayward, Union City, El Cerrito, and Pleasant Hill have recently formed redevelopment districts around BART stations for the very purpose of jump-starting new development. El Cerrito's redevelopment authority has used tax-exempt financing and subsidies for below-market housing to leverage private investments in three large-scale multi-family projects near the El Cerrito del Norte BART station. Sacramento's updated General Plan has targeted 13 light rail station areas for introducing an array of development incentives, including higher allowable residential densities, lower minimum parking requirements, density bonuses, tax-increment financing, and industrial development bonds. A recent survey found that 10 of the 35 northern California jurisdictions with rail transit stations have undertaken major planning activities to attract development around stations, and several have made transit-based development the centerpiece of their community planning efforts (Bernick et al., 1993).

Several southern California cities have also joined the ranks of communities embracing transit-oriented development. The City of Los Angeles's Draft Transportation/Land Use plan calls for increasing public transportation ridership by developing "quality compact pedestrian-oriented mixed-use neighborhoods within walking distance from transit." A symposium and design competition on transit-based housing sponsored by the Los Angeles Metropolitan Transportation Authority in 1993 led to various

proposals to build pedestrian-scale, mixed-use neighborhoods at Metrorail stations at the Vermont, Willow, and El Monte Metrolink stations (Metropolitan Transportation Authority, 1993). This has been followed by a series of conferences held in 1994 called OnTrac (Opportunities for New Transit-Related Activity Centers) that has shifted interest from just transit-based housing to larger transit villages. The City of San Diego has recently adopted "Transit-Oriented Development Design Guidelines" and is currently trying to create specific "Urban Village" zoning which incorporates many of the design principles set forth in the guidelines.

Even state government has entered the picture. In early 1994, California State Assemblyman Tom Bates of Oakland introduced AB 3152, the Transit Village Development Act of 1994, that seeks to encourage relatively high-density, mixed-use development, including affordable housing, around rail stations. The bill would allow municipalities to designate a "transit village district," similar to a redevelopment district, which would have special land assemblage and tax increment financing privileges. The bill also would give transit villages "first priority" for innovative transportation and land use funding sources over which the state has discretion.

Table 1 summarizes transit-based housing development activities in California in recent years. The table lists 20 multi-family rail-based housing projects that have been built since 1988 or that are in the process of being built. All of these projects lie within a one-quarter-mile radius of a California rail station, and most were consciously designed to tie into the nearby rail station through easy pedestrian or shuttle access.

3. Opportunities for Transit-Based Development in California

Three types of opportunities have been identified that are working in favor of transit-based housing and development in California: (1) market-demographic trends; (2) physical assets; and (3) institutional and regulatory factors. These are discussed below.

3.1. Market-Demographic Trends

America's demographic growth trends have been moving in the direction of population groups that are some of the most likely candidates for transit-based housing: young households, retirees and empty-nesters, childless households, small families, and recent immigrants. In the San Francisco Bay Area, for instance, the proportion of population in the age group 25-to-34 and 65-and-over increased from 14.6 percent and 8.9 percent in 1980 to 19.8 percent and 11.0 percent, respectively, in 1990. Los Angeles showed a similar trend, although not as strong, with 17.2 percent of the population in the 25-to-34 age group and 8.6 percent for the over-65 age group in 1980, increasing to 19.8 and 9.7 percent, respectively, in 1990. In addition, after shrinking for several decades, average household size in the two major metropolitan areas stabilized in the 1980-1990 period. In greater Los Angeles, 30 percent of households in 1990 contained no children; in the inner suburbs, two-thirds of households were childless.

Table 1

Major Residential Projects Near Rail Transit Stations in California (1988-1994)

<u>Rail System</u>	<u>Project (Rail Station)</u>	<u>Year Built</u>	<u># Units</u>
BART	Park Regency (Pleasant Hill)	1992	892
BART	Treat Commons (Pleasant Hill)	1988	510
BART	Mission Wells (Fremont)	1991	392
BART	Del Norte Place (El Cerrito Del Norte)	1992	135
BART	Verandas (Union City)	1989	360
BART	Bay Landing (Pleasant Hill)	1988	360
SCLR	Winfield Hill (Almaden)	1994	228
SCLR	River Oaks (River Oaks)	1991	1,214
SCLR	Fior Di Monte (Oakridge)	1995	250
SCLR	Homes at Almaden Lake (Almaden)	1994	84
SCLR	Apartments at Almaden Lake (Almaden)	1994	144
LA Blue Line	Grand Central Market (4th & Hill)	1995	120
LA Blue Line	Bellamar (5th & Pacific)	1990	160
LA Blue Line	Pacific Court (Long Beach Transit Mall)	1992	142
San Diego Trolley	La Mesa Village Plaza (La Mesa)	1991	95
San Diego Trolley	Village of La Mesa (La Mesa - Amaya)	1989	384
San Diego Trolley	Park Grossmont (La Mesa - Amaya)	N/A	160
San Diego Trolley	Mercado del Barrio (Barrio Logan)	1994	144
CalTrain	Palo Alto Central (California Avenue)	1986	74
Sacramento	Windsor Ridge (Butterfield)	1987	112

Source: UC Berkeley National Transit Access Center, Survey of Transit-Based Development, 1993.

Between 1980 and 1990, the Bay Area saw an increase of 6.2 percent in the percentage of households without children under the age of 18 years old.

In California, the trend that has shaken up the state's demographic composition the most is the large influx of immigrants, both legal and illegal. As historically has been the case, recent immigrants tend to concentrate in the nation's largest cities. For the 10 largest U.S. metropolitan areas, immigrants accounted for 78 percent of total population growth between 1980 and 1990. Immigration added over 2 million to the population of the Los Angeles-Long Beach-Anaheim MSA and nearly 600,000 to the San Francisco-Oakland MSA (Speare, 1993). Since many new arrivals to this country have limited resources and are most inclined to live in urban centers, they are a potential market of transit station-area dwellers.

Another market trend that favors transit-based housing is today's overbuilt commercial and office real estate markets. Federal tax reforms that eliminated passive losses and other investment incentives, combined with rising commercial vacancies, have drastically curtailed new office and retail-commercial development. Many real estate developers are searching for new "niche markets." Increasingly, the development of housing near rail stations is viewed by many as a largely untapped market with moderate to high growth potential.

Lastly, shortages of affordable housing is a market trend that favors higher-density housing. The high cost of buying a first home has forced many young people to delay or abandon their hopes of purchasing a single-family home. Homeownership rates declined during the 1980s for the first time since World War II, especially among the young (Urban Land Institute, 1991). For households under 34 years of age, homeownership rates have remained substantially below 1980 levels (Joint Center for Housing Studies, 1990). This means that many households are remaining in the rental market longer, and others are choosing to purchase attached housing rather than single-family homes.

3.2. Physical Assets

Money and land are the two most important assets that transit agencies and local authorities have available to leverage private investment in transit-oriented development. Of course, hard cash is increasingly difficult to come by, as most local governments struggle to meet routine operations and maintenance expenditure requirements, so land holdings (and the ability to acquire land through eminent domain) are increasingly the most potent lures available to governments. Specifically, government's ability to assemble land—such as through land banking, eminent domain, condemnation, or redevelopment takings—and thus help write down costs is very appealing to prospective real estate developers (Bernick et al., 1993). For many transit agencies, surface parking lots that encircle stations and peripheral land holdings are their biggest development asset. Parking lots represent large tracts of pre-assembled, cleared land that is relatively cheap to build upon. Importantly, developers do not have to bear the risks of negotiating land purchases among multiple property owners, any one of whom can hold out, thereby stalling or dooming a project. Large tract land holdings allow developers to reap economies of scale, allowing a

sufficient return on investment even when profit margins are being squeezed. To date, BART and local redevelopment agencies have negotiated with developers to build apartments on or near existing park-and-ride lots at several stations in response to rising land values, local interest in revitalizing station areas, and pressures to increase income through land leases.

In many ways, the conversion of park-and-ride lots to housing and other land uses represents a de facto form of land banking. One of the reasons why so much urban growth has clustered around rail stations in cities like Toronto and Stockholm is that local governments were able to acquire land over and beyond what was necessary to build the system. In Toronto, the metropolitan government used eminent domain rights to acquire some 18 extra city blocks along the Yonge Street subway corridor, land that was later leased or sold to residential and commercial developers. In the U.S., state and federal laws prohibit excess or supplemental land acquisitions—public agencies can exercise eminent domain powers to condemn land that is directly related to the provision of a public facility or service. As station areas mature, however, transit agencies may be in a position to build upon surface parking lots, achieving results similar to land banking over time. The opportunity for reusing park-and-ride facilities is greatest at terminal stations that are slated to become intermediate stations following line extensions. Such was the case at the Ballston Station in Arlington, Virginia, after Washington Metrorail's Orange Line was extended to Vienna in Fairfax County. When a major bus transfer facility was relocated to the new terminus, the Washington Metropolitan Area Transit Authority (WMATA) negotiated a long-term lease with a developer who built a 28-story office-residential-retail complex on the land that was freed up. This helped trigger a massive redevelopment of the Ballston station area, a residential neighborhood that in the early 1980s was suffering from slow commercial encroachment and a deteriorating stock of housing.

Transit agencies can also potentially leverage private co-investments through various cost-sharing schemes. These might include the co-sharing of parallel costs for building public transit facilities and private real estate projects, such as for excavation and earthwork; heavy construction equipment; foundation work; sewer, water, telecommunications, and other utility lines; conduits for fiber optic cables; and equipment staging and storage areas. Possibilities also exist for sharing such facilities as parking structures, ventilation and heating systems, and escalator/elevator conveyances. To date, such cost-sharing joint development schemes have been largely limited to office-commercial projects, particularly in the Washington, D.C., and New York metropolitan areas. From 1980 to 1990, an estimated \$71 million in private capital contributions that went to sharing the cost of jointly developed transit and commercial real estate projects occurred in the U.S. (Cervero et al., 1992). Experiences with commercial joint development in the 1980s should ease the process of hammering out similar deals for residential projects. Transit agencies and land developers have both moved up the learning curve, based on experiences with commercial joint development, which should aid them in pursuing housing joint development schemes now and in the future.

3.3. Institutional and Regulatory Factors

The ability of public authorities to exercise police powers and introduce various tax incentives also provides opportunities for transit-based development. One of the strongest tools available is the specific planning process. The designation of a defined area for developing a specific plan paves the way for governments to reach agreements between local citizens, businesses, and other special interests on how the area should be developed. Among the incentives and tools that local governments have at their disposal to shape growth in a specific plan area are tax-exempt financing, zoning variances, redevelopment powers, density bonuses, impact fee credits, and reduce parking requirements. As noted previously, regulatory controls over land uses and land assembly are perhaps the most potent lures that local authorities have to attract private real estate investments.

Recent local, state, and federal legislation and initiatives have also created an institutional environment that is conducive to transit-oriented development. In recent years, important laws have been passed that encourage the careful coordination of transportation and land use systems. The 1991 national surface transportation act (ISTEA) and federal and state air quality regulations stress the importance of increasing transit ridership in major urban centers. ISTEA requires state departments of transportation and metropolitan planning organizations (MPOs) to assess transportation and land use decisions in relation to one another. The recent Americans with Disabilities Act (ADA), moreover, will likely work toward closer physical integration of transit facilities and surrounding communities so as to guarantee everyone equal access to transit facilities.

Most recently, initiatives by the Clinton Administration to form Empowerment Zones and Enterprise Communities (EZ/EC) as a means to encourage inner-city reinvestment provides new opportunities for building transit-oriented communities. EZ/ECs are eligible for special grants and tax credits, and will receive special consideration in the competition for funding under various Federal programs, including those in the field of infrastructure, transportation, and community development. Supporting the EZ/EC program will be a \$30 million "Livable Communities" set-aside of discretionary funds in the 1995 fiscal year budget of the Federal Transit Administration, with funds to be used "to improve access for residents of distressed areas." The Fruitvale neighborhood of Oakland, which is served by BART, has been chosen as one of a handful of neighborhoods nationwide that will receive funding support under the Livable Communities initiative.

California has emerged as a national leader in legislating and promoting stronger linkages between transportation and urban development. As part of the legislative package for Proposition 111 (which increased the state gas tax), California recently enacted AB471, which requires all cities and urban counties to prepare a Congestion Management Plan. A key component of this plan is a requirement that local land-use decisions be assessed in terms of how they will affect regional transportation systems. California's stringent air quality requirements have also pressured severe non-attainment areas like Los Angeles County to more closely integrate land use and transportation planning. Indeed, one of the

principal justifications for Los Angeles's new rail system and BART extensions in the East Bay has been to reduce mobile sources of air pollution. Clearly, these investments will only impact air quality if they induce significant numbers of motorists to switch over to transit riding. This will depend, in part, on creating denser, more mixed-use nodes of development around existing rail stations.

