

UC Berkeley

IURD Working Paper Series

Title

Real Estate Trends and Transit-Oriented Development: A Compendium for 21 Metropolitan Regions

Permalink

<https://escholarship.org/uc/item/5s0844zq>

Authors

Babsin, Marc

Hill, Mary

Melendy, Laura

et al.

Publication Date

1997-10-01

Peer reviewed

Working Paper 688

Real Estate Trends and Transit-Oriented
Development:
A Compendium for 21 Metropolitan Regions

Marc Babsin, Mary Hill, Laura Melendy,
Megan O'Neill, and Elizabeth Deakin

University of California at Berkeley
Institute of Urban and Regional Development

Contents

Introduction	1
Atlanta	2
Baltimore	8
Boston	12
Buffalo	18
Chicago	22
Cleveland	26
Dallas/Fort Worth	30
Detroit	34
Houston	38
Los Angeles	42
Miami	48
Philadelphia	52
Pittsburgh	56
Portland	60
Sacramento	66
San Diego	70
Santa Clara County (San Jose)	76
Seattle	82
St. Louis	86
Toronto	90
Vancouver	96
Bibliography	100

CHARTS

Each city has a chart of Real Estate Markets on the right-hand page facing the beginning of the text.

REAL ESTATE TRENDS AND TRANSIT-ORIENTED DEVELOPMENT:

A Compendium for 21 Metropolitan Regions

Introduction

This report compiles data on real estate trends in 21 metropolitan regions across the United States, then summarizes experiences with the planning and development of parcels and larger sub-areas around transit stations. Most of the discussion focuses on development around rail transit, but development around park & ride served by buses and carpools also is discussed in several instances.

The data on real estate trends are taken from published sources, primarily those of the Urban Land Institute. The information and examples on land use planning and development around transit are taken from the literature as well as from discussions with key personnel in transit agencies, metropolitan planning organizations, city planning departments, redevelopment agencies, and the development industry.

The report has been prepared as background information for a study on the land use impacts of transit being conducted at the University of California for the Federal Transit Administration (Contract Nos. CD-26-9028 and CA-08-8022). The data are being used in a comparative analysis to be completed in Fall 1997.

ATLANTA

Demographics and the Economy

The site of present-day Atlanta, located in northern Georgia, was chosen in 1837 as the southern terminus of the railroad connecting north to Chattanooga, Tennessee. The city of Atlanta incorporated around the site, and later developed as a rail center with the convergence of other railroads. Today, Atlanta is widely considered the capital of the New South. With a 1990 PMSA population of 3.0 million, the metropolitan area has grown by 142 percent from 1960 to 1990. During the same period, central city population declined by roughly 10 percent. Since 1980, the compound annual growth rate has been 2.9 percent, compared with just under 1 percent for the U.S. as a whole.

Since the 1980s, Atlanta has evolved from a regional service center to a center of national and international economic activity. Service sector activity includes publishing, banking, and insurance; manufacturing activity includes automobiles, electronics, chemicals, processed foods, and paper products. The city has also emerged as a major educational center, with over 20 colleges and universities in the area. Growth in jobs, households, and personal income continues to surpass the U.S. average. The region gained 460,000 jobs between 1980 and 1989. Gains in employment have been strongest in the services and retail trade sectors, followed by government and goods-producing industries.

The Real Estate Market

Metropolitan Atlanta has been among the top performing housing markets for many years. Nearly 200,000 new housing units were permitted between 1990 and 1995. Single-family detached homes dominate the housing market, accounting for 85 percent of the permits between 1990 and 1994. The market for new condominiums remains relatively inactive, but the development of rental apartments is moderate and on the rise. Nearly 19,000 units received construction permits in 1994 and 1995.

Metropolitan Atlanta has one of the largest retail markets in the United States. Retail development has increased in all sectors of the market. A significant amount of "power center" development has occurred in the outskirts of Atlanta in recent years, and several new regional shopping centers are under discussion. Atlanta's downtown is becoming a major entertainment center with the recent opening of hip restaurants and cafes.

Office market conditions are beginning to improve in Atlanta since the recession and overbuilding of the late 1980s. Office vacancy rates in the area have dropped from nearly 20 percent between 1985 and 1990 to only 11 percent in 1995. Office space located in Buckhead and Perimeter Center suburban areas north of Atlanta's downtown is in high demand. New business park development has diminished substantially, though vacancy rates in suburban office parks are under 10 percent. Since 1990, demand for warehouse and service center space has grown steadily, and industrial vacancies have decreased. However, it has become more difficult to assemble large blocks of contiguous space for new warehouse and service centers.

Atlanta serves as one of the premier convention and trade show destinations in the country, with an inventory of 55,000 transient lodging rooms. In 1995, the overall hotel occupancy in Atlanta was 72.5 percent. Most new hotel construction is occurring in the suburbs, with some new conversion and renovations projects occurring downtown. Growth in area employment and increased convention activity will likely justify new hotel construction in the future.

Atlanta Real Estate Markets			
	1985	1990	1995
Population	2,565,600	2,960,000	3,411,000
Nonagricultural Employment	1,306,200	1,534,500	1,826,600
Unemployment Rate	—	4.9%	4.3%
Housing Market			
Annual Construction Units	51,606	27,668	43,000
- Single-family Detached	33,021	21,680	32,300
- Multifamily	18,585	5,988	10,700
Typical Sales Price (new SF units)	—	—	—
Typical Rent (new units)	—	—	—
Rental Vacancy Rate	9.0%	14.4%	4.5%
Shopping Center Market			
Retail Sales (millions)	\$20,319	\$21,325	\$32,073
Annual New Construction (sq.ft.)	955,000	0	845,000
Vacancy Rate	11.0%	12.0%	13.0%
Office Market			
Annual Construction (sq.ft.)	3,428,000	2,366,000	391,600
Annual Absorption	5,729,000	3,296,000	2,800,000
Vacancy Rate	20.4%	19.3%	11.0%
- Downtown	14.8%	17.1%	15.0%
- Office Park	22.0%	19.7%	9.5%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	\$18.16 - 19.93	\$15.50 - 17.50
- Office Park	—	\$17.85 - 19.21	\$17.00 - 18.00
Industrial Market			
Annual Construction (sq.ft.)			
- Distribution	—	11,646,000	12,093,000
- Service Center/High-Tech	—	193,000	22,500
Annual Absorption (sq.ft.)			
- Distribution	—	6,887,500	14,000,000
- Service Center/High-Tech	—	494,200	200,000
Vacancy Rate			
- Distribution	—	17.3%	11.9%
- Service Center/High-Tech	—	21.5%	12.6%
Typical Rate for Industrial Leases (per sq.ft.)			
- Distribution	—	\$3.03	\$3.28
- Service Center/High-Tech	—	\$6.52	\$6.95

Source: ULI 1996; BLS 1990, 1995.

The Transit System

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is the primary transit agency in the Atlanta region. MARTA has operated bus service throughout the metropolitan area since 1965 and heavy-rail service serving the downtown and some suburbs since 1979. The heavy-rail system consists of two major spines, the East-West Line and the North-South Line, crossing at Atlanta's downtown Five Points Station. In 1988, MARTA extended its heavy-rail service on the South Line to Hartsfield International Airport. In June 1996, prior to the summer Olympic Games, MARTA opened three new stations along its North Line. The system now encompasses 39 miles of trackway and 36 stations.

During the 1996 summer Olympic Games, MARTA carried 17.8 million passengers in only 17 days. Daily ridership hit an alltime high of 1.3 million passengers, almost three times the normal ridership level of 475 thousand passengers. Typically, MARTA heavy rail carries 65 million passengers annually and carries about 1 percent of all work trips. Overall, transit captures only 4.6 percent of the region's work trips.

Transportation and Land Use Planning and Policy

The Georgia General Assembly created MARTA in 1965. MARTA was used by the Atlanta Chamber of Commerce as a selling point to recruit businesses to locate downtown. MARTA was intended to trigger private investment in and around stations, with the form of such development essentially left to the private sector. A Transit Station-Area Development Studies (TSADS) program was established to prepare comprehensive land use and development plans for each of the future MARTA stations and to encourage higher density development, the city "up-zoned" parcels of land around proposed MARTA stations prior to construction. Along Peachtree Street, Atlanta's primary north-south spine, these efforts have been quite successful, as most major office developments have located at or near transit stations. Peachtree Center, North Avenue, and Omni/Dome/GWCC stations are among the most successful downtown MARTA stations. Atlanta's ambitious plans to construct high-density, affordable, subsidized housing around rail stations as they were constructed never materialized, however, as HUD and UMTA funding dried up.

The station-area plans have so far been less than successful in focusing growth on targeted station areas. Higher density development that has occurred at MARTA stations has developed for the most part in response to market forces. Since 1985, this development has been largely in two areas in metropolitan Atlanta: the Downtown-Midtown axis and the Lenox-Buckhead area. The City of Atlanta created special public interest districts (SPIDs) in 1981 to encourage high-intensity commercial development in the downtown, Midtown (just north of downtown), and in the Buckhead area. Within the SPID, office developments are exempt from the minimum parking, height, and floor-area ratio requirements. Nearly six million square feet of office space has been constructed in the Midtown and Buckhead areas since the SPIDs were established in 1981.

Atlanta's northern commercial hub, Buckhead, has a reputation of being the most affluent and elegant district in the city. Containing 14.5 percent of Atlanta's population, Buckhead gained 6,600 residents and 22,000 jobs between 1985 and 1995. This high growth rate in the Buckhead area has prompted severe traffic problems: traffic on one arterial through Buckhead already exceeds 2010 traffic projections. Furthermore, buildings are suburban-oriented with very poor pedestrian connections and few pedestrian amenities.

New development proposed in the Buckhead area, including offices, apartment towers, retail, and hotels, must now be carefully planned, taking into account the impacts of any additional development on the transportation infrastructure. In August 1996, an ordinance was proposed for the Buckhead and Lenox stations to ensure more pedestrian-friendly and less auto-dependent development. Special public interest districts

were established, overlapping existing zoning ordinances, that require a certain percentage of housing to be constructed concurrently with any new office projects of 100,000 square feet or more. Transportation Management Plans (TMPs) focusing on alternatives to auto-dependency are to be drawn up for each development in question. Pedestrian amenities are encouraged. The ordinance is aimed to curtail construction of strip centers, fast food restaurants, and independent parking garages.

MARTA stations in suburban locations are largely used as park & ride facilities with little pedestrian access to the system. Traffic congestion is reportedly a constraint in reaching the outlying stations. Still, suburban communities are concerned that transit-oriented development projects will bring increased traffic on local streets and that new developments will not be well built, eventually turning into low-income "slums."

For the 1996 summer Olympic Games, access and security improvements were made to several stations using a \$3 million grant from the FTA to encourage visitors to use MARTA. Also, many companies entered into the MARTA Partnership program, whereby companies subsidize between 50 and 100 percent of MARTA transit fares for their employees. The Olympic Games prompted participation levels to rise from 30 to 100 companies by February 1997. During the Olympics, MARTA ridership was very high, and emissions were estimated to be 30 to 50 percent lower than expected.

It is too soon to tell whether MARTA ridership trends have been permanently altered by the Olympics-induced improvements. In the downtown, retail is not flourishing at levels reached during the Olympic Games. Store space available downtown currently exceeds demand. But while rents pale in comparison to Olympic-sparked highs, the market is still cited as stronger than it was prior to the Olympics.

Development Examples

Brookhaven Station. The location of Brookhaven Station appeals to developers because of its proximity to Buckhead. Groceries and restaurants are within walking distance of the station. In April 1996, an Atlantic Realty Partner's proposal to build luxury apartments near the suburban Brookhaven Station was strongly opposed by the local neighborhood, causing the realty company's plan to be dropped. The county denied the developer's request to tear down 29 homes for the construction of an upscale 188-unit apartment complex on a 6.3 acre site across from Brookhaven MARTA Station. The community strongly favors single-family homes, not apartment buildings. According to MARTA officials, residents were concerned that high-density housing would not be well built or sustainable. The community feared that property values would suffer, traffic levels would escalate, and that eventually the high-density housing would deteriorate into low-income, crime-ridden housing. In December 1996, a 94-room Sierra Suites hotel broke ground right next to the Brookhaven MARTA station, and is expected to be open by August 1997. The Brandywine Group has plans for a 56,000 square foot A&P supermarket and a 100,000 square foot retail plaza, containing a post office and Blockbuster store, also in the vicinity.

Lenox Station. MARTA located its Lenox station near an upscale 200-store shopping mall, Lenox Square, on the outskirts of the downtown. Built during the 1960s, Lenox Square contains 1,372,000 square feet of retail space on the first level, and 170,000 square feet on the second. A Marriott hotel is located adjacent to Lenox Square and connected via an indoor pedestrian bridge. Phipps Plaza nearby contains 825,000 square feet of retail space and has recently announced plans for expansion, including a new Bloomingdale's department store and other shops to total 425,000 square feet of new sales space. The Lenox Forest Apartments, catering to elderly and retired people, are located directly behind the MARTA Lenox Station. A bus shuttle service is provided from the apartment complex to the Lenox Mall and the MARTA Station, although both are within easy walking distance. The Lenox Forest apartment complex consists of six residential buildings on eight acres. The 100-unit St. James Apartments are located across the street from Lenox Forest, about

1.5 blocks from MARTA. Plans for luxury housing and retail development at the station were dropped during a fallout of the real estate market in the 1980s. Traffic is a primary issue, as surrounding communities are concerned that new development will bring already unbearable traffic levels closer to gridlock. Post Properties has plans to build a large apartment project in Lenox Park located some distance from Lenox Station, but will include shuttle bus service.