Two recent legislative actions in California have been directed specifically at promoting transit-oriented development. SB 2559, approved in 1990, authorizes the state to explore the possibility of increasing station-area development on selected demonstration projects:

This bill . . . require(s) the Department of Housing and Community Development (HCD), in cooperation with the California Transportation Commission (CTC) to develop and implement a demonstration program to test the effectiveness of increasing densities of residential development in close proximity to mass transit guideway stations to increase the benefit from public investment in mass transit. The bill . . . also require(s) the commission and any awarding department to consider, in the allocation of proceeds of certain bonds, projects and applicants that promote high density residential development within one-half mile of a mass transit guideway, as specified. (SB 2559)

The intention of this bill was to select three or more demonstration sites that would receive higher priority in the allocation of funds through the state's Transit Capital Improvement Program (TCIP). The criterion for selection of demonstration projects was that the local government entity has to have encouraged high-density residential use near its transit station through its general plan or zoning. To date, no sites have been selected.

What has sparked the most interest of California's transit advocates is the proposed Transit Village Development Act of 1994, introduced as AB 3152. As noted, this bill would allow the use of special land assemblage and infrastructure financing powers, similar to those of redevelopment districts, for creating mixed-use villages around rail stations. After several rounds of negotiations, however, the bill has been substantially watered down as of mid-1994, with most of the provisions for land assemblage and creative financing stripped away. Assemblyman Tom Bates of Oakland, who sponsored the bill, introduced it mainly to get something on the legislative agenda to stimulate discussion on how to incorporate the state's investment in rail systems into the urban fabric and create walkable communities (Brilliot et al., 1994). Still, many transit advocates hope that the bill will eventually pass, providing a legal foundation for building more pedestrian-oriented, mixed-use communities around BART, Los Angeles Metrorail, and other transit systems in the state.

4. Examples of Leveraging Residential Development Using Transit Agency Land

As discussed above, one of the best ways to attract transit-based housing is through using land owned by a transit agency that is near or adjacent to a station. Table 2 lists major residential projects that have been or are in the process of being built on land owned by California transit agencies. By 1995, an estimated 800 housing units will be added to property owned and leased by transit authorities

Table 2
Major Residential Projects on Transit District Land in California (1988-1993)

<u>Rail System</u>	<u>Project (Rail Station)</u>	<u>Year Built</u>	<u># Units</u>	<u>Density</u>
SCLR	Almaden Lake Village (Almaden)	1995	250	48
BART	Grand Central Apartments (El Cerrito Del Norte)	1995	210	77
LA Red Line	Westlake/McArthur (Westlake)	1995	300	75
San Diego	Creekside Villas (47th Street)	1989	141	15

Source: UC Berkeley National Transit Access Center, Survey of Transit-Based Development, 1993.

in southern California and the San Francisco Bay Area. In addition, Table 3 identifies several other residential projects that were at or near the Request For Proposal (RFP) stage as of early 1994.

With these actual and proposed projects, transit agencies have abetted development in several important ways. One, some have eased the process of land assemblage by combining transit agency land with adjacent private ownership land. Second, in the case of BART, the cost of replacement parking is to be amortized over a period of years rather than requiring payment up-front or in the formative years of a project. And third, transit agencies have provided attractive lease and sale arrangements, including delaying lease payments during the project development phase or until effective occupancy, participation as an equity partner in condominium sales, subordination of debt, and assistance in securing federal Housing and Urban Development (HUD) financing and tax-exempt financing.

The successful use of such strategies by transit agencies to leverage station-area housing construction is illustrated by two case studies: Almaden Lake Village near the Santa Clara light rail line and the Grand Central Apartments near BART's El Cerrito del Norte station.

Table 3
Residential Projects Proposed on Transit District Land, 1993

<u>Rail System</u>	<u>Project (Rail Station)</u>	<u>Status</u>
BART	Castro Valley	RFP for minimum 250 residential units issued July, 1993.
BART	Hayward	RFP planned Fall 1993 for housing on 8 acre site.
LA Blue Line	Willow Station	RFP planned early 1994 on combined 9.2 acres.

Source: UC Berkeley National Transit Access Center, Survey of Transit-Based Development, 1993.

4.1. *Almaden Lake Village*

Santa Clara County's light rail system has 30 stations in operation, extending from the Santa Teresa station in south San Jose to the Tasman station in north San Jose and beyond to the Old Ironside station past the Great America recreational theme park (see Map 1). In 1991, County Supervisor Rod Diridon, a member of the Santa Clara County Transit Authority, proposed a program of "trandominiums" —housing built on transit district park-and-ride land adjacent to stations. The purpose of the trandominium program is to site as much additional housing in the county as possible within a quarter-mile radius of light rail stations.

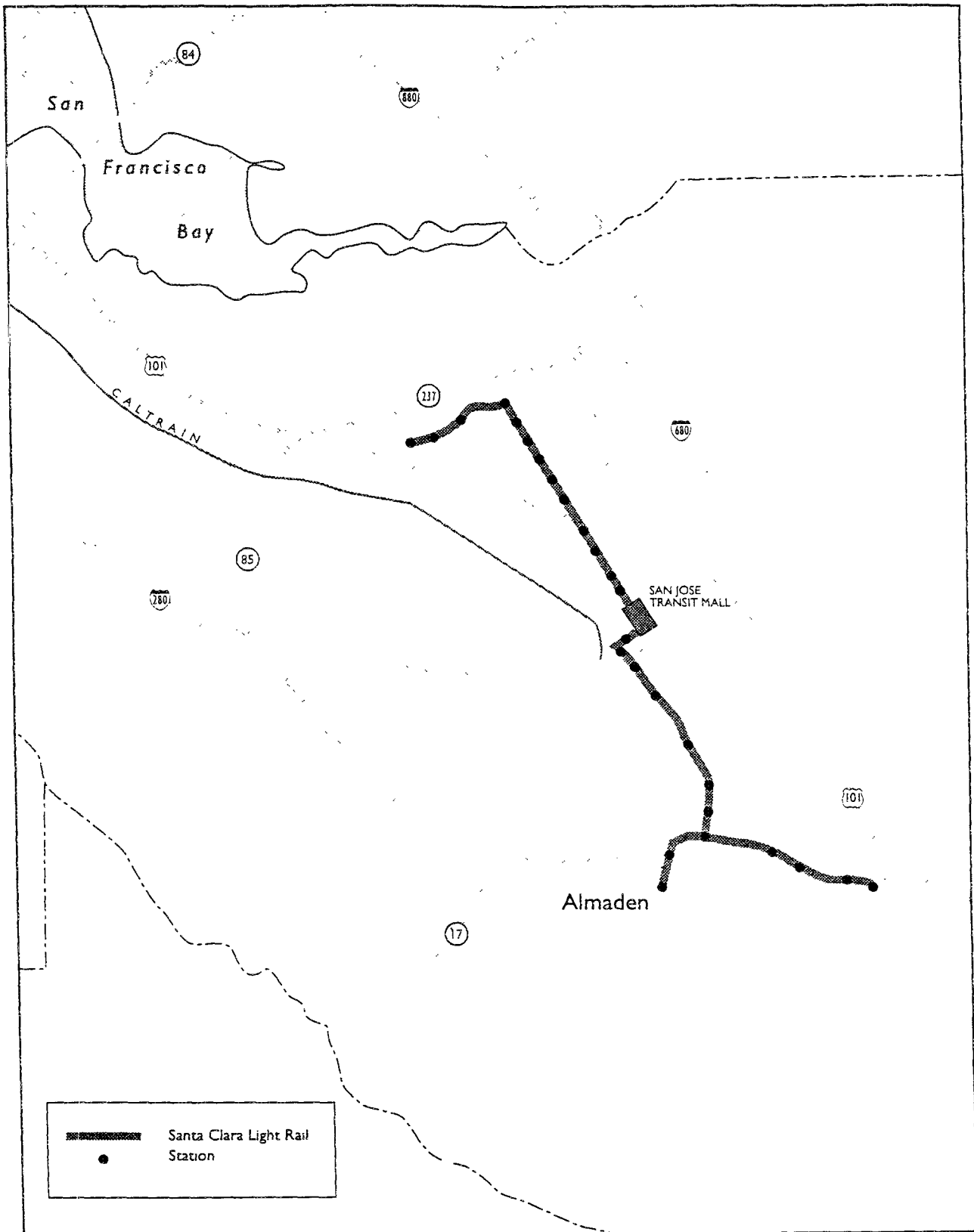
The Almaden station in south San Jose is to be the site of the county's first trandominium, featuring 250 units on 5.4 acres adjacent to the station. The project, developed by Denhart Properties, was approved by the transit board in early 1993. The Almaden trandominium complex, called Almaden Lake Village, is to be built at an average density of 48 units per acre (see Figure 1). When built it will be flanked by the 228-unit Winfield Hill apartment, giving the neighborhood a blended density of over 60 dwelling units per acre. Almaden Lake Village is being designed with two- and three-story buildings on podiums over sub-grade parking. An East Block and West Block are to be linked by a pedestrian bridge, which also serves as a "trans-observatory," where according to the marketing brochures "residents can watch the light rail system as an integrated part of their neighborhood." The complex is aimed at an upscale market. A 700-square-foot, one-bedroom unit is pegged to rent at \$1,000 per month, at the higher end of Santa Clara County's rental market.

Under the development agreement, the Santa Clara County Transit Authority will lease the site for Almaden Lake Village to Denhart Properties over a 75-year period. Lease payments are proposed to be 8 percent of the appraised value of land— an estimated \$300,000 per year— and will not be collected until effective occupancy of the project. No replacement parking is being planned, even though current parking spaces will be lost to the project. If conventional financing is obtained, the transit district has agreed to subordinate its debt.

4.2. *Grand Central Apartments*

In June 1992, the BART board approved an RFP for development on a 2.7-acre surface parking lot owned by BART, adjacent to the El Cerrito del Norte station on BART's Richmond line (see Map 2). Several developers responded, and in February 1993 the board approved the selection of a local developer, Oewel Partners. Oewel Partners proposed a building with 210 residential units, ground-floor retail totaling 26,750 square feet, and 680 parking spaces (320 replacement spaces for BART users, 281 residential spaces, and 79 retail spaces [see Figure 2]). This is the first shared-parking program of this scale entered into by BART. The Grand Central Apartments are scheduled to start construction in 1995.

Although BART joint development policy requires replacement parking on a one-to-one basis, BART will not be charging the developer the \$2.35 million tab for this replacement. Instead, BART



Map 1.

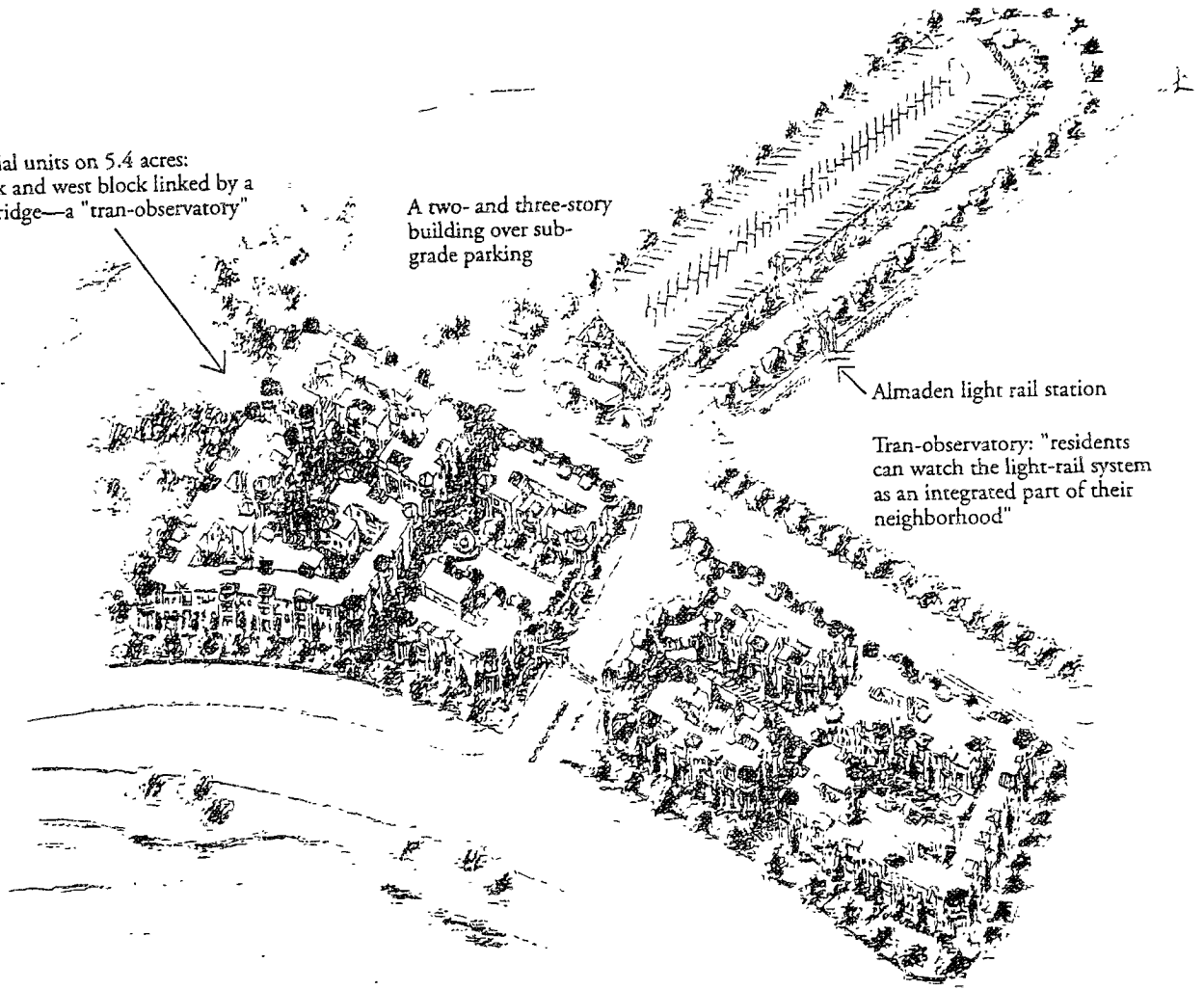
Santa Clara County Light Rail Transit System

250 residential units on 5.4 acres:
An east block and west block linked by a
pedestrian bridge—a "tran-observatory"

A two- and three-story
building over sub-
grade parking

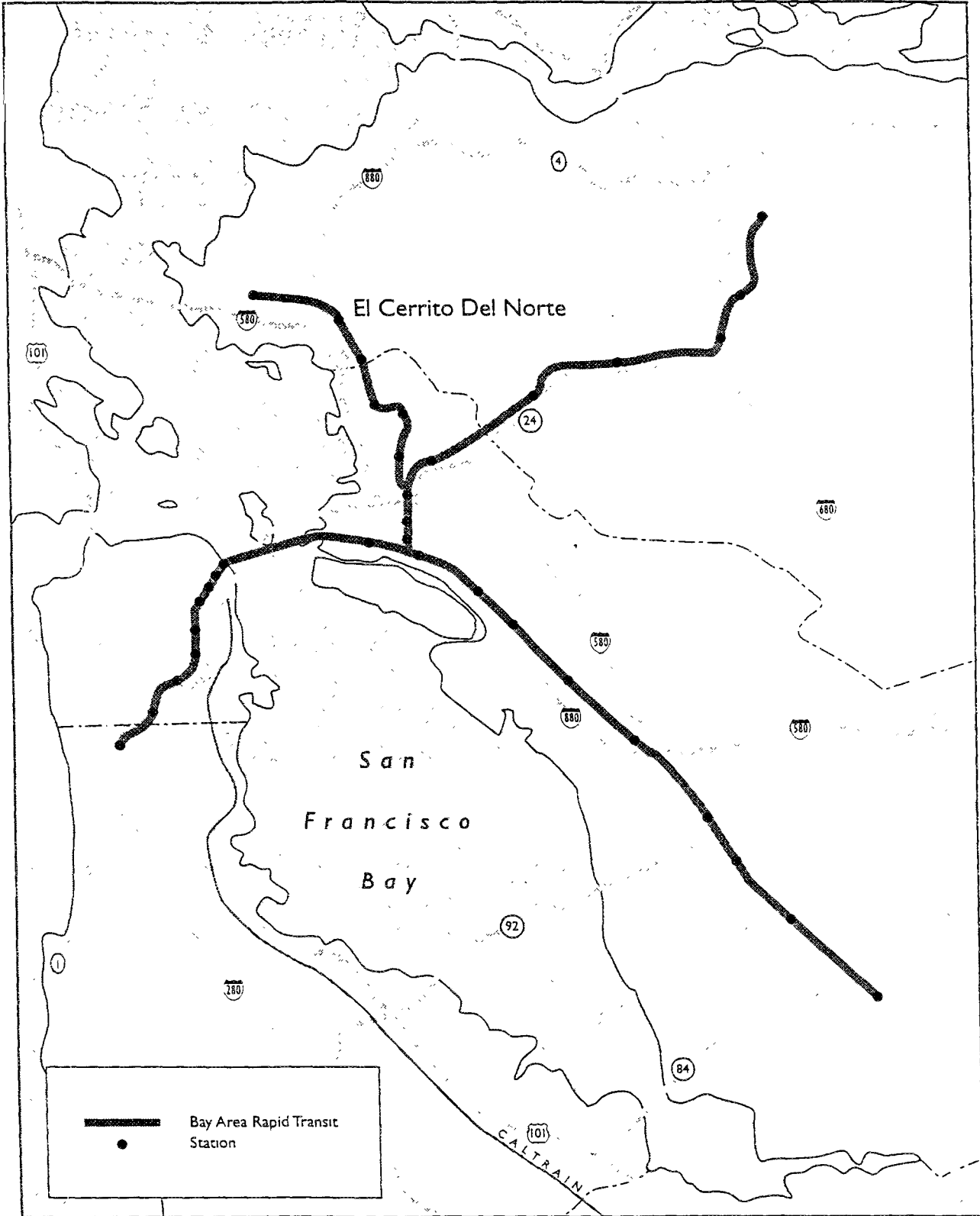
Almaden light rail station

Tran-observatory: "residents
can watch the light-rail system
as an integrated part of their
neighborhood"



BRUCE LEE CHAN

Figure 1.
Almaden Lake Village Project,
Near Almaden Station,
Santa Clara County Light Rail Transit System



Map 2.

Bay Area Rapid Transit (BART) System

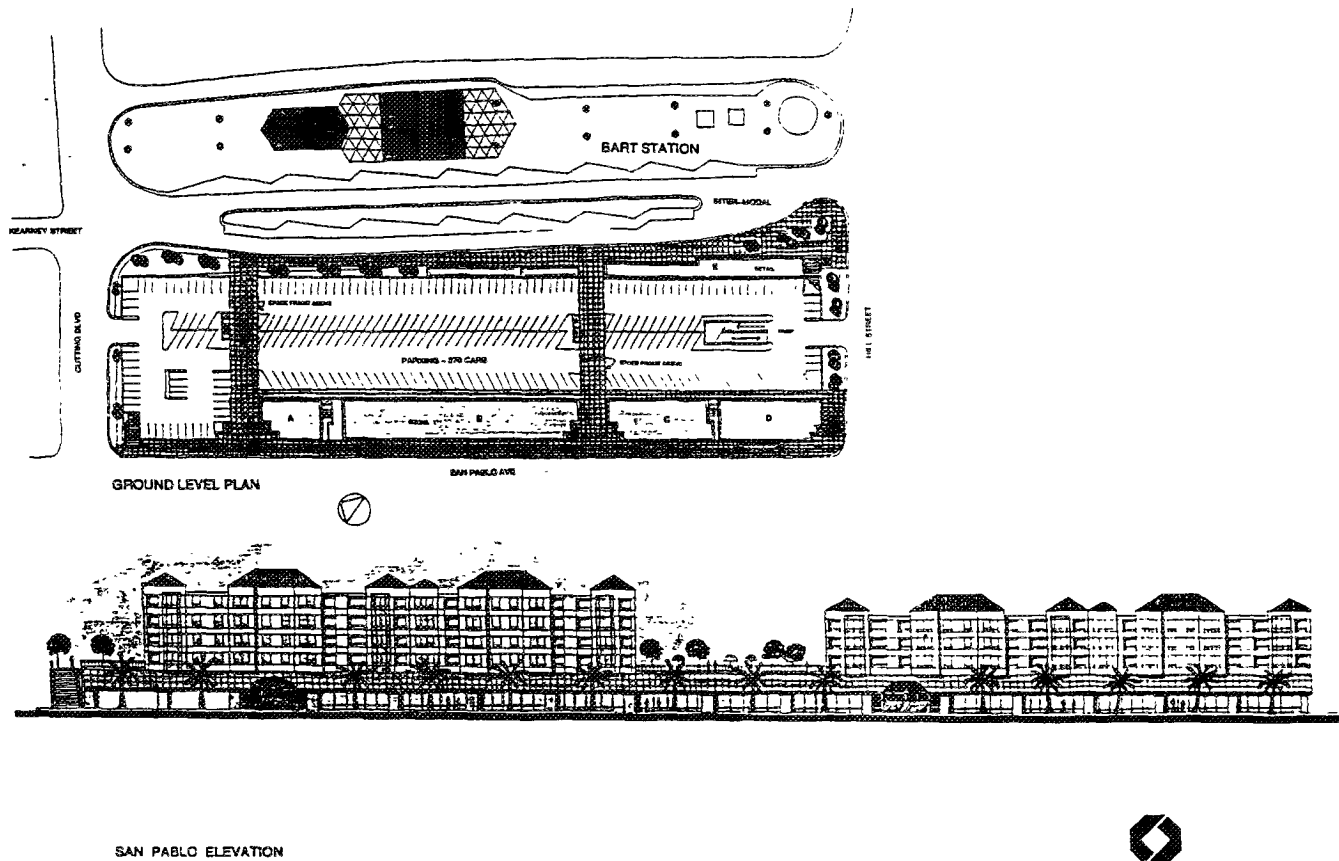


Figure 2.
 Planned Grand Central Apartments,
 Near the El Cerrito del Norte BART Station

has negotiated with the city of El Cerrito Redevelopment Authority to use tax-increment financing to pay for replacement parking.

The 99-year ground lease for the El Cerrito del Norte project delays rent payments until occupancy. BART is charging a base ground rent of \$165,000 per year, with increases based on periodic re-evaluations of the project. If, as BART hopes, the project appreciates in value due to its proximity to the rail station, BART will participate in this added value. Further, the agency has been aggressive in helping the developer secure government-backed financing from the federal Department of Housing and Urban Development.

The Grand Central Apartments, when completed, will add housing to an already emerging new community near the El Cerrito del Norte station. In 1992, the 135-unit Del Norte Place project was completed on redevelopment agency land two blocks from the station. On the adjacent redevelopment agency parcel, a mixed-use project is currently being proposed by Urban Homes, featuring 92 condominiums and 20,000 square feet of ground-floor retail.

5. Case Study of Station Area Planning and Implementation: Pleasant Hill BART Station

The creation of a specific plan district, we have argued, is an important prerequisite and an opportunity for promoting transit-oriented development. Having a political champion to back the project and see it through to implementation is another. The Pleasant Hill BART station is perhaps the best example in the U.S. of how important these two factors are.

The Pleasant Hill BART station is presently the only suburban rail station in California that is surrounded by a large concentration of residential development (see Figure 3). In 1993, there were over 1,600 housing units and 1.5 million square feet of class A office space within a quarter mile of the Pleasant Hill station. The key element in implementing transit-based development in Pleasant Hill has been the Station Area Plan. This plan, drawn up and adopted in the early 1980s, became the blueprint for guiding individual development projects over the past decade.

The Pleasant Hill station area plan represents a victory in coordinated local planning. In 1981, four local agencies — Contra Costa County, the city of Pleasant Hill, the nearby city of Walnut Creek, and BART — worked closely together to develop the master plan for the 125 acres centered around the station. At the time, the area around the station consisted largely of older, modest single-family homes, and strip commercial development on small parcels. The agencies hired the San Francisco planning firm of Sedway-Cooke Associates to prepare Pleasant Hill's specific plan. After a long series of meetings with neighborhood groups, business associations, and other local interests, Sedway-Cooke presented a specific plan in August 1982 that: (1) placed high-rise office development on land owned by BART immediately adjacent to the station; (2) farther out, but within a one-third-mile radius, placed multi-



Figure 3.