Lindbergh Station. Given its desirable lower Buckhead location, convenient shopping, ample parking, and room to build large projects, Lindbergh Station is considered ideal for high-density development. MARTA purchased 47 acres of land at this suburban transfer station and began a transit-oriented development initiative in 1995 for its development. MARTA, the sole land owner, hopes to turn the project into a transit-oriented development showcase. A marketing firm was hired to distribute information on transit-oriented development concepts and generate local enthusiasm. Zoning was changed to allow for high density, and community groups have been heavily involved. Private investors, including Home Depot and an apartment complex in the area, have donated \$30,000 to help finance a land use, transportation, and economic development study at Lindbergh Station. In April 1997, Atlanta hosted a national public-input transit-oriented development workshop. In general, the community was receptive to plans for transit-oriented development at Lindbergh Station. Neighborhood groups expressed interest in preventing low-end or strip-mall type development, and in keeping traffic from overflowing onto local streets. Citizens seemed especially interested in cleaning up and refurbishing the existing neighborhood. A Request for Proposals has been released to developers and is expected back in the fall of 1997.

BALTIMORE

Demographics and the Economy

The Baltimore metro area, 1990 PMSA population 2.4 million, includes the City of Baltimore and six surrounding counties: Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's. From 1980 to 1995, the regional population increased at a compound annual rate of 0.8 percent, while the number of households increased at a compound annual rate of 1.34 percent. Households continue to move from the Washington area into the Baltimore region, particularly along the I-95 connecting corridor. Retirees and younger households have boosted demand for high-density townhouses.

Located on the Atlantic seaboard, Baltimore maintains a position as a major trade and distribution center. The economy in Baltimore is based on foreign trade and distribution, manufacturing, health care, and business services. The Maryland Medical System Complex and Johns Hopkins medical complex establish Baltimore as a center for biotechnology research and training. The move of the Baltimore Orioles in 1995 to Camden Yards, a new downtown stadium, has spurred growth in Baltimore's tourism industry.

The Real Estate Market

Spurred by moderate interest rates, demand in the region, and attractiveness to Washington, D.C., commuters, home building activity is beginning to recover from a low point in recessionary 1991. While single-family detached housing sales have decreased since 1994, townhouse sales are increasing, due to relative affordability and lifestyle factors. New rental apartment construction has occurred substantially in the Owings Mills growth area, where over 1,000 apartments were placed on the market within the past few years and hundreds more are proposed. Actions have been taken by local governments in the Baltimore region to manage growth and slow the rate of residential development using measures such as impact fees and adequate public facilities regulations, but development experts expect growth in residential building to continue.

Big-box retailers dominated the area's retail market in 1995. Competition between big-box, mall, and strip retailers is expected to grow in coming years, leading to the demise of weaker competitors. Demand for new office construction in downtown Baltimore has been low and is not likely to increase substantially. Suburban office markets are stronger than those in the downtown, with declining vacancy rates. Due to Baltimore's favorable location on I-95, a major East Coast transportation route, the demand for distribution centers and industrial warehousing in abutting areas also remains strong.

The Transit System

Baltimore's Metro Subway and Central Light Rail Line services are operated by the Maryland Mass Transit Administration (MTA). Metro construction began in 1976, with service beginning in 1983 and extensions opening in 1987 and 1995. The 1995 extension extended the system to Shot Tower/Marketplace (located within walking distance of activity centers including the Baltimore City Life Museum and Historic Shot Tower), and created a new station in the center of the Johns Hopkins hospital campus. This extension links Baltimore's two major biotechnology centers, Johns Hopkins Medical Complex (which employs over 10,000) and the Maryland Medical System Complex. The MTA has reported a total daily Metro ridership increase from roughly 39,000 to 52,000 over an eight-month period since the completion of the Johns Hopkins extension. The Metro Subway system includes 15.5 miles of trackway and 14 stations.

Baltimore Real Estate Markets			
	1985	1990	1995
Population	2,262,000	2,348,000	2,435,000
Nonagricultural Employment	1,209,000	1,357,000	1,398,000
Unemployment Rate	—	5.3%	5.6%
Housing Market			
Annual Construction Units	18,758	13,173	11,600
- Single-family	14,860	9,180	10,100
- Multifamily	3,898	3,993	1,500
Typical Sales Price			
- Detached Single-family	—	\$199,120	\$215,000
- Townhouses	—	\$121,250	\$120,000
- Apartment Condominiums	—	\$106,795	\$95,000
Typical Rent (new units)			
- One Bedroom	\$470	\$642	\$675
- Two Bedroom	\$520	\$780	\$800
Rental Vacancy Rate	4.0%	6.0%	7.0%
Shopping Center Market			
Retail Sales (millions)	\$14,025	\$17,489	\$20,450
Annual New Construction (sq.ft.)			
- Regional Centers	2,100,000	0	150,000
- Nonregional Centers	2,500,000	1,137,200	—
Vacancy Rate			
- Regional Centers	—	—	3.0%
- Nonregional Centers	—	—	6.0%
Typical Rate for Leases	—	—	—
Typical Price for Land (per acre)	—	—	—
- Regional Centers	—	—	—
- Nonregional Centers	—	—	—
Office Market			
Annual Construction (sq.ft.)	3,800,000	1,600,000	150,000
Annual Absorption (sq.ft.)	400,000	816,800	420,000
Vacancy Rate	9.3%	18.2%	14.0%
- Downtown	—	19.5%	19.5%
- Suburbs	—	16.9%	11.5%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$22.50	\$28.50	\$22.00
- Suburban High Rise	\$17.00	\$23.00	\$18.00
- Office Park	\$15.00	\$18.00	\$15.00
Industrial Market			
Annual Construction (sq.ft.)	4,925,000	1,671,000	1,000,000
Vacancy Rate	7.3%	16.9%	11.7%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech / R&D	\$5.00	\$10.00	\$8.00
- General Manufacturing	\$3.65	\$5.00	\$3.90
- Warehouse	\$3.65	\$4.50	\$4.00

Source: ULI 1996; BLS 1990, 1995.

Baltimore's Central Light Rail Line opened in 1992, running North-South and crossing the East-West subway line downtown. Like Metro, the light-rail line also is connected to activity centers, such as Oriole Park, the State Fair Grounds, and Symphony Hall. The light-rail line consists of 22.4 miles of trackway and 21 stations.

Transportation and Land Use Planning and Policy

Since taking office in 1994, the governor of Maryland has launched an aggressive economic development program aimed to make Maryland more attractive for new businesses. The governor seems to be highly engaged in the battle to combat sprawl, and blames suburban growth for increased road congestion, pollution, and high taxes (*The Baltimore Sun*, 1/29/96). The Governor announced in January 1996 his state plan to spend more than \$46 million to save decaying commercial districts and help families buy homes in older city areas.

In addition, substantial infrastructure investments are being made in Baltimore to improve access and promote economic growth, including a six-gate expansion at BWI airport and new east-west highways. In the downtown area of Baltimore, Empowerment Zone funding and grants have been used to raze and rebuild old highrise public housing projects.

Though the stations on both the subway and light-rail lines seem to have been carefully placed at popular points of interest, with hopes of spurring revitalization, few transit-oriented development projects have been initiated along Baltimore's transit lines. Officials at MTA attribute lack of interest in transit-oriented development somewhat to a poor real estate market in Baltimore today. Given unfavorable market conditions, developers are discouraged. In Spring 1996, a 28-member steering committee of government officials and business and community leaders was developed to make recommendations to the Anne Arundel County General Development Plan, in order to find proper direction for future development and to correct past mistakes. The General Development Plan was last revised 10 years ago. By fall 1996, the group had come up with suggestions to locate mixed use around light-rail stations and Metro stations, as well as other transportation hubs and employment areas.

Development Examples

Owings Mills Station. As part of a master plan, the Owings Mills station, located at the west end of the Metro line in the suburbs, opened in 1987. As part of a new town center development project, development was proposed by the MTA in 1991 for roughly 3.5 million square feet at build-out. The master plan includes offices, residences, shops, and a theater. By leasing air rights, MTA receives rental payments from private developers. A pedestrian connection at the Metro station provides access to the Owings Mills Mall, a large shopping center owned by the Rouse Company. Plans at Owings Mills encountered some delays; at one point during the recession in the early 1990s, plans became "inactive." Also tied to the recession, the local government has not been in a financial position to provide needed infrastructure improvements for future development, such as extended water and sewer lines. In 1996, \$500,000 was budgeted by the state to explore development of the parking lot surrounding the Owings Mills subway station and address local infrastructure issues and needs.

Charles Center Station. A single project at the downtown Charles Center Metro station was constructed in 1986: a 325,000 square foot, 24-story Signet Bank office tower with some retail at ground level. Air rights over the subway station were leased to the developer, while the MTA collects rent. Pedestrian amenities on four sides of the tower, including weather protection and landscaping, were required of the

developer. According to officials at MTA, impacts on transit ridership are favorable and have eliminated the need to consider construction of an additional parking garage downtown.

Reisterstown Plaza Station. Reisterstown Plaza station is located on the edge of downtown Baltimore, along the subway line. The MTA proposed and constructed a daycare facility adjacent to the station and connected with a pedestrian passageway. The \$2 million project is designed to provide day care for 100 children. The MTA plans to lease the facility to the city or child-care provider. Operation of the daycare center was recently put out to bid, and the facility is expected to open in September 1997. In addition to the day care, a police substation is also under works next to the Reisterstown Plaza station.

BOSTON

Demographics and the Economy

The Boston metropolitan area includes the City of Boston and some 100 other cities and towns located in the region bordered by I-495 on the west and the Atlantic Ocean on the east. All of Suffolk County and portions of Bristol, Essex, Middlesex, Norfolk, Plymouth, and Worcester Counties lie within the metropolitan area. The Boston metropolitan area had a population of approximately 3.8 million persons in 1995, just over half of the state's population. During the period from 1985 to 1995, the population increased by approximately 2.3 percent, and is currently growing at a modest rate.

According to *ULI Market Profiles 1996* Boston is in a period of slow but steady economic growth. However, nonagricultural employment is still slightly below 1990 levels. Unemployment was 5.7 percent in 1995, up from 4.3 percent in 1990. The 1991 recession hit Boston and its computer and defense industries especially hard, and corporate downsizing was still continuing through 1995. There has been some job migration to the outer suburbs.

The Real Estate Market

The housing market saw a decline in single-family starts at the beginning of 1995 but began a recovery by the year's end, following strong growth in 1994. The multi-family market has been weak in central Boston and strong in the outer suburbs. The average price of a multi-family unit increased about \$6,000 to an average of \$40,000 in 1995. Vacancy rates have declined during the 1990s and were at 3.31 percent at year-end. Decreasing vacancies and increasing rents led to investment in the multi-family market during 1995.

Retail sales grew 4 percent in 1993 and 6 percent in 1994 but remained flat during 1995. Rental rates also stabilized after significant increases in 1993 and 1994. According to *ULI Market Profiles*, consolidations, bankruptcies, and leveling consumer demand point to a soft retail market.

The office market saw strong activity in 1995 with an absorption rate of 3.7 million square feet, mostly concentrated in the outlying suburbs due to the increased rent and narrowing options in the core. Vacancy rates decreased significantly from an overall 18.8 percent in 1990 to 11.4 percent in 1995.

The industrial market slowed from its 1994 pace but still enjoyed an absorption rate of 1.4 million square feet in 1995, mostly from medium-size commitments. The vacancy rate steadily decreased from 29 percent in 1990 to 17 percent in 1995.

The Transit System

Boston has a history of public transportation dating back to 1631. The first electric streetcar line opened in 1889, and the nation's first subway opened in 1897. Boston's first motor-bus route began operations in 1992, and in 1936 the city opened its first trackless-trolley line. The system became public in 1918; its current organizational structure, the Massachusetts Bay Transportation Authority (MBTA) was created in 1964. The "T," as it immediately came to be known, was one of the first combined regional transportation planning and operating agencies in the United States.

Boston Real Estate Markets			
	1985	1990	1995
Population	3,723,000	3,784,000	3,811,000
Nonagricultural Employment	2,926,000	2,978,000	2,948,000
Unemployment Rate	—	4.3%	5.7%
Housing Market			
Annual Construction Units	3,280	1,303	1,348
- Single-family	2,163	933	1,214
- Multifamily	1,117	370	134
Typical Sales Price (detached single-family)	\$ 131,000	\$ 174,000	\$ 175,000
Typical Rent (new units)			
- One Bedroom	—	—	\$ 703
- Two Bedroom	—	—	\$ 857
Shopping Center Market			
Retail Sales (millions)	\$ 3,166,000	\$ 4,239,000	\$ 4,509,000
Office Market			
Annual Construction (sq.ft.)	11,000,000	2,200,000	0
Annual Absorption (sq.ft.)	5,200,000	2,300,000	3,700,000
Vacancy Rate	14.3%	18.8%	11.4%
- Downtown	10.3%	15.6%	11.7%
- Suburbs	19.7%	23.4%	11.9%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$ 40.00	\$ 26.00	\$ 30.00
- Suburban	\$ 20.00	\$ 19.00	\$ 23.50
Industrial Market			
Annual Construction (sq.ft.)	400,000	195,000	540,000
Annual Absorption (sq.ft.)	2,100,000	(200,000)	1,400,000
Vacancy Rate	20.0%	29.00%	17.0%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech / R&D	\$ 10.00	\$ 7.00	\$ 7.00
- General Manufacturing	\$ 6.00	\$ 4.50	\$ 5.00
- Warehouse	\$ 4.75	\$ 3.75	\$ 3.75

Source: ULI 1996; BLS 1990, 1995.

Currently, the MBTA is the nation's sixth largest mass transit system, operating heavy-rail, light-rail, commuter rail, bus, trolleybus, ferry, and demand-responsive service. In 1993, MBTA services accounted for 99.9 percent of all unlinked trips in Boston, including 56 percent heavy-rail, 28 percent motor-bus, 8 percent light-rail, 6 percent commuter rail, 1 percent trolleybus, and less than 1 percent ferry and demand-response. Total daily ridership in 1993 averaged 922,000 passengers on its 155 bus routes, three rapid transit lines, five streetcar lines, four trackless-trolley lines, and 11 commuter rail routes.

Transportation and Land Use Planning and Policy

Development around transit stations in the Boston Metropolitan Area is characterized by private investment and a general lack of centralized planning. One exception is the Southwest Corridor Project along the Orange Line. A huge corridor through existing low-income communities was acquired in the 1970s for a highway. After many citizen protests, then-Governor Francis Sargent stopped the project and, following a major re-study, transit and a scaled-down road were substituted. The plan for the corridor was intended to encourage land use around the stations. However, very little development has taken place. In fact, according to Boston Redevelopment Authority (BRA) staff, there has only been additional public sector investment, such as the expansion of some city administrative offices to Ruggles Station, in an attempt to attract private investment.

BRA staff report that citizen organizations have formed at some stations to support development, but the developers haven't chosen to invest there. This lack of private investment may be related to the lack of parking at these stations, the staff suggest, arguing developers believe that at most 30 percent of employees will ride transit and therefore they will need to provide parking for the rest. The city wants compact, dense development around the stations and so opposes surface parking, but structured parking facilities are too expensive to construct.

Development Examples

Orange Line

Ruggles Station. At Ruggles Station in Roxbury, one building (Phase I of a three-phase project) was built by private developers, but the tenants left and none of the other buildings were ever built. The city may acquire the vacant building and use it for administrative offices; however, there has been opposition because Roxbury residents want private investment in order to boost the local economy.

Back Bay Station. At the Back Bay Station on the commuter line, approximately six or seven major hotels and convention centers have been developed. A large parking garage is located next to the station, which also serves one of the most upscale office, retail, and residential districts in the nation.

Wellington Station. At the Wellington Center Station in Medford on the Orange Line, a large amount of development is occurring around the "T" stop. This station is a suburban station serving commuters to Boston, so the station has an adjacent parking lot with 1,253 spaces. The station is at the crossroads of Revere Beach Parkway (Route 16) and Route 28. The land use across this road was a drive-in theater. Cabot, Cabot and Forbes (CC&F) bought the land and developed a suburban office park with a 0.3 floor-area ratio. CC&F did pay for some pedestrian linkages to the "T" station, and the "T" is used by a fair proportion of workers at the office park.

Across the "T" line from the Wellington station, CC&F acquired the land hoping to put in a 1.1 million square foot hotel and commercial development with pedestrian links to the "T". Phase One of Mystic Center consisted of a 164,000 square foot building and was completed prior to the market crash. Now that

the market is revived, the completion of the center is expected in 10 years. However, the hotel has been dropped from consideration and the project will now consist of almost entirely office space, as the developer has had trouble attracting retail tenants. CC&F is building a 1,250-space parking garage that will be used by both "T" riders and Cabot employees. Riders will be transported from the nine-level garage to the Center via a 55-second ride on one of two people-movers, each capable of carrying 1,000 passengers per hour. CC&F obtained a parking reduction of about 1.5 spaces per square foot by locating next to the transit station but must provide 3.2 spaces per 1,000 square foot of office space. CC&F also plans a shuttle bus into the neighborhood to further reduce reliance on cars. A transit mode share of 30 percent is expected according to the Metropolitan Area Planning Council staff.

North and west of the Wellington Center Station, at the intersection of the highway and the "T" line, the land is zoned industrial. The developers, however, obtained a use variance to build highrise apartment buildings on the site, including a 260-unit condominium. The link to transit is not ideal and involves walking along the four-lane highway and negotiating a traffic circle; the units are, however, accessible to the highway, convenient to Boston, and enjoy a Mystic River view.

Green Line

Riverside Station. In Newton, an affluent suburb west of Boston, CC&F is negotiating to convert an old 60,000 square foot Jordan Marsh warehouse into office space. The warehouse is located adjacent to the Riverside "T" light-rail station and less than a quarter mile from Route 128. Riverside station already has a large parking lot because it is the end of the line. CC&F has the right to convert the warehouse to office space but they are negotiating with the city of Newton to provide more than just offices: they are also hoping to build a parking garage (with reduced parking requirements in light of the transit link) and provide pedestrian connections to the Charles River. CC&F is also negotiating to change the warehouse's main entrance to a side door to further link to the transit station 25-50 feet away; the "T" would have to move a fence in order to provide the pedestrian link to the station. Multiple land owners (MDC, Turnpike Authority, Mass Highway, and MBTA) may make it more complicated to authorize such changes.

Over the hill and behind the Jordan Marsh warehouse is single-family housing. Across a two-lane busy street are garden apartments. Also nearby is a four-story Day's Inn. Regional planning staff believe that the neighbors are generally pleased with the proposed development, although there is a small group that feels threatened by change.

Red Line

On the Braintree extension (south of Boston), and at the Quincy Station in particular, private investment has grown up around park & ride lots. At the Quincy station, however, the parking lots are built such that it is difficult to get to or from the station except by car. As a result, development around the station is not well-linked to transit. This parking lot design arose from neighborhood concerns regarding parking on city streets if development was spurred by transit.

At two stations on the northern extension to Somerville, Porter and Davis Squares, there has been redevelopment activity and formerly vacant buildings are now full, but people disagree as to what extent this is attributable to transit.

Urban Ring Line

Currently a debate is underway between the "T" and municipalities over the issue of an Urban Ring Line. Six municipalities, including Boston, Brookline, Cambridge, Somerville, Everett, and Chelsea, have banded

together to support the construction of an Urban Ring Line that would intersect the radial system, thereby allowing non-CBD trips. Currently, commuters take one "T" line into Boston, switch to another line, and travel back out of Boston in order to reach a non-CBD location. The FTA has given the MBTA \$1.1 million to study this issue. The six municipalities have signed a compact to cooperate in the study of the line. As the definition of the line becomes more concrete, the municipalities have also agreed to look at adjusting their land use plans patterns to enhance transit ridership.

BUFFALO

Demographics and the Economy

The Buffalo Metropolitan Area is located near the border of the United States and Canada in western New York State and consists of Niagara and Erie Counties. The City of Buffalo experienced a 38 percent population decline over the period from 1960 to 1990, and similar declines were seen throughout the metropolitan region. However, from 1990 to 1995 the population of the Buffalo Metropolitan Area remained steady at about 1.2 million persons.

According to *ULI Market Profiles 1996*, Buffalo emerged slowly from the 1990-91 national recession, which halted the strong economic growth experienced by the city in the 1980s. Since 1993, Buffalo's economy has expanded at a steady pace with growth due in part to the recovery of the automotive industry. The unemployment rate in 1995 was 5.4 percent, just 0.5 percent higher than the 1990 rate of 4.9 percent.

The Real Estate Market

Single-family construction in the Buffalo Metropolitan Area slowed in 1995 after stable activity in 1993 and 1994. Multi-family construction in 1995 also saw a decrease from 1990 levels, and only 2,100 permits were issued in the 1990-1995 period. The majority of new residential building activity is located in the suburbs of Lancaster, Hamburg, Amherst, and Clarence.

Retail sales increased from 1990 to 1995. However, only 125,000 square feet of regional retail space was added during the six-year period, while non-regional retail construction slowed considerably from 1990 levels. Vacancy rates in both submarkets are higher than in 1990, up to 17 percent in non-regional centers. New retailers fall mostly in the big-box retail category. Canadian cross-border shopping continues to play a role in the retail market, but has declined since its peak in 1991 due to the drop in the Canadian dollar and the weak Canadian economy.

The Buffalo office market has improved since 1990 with vacancy rates stable at around 13.5 percent since 1993. Construction levels are down from the 1990 level of 1.013 million square feet, with 621,000 new square feet constructed in 1994 followed by an additional 132,000 square feet in 1995. Downtown office space rents fell from \$17.25 per square foot in 1990 to about \$15.50 in 1993 and 1994, but increased to \$16 per square foot in 1995. Office park rents have increased an average of \$2 since 1990 to reach \$16.50 in 1995. According to *ULI Market Profiles 1996*, the central business district is one of the soft sectors in the real estate market, with Class A office space experiencing vacancy rates in mid-20s. Suburban markets are reportedly much tighter, with vacancy rates less than half those in the CBD.

Buffalo's industrial market is stable with relatively low vacancy rates (approximately 7.1 percent). Lease rates have remained virtually unchanged from 1990 to 1994, but manufacturing and warehousing rents rose 8 percent and 6 percent respectively in 1995.

Buffalo Real Estate Markets		
	1990	1995
Population	1,189,300	1,189,000
Nonagricultural Employment	547,900	533,700
Unemployment Rate	4.9%	5.4%
Housing Market		
Annual Construction Units	3,640	1,810
- Single-family Detached/Attached	3,156	1,610
- Multifamily	484	200
Typical Sales Price (new units)	—	\$ 132,500
Typical Rent (new units)		
- One Bedroom	\$ 515	\$ 625
- Two Bedroom	\$ 660	\$ 780
Shopping Center Market		
Retail Sales (millions)	\$ 8,230	\$ 10,853
Regional Centers		
- Annual New Construction	0	0
- Vacancy Rate	5%	7%
Non-regional Centers		
- Annual New Construction (sq. ft)	884,000	280,000
- Vacancy Rate	9%	17%
Office Market		
Annual Construction (sq. ft)	1,013,000	132,000
Annual Absorption	(209,725)	47,000
Vacancy Rate	18.4%	13.5%
Typical Rate for Office Leases (per sq. ft)		
- Downtown	\$ 17.25	\$ 16.00
- Office Park	\$ 14.50	\$ 16.50
Industrial Market		
Annual Absorption	580,000	30,000
Vacancy Rate	8.3%	7.1%
Typical Rate for Ind. Leases (per sq.ft.)		
- High-Tech/R&D	\$ 14.00	\$ 14.00
- General Manufacturing	\$ 3.25	\$ 3.50
- Warehousing	\$ 4.00	\$ 4.25

Source: ULI 1996; BLS 1990, 1995.

The Transit System

The Niagara Frontier Transit Authority (NFTA) was created in 1967 and oversees the Niagara Frontier Transit Metro System (Metro), which includes bus, light-rail, and demand-responsive services. Metro averages 85,000 riders per day systemwide. Buffalo's light-rail line opened in 1985 and runs 6.2 miles north/south through the city, serving 14 stations. The line runs at street level along Main Street downtown and descends underground to the South Campus of the State University of New York at Buffalo. Passengers pay fares on an honor system.

Transportation and Land Use Planning and Policy

With a regional population loss of 50 percent since 1950, some neighborhoods have experienced decline. The City's approach to development has changed from site-based to larger-scale neighborhood development around transit stops. Currently, two area plans are being implemented around transit stops at the ends of the main line. One downtown stop, Fountain Place, already experienced development around the transit stop, as part of the Downtown Development Plan.

Buffalo's projects are joint development and/or redevelopment with public funds leveraging private investments. According to the City's Division of Planning, the projects have received public support. The City of Buffalo and the Niagara Frontier Transit Agency are both involved in the planning of these station areas. In all cases the transit stop is an integral part of the plan. Pedestrian connections are a major consideration, and incentives are implemented to encourage transit ridership. In addition, less parking is provided at these stations. The downtown zone on the light-rail line is free and the transit links a new arena, as well as theater and restaurant districts.

Development Examples

La Salle Station (Main-La Salle Redevelopment Project). This station is located next to the SUNY Buffalo South Campus, which used to be the single campus for all undergraduate and graduate programs. The undergraduate and graduate programs have now moved to a suburban site and the South Campus is being turned into a medical-related campus. As a result, the neighborhood surrounding the La Salle station has suffered a large population loss and is on the verge of decline, according to the City's Division of Planning.

The Main-La Salle Redevelopment Project is a joint development project between the City and NFTA and consists of 76 acres of former railroad land on Main Street, adjacent to McCarthy city park and city high school. The project includes a comprehensive plan with 200 market rate housing units (single-family, zero-lot line brownstones and a few apartments), a new elementary school, and approximately 100,000 square feet of retail on the ground floor of the planned rehabilitated station. Multi-unit rental housing will be on top of the station. Also, a 150-unit Senior Care Housing Complex is already in place on transit grounds.

The project was purposely designed to incorporate and rebuild ridership on transit. It includes "new urbanism" design with greenways, pedestrian access to housing from transit, and many amenities such as intensive landscaping. The project is situated to profit from the planned Tonawanda rail extension that would run NW to SE connecting La Salle station to the airport and to Tonawanda. The city has retained the easements for future light-rail extensions. According to NFTA and the City of Buffalo, community reaction to the project is positive and citizens generally support development around transit stops.

Phase II of the environmental review is completed and the city is starting to request proposals from developers. Phase I of construction includes rehabilitation of McCarthy Park, building of infrastructure, and completion of environmental mitigation. The city expects to complete the first housing phase in spring 1998, reaching full build-out in 10 years. The public cost of the project is \$9 million, not including the new school for which funds will be raised from a city bond grant, Community Development Block Grant Funds, and HUD Section 108 funds. This \$9 million public investment is leveraging \$70 million in private investment. The city and NFTA are still looking for funding for rehabilitating the station.

Last Southern Stop-Inner Harbor. As part of the Downtown Waterfront Master Plan, this transit stop is being added to the light-rail line to connect the inner harbor with the new \$115 million Crossroads Arena that is being built to replace the old Memorial Auditorium. This new 20,000-seat arena is 800 feet from the transit stop. The waterfront transit stop will be in the old historic Delaware, Lackawanna & Western (DL&W) Railroad station building that will be rehabilitated. A new upgraded Amtrak railway station will also be built adjacent to the current Metrorail Memorial Auditorium Station, creating a direct intermodal link to Metrorail service. Above the new station, in the expanded second floor of the DL & W building, a science and technology center and maybe new retail, which will overlook the new Inner Harbor development, is proposed. Additional upper floors may also be added if necessary in the future.

The Waterfront Plan is a completed redevelopment development plan for which transit is central. It is an adopted plan, and the city is under contract for engineering and design. The plan includes a small harbor inlet and a veterans' museum. Residential development is planned for in the both inner and outer harbors, along with a significant retail component of approximately 200,000 square feet. The old 16,000-seat Memorial Auditorium will likely be converted to an Entertainment Center. The city is also considering a hotel on this location. The Harbor Community portion of the plan includes 55 acres available for private development, not including parks and roadways slated for commercial and residential development.