Transit-Based Housing Around the Pleasant Hill BART Station

family housing, tapering to single-family housing; and (3) spread retail and public open space throughout the project area's one-third-mile radius, to create an active street life.

A significant part of the Sedway-Cooke plan was achieved over the ensuing ten years, due mainly to the strong commitment and vigilance of the Contra Costa Redevelopment Agency's staff. As important steps to implementing the plan, the agency assembled the irregular parcels into developable parcels, invested in new public infrastructure and traffic improvements, and issued tax-exempt bond financing for all public and private improvements.

Currently, the Pleasant Hill station area boasts over 1,600 units of housing and 1.5 million square feet of office buildings. Within a one-quarter-mile radius of the station are four major residential complexes and four mid-rise office buildings. The County Redevelopment Agency issued an RFP in mid-1993 for a fifth multi-family residential development on land it owns between the I-680 freeway and the Pleasant Hill station.

While the Pleasant Hill station has been surrounded by a large concentration of residential and office development, as envisaged in the Sedway-Cooke plan, it has not achieved the pedestrian orientation and active street life that was hoped for. Presently, the area contains no retail shops, sidewalk traffic is light, and the area is largely vacated in the evening. Even the head of the Contra Costa Redevelopment Agency recently remarked at a joint development conference that the station area "lacks a heart."

Presently, the Pleasant Hill station area is, by the calculations of its sponsors, only 60 percent built out, so it is probably premature to pass judgment on its success. Moreover, the Redevelopment Agency, along with BART, is seeking to introduce new land uses into the area, including restaurants, retail shops, and perhaps even a regional cultural/entertainment complex. Plans also call for converting two BART parking lots into structured replacement parking and retail uses, following the lead of El Cerrito's redevelopment office.

Pleasant Hill's emergence as the Bay Area's most significant concentration of transit-based housing owes as much to the unwavering commitment of local politicians as it does to the existence of a specific plan. Shortly after the Contra Costa Board of Supervisors adopted the Sedway-Cooke plan (in the early 1980s), one of the supervisors, Sunne McPeak, decided to make Pleasant Hill her "life work in planning," as she has put it, and over the years she has continually pushed for implementation, including a financial package that would make the project work. Her perseverance and commitment to the project are perhaps the single most important factor that distinguish what has happened around Pleasant Hill from all other BART station areas.

6. Barriers to Transit-Based Development in California

While the number of major residential projects built to tie into California rail stations has increased significantly in the past five years, there are also a significant number of projects that have not moved forward. Six projects that have stalled are identified in Table 4. Among the factors that impeded

Table 4.

Proposed Residential Projects Near Northern California Rail Stations
That Have Not Moved Forward, 1988-1993

<u>Rail System</u>	<u>Project/Rail Station</u>	<u>Postponement/Cancellation</u>
BART	Hayward	Redevelopment Agency competition for residential development on a Redevelopment parcel next to the BART station. Felson withdrew in 1993, citing financial difficulties.
BART	El Cerrito Plaza	The Koll Company and Bridge Housing in 1992 proposed housing on the El Cerrito Plaza parking structure. Shortly thereafter, the City of El Cerrito, which had supported this transit-based residential development, announced that it wanted to build a regional parking garage on the site.
BART	MacArthur	A series of proposals have come and gone on the BART parking lot over the past ten years. Station area designs have not been followed-up with any implementation efforts by BART or the City of Oakland.
BART	Ashby	IDG Architects came to BART in 1991 with a proposal to build a mixed-use project on the Ashby BART parking lot. The project never went past the discussion stage, due to the opposition to the multi-family from the councilwoman representing the area. The City of Berkeley subsequently downzoned the BART area.
CalTrain	San Mateo Center	The San Mateo City Council initially approved a 358-unit, 12-story residential complex next to the San Mateo CalTrain station. This was scaled back to a 9-story, 249-unit project, due to neighborhood opposition to the high rise. The project has been on hold seeking financing.
CalTrain	Mountain View	The Old Mill project at the Mountain View CalTrain station was introduced in 1991. The plan redesigns the station stop to open into a new neighborhood over 16 acres, with over 400 new residential units. The plan has been on hold, as planned financing has fallen through on several occasions.

Source: UC Berkeley Nat'l Transit Access Center, Survey of Transit-Based Development, 1993

these projects have been multiple landowners and multiple parcels, which has impeded land assemblage; neighborhood and political opposition to higher densities; and the inability to secure financing.

For the most part, designing and retrofitting station areas to better complement rail transit has not been as wrinkle-free a proposition as California's transit planners have hoped for. With the exception of Pleasant Hill, densities around suburban rail stations throughout California remain much as they have been for the past 30 years. Preliminary evidence from the "BART at 20" update study indicates that residential density gradients actually fell from 1980 and 1990 along the Oakland-Fremont corridor, and that housing growth has been far stronger outside of BART-served corridors than within. The axiom "build it and they will come" does not seem to apply to rail transit in California. The next

several sections probe the most significant barriers that stand in the way of transit-based development in California, with a particular focus on BART and the Santa Clara County Light Rail systems.

Concern over barriers to transit-based development is nothing new. In 1930, Spengler showed that rail lines in Brooklyn had to be accompanied by other factors, most importantly a buoyant local economy, in order to increase land values for adjoining properties. Knight and Trygg (1977) similarly concluded that transit-based development will occur only when other favorable factors are in place, including a strong market demand for new office and residential development, supportive local land use policies (e.g., permissive zoning), availability of developable land at reasonable risks and costs, and the attractiveness of a site for development. The 1978 BART Impact Program Final Report also found urban blight and BART's lack of direct land use authority to be two major impediments to real estate development around stations.

The following sections elaborate on three main types of obstacles to station-area development in California: (1) economic: factors that detract from the financial feasibility of a project, such as questionable market viability, lack of conventional financing, and construction-related costs; (2) political: land-use policies and NIMBY forces that impede multi-family housing development; and (3) structural: factors related to the physical features of land or the workings of the construction industry, such as the unsuitability of land and the lack of suitable prototypes. Materials presented are based largely on a series of interviews of San Francisco Bay Area housing developers conducted in mid-1993. While the particulars presented are most relevant to transit-based housing development in the Bay Area, the same impediments likely hold in other areas as well. Because of the region's historically high housing prices, coupled with California's present economic woes, these obstacles are perhaps amplified in the Bay Area. If they can be overcome in the Bay Area, they can likely be overcome anywhere.

7. Economic Obstacles

7.1. *Questionable Market Viability*

For every report signaling an untapped market for multi-unit housing for low- and moderate-income buyers and renters, there is another survey underscoring consumers' unshakable preference for single-family homes. For example, a recent Building Industry Association of Northern California (1993) survey concluded that "single family homes are what people want for themselves and their community, no matter how unenlightened the professional planners says that is." The survey of over a thousand Bay Area residents (in all counties except San Francisco) found that 82 percent of respondents preferred a single-family home over all other housing types. However, those who perceive a viable market for multi-unit housing point out that single-family homes are out of reach of many moderate-income buyers and that sales of attached housing are strong. For example, in Santa Clara County, sales

of "attached housing," including townhomes, rowhouses, flats, walk-ups, and high-rises, reached 45.7 percent of total new home sales in 1992, as compared to 31.8 percent the year before.

In an interview for *Urban Land* on the future of high-density housing, the managing partner of Robert Charles Lesser & Company in Beverly Hills contends that in Southern California, single-family houses are "preferred over attached products by a ratio of nine to one," higher than what was found in the northern California survey (Bookout, 1992). Even single-family houses on small lots will outsell attached products if prices are equal. It is a fundamental rule, according to the developer, that "as density goes up, the general interest from the consumer goes down" (Bookout, 1992: 15).

Among the few transit-based developments built in recent years, results have been encouraging, but hardly uniform in their success. Absorption rates are above average at a number of condominium projects near the Pleasant Hill BART station and at an apartment building near the El Cerrito del Norte BART station, but are below average at a condominium projects near the South Hayward BART station and near a downtown San Jose light rail station.¹ Builders of two unfinished transit-based ownership housing developments in San Jose say their projects have so far generated great interest— even waiting lists —but that it is too early to say with any confidence if these projects will sell in the time and price range expected.

While developers in more traditional urban settings seem somewhat receptive to the idea of transit-based housing, interests seems to rapidly erode as one heads farther out in the suburbs and exurbs. During an interview, a residential home builder in Pleasanton, which will soon share a BART station with nearby Dublin, summed up the development community's attitude towards the risks of producing higher density housing near transit:

We are home builders. Some builders take risks and go from one product to another. From black to white. They take a lot of risk, and they fail. We don't. We go from one shade of black to another shade of black. We're still in business. We are skeptical about the depth of the market for transit villages.²

In Sacramento, a planner who was interviewed quoted one developer as saying "people don't move to Sacramento to live in a TOD (Transit-Oriented Development)."³ Sacramento County has developed a comprehensive and very specific set of guidelines for development occurring around transit stations that were intended to be a part of the General Plan. A number of Sacramento developers have used their influence to strip these guidelines out of the plan. The typical scare tactic used was the claim that these design features would drive up housing costs, which would eventually impinge upon Sacramento's regional economy. As a result, new development around Sacramento County's edges continues to be low-density, single-family subdivisions.

While there is debate about the level of market demand, nearly everyone agrees that transit-based housing appeals to a certain audience of renters and homebuyers: single people, young couples without children, divorced people, retirees seeking smaller homes and cashing in on their accumulated housing

equity, students, artists and other "independent" professionals interested in simple but convenient accommodations, first-time home buyers, and low-income buyers and renters. Some developers add specifics, such as people who work in downtowns where transit systems go, people who like cozy, old-fashioned neighborhoods, and people who simply don't want to drive. Voith (1991), for instance, provides evidence that a number of wage-earners living near suburban Philadelphia commuter stations chose their housing location mainly so they could rail-commute to work—the 1980 share of a census tract's labor force working in downtown Philadelphia was 12 percent higher for tracts with commuter rail service nearby, other things held constant.

The one submarket not interested in transit-based housing is buyers filtering upward through the housing stock. During interviews, one home-builder cautioned that "it's difficult to get a move-up buyer interested in the attached product."⁴ Given the money and the choice, local homebuyers—particularly those with children—tend to choose a detached single-family house with a private yard over a condominium, townhouse, or apartment.

Transit-based housing may also not appeal to the automobile-driving mainstream because accessibility via transit does not offer an advantage over their current mode. BART was designed to funnel commuters into downtown San Francisco and Oakland, yet much of the Bay Area's employment growth has been on the periphery, in non-BART-served corridors such as the I-680 stretch from San Ramon to Pleasanton. Santa Clara County Light Rail currently consists of a single line which, outside of downtown, is isolated from most popular destinations, such as the swath of campus-style office parks dotted throughout the Silicon Valley. For an increasing number of commuters, the automobile is a superior form of transportation that virtually no other form of transportation can match. This is certainly borne out by journey-to-work statistics, which showed that the national share of drive-alone commuters rose from 64.4 percent in 1980 to 73.2 percent in 1990 (Pisarski 1992).

Beyond demographics and stage of lifecycle, it becomes a bit difficult to generalize as to what other characteristics define the market for transit-based housing. Markets no doubt vary widely by station area. The most receptive areas are likely those in need of redevelopment, typically inner-city areas, and the least receptive are farther out places. The most promising areas for clustering more housing around BART—Rockridge, North Berkeley, Orinda, Lafayette, Walnut Creek—are all but closed off to development because of restrictive land-use policies and building moratoria. These are the very places which are attractive to many potential Bay Area homebuyers (because of their pleasing aesthetics, upper-middle-income profiles, good schools, walkable centers, etc.), but are also places where residents want to preserve their cultural hegemony, not to mention their housing values, by keeping others out. Meanwhile, developers are left with riskier areas in which to build. Most end up turning to less risky "products," notably the tried-and-true suburban tract housing projects.

In San Jose, the heart of the market viability debate centers not so much on zoning as on the "lifestyle issue." Those who question the market for transit-based housing point to the built-in

preference for single-family homes in the South Bay, and the sacrifices in the way of lengthy commutes to such far-flung places as Hollister and Gilroy, for example, that homebuyers are willing to endure to own an affordable detached house and enjoy a traditional suburban lifestyle. However, some developers feel the lifestyle issue is ephemeral. One builder opined: "over the next 5 to 15— and certainly 10 to 15 —years, high-density housing is coming to the South Bay. Trends in California haven't changed. Immigration is up and so are land prices. When you have that many people and environmental regulations, it's going to be . . . a lot easier to go up than out."⁵

7.2. Lack of Conventional Financing

Because of California's sluggish economy, the softness of the real estate markets, and the fallout from the savings and loans crisis of the late-1980s, banks are understandably hesitant to provide construction or permanent financing for new, largely untried, projects like transit-based housing. Lenders are becoming more and more ultra-conservative in their investment practices, only lending to projects with a proven track record of success. Unfortunately, with few prototypes or "comparables" of transit-based housing or transit villages in any one region, lenders are reluctant to stray from the low-risk single-family investment. As of late 1993, there were at least three transit-based housing projects within 1,000 feet of a Bay Area rail station, with a total of around 600 units, that were struggling to find financing.

Developers who have found financing in recent years tended either to have an enduring working relationship with a bank that trusted them based on a proven track record, inside financing, a loan made under the Community Reinvestment Act, or U.S. Housing and Urban Development (HUD) mortgage guarantees. Otherwise, a redevelopment authority helped underwrite the project through special financing. Most of the funding of a mixed housing-retail project recently opened adjacent to the El Cerrito del Norte BART station has been publicly provided, using tax increment financing, precisely because no lenders were interested. This was a joint venture between the IBEX development group and the city. El Cerrito's redevelopment authority drew upon huge portions of its reserves in financing this project, however, and is now in no position to back any new ones any time soon.

Where lenders are willing to finance neotraditional or more transit/pedestrian-friendly developments, experiences in Loudon County, Virginia (Brambleton), Montgomery County, Maryland (Kentlands), and Sacramento County (Laguna West) show they can force many traditional suburban design standards to be used. In these places, lenders forced urban designers to go back to the drafting boards to introduce wider streets, provide over one parking space per housing unit and worker, and to set retail projects back from the street to put customer parking in front. In the past, lenders have made money from projects that adhere to conventional suburban design standards and codes, so "why change things now?" The end result is that lenders not only have the power to make or break a project but also the de facto power to set design standards.

Lenders also act and react according to macroeconomic forces. The low interest rates of the past few years have likely created a relatively more attractive single-family home market, at the expense of higher-density housing. Once interest rates begin climbing back up, banks and developers might again turn towards multi-family housing.

7.3. Costs

Even if developers are satisfied a market exists for multi-unit housing near rail, they may be reluctant to build because of the high costs involved. Several factors, including costs of constructing at high densities, the price of land, municipal fees, and the added costs of risk, conspire to make it difficult to deliver high-density housing at affordable prices.

7.3.1 Construction Costs

One misconception about higher-density housing is that, by definition, it is more affordable. Notes the director of land acquisition for the largest home builder in San Jose: "Higher-density houses are more expensive to build, so density does not necessarily translate into affordability" (Bookout, 1992: 16). As multi-unit buildings become larger and more complex, costs for design, construction, and liability insurance increase commensurately.

The added costs of building at high densities can offset the advantages of fitting more units on a site. One developer of several mid-rise housing projects in Santa Clara County estimated that, in 1993 dollars, construction costs per square foot rises with density as follows: small detached cottages (12 DU/acre) — \$52/sq. ft.; townhouses (20 DU/acre) — \$60/sq. ft.; condominiums on podium (40-52 DU/acre) \$75/sq. ft.; and mid-rise (100 DU/acre) — \$80/sq. ft.

Whether a dense housing project "pencils out" often turns on the question of parking costs. According to the San Jose Housing Initiative (City of San Jose, 1989: 12), "the cost of providing parking can often make the difference between a financially feasible project and one that does not provide an adequate return. This becomes especially critical in the case of high-density housing where the number of required spaces can be quite extensive relative to the site size, leading to structured parking or other expensive forms of parking." Specifically, beyond 35 or 40 dwelling units per acre, podium or other expensive parking structures become necessary, adding a second layer of costs to original wood-frame construction figures. Once construction goes above four stories, the more expensive steel-frame construction becomes necessary. Unit costs are also driven up in multi-story structures by the addition of elevators, stair wells, and lobby areas.

7.3.2. Land Costs

High prevailing land prices also make it difficult to offer transit-based housing at an affordable price. In 1993, land prices were estimated to range from \$13 to \$20 per square foot near light rail stations in San Jose and from \$20 to \$35 per square foot in the vicinity of suburban BART stations in

Contra Costa County.⁶ These rates are well above the \$5 per square foot that the Bay Area's largest home builders, like Kaufmann Associates and Broad and Shea Homes, have paid in the past for virgin land at the urban edges, usually purchased from farmholders well in advance of planned construction. The gap between land prices in infill areas and exurban areas is enormous, and no doubt turns the attention of cash-strapped developers to tract housing on the outskirts.

Ironically, another factor driving up land costs, and thus potentially working against transit-based housing, is proximity to transit itself. Landis et al. (1994) have recently found a significant land value premium for residences near BART stations; in Alameda County, for every meter a home is closer to the nearest BART station, its selling price increases by \$2.29, all else being equal. Voith (1993) has similarly shown that the accessibility benefits of suburban homes near CBD-oriented rail lines in greater Philadelphia get capitalized into rent premiums; in 1988, the premium exceeded \$20,000. He found premiums increased as CBD employment rose, suggesting there was increased market pressure for rail-based housing when the share of workers heading to rail-served destinations rose.

Higher costs would not necessarily be a detriment to developers if the market could bear the prices necessary to ensure developers of reasonable margins on high-density, attached units. But in today's weak market, the going prices for condominiums do not reach the point where developers are assured of an attractive financial return. For example, in San Jose, typical condominiums were selling at \$150 to \$180 per square foot in early 1993, but to make the margins developers require, the price must be around \$210 per square foot, about the unit price for a modest, used single-family home in the same vicinity. For the same price, a buyer could purchase about 400 extra square feet in southern Santa Clara County than in neighborhoods served by the inner-city light rail line.⁷

7.3.3. Development Fees and Regulations

In many fast-growing regions of the country, such as Florida, New Jersey, Maryland, Virginia, and the west coast, development fees became an accepted way for communities to recoup the costs of accommodating additional growth. Substantial development fees for streets, infrastructure, parks, and services are required for most new housing developments in the San Francisco Bay Area and other regions experiencing growth pressures (Nelson, 1988). In Bay Area suburbs, development fees can add 10 to 15 percent to the cost of a dwelling unit. Although exactions vary by city, some fees are biased against high density. This often occurs when such standards as the Institute of Transportation Engineer's trip generation rates are used to exact a relatively high traffic impact fee on apartments, even though in theory such developments use infrastructure, especially roads, more efficiently and in combination with other high-density housing support high levels of transit services.

One developer remarked that the problem with trying to provide higher-density, more affordable housing "is the litany of environmental regulations that developers continue to face. Local agencies

often have a bias against higher-density housing that ultimately leads to higher construction costs" (Bookout, 1992, p. 17).

7.3.4. Risk-Associated Costs

Developing higher-density housing carries with it risks not generally incurred by the construction of single-family homes. First is the question of liability. According to California law, a developer can be held liable for faults in construction up to ten years after the completion of the project. Litigation runs rampant in the world of attached housing, and developers agree that the risks of getting sued by a homeowner's association by the tenth year after construction are high enough to dissuade them from building. From interviews, developers describe a world where opportunistic attorneys seek out otherwise satisfied condominium owners and punch holes in walls in order to probe whether any structural deficiencies might warrant a homeowner association lawsuit.

The second cost-associated risk relates to the "phasing" of projects. Single-family homebuilders build in increments, their only outlay being land and utility costs. In contrast, multi-unit construction is built in large chunks and cannot be easily tailored to changing market conditions once it is begun. Developers have to be particularly judicious with their market research and cost pro formas, since with large-scale projects it only takes a single miscalculation to ruin a developer financially.

A third risk is fragmented land ownership. Around many in-fill areas there are few large, undeveloped parcels. More typically there are several large parcels with different landowners, each of whom has his or her own agenda for the property. The time invested in negotiating and brokering land assemblage among multiple land can run into the months and even years. It only takes one hold-out to stall or kill a project. If property owners know a group is bidding for land in their neighborhood, they can form a cartel that extracts monopolistic profits from the land. If government eminent domain powers are invoked to help assemble land, such as through the formation of a redevelopment district, the displacement and relocation costs of existing households and the demolition costs of existing structures also need to be accounted for.

A fourth risk associated with high-density housing is the ever-present threat of neighborhood opposition. Fighting community groups opposing high-density housing in emotionally charged public gatherings can be terribly time-consuming, and therefore costly. One San Jose condominium development near the Japantown light rail stop was delayed by nearly four years while the developer re-tooled the plans to appease a group of neighbors discontent with the original density and design. Such horror stories quickly circulate within the development community. It is no surprise, then, that most developers prefer building on undeveloped land where opposition is nil than attempt an infill project that could raise the ire of watchful neighbors and delay a project for years. This presents developers with an unfortunate paradox: the best markets for new housing are often in areas where neighborhood opposi-

tion is the most vocal. This leads us to the second set of barriers to transit-based development, political obstacles, discussed in the following section.

8. Political Obstacles

A pair of "isms" —localism and NIMBYism —stand as the biggest political hurdles to developing transit villages and building transit-based housing. Even if the economics of a project work out, the politics of transit-oriented development can stifle even the most community-minded builders.

8.1. *Localism*

In California, and indeed in most states, the legal separation between control of a transit system and the control of abutting land uses is almost complete. While cities, counties, and special authorities operate public transit systems, only local jurisdictions have the authority, under state law, to control land uses, so transit agencies can only plead with municipalities to allow transit-oriented projects within their borders. To date, many suburbs have been unenthused. As Fulton (1991: 34) notes: "One of the most cherished privileges of Californians is the privilege of non-partisan, decentralized 'home rule' local governments. In most cases there is no regional or state agency with the power to hold these local governments accountable.

One motivation for keeping out high-density housing is fiscal zoning. This is the tendency of jurisdictions to "zone in" high tax-yielding land uses, such as residential estates, shopping centers, and office parks, and to "zone out" service-demanding activities, notably apartments (that burden already overburdened schools, infrastructure, and city services). California's Proposition 13, a 1978 voter-approved ballot initiative that dramatically reduced local government's capacity to generate revenues through property taxes and the issuance of general obligation bonds, is often blamed for fiscal zoning and forcing Californian communities to be more competitive than cooperative. Fiscal zoning has had the unfortunate consequence of separating where new workplaces get built (often in relatively well-to-do places that are "winners" of the competition) and where housing for workers go (often in lagging areas or places willing to take any development they can get).

Other restrictions of publicly initiated housing projects or transit village development in California are ceilings on the general-obligation bond capacity of local governments and the restrictive two-thirds vote needed to bond indebtedness. Restrictions on bonded indebtedness, for instance, largely precludes any community from debt-financing the cost of building a network of interconnected streets and pedestrian alleys within a planned transit village.

8.2. *NIMBYism*

Neighborhood opposition to high-density development, and the restrictive zoning practices that often follow, have stood in the way of efforts to intensify development around a number of Bay Area

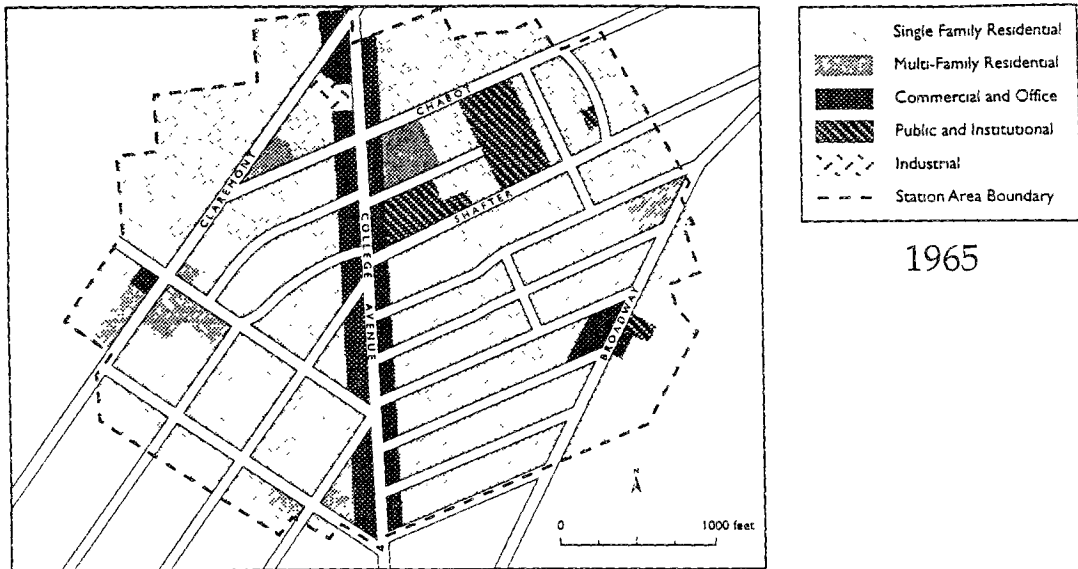
rail stations. In the case of the Rockridge district of Oakland, fears that several proposed mid-rise apartment towers would lower neighborhood property values and create more congestion reached such a crescendo by the mid-1970s that the Oakland city council imposed a building moratorium and downzoned the neighborhood. Figure 4, which shows the land-use changes that have taken place around the Rockridge BART station over the past 30 years, suggests that the NIMBY-induced growth moratoria have been successful indeed.