This project appears to be transit-oriented with pedestrian links from transit to the inner-harbor waterfront and the new arena. Both the Inner and Outer Harbor plans include parks and greenways. Parking at the new 20,000-seat arena was also restricted to 1,800 spaces to encourage transit use.

Phase I is \$27 million, with a total public component of \$200 million. This will fund infrastructure, greenways, esplanade, site preparation, and dredging a new harbor inlet. Private investment will be \$700 million.

Fountain Place. This project, completed in 1989, is in downtown Buffalo, next to and integrated with the Fountain Place light-rail station. The development was part of the Downtown Development Plan, but was realized in conjunction with the bank boom in late 1980s. The development consists of four separate office buildings (Marine Midland, Key, and Fleet, and another bank) with a fountain and an ice-skating rink in the large plaza linking the transit station with development.

The project includes about 750,000 square feet of office space with ground floor retail and has become the focal point of the transit system. According to the City's Division of Planning, there was no citizen opposition to this project.

CHICAGO

Demographics and the Economy

The Chicago CMSA consists of a total of 13 counties in three states. However, the Chicago market area is defined here as the City of Chicago in Cook County and five other counties in northeastern Illinois, including DuPage, Kane, Lake, McHenry, and Will Counties. The 1995 population of the six-county area was estimated at 7.5 million, an increase of 4 percent since 1985. Most of this growth occurred between 1990 and 1995, when the population increased by 225,000 persons, or about 3 percent.

According to *ULI Market Profiles 1996*, Chicago's employment reached 3.2 million private-sector jobs in 1995 and continues to grow with increases in all industries. The six-county area gained about 83,000 jobs in 1994, 66 percent of which were in Cook and Page Counties. Employment in the City of Chicago increased by about 5,900 jobs, reversing recent declines. Unemployment for the entire Chicago PMSA was 5.1 percent in 1995, down from 6 percent in 1990.

The Real Estate Market

The housing market in Chicago remains strong, with a steady construction rate averaging 29,000 units per year over the past five years. Most of the new construction consists of single-family homes, about half of which are attached units. According to *ULI Market Profiles 1996*, few rental projects have been developed as rents are not high enough to support development, and it is also difficult to find appropriately zoned land in communities willing to accept rental housing. Since 1990, vacancy rates have dropped nearly two percentage points, and average home prices and rents have increased anywhere from 12 to 27 percent depending on the specific sub-market. According to ULI, the number of households is expected to increase by 130,000 over the next 10 years, suggesting continued residential demand.

The retail market in Chicago is very active with a nearly 60 percent increase in retail sales since 1985 and steady annual construction rates averaging six million square feet since 1993. In 1995, 4.2 million square feet of new retail space was constructed, including 18 new developments and expansions of 17 existing centers. New construction is located throughout the market area in downtown Chicago, city neighborhoods, mature suburbs, and developing communities. According to *ULI Market Profiles 1996*, market analysts believe that the Chicago retail market is saturated and vacancy rates will likely begin to rise.

The Chicago office market has seen no new construction in the past three years, but high absorption and declining vacancy rates, particularly in the suburban markets, marked the continuing recovery during 1995. No speculative construction has occurred since 1992 but, according to *ULI Market Profiles 1996*, the east-west corridor market will probably see speculative building in the near future. Chicago's large corporations are just finishing a period of restructuring and downsizing, so new demand will likely be a result of medium-sized firms seeking spaces of less than 25,000 square feet.

The Chicago industrial market has been very active in the past several years with annual construction averaging about 5.7 million square feet since 1993. Absorption rates averaged more than 35 million square feet over the same period. *ULI Market Profiles 1996* credits most of this activity to Chicago's prominence as a Midwest distribution center for consumer products companies and retailers entering this market. Most of the new industrial growth is occurring in large business parks located near the expressways.

Chicago Real Estate Markets			
	1985	1990	1995
Population	7,182,400	7,261,200	7,487,100
Nonagricultural Employment	2,650,300	3,059,500	3,168,000
Unemployment Rate¹	—	6.0%	5.1%
Housing Market			
Annual Construction Units	30,824	27,436	32,000
- Single-family	17,723	21,005	28,000
- Multifamily	13,101	6,431	4,000
Typical Sales Price (new units)			
- Detached Single-family	\$ 140,000	\$ 165,000	\$ 185,000
- Townhouse	\$ 82,000	\$ 114,000	\$ 145,000
- Apartment/Condominiums	\$ 87,000	\$ 118,000	\$ 135,000
Typical Rent (new units)			
- One Bedroom	\$ 510	\$ 720	\$ 850
- Two Bedroom	\$ 640	\$ 875	\$ 1,075
Rental Vacancy Rate	6.0%	5.4%	3.5%
Shopping Center Market			
Retail Sales (millions)	\$ 49,552	\$ 67,818	\$ 78,900
Annual New Construction (sq.ft.)	3,100,000	5,700,000	4,200,000
Typical Price for Land (per acre)	\$ 310,000	\$ 350,000	\$ 390,000
Office Market			
Annual Construction (sq.ft.)	15,600,000	8,800,000	0
Annual Absorption (sq.ft.)	5,900,000	3,900,000	3,500,000
Vacancy Rate	14.0%	17.3%	15.3%
- Downtown	11.0%	16.2%	16.9%
- Suburbs	18.0%	19.4%	12.0%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$ 20.00	\$ 28.00	\$ 23.00
- Suburban High Rise	\$ 15.00	\$ 21.50	\$ 21.00
- Office Park	\$ —	\$ 14.00	\$ 15.50
Industrial Market			
Annual Construction (sq.ft.)	—	—	6,800,000
Annual Absorption (sq.ft.)	—	—	41,500,000
Vacancy Rate	—	9.40%	7.90%
Typical Rate for Industrial Leases (per sq.ft.)	\$ 2.52	\$ 3.70	\$ 3.54

¹ Unemployment rates are for the entire Chicago PMSA.

Source: ULI 1996; BLS 1990, 1995.

The Transit System

Chicago has a long history of rail transit. Privately owned and operated streetcar service, as well as parts of the elevated railway (known as the "L"), were available to the public before the turn of the last century. Today, the Regional Transit Authority (RTA) provides planning, funding, coordination, and fiscal oversight for three separately governed operating subsidiaries (called service boards): the Chicago Transit Authority (CTA), the Commuter Rail Division (Metra), and the Suburban Bus Division (Pace). CTA, Metra, and Pace are directly responsible for the provision of public mass transportation in the six-county Chicago metropolitan area. Rail transit service includes 107.5 miles of trackway and 145 stations on the CTA heavy-rail system, and 512 miles of trackway and 233 stations on the Metra commuter rail system.

The RTA system is the second largest public transit system in the United States (second only to New York's MTA), carrying almost 8 percent of all U.S. transit ridership. Average weekday transit ridership in Chicago exceeds 2.1 million passengers. Annual ridership systemwide exceeds 600 million passengers, of which CTA carries nearly 300 million and Metra over 75 million. Public transit captures 15.6 percent of all work trips in Chicago, about half of which are on CTA or Metra rail.

Transportation and Land Use Planning and Policy

Throughout the Chicago region, transit-oriented development is being discussed as a viable growth management tool. A Chicago Area Transportation Study (CATS) panel has recently included transit-oriented development in its regional planning for state and federally funded projects. The Northeastern Illinois Planning Commission, a regional planning body, is in favor of directing the region's projected population growth over the next 15 years to areas within one-half mile of CTA stations or within three miles of Metra stations.

The CTA is working with a number of community organizations to encourage transit-oriented development around rapid transit stations in Chicago. The CTA is planning two transit "super stations" with on-site day care, retail, and police offices along its recently refurbished Green Line, at the Pulaski/Lake Station and the 51st Street or 55th Street Station.

The Neighborhood Capital Budget Group, a consortium of community groups, completed a development plan for areas along the Green Line east of Pulaski, including the United Center neighborhood. Also, the Center for Neighborhood Technology, a research body, is actively promoting the idea of transit linked development in Chicago.

In outlying Naperville, the planning commission is considering a transit-oriented development near a Metra commuter rail station. In addition, PACE, the suburban bus operator, has created a set of Development Guidelines to instruct developers and municipalities on how to produce transit supportive development projects.

Development Examples

Pulaski/Lake Station. Located in the West Garfield Park neighborhood, this Green Line CTA transit station is to be refurbished and converted into a multi-purpose "super station." Bethel New Life, a local community group, is working with the CTA and leading the effort to generate extensive development in the station area. The station is currently surrounded by numerous abandoned properties. Plans call for several franchise retail establishments, a movie complex, and a 60-unit residential development set around cul-de-sacs. The station will also be linked, by a trail, to nearby Garfield Park and its recently rehabilitated conservatory.

Kimball Station. The Lawrence Avenue Community Development Corporation is working with the CTA and the Albany Park Chamber of Commerce on plans for a mixed-use development at this Brown Line station. Plans for the Kimball Station Project envision 130 senior housing units, 25,000 square feet of retail, a 250-car parking garage, a daycare center, professional office space, and possibly an open-air market. The project, which incorporates the CTA terminal, would also connect to a riverwalk trail.

The \$18 to \$20 million project is pending approval by the Chicago City Council, the Illinois Housing Development Authority, and the CTA. Financing is to be provided by tax increment revenue, the CTA, and the state. Construction is slated to begin in early 1998.

Railway Plaza. The Naperville Planning Commission is currently considering plans for a mixed-use development near a Burlington Northern Metra commuter line station. The proposal features 417 apartment units, a daycare center, and commercial space.

CLEVELAND

Demographics and the Economy

Cleveland is a mid-sized city with a 1990 central city population of 505,619 within a PMSA of 1.8 million. Between 1960 and 1990, the central city experienced a significant population decline of 42.3 percent. In the next 10 years, the central city is expected to experience another slight population decline, which should be offset by small gains in outlying areas. The central city has a much different racial composition than the PMSA as a whole. While the PMSA is predominantly Caucasian, the central city is evenly split between black and Caucasian residents, with a minimal presence of other races.

Cleveland's economic history is rooted in industry and manufacturing. However, like most other parts of the country, the city's economic base has recently shifted to the services sector. Employment in Cleveland's PMSA is expected to rise in the near future, with most of the new jobs being created in services. The legal services sector, in particular, is expected to grow rapidly.

Cleveland's CBD has had an infusion of high-profile developments over the last few years. The Rock & Roll Hall of Fame, Jacobs Field, Gund Arena, and Playhouse Square have attracted an increasing amount of local and out-of-town visitors to the CBD. In addition, a \$250 million professional football stadium and a \$400 million renovation of the Cleveland Convention Center are planned for the downtown core within the next several years.

The Real Estate Market

Two areas of particular interest in Cleveland's real estate market are CBD housing and office space. Cleveland's CBD housing stock has traditionally been small due to a lack of demand. This may be changing with the improved image and appeal that the high-visibility projects have brought to the CBD. Currently, 1,500 units are in existence, and 2,000 more will result from the ongoing conversion of approximately 12 buildings. Demand in the CBD has been estimated at 5,000 units. Nearly all existing and planned units are priced for an upscale market.

The overall Cleveland office market has slowly rebounded from overbuilding in the late 1980s and early 1990s. The suburban market is much stronger than the CBD, with 12 percent vacancy rates as opposed to 22 percent. No new office construction is expected in the CBD for the next couple of years.

The Transit System

The Greater Cleveland Regional Transit Authority (RTA) operates a 19-mile/18-station heavy-rail line; a 1,105-mile/102-route motor-bus system; and two light-rail lines: an established, 12.5-mile/34-station line and a new, two-mile/six-station line. Opened in 1996, the new light-rail Waterfront Line connects Tower City Center with Settlers' Landing, the Flats, and a number of civic buildings along Lake Erie.

Cleveland Real Estate Markets		
	1990	1995
Population	1,412,100	1,409,500
Nonagricultural Employment	646,900	654,500
Unemployment Rate	5.3%	5.1%
Housing Market		
Annual Construction Units	2,242	2,580
- Single-family Detached	1,992	2,080
- Multifamily	250	500
Typical Sales Price (new SF units)	\$191,000	\$210,000
Typical Rent (new units)		
- One Bedroom	\$525	\$590
- Two Bedroom	\$750	\$800
Rental Vacancy Rate	10.0%	10.0%
Shopping Center Market		
Retail Sales	\$18,074	\$20,650
Annual New Construction (sq.ft.)		
- Regional Centers	800,000	1,300,000
- Nonregional Centers	200,000	425,000
Vacancy Rate		
- Regional Centers	6.0%	7.0%
- Nonregional Centers	9.0%	8.0%
Office Market		
Annual Construction (sq.ft.)	2,086,000	0
Annual Absorption (sq.ft.)	911,000	400,000
Vacancy Rate		
- Downtown	16.0%	22.0%
- Suburbs	20.0%	12.0%
Typical Rate for Office Leases (per sq.ft.)		
- Downtown	\$18.00 - 25.00	\$16.00 - 20.00
- Suburban High Rise	\$12.00 - 15.00	\$11.00 - 20.00
- Office Park	\$11.00 - 13.00	\$12.00 - 16.00
Industrial Market		
Annual Construction (sq.ft.)	797,000	3,000,000
Annual Absorption (sq.ft.)	—	4,500,000
Vacancy Rate	12.8%	10.8%
Typical Rate for Industrial Leases (per sq.ft.)		
- High-Tech / R&D	\$9.00	\$8.25
- General Manufacturing	\$3.50	\$3.75
- Service Center/High-Tech	\$3.75	\$3.75

Source: ULI 1996; BLS 1990, 1995.

Transportation and Land Use Planning and Policy

While the city of Cleveland does not have a long history of TOD supportive policies, it is currently working jointly with RTA on station-area development plans for the Euclid Corridor Project. On account of natural obsolescence, five transit stations along the Euclid Corridor of the heavy-rail Red Line are to be relocated within a few hundred yards of their present sites. The city and RTA are using the opportunity to identify new sites that are conducive to high-density development. The city is also considering modifying its parking policies around the stations in order to attract transit-supportive development. The city, RTA, and local development corporations are currently seeking funding from private foundations for the creation of additional station-area development plans.