In studying opposition to densification around BART stations and why projects never got built, Johnston and Tracy (1983) place much of the blame on local governments because of their timidity. According to the authors (p. 98), policies supporting denser development "have not moved off the pages of the general plan in a meaningful way. Usually only a small token area is actually zoned for high-density development . . . Most of the local jurisdictions do not take their land-use intensification policies seriously at all . . . No concerted push to promote truly high-density development in outlying areas is evident." Johnston and Tracy record successful community efforts to downzone station areas and stop proposed apartment projects at Rockridge, Concord, Berkeley, San Francisco's Mission District, Daly City, El Cerrito, Orinda, and Pleasant Hill.

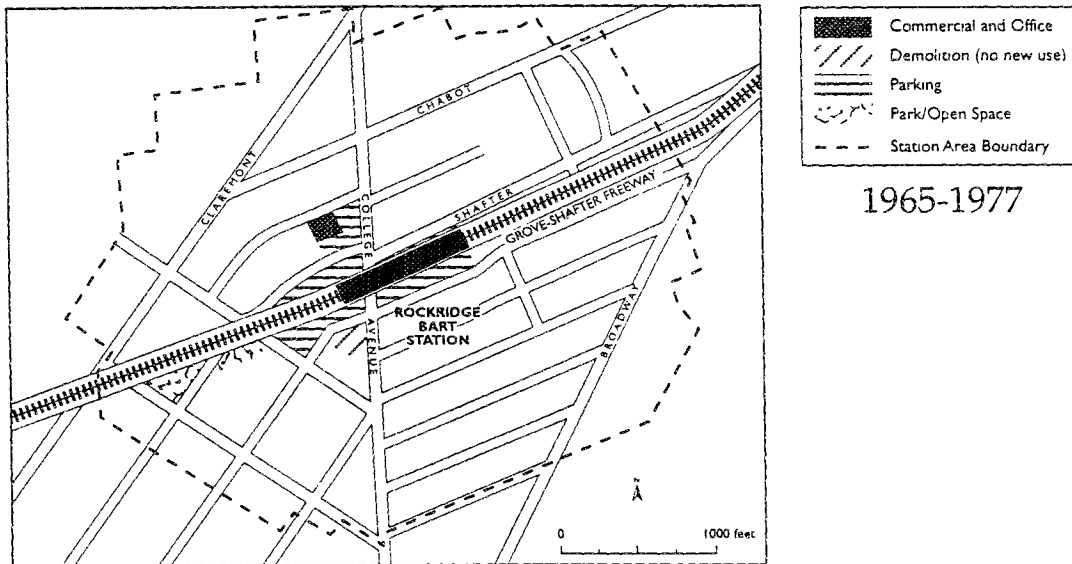
The best example of mixed housing-retail development around a BART station—the Del Norte Place project adjacent to the El Cerrito del Norte station—almost never got off the ground because of stiff neighborhood opposition. The four-building, four-story project features 135 apartment units and 21,000 square feet of ground floor retail (see Figure 5). Around 40 percent of units are rented to very low-income households or are set-aside for seniors. The project is also home to the West Contra Costa County Older Adults' Clinic, a gerontology center and Alzheimer's clinic operated by the Contra Costa County Health Services Department. The two chief reasons why neighbors opposed the project was the fear that very low-income housing would lower property values and that financing would be inequitable (Brilliot et al., 1994). Thus, some established residents saw the project siphoning community dollars to help finance the housing for people they don't want in the neighborhood in the first place, while also enriching profiteering developers.

Americans often blame density for a raft of woes and jealously guard against it. Transit-based housing carries with it the specter of more crowds and congestion, the stigma of low-income projects, and the prospect of changing the character of a cherished neighborhood, bringing property values down with it. These perceived impacts of transit-based housing, all interrelated, are elaborated upon below.

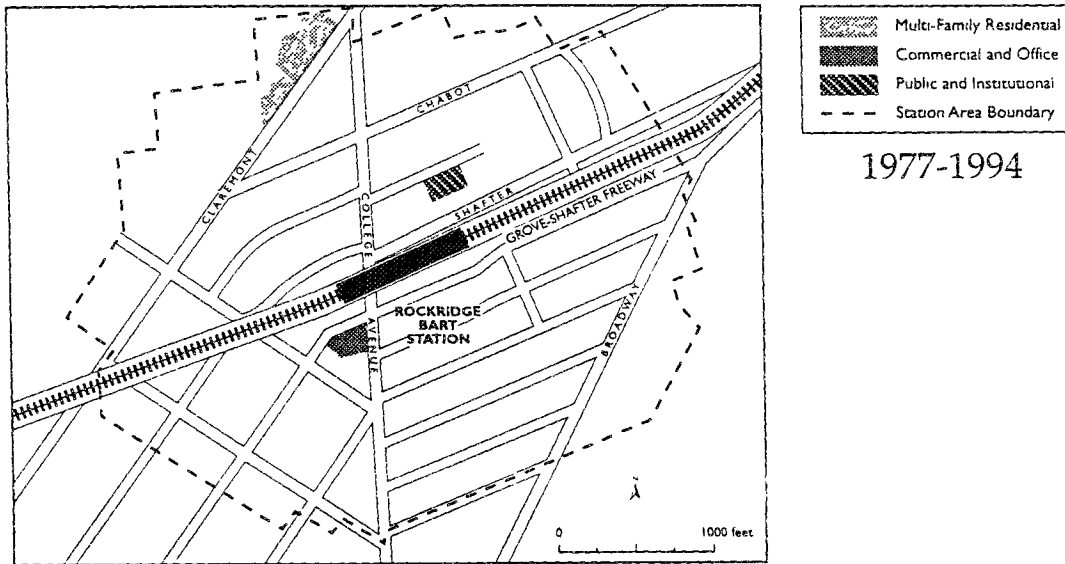
- *Threat to property values.* Because high-density housing tends to cost less than single-family homes, many single-family home-owners understandably fear that the addition of nearby apartments will "taint" the neighborhood. Since a good share of the wealth of urban Californians is tied up in their homes, housing is a particularly cherished commodity. Second, high-density housing, and in particular affordable housing, whether near a station or not, is criticized for bringing "undesirables" and crime into the neighborhood. At a conference on joint development in 1992, a San Diego developer made a public statement



1965



1965-1977



1977-1994

Figure 4.
Changes in Land Use Around the Rockridge BART Station, 1965-1994



Figure 5.

Del Norte Place at El Cerrito del Norte BART Station

that he would not lease space of a mixed-use project near a rail station in La Mesa if a prospective tenant wanted to be there because of superior rail access on the very grounds that he did not want the kinds of people who use rail loitering around his projects. Class and racial prejudices lie at the subsurface of many NIMBY reactions to change.

- *Increased traffic and demand for services.* Higher densities translate into more people, and in turn more cars, traffic, and crowded schools. According to the president of a community group that has opposed some transit-based housing projects near the Almaden station in San Jose, "traffic is already horrendous getting out of Almaden Valley; people are afraid of more buildings creating longer traffic jams." Furthermore, his group is concerned about the impact on other facilities, most notably parks, which are already overcrowded.⁸
- *Threat to neighborhood stability.* High-density housing caters mainly to renters, not homeowners. Renters are often perceived as itinerants who add little to neighborhood stability. Take the case of a new condominium project near the Japantown LRT line in San Jose. Explains a neighborhood activist who led a four-year fight to change the design concept: "The developer thought it would be grand to stick in as many one-bedroom condos as possible. Those do not end up being owner-occupied. No one's into high turnover. We would like to see stability in the neighborhood."⁹
- *Neighborhood blight.* Some suburbanites equate high-density housing with slum housing. Unfortunately, such views have been perpetuated by the poor quality of many contemporary apartment buildings, too many of which were built with cheap materials, lack aesthetics, are undermaintained, and were designed without regard for the context, design, and scale of existing neighborhoods.

NIMBYism has gained a certain amount of legitimacy because it easily translates into government action, given the existing system of regulating land use and development. Current residents and organized neighborhood groups can exert great influence over the electoral and land development process, to the exclusion of non-residents, prospective residents, or for that matter, all outsiders. Restrictions on affordable and higher density housing are just one manifestation of this sentiment.

Meanwhile when it comes to retail development, a reverse political battle—YIMBYism—is being waged. While cities are fending off apartment proposals, they actively vie for retail projects that promise to fatten local coffers. Competition has become so fierce that cities have threatened to bring legal action against neighboring jurisdictions that are thought to be "pirating" sales tax revenue. The city of Walnut Creek sued the Contra Costa Redevelopment Agency over the construction of transit-based housing and proposed retail projects on the grounds that it could undermine Walnut Creek's downtown development programs. The redevelopment agency settled, agreeing to limit the amount of retail around the station to roughly 100,000 square feet.

9. Structural Obstacles

A final set of obstacles to transit-based housing is structural in nature, having to do with the lay of the land and the nature of the building industry. Structural obstacles included the lack of available

land, the unsuitability of whatever land is available, and problems inherent in there being few prototypes or paragons of transit-based development.

9.1. Lack of Land

Modern rail transit systems are for the most part superimposed on a pattern of low-density land uses that evolved around freeways and thoroughfares. Development opportunities are often precluded by the absence of meaningful-sized parcels near stations. With no land assemblage powers, developers have little other option than to negotiate acquisition with landholders. The mixed-use Del Norte Place project in El Cerrito was only possible because of local redevelopment powers to assemble and write down the land. Since California law limits redevelopment districts to "blighted areas," the number of locations where land can be acquired through exercising eminent domain rights is limited and are generally not the places where most people aspire to live.

Expansive park-and-ride lots encircle many suburban transit stations throughout the U.S., preempting possible development, at least in the near term. In the case of BART, up to 20 acres of land is consumed by parking at terminal stations, imposing long distances between stations and surrounding land uses. However, as noted in Section 3, what appears to be a barrier can be turned into an opportunity. BART is currently entertaining plans to conserve land around stations by building multi-level garages, and thus possibly freeing up land for joint development projects. The Santa Clara County Transit Authority is planning a "trandominium" project on what is now a parking lot at the Almaden station, a terminus on the southwest spur of San Jose's LRT system.

9.2. Unsuitability of Land

Even where land is readily available, it is not always attractive to build on. Many undeveloped station areas are undeveloped precisely because they are unattractive places— in freeway medians, in blighted neighborhoods, in warehousing and transitional zones, and in the path of overhead utility lines. Dingemans (1975) found the location of BART's Concord line in the Route 24 and I-680 freeway median to be a major impediment to land development. Such sites suffer from freeway noise, vibration, fumes, and the glare of automobile headlights at night. BART stations like the Coliseum are uninspiring because they are surrounded by factories, warehouses, and a sports stadia complex, meaning the area is often devoid of people after 5 p.m.

9.3. Inexperience and Lack of Prototypes

Many homebuilders in the Bay Area and elsewhere know how to do one thing: build single-family homes. Planning, designing, negotiating, building, marketing, and operating transit-based housing may require expertise not easily available to most home builders. The "infant industry" of transit-based housing is struggling to find high-quality prototypes and good examples that can be mimicked.

Without exemplars, those willing to risk entry into the uncharted waters of transit-based housing often have little to go on other than instinct and common sense.

10. Overcoming Barriers

While not all barriers to transit-oriented development can be easily overcome, plainly some tactics, whether reasonable under current political conditions, or more long-term and radical in nature, can help. Making incentives outweigh the barriers to a project is perhaps the simplest prescription to seeing transit-based housing through to implementation. Incentive currently being applied to promote housing near northern California train stops include rezoning for higher densities, reduced parking requirements, tax-exempt financing, and the formation of redevelopment districts. Only the redevelopment powers of assembling and writing down the costs of land have been strong enough to offset barriers to station-area housing construction in California.