In addition to these efforts, the Transit-Oriented Design/Development Coalition of Cuyahoga County formulates TOD policies and initiatives for the Cleveland region. This local task force, which has been meeting for a couple of years, is comprised of local developers, chamber of commerce officials, RTA personnel, city staff, environmentalists, and MPO staff, among others.

RTA has also actively participated in several station-area developments. As the examples below illustrate, it has achieved mixed results.

Development Examples

Tower City Center. Tower City Center is a 17-acre, mixed-use redevelopment of the historic Terminal Tower transit complex. The station serves as the hub for the Red, Blue, Green, and Waterfront rapid transit lines. RTA, FTA, HUD, Ohio Department of Transportation, and a private developer collaborated to complete the redevelopment. The project involved:

- conversion of an obsolete retail arcade in the old Union Railroad Terminal into a 360,000 square foot shopping center
- conversion of a former post office into an office building
- construction on existing foundations of two new buildings: a 13-story, 360,00 square foot office complex and a 208-room Ritz Carlton Hotel with four additional floors of office space
- renovation of transit facilities including relocating the old station, building new platforms and waiting rooms, and constructing an atrium to open up the transit space to the retail arcade.

The RTA participated in the project by assembling land and negotiating with the private developer and the other public agencies.

Transit ridership has increased 18 percent since the facilities opened in 1990.

The Flats entertainment district. The opening of the Waterfront Line has spurred a large amount of private investment in the Flats entertainment district. In recent years, the Flats (a former industrial area which borders Cleveland's CBD) has drawn upwards of seven million people to its eating and entertainment establishments. However, the growth of the district has been limited by a shortage of parking.

In the last five years, the number of retail establishments has grown from 32 to over 50. Prominent projects include:

- Crittenden Court Apartment Complex — a 17-story, 200-unit apartment complex.

- **National Terminals Building** — a \$26 million renovation that will create 248 apartment units and 9,000 square feet of retail. An entrance has been created on the side of the building that faces the transit line. Construction is to be completed in mid-1997.
- National restaurants such as Landry's Seafood House, The Longhorn Steakhouse, Dick's Last Resort, and John Harvard's Brew Pub have recently opened along the line.

A private developer who has overseen development in the Flats attributes a large part of the recent growth to the Waterfront Line. RTA has not played a formal role in attracting private development to the Flats.

Windermere Transit Station. RTA is currently renovating Windermere Station in East Cleveland and building an adjacent Head Start facility. The new building will house eight Head Start classrooms and two private daycare classrooms.

The station renovation, acquisition of land for the Head Start facility, and construction of the facility will cost \$17 million. The FTA awarded RTA a \$4 million Livable Communities Initiative grant for the land acquisition.

RTA officials hope that the renovated station and new Head Start building will spur additional private development. RTA held a town hall meeting with the neighborhood residents to discuss the Head Start facility and gauge the level of support for different types of development in the station area. The 250 residents in attendance, who were primarily in favor of development, proposed a variety of land uses for the area including a hotel, single- and multi-family housing, a recreation facility, a skating rink, a movie complex, a bowling alley, a grocery store, and a restaurant.

Triskett Transit Station. RTA attempted to develop excess land from a park & ride lot at Triskett Station into a Head Start facility. Neighborhood opposition from the predominantly white, blue-collar/middle-class community led to the cancellation of the project.

The City of Cleveland, which formerly owned the site, reserved rights over the air space when it transferred the land to RTA. Before development could occur, the City Council needed to pass legislation permitting the use of the air rights. The local City Council member was opposed to the Head Start project, and the necessary legislation did not pass. A large portion of RTA's land has been acquired from the city under these constraints.

DALLAS

Demographics and the Economy

The Dallas metropolitan area is comprised of a large central city area, surrounded by an extensive network of low-density suburbs. The Dallas PMSA includes eight counties: Dallas, Denton, Collin, Henderson, Hunt, Rockwall, Kaufman, and Ellis. Overall population growth in the Dallas PMSA between 1960 and 1990 was substantial, at 47 percent, resulting in a 1990 population of over 2.5 million. Moreover, growth in the central city during that same period was even higher, at just over 80 percent, leading to a 1990 population of 1.2 million. Dallas's proximity to Fort Worth has exacerbated metropolitan sprawl, and the two metro areas are often linked together as the Dallas-Fort Worth-Arlington CMSA in urban analyses and discussions. The Fort Worth-Arlington PMSA consists of Tarrant, Hood, Johnson, and Parker counties. With an annual population growth rate of 2.6 percent since 1980, the CMSA's population surpassed 4.4 million in 1995.

Since 1930, with the discovery of the great East Texas oil field, headquarters for many refineries and other oil-related businesses have concentrated in Dallas. The oil industry remains a substantial and visible part of the city's economy. After World War II, Dallas began an era of rapid economic growth with the arrival of several large aircraft-manufacturing firms and other war-related industries, followed by electronics and auto-manufacturing firms which also remain an important part of the local economy. Today, the city is the financial and service center of the Southwest, with over 100 insurance companies and substantial publishing and advertising industries. Dallas is also emerging as a regional clothing manufacturing and fashion center. The result is a diversified and stable economy, with relatively low unemployment.

The Real Estate Market

While office space inventory in the Dallas-Fort Worth-Arlington CMSA tripled between 1980 and 1987, no new space was completed between 1990 and 1995. Downtown Dallas holds 39 million square feet of office space, which is more than one-fourth of the total office space in The Dallas area. Suburban office space is approaching full occupancy, accompanied by rising rental rates; downtown office vacancy rates are slowly falling (from a high of 33 percent), and some new development is underway. ULI's 1996 Market Profiles characterized development in the downtown office real estate market as "a long drought . . . ending . . . with a light drizzle rather than a gully washer." Most new retail development is expected in the form of regional centers with a large, usually big-box anchor, and as expansion to regional malls and existing centers.

Overall housing construction increased moderately in 1995, with the primary growth areas in the suburbs. Construction of single-family detached homes fell slightly, sales of attached units and condominiums remained stable, and new apartment construction soared. Inventories of finished new single-family homes rose in 1995, but the number of units under construction slowed in response to lower demand, possibly due to moderate job growth and rising mortgage rates. The suburban apartment market is nearing capacity, and urban rental rates are rising. However, the surge of new suburban apartment construction is expected to exceed demand, causing lower suburban apartment occupancy, and less demand for urban units.

Dallas/Fort Worth Real Estate Markets			
	1985	1990	1995
Population	3,769,900	4,050,700	4,453,600
Nonagricultural Employment	1,865,900	2,015,900	2,309,400
Unemployment Rate	—	5.1%	4.6%
Housing Market			
Annual Construction Units	73,905	19,559	37,130
- Single-family Detached	31,705	14,292	22,150
- Multifamily	38,118	5,208	14,800
Typical Sales Price			
- Detached Single-family	—	\$121,238	\$147,000
- Townhouse	—	\$85,000	\$96,000
Typical Rent (new units)			
- One Bedroom	—	\$392	\$458
- Two Bedroom	—	\$513	\$602
Rental Vacancy Rate	14.0%	9.0%	7.0%
Shopping Center Market			
Retail Sales (millions)	\$32,700	\$37,200	\$56,300
Annual New Construction (sq.ft.)			
- Regional Centers	—	958,388	0
- Nonregional Centers	—	782,612	2,236,532
Vacancy Rate			
- Regional Centers	—	10.0%	6.0%
- Nonregional Centers	—	24.0%	14.0%
Typical Rate for Leases (per sq ft)			
- Regional Centers			
Women's Ready-to-Wear	—	\$15.00 - 35.00	\$15.00 - 50.00
Men's Wear	—	\$15.00 - 35.00	\$15.00 - 50.00
Family Shoes	—	\$15.00 - 35.00	\$15.00 - 50.00
- Nonregional Centers			
Supermarkets	—	\$4.00 - 8.00	\$5.00 - 10.00
Cleaners	—	\$5.00 - 18.00	\$5.00 - 20.00
Office Market			
Annual Construction (sq. ft)	17,285,189	795,353	790,442
- High Density	11,325,529	0	734,888
- Low Density	5,959,660	795,353	55,554
Annual Absorption (sq. ft)	7,892,700	2,317,600	4,890,442
Vacancy Rate	23.0%	20.0%	14.0%
- Downtown	19.0%	19.0%	26.0%
- Suburbs	24.0%	21.0%	10.0%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$19.89	\$19.31	\$15.50
- Suburban High Rise	\$18.10	\$13.48	\$14.81
- Office Park	\$14.94	\$10.21	\$11.29
Industrial Market			
Annual Construction (sq.ft.)	16,184,100	3,396,800	8,931,700
- Industrial Space	—	3,171,400	8,784,700
- Hybrid Industrial/Office Space	—	225,400	147,000
Annual Absorption (sq.ft.)	—	11,201,900	12,000,000
- Industrial Space	—	8,671,900	10,500,000
- Hybrid Industrial/Office Space	—	2,530,000	1,500,000
Vacancy Rate	13.0%	14.0%	6.0%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech/R &D	—	\$6.25	\$6.20
- Warehouse	—	\$3.09	\$3.15

Source: ULI 1996; BLS 1990, 1995.

The Transit System

Fixed rail transit is new in Dallas. In 1996, a 10-mile commuter rail service connecting Dallas and Fort Worth was inaugurated, as was the first phase of The Dallas light-rail system. Both systems are operated by Dallas Area Rapid Transit (DART). Additional light-rail service came on line in January 1997. The light-rail system currently consists of 17 miles of trackway and 17 stations. Additional light-rail service is expected to open in May 1997, for a total of 20 miles of trackway and 20 stations. One additional station along existing trackway will open in 1998. Since January 1997, the light-rail has been running near capacity, with more than 30,000 riders per day.

Transportation and Land Use Planning and Policy

Neither DART, the City of Dallas, nor the North Central Texas Council of Governments (Dallas' MPO) has adopted any policies or incentives specifically aimed to promote transit-oriented development. According to the DART "Transit System Plan," the Plan

will make significant contributions in the areas of community and economic development. Among the benefits is the reduced dependency on the single occupant automobile which will permit the development of more liveable communities. Residential and commercial development can have higher densities with less land and structures needed for roadways and parking. As a result, residential and commercial areas will become more pedestrian and transit oriented. This will in turn lead to an increase in the number of jobs that will be created for both the implementation and operation of the transit system. Finally, the Transit System Plan provides an increased opportunity for an equitable distribution of investments and benefits among all of DART's stakeholders. In this manner all geographic and socioeconomic subdivisions of the community obtain their fair share of the overall transit investment.

However, there is no mention anywhere in the Plan of the mechanisms to make these benefits happen. DART does not currently produce station-area land use plans.

Other than parking facilities and a few privately developed projects, Dallas has so far experienced little development in conjunction with its new transit systems. This may be explained by a sluggish real estate market and high downtown office vacancy rates, coupled with skepticism about the sustained success of the new transit system. However, several recent articles in *The Dallas Morning News* (2/7/97, 1/3/97, 7/30/96) indicate that area developers are now beginning to look at buying properties and building along the rail line. While developers are starting to warm up to the idea of development near transit, little of the new or proposed development includes interfaces to the transit line. Furthermore, much of this development is not specifically geared toward supporting transit, or drawing people from transit.

Development Examples

Illinois Station. Adjacent to the station, restoration of the old trolley maintenance shop and conversion of the building into a mixed-use transit-oriented development is nearing completion. The 30,000-square foot historic building, built in 1914, will house a multi-screen movie theater, a daycare facility, a transit police office, a transit museum, a satellite hospital outreach for seniors, a pharmacy, a dry cleaner, and various other retail shops and services. The developer supplied between \$1.2 and \$1.6 million for the project, supplemented by \$2.5 million from DART, including ISTEA enhancement monies. As an historic building, the project was eligible for city, state, and federal tax incentives.

Union Station. HBE Corporation, a St. Louis hotel developer, plans to invest more than \$150 million transforming the vacant Southland Center hotel and office complex into a 1,700-room Adam's Mark hotel. This conversion will remove 1.2 million square feet of empty office space from the downtown market.

Cedars Station. Private investors recently bought the historic Sears, Roebuck and Co. warehouse complex only one block from the station. The nearly 1.5-million-square foot complex had been vacant and for sale since 1993, when Sears shut down its catalog warehouse operation. PanAmerican Capital Corporation, and other investors, plan on turning the 18-acre, three-block complex of historic red-brick buildings into at least 400 loft apartments and 350 hotel rooms, plus office, retail, and enclosed parking space. The project is estimated to cost \$50 million.

West End Station. A partnership of Canadian and Dallas investors purchased four historic buildings adjacent to DART's light-rail line on Pacific Street. Three of the four buildings have been reconfigured into 127,000 square feet of office space (95 percent leased) with ground-floor retail. The fourth building is currently being reconstructed into 40 condominium units.

Mockingbird Station. The replacement of an existing single-story industrial building with a mixed-use office and retail complex is planned by developers currently negotiating purchase of the property. A luxury condominium complex is planned for the site of the recently demolished Dr. Pepper building. These properties are on opposite sides of the light-rail line, and both are near the Mockingbird Station.

DETROIT

Demographics and the Economy

Detroit, with a 1990 central city population of 1.2 million and a 1990 PMSA population of 4.4 million, is among the largest metropolitan regions in the country. However, the central city population decreased by 25 percent between 1960 and 1990. The racial composition of Detroit and its outlying suburbs are diametric opposites. In 1990, 66 percent of the city population was black, while 76 percent of the entire PMSA was Caucasian. Overall, the PMSA is well-off and well-educated, relative to other major regions. However, median household incomes and levels of educational attainment within Detroit are far below national averages.

Detroit appears to be undergoing an economic renaissance of sorts. The metropolitan area has experienced three consecutive years of economic growth. The city unemployment rate has fallen to 9.1 percent from a high of 17 percent during the 1992 recession. In 1994, the city was named one of six federal Empowerment Zone recipients,¹ leading to an influx of private sector investment. Within the 18-square-mile Empowerment Zone, 29 companies have announced plans to invest \$2.17 billion on opening, expanding, or relocating operations.

The Real Estate Market

While the bulk of the region's growth continues to occur outside of the city boundaries, development activity within the city is drawing headlines for the first time in years. Coinciding with the Empowerment Zone designation, local lending institutions and corporations have begun playing a more prominent role in the city's development.

Composite CBD office vacancy rates continue to hover around 20 percent. Yet, Class A office space vacancy rates are reported to be below 10 percent. The city is actively marketing itself to retail developers. However, land assemblage is a frequent stumbling block to retail development. The city has embarked on a program of removing economically and physically obsolete buildings from the CBD in hopes of making room for future development.

The Transit System

The Detroit Transportation Corporation operates a 2.85-mile/13-station automated guideway People Mover that circles Detroit's CBD. The system opened in 1987. In 1993, the People Mover averaged 7,000 riders per day.

The Detroit Department of Transportation (D-DOT) and the Suburban Mobility Authority for Regional Transportation (SMART) each operate a 56-route bus service. D-DOT runs 552 vehicles over 742 miles. SMART runs 359 vehicles over 1,768 miles. D-DOT carries 84.3 percent of the region's transit trips.

¹Detroit was one of six U.S. cities to be awarded \$100 million in federal development grants and business tax credits for use within a designated Empowerment Zone area.

Detroit Real Estate Markets		
	1990	1995
Population	4,590,000	4,695,000
Nonagricultural Employment	1,988,000	2,013,000
Unemployment Rate	7.5%	5.0%
Housing Market		
Annual Construction Units	17,677	24,353
- Single-family	11,108	18,633
- Multifamily	6,569	5,720
Typical Sales Price (existing homes)	\$76,700	\$124,328
Rental Vacancy Rate	7.4%	4.0% - 7.0%
Shopping Center Market		
Retail Sales (millions)	\$33,316	\$45,070
Overall Vacancy Rate	8.2%	—
Typical Rate for Leases (per sq.ft.)		
- Regional Centers	\$20.00	\$25.00
- Nonregional Centers	\$12.50	\$14.50
Office Market		
Annual Construction (sq.ft.)	2,221,000	152,000
Annual Absorption (sq.ft.)	2,384,864	2,098,945
Vacancy Rate		
- Downtown	14.7%	20.0%
- Suburbs	20.2%	14.5%
Typical Rate for Office Leases (per sq.ft.)		
- Downtown	\$15.50	\$14.00
- Suburban	\$17.31	\$16.20
Industrial Market		
Annual Construction (sq.ft.)	3,716,000	—
Annual Absorption (sq.ft.)	6,113,000	—
Vacancy Rate	9.02%	—
Typical Rate for Industrial Leases (per sq.ft.)		
- High-Tech / R&D	\$7.78	—
- Warehouse	\$4.37	—

Source: ULI 1996; BLS 1990, 1995.

Transportation and Land Use Planning and Policy

In its master plan, the city of Detroit makes nominal reference to expanding the People Mover system and encouraging development near People Mover stations. For example, the plan calls for encouraging new government offices to be placed near People Mover stations. However, the city has not implemented any specific policies or regulations to facilitate station-area development.

There has been some private development within walking distance of People Mover stations. However, neither the city nor DTC has not played an active role in the process. DTC owns some excess land around the stations, but has not taken any action towards generating development on these parcels.

There has not been any transit-oriented development near the region's bus stations.

Development Examples

Some of the recently generated economic activity has occurred near People Mover stations. Most notably, GM announced that it will move its world headquarters to the four-tower Renaissance Center in the CBD. The People Mover stops in the Renaissance Center, and some DOT officials attribute GM's decision, in part, to the presence of the People Mover. Others dispute this, however, arguing that the People Mover had essentially no impact on GM's location decision.

Development has occurred within walking distance of other People Mover stations. Near the Broadway Station, three housing/loft conversion projects are currently in progress, and the Detroit Opera House was recently renovated. The Grand Circus Park Station is located within the rejuvenated theater district. In recent years, three major theaters have been refurbished and a few comedy clubs have opened. The convention center, located at the Cobo Hall Station, has recently expanded to double its original size. Also, the four-star Atheneum Hotel is located near the Greektown Station, which has the system's highest ridership levels.

Baseball's Detroit Tigers and football's Detroit Lions will each build a new stadium in Detroit within the next several years. City officials view the sports facilities, which will be situated next to one another, as a potential focal point of an entertainment district that will act as a catalyst for further CBD development. DTC hopes to build a spur line off of the People Mover to access the complex. On account of this proposed transit extension, the city is considering providing a reduced amount of parking at the sports complex. Also, three casinos are slated for opening in Detroit, and transit officials anticipate that at least two of the casinos will be located near People Mover stations.

HOUSTON

Demographics and the Economy

The Houston Metropolitan Area includes the City of Houston and parts of eight counties. Harris County represents 75 percent of the region's 1995 population of 4.2 million. During the period from 1985 to 1995, the region's population increased by nearly 17 percent, or approximately 600,000 new residents; the growth rate in 1990-95 was 10.5 percent.

According to *ULI Market Profiles 1996*, Houston's economic performance improved in 1994 and gained strength in 1995. Employment grew about 6 percent over the same period while unemployment increased from 5.1 percent to 5.7 percent.

The Real Estate Market

Houston's housing market was stable in 1995, and new and existing home prices increased modestly over 1994. Total 1995 single-family home sales equaled 1994 levels. New multi-family construction remained steady in Houston, but the number of renovated units entering the market slowed from previous years. New residential construction in 1995 was down from 1994, but about 30 percent higher than 1990 levels. New single-family construction is occurring mostly within the region's 10 large master-planned communities² as well as in older neighborhoods and new communities on infill sites. New apartment projects have been added on sites closer to downtown and in some suburban locations.

In 1995, 4.5 million square feet of retail space were constructed, with big-box retail providing the majority of the new space. Vacancy rates in all types of retail centers are lower than in 1990 and range from 11 percent in regional centers to 16.7 percent in neighborhood centers. In 1994, a one million square foot mall opened in one of the region's master planned communities. Another four million square feet of retail space was added in 1996, and another one million square foot mall is under construction in Fort Bend County.

Houston's office market is comprised of 19 office activity centers, with 76 percent of the leasable space in suburban markets. In 1995, vacancy rates were 18 percent overall, with a rate of 20 percent downtown and 17 percent in office parks. According to *ULI Market Profiles*, the CBD will remain the region's largest activity center throughout the 1990s, but worker decentralization will continue. In 1995, 76 percent of Houston's leasable space was located outside of the CBD. Lease rates have been unchanged since 1993, averaging about \$14 per square feet in both downtown and office park locations.

Industrial space absorption was strong in 1995 at over six million square feet. About eight million square feet were absorbed in 1994. Warehousing accounted for 62 percent of absorption in 1995, while manufacturing accounted for the remaining 38 percent. New construction is mostly occurring in planned business and industrial parks.

²These include Kingwood, Woodlands, Fairfield, Copperfield, Cinco Ranch, New Territory, Greatwood, First Colony, Clear Lake, and South Shore Harbor.

Houston Real Estate Markets

	1985	1990	1995
Population	3,600,000	3,800,000	4,200,000
Nonagricultural Employment	1,611,000	1,751,000	1,857,400
Unemployment Rate		5.1%	5.7%
Housing Market			
Annual Construction Units	14,000	15,700	20,300
- Single-family Detached	9,400	13,600	16,400
- Multifamily	4,600	2,100	3,900
Typical Sales Price (new SF units)	\$ 140,000	\$ 150,000	\$ 192,500
Typical Rent (new units)	—	\$ 506	\$ 616
Shopping Center Market			
Retail Sales (millions)	\$ 26,400	\$ 32,400	\$ 42,700
Annual New Construction (sq. ft.)	9,100,000	1,100,000	4,500,000
Vacancy Rate			
- Regional Centers	7.0%	13.4%	11.0%
- Community Centers	21.0%	19.5%	15.3%
- Neighborhood Centers	31.0%	29.2%	16.7%
Office Market			
Annual Construction (sq. ft.)	4,100,000	900,000	100,000
Annual Absorption (sq. ft.)	200,000	4,800,000	1,000,000
Vacancy Rate	25.2%	21.3%	18.0%
- Downtown	17.8%	19.7%	20.0%
- Office Park	27.6%	21.9%	17.0%
Typical Rate for Office Leases (per sq. ft.)			
- Downtown	\$ 19.38	\$ 16.76	\$ 13.95
- Office Park	\$ 18.53	\$ 13.50	\$ 14.00
Industrial Market			
Annual Construction	—	1,950,000	2,100,000
Annual Absorption	9,800,000	4,100,000	6,200,000
Vacancy Rate	18.8%	15.2%	13.5%
Typical Rate for Industrial Leases (per sq. ft.)			
- Office Service Center	\$2.40 - 6.00	\$2.64 - 7.80	\$3.84 - 8.40
- General Manufacturing	\$1.68 - 2.64	\$1.80 - 3.60	\$2.04 - 4.20
- Warehousing	\$1.92 - 3.60	\$2.04 - 4.20	\$2.52 - 4.35

Source: ULI 1996; BLS 1990, 1995.

The Transit System

Houston's transit system consists of the Metropolitan Transit Authority (Metro), which operates only bus and demand-responsive services on 125 routes with a bus fleet of 1,391 vehicles. Houston has 15 transit centers, 22 park & ride sites, and over 1,100 bus shelters. Metro ridership averages 240,000 passenger trips per day.

Transportation and Land Use Planning and Policies

The City of Houston has no public land use controls, although private covenants serve many of the same functions, particularly in residential neighborhoods. As a consequence of this bus-based transit system and lack of zoning, no notable station-area development has occurred in Houston. In fact, the development that does exist around major bus facilities, such as the Magnolia Transit Center, tends to be auto-oriented, including gas stations, car washes, and fast food restaurants. These uses are not transit-oriented and were all done by different developers on non-Metro land.

LOS ANGELES

Demographics and the Economy

The population of the Los Angeles region, currently at 9.3 million, continues to grow and diversify. Foreign immigration has had a dramatic impact on the region's ethnic makeup. Year 2000 population projections indicate that the Caucasian population will have decreased 20 percent since 1980, while the Hispanic population will have simultaneously increased 126 percent. In the year 2000, Hispanics will account for 46 percent of Los Angeles County residents; Caucasians for 33 percent; Asians for 11 percent; and African-Americans for 10 percent. Unlike many other regions, the racial composition of the central city and the entire PMSA are nearly identical.

The Los Angeles economy is extremely diversified. Ten different industries each generate substantial revenue for the economy: business and professional management services, health services, tourism, wholesale trade and distribution (except apparel), technology, motion picture/TV production, apparel/textiles, financial services, agricultural/food products manufacturing, and international trade. After suffering a tremendous loss of jobs during the 1990-93 recession, the economy has undergone a restructuring. The recovery, which began in mid-1994, is broad-based, with particular strength in motion picture/TV production and international trade.

The Real Estate Market

In 1995, the residential housing market continued to experience the effects of the severe 1990-93 economic recession. Annual construction of new housing units has dropped 85 percent since 1985 and 31 percent since 1990. Condominium construction continues to decline as builders and architects have become increasingly wary of facing litigation for latent construction defects.

For the last several years throughout the Los Angeles region, big-box discount retail outlets have expanded at the expense of mom-and-pop stores and local/regional chains. While budget-constrained municipalities favor power centers for their capacity to generate sales tax, there is a potential for oversaturation. Also, several of the area's regional centers have recently undergone remodeling.

The downtown and adjacent Mid-Wilshire office markets continue to struggle. Downtown vacancy rates hover around 20 percent, while the Mid-Wilshire area is experiencing 30 percent vacancies. The Urban Land Institute expects the office market to slowly emerge from its current funk over the next five years.

The Transit System

The Los Angeles County Metropolitan Transportation Authority (MTA) operates an 11,470-mile motor-bus system, a 3.1-mile/5-station heavy-rail line (Metro Red Line), and two light-rail lines: one spanning 22 miles and 22 stations (Metro Blue Line) and another spanning 21 miles and 14 stations (Metro Green Line). In 1993, buses accounted for 96 percent of all transit trips in the region. Ridership on the Red, Blue, and Green Lines has risen steadily since inauguration in the early 1990s. The rail lines carried an average of 75,000 passengers per weekday in 1993. Additional portions of the Red Line are scheduled to be completed in 1998, 2001, and 2004.

Los Angeles Real Estate Markets			
	1985	1990	1995
Population	8,286,100	8,863,800	9,259,600
Nonagricultural Employment	3,754,500	4,133,300	3,752,100
Unemployment Rate		5.9%	7.9%
Housing Market			
Annual Construction Units	54,192	25,045	7,772
- Single-family	15,157	8,909	5,118
- Multifamily	39,035	16,136	2,654
Typical Sales Price			
- Detached Single-family	\$125,000		\$137,648
- Townhouses	\$99,000		\$129,509
- Apartment Condominiums	\$112,500	\$116,688	\$102,012
Typical Rent (new units)			
- One Bedroom	\$450 - 1,000	\$600 - 1,250	\$711 - 827
- Two Bedroom	\$650 - 1,200	\$900 - 1,550	\$898 - 1,042
Rental Vacancy Rate	5.4%	6.1%	9.8%
Shopping Center Market			
Retail Sales (millions)	\$51,837	\$71,957	\$74,386
Regional Center New Construction (sq.ft.)	—	2,333,600	1,500,000
Regional Center Vacancy Rate	—	—	3.5%
Office Market			
Annual Construction (sq. ft)	5,619,732	5,187,144	789,000
Annual Absorption (sq.ft.)	8,305,120	5,270,607	1,000,000
Vacancy Rate	17.8%	15.0%	18.3%
- Downtown	17.4%	12.8%	19.0%
- Suburbs	18.0%	15.5%	18.0%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	\$26.50	\$16.75
- Suburban High Rise	—	\$25.00	\$22.00
- Office Park	—	\$19.00	\$16.25
Industrial Market			
Annual Construction (sq. ft)	15,730,000	14,254,279	400,000
Annual Absorption (sq.ft.)	41,292,937	40,660,067	42,000,000
Vacancy Rate	9.2%	9.40%	9.2%
Typical Rate for Industrial Leases (per sq.ft.)			
- Industrial Parks	—	—	\$8.00
- Hybrid Industrial/Office Parks	—	—	\$12.50

Source: ULI 1996; BLS 1990, 1995.