The following sections outline strategies that might be pursued for overcoming each of the three classes of barriers discussed previously: economic, political, and structural.

10.1. *Overcoming Economic and Financial Barriers*

No obstacle to transit-based development in California has been greater in recent years than the shortage of financing. Transit-based development has not been immune from the financing difficulties facing all multi-family homebuilders in the 1990s.

A number of strategies could help overcome, or at least attenuate, the financial and economic obstacles to building transit-based housing. All of these strategies, however, are redistributive in nature, shifting the risks of transit-based development from one party to another. In this section, financial strategies are broken into two groups: those that transit agencies, in concert with redevelopment agencies, can and have introduced, and those that other parties, such as city governments and developers, might pursue.

10.1.1. *Transit and Redevelopment Agency Initiatives*

California's transit agencies and redevelopment authorities have introduced a number of financial incentives in recent years in an attempt to move proposed residential projects near rail stations forward. The five principle ones have been:

- (1) Reduce land assemblage costs to developers through write-downs
- (2) Finance of infrastructure improvements through public-sector tax increment financing
- (3) Reduce development financing costs through tax-exempt financing
- (4) Serve as a guarantor of loans made to a private-sector developer
- (5) Participate as an equity partner in the development

To a large degree, these measures have meant that public agencies are willing to share in the risks of station-area development and help shield developers against possible economic downturns and uncertainties. The hope is that while the public sector will shoulder some of the downside risks, in the long term they will also share in some of the future upside rewards of transit-based development.

To date, at least two transit-based developments in California owe their existence to a transit agency and redevelopment authority putting together a fair and workable financial package.

Del Norte Place. Del Norte Place is, as previously noted, a 135-unit apartment complex with 19,000 square feet of ground-floor retail within a block of the El Cerrito del Norte BART station. The project was built on land owned by the El Cerrito Redevelopment Agency. When the agency sought proposals for the site, John Stewart, a San Francisco-based housing developer, put in an aggressive bid, actively seeking a site near a transit station. To make the project work, the Redevelopment Agency has become an equity partner in Del Norte Place, leasing land to the developer for \$1 per year and 15-20 percent of cash flow. The agency also underwrote nearly \$10 million of the \$14 million in infrastructure improvements through the use of tax increment financing.

Del Norte Place has leased rapidly. It opened in mid-1992 and, by mid-1993, 97 percent of its apartments were rented. Most tenants are singles or married couples without children who work in downtown San Francisco or Oakland, students at the nearby University of California at Berkeley, or empty-nesters. Only 17 percent of Del Norte Place's households include children; 56 percent of the units have a single occupant.

La Mesa Village Plaza/Villages of La Mesa. In the San Diego area, the best example of transit and redevelopment agencies cooperating to help finance a project is La Mesa Village Plaza, a mid-rise project with residential, retail, and office uses (see Figure 6). Ground-floor retail and office is topped by three stories of residential units. The project's 95 residential units are spread over 5.4 acres, producing a blended density of slightly more than 17 units per acre.

Like Del Norte Place, La Mesa Village Plaza was a conscious attempt by the local redevelopment and transit agency to target housing development at a trolley station. The redevelopment agency owned 5.4 acres adjacent to the La Mesa Boulevard trolley station, and issued a number of RFPs in the late 1980s, seeking to attract intensive, mixed-use development near the station. When several proposed projects fell through for lack of funding, the agency significantly discounted the land costs, and significantly reduced the capital required up front. La Mesa Plaza paid a relatively small amount of money up front (\$150,000), and the agency carried a note for payment over time. Further, the transit agency, MTDB, spent money to improve the station design so as to make it architecturally compatible with the Plaza.

The La Mesa Redevelopment Agency also played a major role in seeing the nearby Villages of La Mesa project through to completion (see Figure 7). The redevelopment agency assembled the 19 acres of land for the project. It then sold the land to the developer, the Douglas Allred Company. Once the Villages of La Mesa was designed, the MTDB relocated the station site and swapped land with the



Figure 6.

**The Mixed-Use La Mesa Village Plaza,
Adjacent to the La Mesa Boulevard San Diego Trolley Station**

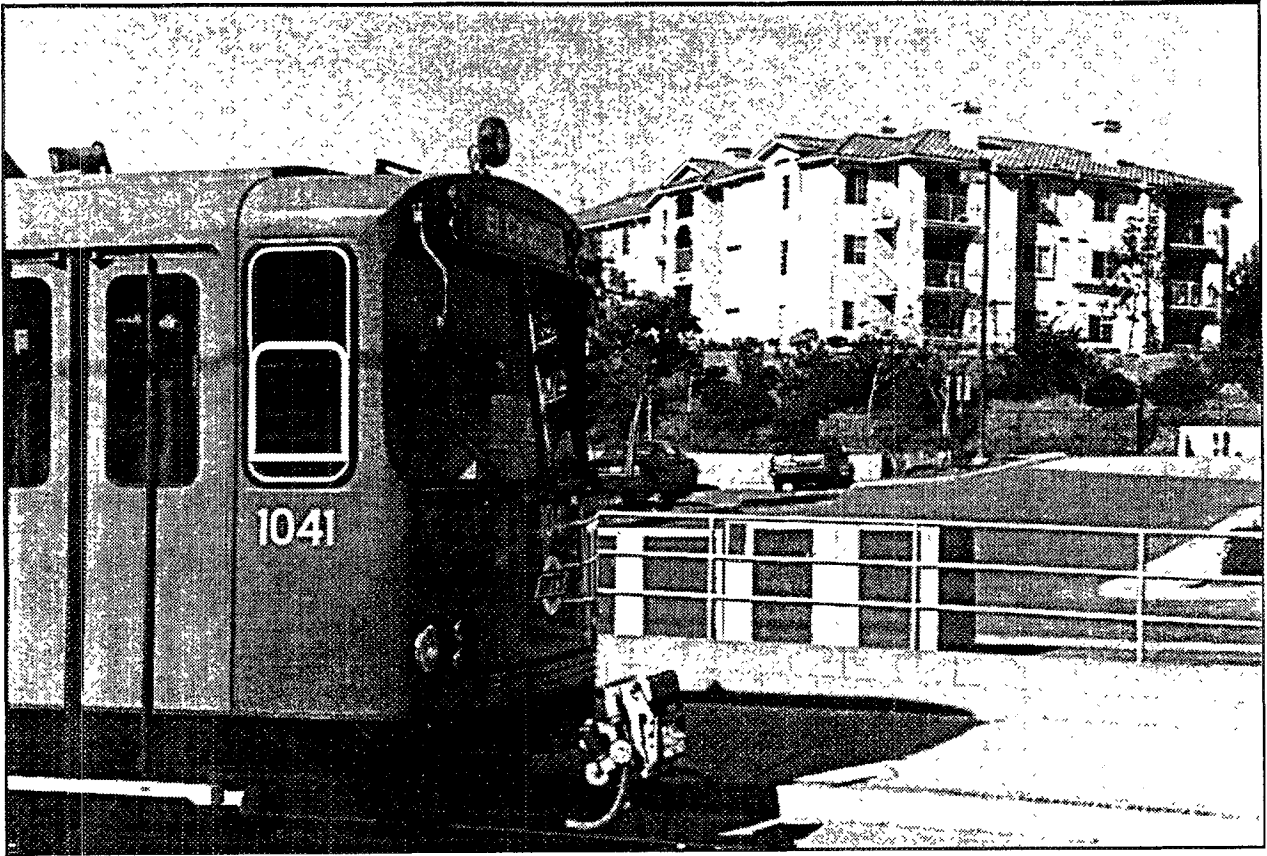


Figure 7.

Villages of La Mesa, Across From a San Diego Trolley Station

developer, to ensure better station access for residents and others walking to the station. Today, the 384-unit apartment complex has a gross density slightly over 20 units per acre, substantially above the city of La Mesa's average of 6.2 units per acre.

10.1.2. *Other Financial Initiatives*

Local governments, developers, lenders, and other groups are likewise in a position to help ease the financial burden of making transit-based housing projects work. Several possible strategies are outlined below.

- *Lower the development fees imposed on transit-based development.* To the extent that transit-oriented developments shift people from car to transit travel, an argument could be made for giving developers tax credits rather than exacting fees. After all, if local governments are relieved of the burden of expanding street capacity, this is a real economic savings that should be at least partially passed on to land developers to reward such behavior. In California, several transit advocates have proposed exempting transit-based housing projects from the state's Congestion Management Plan requirements on payment of traffic mitigation fees. Tax abatement and impact fee credits are tools that are readily available to local governments. Finding a politician to champion such initiatives in the face of shrinking local revenues might be difficult, however.
- *Introduce creative financing.* Cities could take the lead of transit agencies and redevelopment authorities in fashioning together creative financing schemes. One option would be for cities to provide "sleeping second" mortgages through Community Development Block Grants (CDBG) to help developers obtain financing and make projects feasible. Another creative fiscal instrument would be "green mortgages," which call for an accounting of commuting costs when calculating attainable home loans.

Presently, the city of San Jose is playing the role of a proactive transit and redevelopment agency by providing financial incentives for the Winfield Hill project near the Santa Clara County light rail system. Winfield Hill contains a mix of 84 ownership units and 144 rental units. At 20 units to the acre, its density is well above that of surrounding neighborhoods. The developer, Martin Group/Devcon Investments, consciously sought out a site near a Santa Clara County light rail station. Winfield Hill was made possible primarily through financial incentives introduced by the city of San Jose to promote transit-based housing. Because of Winfield Hill's close proximity to the Almaden station, it received priority access to the city's housing fund. The city subsidized more than 25 percent low- and moderate-income units (for families with annual incomes between \$18,000 and \$35,000 per year) through a \$8.5 million loan fully subordinated to the construction loan. Additionally, the city provided a \$2.6 million loan to assist moderate-income homebuyers.

- *Employ cost-saving design and construction techniques that do not sacrifice quality.* One developer of high-density housing offered the following suggestions: stick to slab foundations and retaining walls; keep floorplates level over an entire project; if more light is needed, make windows taller instead of wider — a solution that reduces framing requirements; stack all load-bearing walls to avoid the need for posts and beams in the interior; and, perhaps most importantly, bring in the head building official early in

the design process to avoid surprises downstream, such as stricter structural requirements than expected (Bookout, 1992: 17).

- *Reduce the time required for permit review and public hearings for projects within a defined radius of transit stations.* The times savings from "fast-tracking" transit-based housing through the development review process can translate into substantial dollar savings. Even more far-reaching regulatory reforms have been proposed. In a report to California's Governor on some of the obstacles facing developers of higher-density and more affordable homes, the task force recommended relaxing land use controls and modifying the California Environmental Quality Act (CEQA) to do away with project-by-project environmental reviews.
- *Conduct more market studies on transit-based housing.* Better research on this question will lead to projects that are appropriately built to satisfy consumer preferences.
- *Complement transit-based housing projects.* Public improvements, like nearby plazas, landscaping, and infrastructure upgrades that impart a pleasant, more urbane, and pedestrian-friendly neighborhood environment around stations can help attract tenants.
- *Produce attractive prototypes of transit-based housing that homebuilders can mimic and learn from.* Such prototypes would likely require seed funding, such as under the federal Empowerment Zone and Enterprise Communities Program, which provides special grants and tax credits to designated areas.
- *Introduce pricing initiatives.* One rather draconian way to get more people into trains and buses, and thus create a large market of potential station-area homebuyers and tenants, would be to raise dramatically the price of owning and operating an automobile in dense urban settings closely in line with true social costs. Some well-known long-term proposals to bring this about include congestion pricing, mandatory parking fees, and increase fuel taxes. How high these prices should be raised is a subject of much debate; however, if European experiences are any guide, cities with pleasant pedestrian-oriented environments and superb transit services often have auto-free zones and punitive central-city parking rates of around \$20-\$30 per day, not to mention prices at the pump that are 3-4 times higher than in the U.S. (Pucher 1988).

10.2. Overcoming Political Obstacles

As with any urban initiative, the politics of transit-based housing requires gainers and their supporters to appease those who see themselves as losers, usually by brokering compromises. Several possible ways of overcoming political hurdles are outlined below.

- *Develop effective communication strategies to quell neighborhood opposition.* This means keeping neighborhood leaders in the loop early on and making them part of the project planning process. Developers might also organize visits to successful projects as a way to build confidence and allay unfounded fears. For example, an affordable housing project in the Bay Area by Bridge Housing Corporation won neighborhood approval after the developer took local residents to see developments similar to the one proposed. Seeing that Bridge apartments were of a high-quality and well-maintained, most opponents reversed their position.