Transportation and Land Use Planning and Policy

The City of Los Angeles Land Use Transportation Policy, adopted by the City Council in 1993, aims to focus future residential and commercial growth in rail and bus transit corridors. The city updated its General Plan along those lines in January 1995 by calling for 75 percent of all new development to be within "targeted growth areas" that comprise 5 percent of the city's land. The growth areas are predominantly near rail and bus stops. The city is considering allowing density bonuses on the order of 6:1 for development within these areas.

MTA also has been aggressive in producing station-area plans and assessments, forging public/public and public/private partnerships, and assembling land in pursuance of station-area development. To date, however, little has been constructed due to a weak Southern California real estate market and the infancy and incomplete state of the transit lines. Only the Blue Line is completed, and much of that line passes through industrial areas where the market for transit-oriented development is weak or non-existent.

MTA's Joint Development Department has established land use standards for transit-related development in order to enhance the built environment, increase transit ridership, and achieve an appropriate return on MTA investments. In addition, MTA adopted Urban Design and Development Principles to be used as a framework for public/private transit-oriented development on property owned by MTA or located within MTA station areas. The guidelines promote integrated development, transit mobility, sensitivity to the neighboring community, and pedestrian circulation.

In 1992-93, MTA conducted land use assessments for each proposed station on the Red Line. The assessments, which covered areas within 1/4 to 1/2 mile of the stations, included land use mapping of outer regions and site-specific detailing of areas closer to the stations. The assessments identified opportunities for joint development and enabled station designs to be compatible with the surrounding community. In 1993, MTA also funded the Regional Station Prototype Study, through which the city planning office developed eight detailed land use plans of areas within 1/2 mile of proposed rail stations.

MTA also seeks to promote joint development by allowing private property owners to construct direct connections to rail stations. Prospective joint development participants must consider incorporating child-care facilities into developments where practicable and warranted.

Development Examples

Grand Central Square. MTA is acting as a guarantor for \$30.8 million in bonds being used by a private developer. MTA joined the project after much of the planning had been completed and the developer was unable to obtain a loan. In exchange for an annual service fee and a first deed of trust on the property, MTA makes regular bond payments and is reimbursed from the project's proceeds.

The completed complex contains 121 apartments (50 percent affordable), 20,000 square feet of office space, 20,000 square feet of retail, and a 500-car/11-level parking structure. MTA used a \$1.78 million ISTE grant, along with \$356,000 of funds from the Los Angeles Community Redevelopment Authority (CRA), to enhance the sidewalk connection between the station portal and the project.

Willow Station. MTA worked extensively with the city of Long Beach and the Long Beach Redevelopment Authority to assemble land on a 14-acre site for a 132,000 square foot community retail center at the Willow Station transit stop. To enable Long Beach to purchase a 4.19-acre trailer park adjacent to the

station, MTA obtained a \$6 million grant from the California Transportation Commission and \$3.1 million from Proposition C (sales tax) HOV/park & ride funds.

MTA and Long Beach will lease the land to a private developer, and MTA will use its share of the rental payments to amortize the construction of a 700-car parking structure which will serve the transit station and the retail center. MTA also plans to construct a large public plaza that will connect the station with the retail center.

MTA has recently won a zoning appeal brought by three local residents who were dissatisfied with the project's design. Aside from this opposition, the project has received strong residential support, as evidenced by attendance at planning meetings and the opinions expressed at those meetings. The Willow Station neighborhood lost many of its retail establishments in the 1992 riots. Long Beach officials view this project as a catalyst for additional private investment in the area.

Pasadena Del Mar Station. MTA participated with the City of Pasadena's Housing and Community Development Department and Public Works Department in a community charrette, i.e. design workshop, process resulting in a land use plan for the five acres surrounding the station, collectively referred to as the Santa Fe Transportation Center. The preferred development plan for the Transportation Center envisions approximately 300,000 square feet of office use, 60,000 square feet of retail use (including a 45,000 square foot destination/specialty market place modeled after Seattle's Pike's Place), 125 housing units, and approximately 1,600 parking spaces (including 600 for transit users). MTA owns the entire site, and has reached a Memorandum of Understanding with the City of Pasadena that is consistent with the plan.

The community charrette occurred over three days in November 1994. Through a collaborative process that allowed for the discussion of alternate conceptions, the participants forged a vision plan for the area. The consensus vision plan articulated principles and guidelines for urban design and pedestrian use, land use and massing, transit and transportation, historic preservation, and joint development opportunities. The charrette was followed by two public workshops and review by numerous Pasadena commissions and boards.

Hollywood/Western Station. MTA and the CRA assembled land for the development of a pedestrian-oriented neighborhood center in the station area. Transit officials report that this prominent intersection has long been a blight on the neighborhood. Proposed new uses include multi-family housing, neighborhood shopping, community/recreation services, two park & ride lots, and a station plaza. Phase I, comprised of 70 housing units and a child-care center, should be completed in late 1997. Phase II, with 50 housing units and 24,000 square feet of retail, is set for a 1998 completion date to coincide with the commencement of transit service to the station.

The station area is located in the CRA Hollywood Redevelopment Project Area. The CRA purchased vacant land adjacent to the station with federal earthquake recovery funds made available through the L.A. housing department. The development plan is an outgrowth of the 1992 MTA Master Plan Assessment of the station area. In formulating the Master Plan Assessment, MTA actively collaborated with neighborhood associations, local school administration, local clergy, and numerous social service organizations. Transit officials report across the board community support for housing, retail, and child care in the station area.

Jackie Goldberg, a city council member whose district includes three Hollywood Boulevard transit stations and three Vermont Avenue transit stations, has actively supported MTA station-area planning. At the Hollywood/Western site, Goldberg pulled together commitments from multiple city agencies that enabled development to proceed.

Hollywood/Highland and Hollywood/Vine Stations. Located within the Hollywood Boulevard tourist/entertainment district, these two stations will offer prime opportunities for the development of lively transit plazas with retail components.

The Hollywood/Highland station will be situated on a 59,500-square foot site that is adjacent to Mann's Chinese Theater. Mann's currently attracts between three and six million tourist visits per year. This figure may increase, as private developers recently announced a \$145 million plan to build a retail and entertainment complex with 12 movie screens near a refurbished Mann's. MTA is currently negotiating a ground lease for the station plaza with this developer. Under a proposed agreement, the developer will build the station plaza and pay rent to MTA. Down the street, the Egyptian Theater is also being restored. MTA participated in the formation of a Business Improvement District in the vicinity of the station and sits on the BID board as a property owner, not as a transit agency.

At the Hollywood/Vine station, MTA has assembled a 120,000-square foot site upon which it plans to develop an entertainment-oriented station area. MTA has relocated the station portal to face the Pantages Theater, and it hopes to create a theater district cafe and ticket/information outlet on the station plaza. MTA also anticipates joint development opportunities including a live theater complex, higher density residential space, or office space. In order to take fuller advantage of the development opportunity that this site presents, MTA has reconfigured its multi-modal bus/rail interface by shifting eight bus layover spaces from the site to the street.

Westlake/MacArthur Park Station. MTA is seeking to implement the Westlake/MacArthur Park Station Area Master Plan, which calls for 400,000 square feet of office, retail, residential, and civic/institutional space. The plan anticipates 90 community-based retail tenants and a major anchor tenant.

MTA owns approximately 3.8 acres of the proposed 12-acre site and is currently in exclusive negotiations with the Catellus/Yellin Partnership to implement the plan. An adjacent property owner has also expressed interest in the development.

Wilshire/Vermont Station and Wilshire/Western Station. MTA is working with the Mid Wilshire-Koreatown Redevelopment Agency on station-area plans for these stations. There is currently some pressure for quick development along this completed portion of the Red Line. However, MTA believes that if it waits for the real estate market to pick up, it could attract a higher density project than is supportable by the current market. As a result, MTA is considering interim plaza retail development with a 5 -7 year life span.

Both station areas are within the Recovery Redevelopment Plan Area of the CRA, which was adopted in December 1995 in response to the 1992 riots. MTA owns approximately 7 acres of land at the Wilshire/Vermont station and 1.67 acres of land at the Wilshire/Western station. MTA conducted station-area assessment studies of the sites and concluded that the assemblage of adjacent properties is essential to a comprehensive development project.

Chatsworth Wye Public Storage/Chatsworth Marilla Street Driving Range. MTA owns two parcels of property in Chatsworth, a San Fernando Valley community in Los Angeles, which it does not anticipate needing for transit purposes before the year 2012. To allow for an interim revenue stream, MTA has leased the properties.

One property, a 4.03-acre site, is being leased to a storage business for a seven-year initial term with two five-year extension options. MTA may terminate the lease with 180 days notice. The NPV of the lease payments is approximately \$1 million.

The other property, a 8.39-acre site, is being leased for use as a driving range with a 17-year term. MTA may cancel the lease with a one year notice. The NPV of the lease payments is approximately \$2.76 million.

Vermont/Beverly Station. MTA owns a 23,176 square foot station-area site, with a residual development area of approximately 13,000 square feet. MTA has formulated a joint development plan that anticipates a mixed-use development of 39 affordable housing units and 4,500 square feet of retail, with the possibility of social services. The proposed project will have three floors of residential units above ground-floor retail. An adjacent property owner has expressed interest in working with MTA.

Vermont/Santa Monica Station. MTA owns a 45,506 square foot station-area site, with a residual development area of approximately 26,381 square feet. MTA has formulated a joint development plan that anticipates a mixed-use development of 56 affordable housing units and 7,200 square feet of retail, with the possibility of social services. The proposed project will have three floors of residential units above ground floor retail. An adjacent property owner has expressed interest in working with MTA.

MIAMI

Demographics and the Economy

The Miami metropolitan area, coterminous with Dade County, is the southernmost county on Florida's mainland and is bounded by the Everglades and the Atlantic Ocean. Following Hurricane Andrew in 1992, population dropped 3 percent due to displaced residents. Since 1993, population has increased nearly 7 percent to 2.1 million in 1995. A population increase of 420,000 persons is expected by 2010, largely due to immigration from Latin America and the Caribbean. Retirees are concentrated in several municipalities.

Growth in the Miami area remains strong. The overall economy was estimated at \$50 billion in 1995. Approximately one-half of Dade County's employment stems from the services and trade industries. Tourism also plays a major role in Miami's economy. In 1995, more than 4.7 million people visited the Miami region.

The Real Estate Market

New housing development activity is evident throughout Dade County. Multi-family housing has concentrated mostly in Kendall and Dade County shoreline areas. Single-family housing sales are declining in recent years due to an adjustment in demand following the post-Hurricane Andrew (1992) boom and increased interest rates and sale prices. The market for condominiums in Dade County remains strong. Opportunities for infill and rehabilitation are abundant in south Dade, as the area slowly recovers from Hurricane Andrew.

In recent years, retail development activity in Dade County has been dominated by construction of power centers for big-box, category-killer tenants. The expansion and introduction of new big-box retailers in the market has increased the demand for space. As a result, rental rates for both local and anchor retail space have increased. Population growth and post-hurricane redevelopment opportunities are expected to boost the retail market in the future.

Corporations seeking to establish themselves in Latin American and Caribbean markets have traditionally been attracted to Miami, an international business hub. Renovations to several buildings in Miami's downtown have contributed to high vacancy rates in the CBD. Despite these high vacancy rates, rental rates for downtown space are among the highest in the region. New suburban office development and multi-use projects have occurred primarily in two areas: Airport/West Dade and Coral Gables. Future development will be affected by the concurrency requirement that new projects be accompanied by adequate infrastructure construction.

The international freight shipment industry in Dade County has been growing steadily, and is expected to remain healthy. The Airport/West Dade will likely play a large role in fulfilling the demand for industrial space.

Fueled by Dade County's healthy tourism industry, the hotel market in Miami remains strong. Completion of new hotel and convention space in the area, including a proposed two-million-square foot World Trade Center downtown, is expected.

Miami Real Estate Markets

	1985	1990	1995
Population	1,789,300	1,937,100	2,083,500
Nonagricultural Employment	782,600	881,400	909,800
Unemployment Rate	—	7.0%	7.3%
Housing Market			
Annual Construction Units	15,035	13,396	—
- Single-family	5,402	6,722	—
- Multifamily	9,633	6,674	—
Typical Sales Price			
- Detached Single-family	\$87,190	\$120,699	\$136,051
- Townhouses	\$75,310	\$112,300	\$138,000
- Apartment Condominiums	\$77,177	\$114,982	\$130,545
Typical Rent (new units)			
- One Bedroom	\$446	\$550	\$618
- Two Bedroom	\$524	\$675	\$777
Rental Vacancy Rate	8.0%	6.0%	4.6%
Shopping Center Market			
Retail Sales (millions)	\$12,638	\$15,113	\$20,300
Annual New Construction (sq.ft.)			
- Regional Centers	—	0	400,000
- Nonregional Centers	—	1,250,000	380,000
Vacancy Rate			
- Regional Centers	—	8.5%	8.0%
- Nonregional Centers	—	13.0%	7.1%
Typical Rate for Leases (per sq.ft.)			
- Regional Centers	—	—	\$20.00 - 22.00
- Nonregional Centers			
Supermarkets	—	—	\$6.00 - 7.50
Cleaners	—	—	\$12.50 - 14.50
Office Market			
Annual Construction (sq.ft.)	4,588,345	677,000	638,000
Annual Absorption	2,004,376	37,982	221,900
Vacancy Rate	25.1%	22.6%	16.4%
- Downtown	30.1%	25.9%	21.8%
- Suburbs	20.5%	19.7%	11.1%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$14.00 - 31.00	\$12.00 - 19.00	\$17.00 - 22.00
- Suburban High Rise	\$16.00 - 23.00	\$15.00 - 22.00	\$15.00 - 22.00
- Office Park	\$12.00 - 20.00	\$11.00 - 23.00	\$17.00 - 24.00
Industrial Market			
Annual Construction (sq.ft.)	—	1,800,000	9,831,100
Vacancy Rate	—	10.5%	6.2%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech / R&D	—	\$6.50 - 10.00	\$6.75 - 13.00
- General Manufacturing	—	\$3.50 - 6.25	\$3.50 - 7.50
- Warehouse	—	\$3.25 - 6.75	\$3.50 - 7.50

Source: ULI 1996; BLS 1990, 1995.