- *Include neighborhood improvements*, such as the creation of a park and open space, as part of a high-density housing project. Such tactics to overcoming political barriers, of course, are at the expense of creating new financial barriers. Realistically, in today's market economy, the upfront cost of such add-ons would likely have to be shared between public and private interests, such as part of a joint development arrangement between a homebuilder and a redevelopment authority. As a demonstration of its commitment to a proposed residential and mixed-use development near its downtown BART station, the city of Hayward recently proposed locating a library, fire station, and cultural facility nearby. The project is still being held up, however, because of the inability to attain financing.
- *Focus transit-based housing projects in redevelopment zones, rather than established neighborhoods, to reduce NIMBY opposition.* This means targeting projects in "blighted" areas, however; hardly settings where big housing developers see much money to be made. California's proposed Transit Village legislation might provide sufficient incentives for building projects in non-blighted, suburban settings; however, these would likely have to be largely undeveloped areas. In the San Francisco Bay Area, the West Pittsburg/Baypoint and Dublin/Pleasanton station areas that will open in 1996-97 as part of BART's East Bay extension are promising areas for developing transit villages on the very grounds that both sites have plenty of virgin nearby land and fairly buffered from established residential neighborhoods.

There are also more radical and heavy-handed ways of seeing transit-based housing through to implementation, though all require one or more individuals to stake their political future in an arena that to date few politicians have shown much interest in. Regional governance is often recommended as an antidote to many urban ills, including the shortage of affordable housing and transit-oriented places. Most suburbanites and their legislators recoil at the idea of financing services for inner-city residents. The idea might also not be enthusiastically embraced by central city politicians and their constituents either, because of the resulting loss of central city autonomy in situations where cities would be outnumbered by their suburban partners with respect to service needs, priorities, and the allocation of resources (Salins, 1993). To achieve *de facto* regional oversight of land use, Johnston and Tracy (1983: 114) recommended "tying state and federal grants for sewers and highways to transit-supportive zoning, and funding those projects incrementally so continued compliance is assured." Even more draconian is the suggestion of "reducing service at stations until land around them is upzoned" (Johnston and Tracy, 1983: 114).

Another idea is to pay off negatively affected landowners through benefit assessment transfers, a scheme in which benefiting landowners near the station would be taxed on some of their windfall and other landowners outside the ring of "positive impact" would receive compensation for negative impacts such as increased traffic. Such transfers would effectively mean using proceeds from "value capture" to provide "disvalue compensation" — i.e., gainers paying off losers. Real problems can be imagined in trying to implement such a scheme, not the least of which would be exactly where to draw the boundary between gainers and losers.

One reason why such political tactics are rarely employed is that beneficiaries of transit-based housing are often prospective tenants of moderate-priced housing, hardly a cohort with much political clout, while the perceived losers are established homeowners, who are financially better off and are often active in local politics. Unless there is substantial political capital to be gained, such as in the form of large sums of money passed down from higher levels of government, it will be the rare local politician who politically embraces such programs as transit-based housing.

10.3. Overcoming Structural Barriers

The two best means for overcoming the problem of insufficient land would be to selectively recycle some surface park-and-ride lots to housing projects and to form redevelopment districts to help assemble parcels suitable for moderate or large-scale projects. Parking at rail stations, however, can be a politically charged issue since those who benefit most tend to be fairly affluent single-family homeowners who depend on park-and-ride to reach stations and well-paying downtown jobs. Even though BART has explored the possibility of reusing park-and-ride lots for housing, BART's current board is strongly divided on this issue, with some wanting to reduce parking supplies and others wanting to vastly increase it.

Cities might also be proactive in identifying possible infill sites near stations and assisting developers with land assemblage outside of redevelopment districts. Planners working on the San Jose Housing Initiative, for example, conducted an extensive land availability inventory in 1989, identifying over 70 developable sites near transit capable of accommodating more than 13,700 housing units.

11. Achieving Transit-Based Development

11.1. Opportunities Winning Out Over Obstacles

An obvious challenge to advocates of transit-based housing and transit villages is to aggressively seize the opportunities and eliminate or marginalize as many of the barriers as possible that have been discussed in this report. The best chance of doing so is to bring as many of the stakeholders together as possible in hopes of brokering a financially viable and politically acceptable arrangement.

The reality, however, is that most barriers loom larger than opportunities, which accounts for the dearth of transit-based housing projects and transit villages in California and elsewhere in the U.S. As noted, overcoming one barrier can exacerbate another. For example, in the attempt to appease NIMBY opposition by encouraging developers to create a neighborhood park or help fund a library, projects may no longer be financially feasible as a result. Another example is the reuse of park-and-ride lots for housing, which overcomes the structural barrier of insufficient land, but can cause a political backlash among well-to-do suburbanites who depend on these lots for accessing suburban stations.

While Bay Area rail stations in Pleasant Hill, El Cerrito del Norte, and Almaden are paving the way for future transit-based housing development, zoning policies continue to be restrictive around many Bay Area stations with the greatest development potential. Obtaining permissive zoning is just the first hurdle. Once that is achieved, as it has been at numerous sites along San Jose's light rail line, a developer then faces the uphill battle of overcoming economic and structural barriers that remain.

If the transit village concept is ever to get off the ground in a meaningful way, the risks will likely have to be spread out among multiple parties. This could take the form of cities, transit districts, developers, bankers, and even higher levels of government interested in novel but promising urban programs sharing the financing of transit-oriented development. Transit villages and transit-based housing must be treated like any other "infant industry." The transit village "industry" is struggling to gain a foothold in the marketplace and clearly needs an injection of outside support to test the concept in hopes of establishing enough momentum where it eventually can be self-sustaining. Federal grants for public takeover of struggling transit services in the 1960s and the original transit operating subsidy programs were based largely on the infant-industry logic (Cervero, 1982), so there is at least some precedence within the transit arena.

From a local government standpoint, what is most needed is a proactive stand on transit-oriented development. Pleasant Hill is a testament to the importance of local officials and planners becoming actively involved in providing a vision and building a coalition to bring about change around rail transit stations. It is a mistake to believe that development will "evolve naturally" on its own around transit stations. As Knight and Trygg (1977) have concluded, it takes a complement of other initiatives, such as density bonuses, tax increment financing, and the purposeful siting of special facilities (e.g., libraries) to catalyze major land use changes around rail transit stations. The dream of BART's planners was to build a polycentric metropolis with mini-communities sprouting around rail stops (Merewitz, 1973). This dream has gone largely unfulfilled not only because of neighborhood opposition, institutional inertia, and financial constraints, but also because many thought the process would unfold naturally on its own. Forging a coalition of political champions, proactive planners, visionary developers willing to take a risk, and neighborhood leaders who are willing to compromise is essential if the transit village and transit-based housing concepts are to break ground and the urban development promises that were originally held out for rail investments like BART are ever to materialize. The importance of building a political base of support for transit-oriented development is underscored in the closing section on an agenda for action.

11.2. An Action Agenda

Based on the case experiences outlined in this report, we believe the following elements are essential ingredients in making transit-based development happen. While not all of these elements are necessary for each development, at least some of them must be in place if transit-oriented growth is to occur.

1. *Local elected officials must formally endorse the principle of transit-based development.* The idea of transit-based development has long been promoted by such regional entities as BART, the Association of Bay Area Governments (ABAG), and the air quality district. What has been missing, in most cases, has been a parallel commitment on the part of local elected officials and of local planning commissioners to zone and plan for specific transit-oriented development.

To win the formal endorsement of local elected officials, the emphasis must be less on what is good for the region or is necessary to justify transit and more on what benefits would accrue to individual cities and counties. Possible benefits that should be marketed include: meeting affordable housing goals while preserving established neighborhoods; adding retail growth that generates additional property and sales tax income; and promoting mixed-use development that generates less traffic than if the development occurred elsewhere.

In Pleasant Hill and El Cerrito, transit-based development is being achieved because local elected officials formally bought into the concept at an early stage. In the case of Pleasant Hill, the Contra Costa Board of Supervisors in 1982 formally approved the idea of making the Pleasant Hill station the centerpiece of a new mixed-use center. The Board also won support for station-area development from the elected boards of nearby Walnut Creek and the city of Pleasant Hill.

In contrast, in Oakland, at no time did the city council consider and adopt the idea of transit-based development. For the most part, city leaders were more concerned about appeasing their constituents by downzoning than seizing opportunities to redevelop near BART stations. Thus, although individual proposals have come forward for the MacArthur station over the past two decades, nothing has gotten off the ground. Similarly, in Concord, transit-based development has never been embraced by the city council as an important community objective. Consequently, several very promising areas near the Concord BART station have seen small and unrelated commercial and residential projects built to date.

2. *A specific plan for transit-based development is essential.* The value of a specific plan lies in going beyond individual projects to achieve a complement of activities that are physically related to each other and to the station. Infrastructure provisions and community services that are necessary to attract investors, tenants, and residents must also be detailed in the plan. Plans should generally encompass about a quarter-mile radius of a station, the maximum distance that many are willing to walk to a station. Research shows that ridership is strongly influenced by proximity to stations— in California, rail ridership falls off by 1.1 percent with every 100 foot increase in distance to a rail station, all else being equal (Cervero, 1993). A good specific plan for transit-base development should also evaluate the market for housing and retail-commercial activities near a station. A rigorous market assessment is important to persuade city officials that transit-based development is more than a pipedream. It is also important to draw interest among areawide developers who might otherwise not be aware of the potential for building houses and shops near transit.
3. *One or more local elected officials must become champions of transit-based development.* Even where local officials accept transit-oriented development as a good thing, whether development moves forward hinges to a large degree on whether one or more politicians

take it up as "their issue." Political inertia is often so strong that nothing gets built unless someone in a position of power constantly monitors and pushes a project. In the case of the Pleasant Hill BART station, this person was Supervisor Sunne McPeak. She chaired a committee on implementation, regularly met with local residents and businesses to galvanize support, and continually followed the project's progress. Similarly in San Jose, Supervisor Rod Diridon aggressively pushed his concept of transdominiums through to implementation at the Almaden station area.

4. *Win the support or acquiescence of neighborhood groups for transit-based development plans.*
It is unlikely that many neighborhood groups will ever be entirely won over to transit-based housing. If they can be compensated for their perceived losses, whether in the form of money or neighborhood improvements, there is a chance that they might at least acquiesce. In depressed areas, neighborhood groups can be allies. Near Oakland's MacArthur BART station, a development project is finally beginning to start up because the neighborhood association, Temescal Neighbors Together (TNT), recently approached BART about redeveloping the area. TNT wants BART to make the parking lot, in the words of one member, "more than just a hole in the ground." Recently, they have petitioned the city of Oakland to redevelop the neighborhood into a "mixed-use community incorporating residential and commercial uses to bring round-the-clock activity to the station."
5. *Where possible, form a redevelopment authority to assist with land assemblage and financing.*
In the Bay Area, redevelopment agencies have spearheaded transit-oriented plans and projects by assisting developers assemble land and finance projects near four BART stations. Currently, 11 of BART's 22 suburban stations are in established redevelopment zones, and two others (Fruitvale and Coliseum) are in a proposed zone. If California's transit village legislation passes, the number of areas with special land assemblage and financial privileges could increase manyfold.
6. *Lobby for federal and state assistance in creating pilot programs for transit-based development.*
Having good prototypes would help allay some of the fears of developers, bankers, and others about the questionable market feasibility of transit-based developments. Important lessons on design and marketing might also be gained from good examples in the field.

Notes

¹These estimates were based on interviews with developers and property managers at the respective sites.

²Cited in: Brilliot, M., B. Fukuji, T. Kirk, and V. Menotti. "Growing Transit Villages." Berkeley: University of California, Department of City and Regional Planning, mimeo.

³Op. cit.

⁴Interview with M. Lazzarini, executive director, Building Industry Association of Northern California, Southern/West Bay Divisions, April, 1993.

⁵A. Hunt, project manager, Holland Properties, San Jose. Interview, April 1993.

⁶These estimates were provided by several developers interviewed in the respective areas, April 1993.

⁷These estimates were provided by two Santa Clara County developers of affordable market-rate housing, under the condition of anonymity. Interviews were conducted in May 1993.

⁸Interview with J. Schrum, president, Almaden Valley Neighborhood Assoc., April 1993.

⁹Interview with D. Dring, San Jose resident, May 1993.

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