The Transit System

Since 1984, Metrorail, an elevated rapid transit system, has served regional Miami, and since 1994, Metromover, an elevated people-mover system, has served the downtown central business district. Both systems are operated by the Metro-Dade Transit Agency, the public transit authority serving the Dade County area. Encompassing 21 miles and 21 stations, Metrorail serves 14.8 million passengers annually, and with 4.4 miles and another 21 stations, Metromover serves an additional 2.3 million passengers annually. Combined, Miami's two rail systems capture less than 1 percent of all work trips.

Transportation and Land Use Planning and Policy

Florida's Growth Management Act limits new development by requiring local development boundaries to ensure sufficient education and transportation facilities. These development boundaries are set by local governments, and have potential to slow or stop further westward expansion of the county.

At the same time construction of the Metrorail system was approved in Miami, UMTA funded a series of Station Area Design and Development profiles for Metrorail stations between 1978 and 1985. Each profile aimed to encourage land use appropriate to each station, incorporating high-density housing near the transit stations and meeting the approval of the respective communities. Although the original Metrorail line opened in 1984, federal funding, primarily from UMTA and HUD, diminished and much of the proposed development never occurred.

In past years, Miami has been said to have "more cars than people." In order to increase ridership, larger-capacity parking facilities had to be built at Metrorail stations. The Downtown Miami Master Plan of 1989 recognizes the city's heavy reliance on private automobiles for daily commuters, and calls for the following incentives to be applied to encourage residential and mixed-use developments in Miami: rezoning to permit residential densities in the downtown area of over 100 units/acre, floor-area ratio bonuses of one square foot non-residential per one square foot residential use in areas of high land value, maximum floor area ratio increases of 0.5 times the gross lot area for developments incorporating a Metromover station, and allowance of housing within air rights over public facilities. The Government Center Metrorail Station downtown has been successful in bringing affordable housing to downtown Miami.

The two outermost suburban stations, Dadeland North and Dadeland South, have received considerable attention by developers and are in the second and third phases of high-density development, including office, hotel, retail, and residential uses. In addition to the Government Center Station and a joint development project with the Omni Mall downtown, another downtown project will incorporate residential and retail development at the First Street Metromover station. Although a few more proposals are currently under consideration, the farthest suburban transit stations and the downtown transit stations seem to be attracting the most growth, while no development is occurring at stations in between.

Examples

Overtown/Arena and Government Stations. Adopted in 1982, the Southeast Overtown/Park West Redevelopment plan near the Overtown/Arena and Government Center Stations downtown ties together commercial, retail, and cultural facilities with central Metrorail and Metromover stations. Located within blocks of Miami municipal and county government buildings, the project received funds exceeding \$10 million in Urban Development Action Grants and HUD awards in 1986. A series of subsidized housing

projects were developed in the Overtown/Park West Redevelopment area despite initial resistance from local banks and developers concerned with the area's reputation for crime and civil disturbance.

Omni Station. At the Omni Station in downtown Miami, a joint development project was undertaken to connect the Metromover to the Omni International Mall via extended aerial platforms. The Omni International Mall contains 85 stores, 12 restaurants, and a 10-screen movie theater. The joint development project was proposed by the Metro-Dade Transit Authority. Omni International Mall pays 23 percent of station maintenance costs.

Dadeland South Station. Two 2,000 square foot office buildings, a Marriott hotel, some retail, and a 1,650-space parking garage were developed on air rights and adjacent to the Dadeland South transit station in suburbs. Development is located within walking distance of the 1.5-million-square foot, 175-store Dadeland Mall — the largest shopping mall in southern Florida, adjacent to U.S. 1 expressway. In 1982, Green Company developers donated the six-acre site to the county in exchange for a guaranteed long-term leasing agreement. Green Company persuaded the county to rezone the area for high-density, mixed use development. To date, the project is viewed by developers and Metro-Dade Transit Authority as a success. Success may be attributed in part to the heavy use the station draws since it is located at the end of the line, and the fact that it was located in an already established commercial center. Additional phases in project development are yet to come. Progress has slowed due to a real estate slump.

Dadeland North Station. At Dadeland North Station, one stop north of the Dadeland South Station, 320,000 square feet of retail space has been developed by Burkowitz Development Group. Referred to as a "vertical power center," the development includes a 60,000 square foot electronics chain store and another 20,000 square feet of retail space on the first floor, a 120,000 square foot discount chain on the second floor, and a home retail store and sports equipment chain above. The idea of placing "power tenants" at the transit station appealed to the developer because these retail stores were not accessible by transit anywhere else, and because alternative urban property could not be found. Covered pedestrian walkways connect to the transit station and to the six-story, 1,450-space parking garage nearby. Built on less than nine acres of surplus parking space, Phase I was completed in 1996. Although no hard numbers are available, the developer believes that transit ridership impacts are very favorable. The retail chains employ nearly 500 people, and all stores are doing well to date. Future phases include a 305-room hotel and 200,000 square feet of commercial space. In addition to the "power center," many rental and condominium developments are located within a one- or two- block radius of the Dadeland North Station. The Granada Dadeland Apartments, designed for elderly and retirement residents, is located directly adjacent to the large parking lot at Dadeland North Metrorail Station.

PHILADELPHIA

Demographics and the Economy

Metropolitan Philadelphia, 1990 PMSA population 4.9 million, covers an area of 3,776 square miles and consists of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Salem in New Jersey. The regional population has remained relatively steady with 12 percent growth between 1960 and 1990, though population distribution within the region is shifting more and more from the city to the suburbs.

Economic conditions in the Philadelphia area are less than vibrant. Consolidation and downsizing in several of the area's largest corporations have weakened Philadelphia's economic base. The unemployment rate for Pennsylvania was 5.9 percent in 1995, just above the national average.

The Real Estate Market

The rate of residential sales throughout metropolitan Philadelphia is generally flat. Sales of existing homes, in particular, are low. The residential development that is occurring continues to locate in the suburbs. Single-family detached housing units are preferred to townhouses or condominiums. Occupancy rates in properties throughout Philadelphia remain high — above 90 percent in suburban areas and above 95 percent in the city. Although developers are actively seeking opportunities to develop new projects in outlying suburbs, delays in zoning approvals and density limitations in suburban townships are discouraging.

The retail market in Philadelphia accounted for 80 percent of all new construction in 1995. Philadelphia has experienced a recent surge of value-oriented big-box retailer developments; "power-center" developments anchored by big-box tenants accounted for 75 percent of Philadelphia's retail activity in 1995, and are expected to continue to dominate the retail market over the next few years.

The office market in 1995 experienced a vacancy rate of 15.9 percent, limiting new office development to build-to-suit projects. Since 1993, no new office space has been built in Philadelphia's CBD. Following the merging and consolidation of several large Philadelphia employees, more vacant space in the CBD has emerged. In suburban markets, average vacancy rates have generally been decreasing. Most suburban office space exists in the form of corporate office parks. In some suburban locations, developers face proposals for growth management measures which would require infrastructure improvements to be funded by office park complexes greater than 500,000 square feet.

Warehouse/distribution space in Philadelphia is in high demand. Build-to-suit construction is continuing. In suburban Philadelphia, decreasing inventory has sparked an increase in rental rates.

Local government officials are promoting improvements in Philadelphia's tourism industry and hotel market. The supply of downtown hotel space increased by over 20 percent in 1995. Outside the central city, demand for hotel space is also on the rise.

Philadelphia Real Estate Markets			
	1985	1990	1995
Population	—	4,922,000	4,964,000
Nonagricultural Employment	—	2,127,000	2,157,000
Unemployment Rate	—	4.7%	5.9%
Housing Market			
Annual Construction Units	20,860	11,907	13,303
- Single-family	18,298	9,962	11,788
- Multifamily	2,562	1,945	1,515
Typical Sales Price			
- Detached Single-family	\$110,000	\$229,000	\$213,247
- Townhouses	—	\$140,250	\$131,233
- Apartment Condominiums	—	\$94,560	\$101,407
Typical Rent (new units)			
- One Bedroom	525	\$695	\$775
- Two Bedroom	644	\$910	\$1,025
Rental Vacancy Rate	—	—	7.0%
Shopping Center Market			
Retail Sales (millions)	—	\$36,033	\$35,376
Annual New Construction (sq.ft.)			
- Regional Centers	—	—	300,000
- Nonregional Centers	—	1,800,000	2,365,000
Vacancy Rate			
- Regional Centers	—	—	4.1%
- Nonregional Centers	—	—	8.6%
Typical Rate for Leases			
- Regional Centers			
Women's Ready-to-Wear	—	\$26.00	\$28.00
Men's Wear	—	—	\$28.00
Family Shoes	—	—	\$28.00
- Nonregional Centers			
Supermarkets	—	\$11.00	\$12.75
Cleaners	—	\$18.00	\$16.25
Typical Price for Land (per acre)			
- Regional Centers	—	\$98,750	\$108,500
- Nonregional Centers	—	\$99,000	\$103,000
Office Market			
Annual Construction (sq.ft.)	—	6,007,051	84,691
Annual Absorption (sq.ft.)	—	3,737,249	1,299,656
Vacancy Rate	—	17.0%	15.9%
- Downtown	—	12.7%	16.5%
- Pennsylvania Suburbs	—	21.1%	14.9%
- New Jersey Suburbs	—	—	20.7%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	\$24.35	\$19.82
- Suburban High Rise	—	—	\$19.20
- Office Park	—	\$20.00	\$20.00
Industrial Market			
Annual Construction (sq.ft.)	4,188,000	1,490,000	433,000
Vacancy Rate	10.8%	13.30%	12.9%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech / R&D	\$10.25	\$8.00	\$8.00
- General Manufacturing	\$2.58	\$3.15	\$4.25
- Warehouse	\$3.88	\$3.65	\$1.00 - 7.00

Source: ULI 1996; BLS 1990, 1995.

The Transit System

SEPTA, the Southeastern Pennsylvania Transportation Authority, has served Philadelphia for over 50 years with both regional rail and subway systems. SEPTA is composed of three divisions. The City Transit Division of SEPTA operates bus, trolleybus, light-rail, and heavy-rail lines in the City of Philadelphia. The Suburban Transit Division operates bus and light-rail lines in the suburban counties, and the Regional Rail Division provides regional commuter service. In addition, the Port Authority Transit Corporation (PATCO) runs heavy-rail service between Philadelphia and New Jersey suburbs. Regional rail services include 25.5 miles of heavy-rail with 62 stations, 49.7 miles of light-rail with 236 stops, and over 300 miles of commuter rail with 187 stations on 14 routes.

SEPTA ridership peaked in 1943 with over 1.1 billion unlinked passenger trips; ridership has been declining ever since. In 1995, SEPTA averaged over one million unlinked passenger trips per weekday, for nearly 300 million unlinked passenger trips annually. Regionally, transit captures 11.5 percent of all work trips (nearly evenly divided between bus and rail modes), which is more than double the national transit share of 5.3 percent for work trips.

Transportation and Land Use Planning and Policy

Several public works projects, such as street and access improvements, have been launched to revitalize the center city, increase tourism, and encourage private investment. An entertainment and cultural district for downtown Philadelphia is progressing. Renovations of the Academy of Music and a new Orchestra Concert Hall are being planned as well as hotel projects. Hinged on the approval of riverboat gambling initiatives, a wave of new development along the Delaware River waterfront is expected.

Little or no vacant land is available for development at many transit stations in the Philadelphia region, as many of the rail lines pass through or under areas that have long been built-out. For Philadelphia's old and established transit system, focus has been placed on renovating and redeveloping existing transit stations rather than constructing new stations, or developing large new commercial projects around existing stations. A slumping real estate market in Philadelphia has limited opportunities for such development, however.

Most development that has occurred at suburban stations has been along commuter rail lines in the form of cost-sharing joint-development projects between commercial tenants and SEPTA. Under SEPTA's Lease and Maintain Program, the developer agrees to pay an annual rent, similar to the conventional lease, for retail or office space within a commuter rail station. Additionally, the developer or business owner is required to renovate the public areas of the station, rehabilitate the space to be occupied, and contribute to the maintenance of the facility. Since most of the Lease and Maintain projects are located along commuter lines in residential areas, development has typically consisted of small-scale commercial projects located entirely within the existing station complex.

Commonly, outlying rail transit stations are surrounded by established neighborhoods resistant to change. According to planners at SEPTA, local residents in Philadelphia suburbs are not often receptive to transit-oriented development, and sometimes hold anti-townhouse sentiment, fearing a row-house phenomenon similar to what has occurred in the city; at most suburban stations, local residents want to maintain the low-density (one to two dwelling units per acre) character of the surrounding area. Zoning in residential districts usually restricts mixed uses and high densities, and local opposition has denied approval of some of SEPTA's proposed commercial projects in residentially zoned neighborhoods.

In addition to local opposition and unfavorable zoning, cross-jurisdictional coordination can be difficult in metropolitan Philadelphia. The region contains nearly 3,000 municipal officials holding tremendous decision-making power for their respective areas. The area southeast of Philadelphia, for example, includes 239 municipalities. No comprehensive, cross-jurisdictional, regional plan for transit-oriented development exists.

Development Examples

8th Street through 11th Street Stations — The Gallery Shopping Center. The Gallery Shopping Center, built in the 1970s, connects transit stations downtown and is largely considered a success, since it eliminated the need for much parking that otherwise would have been required, and provides an intermodal connection between commuter rail and subway. Gallery I, developed by the Rouse Company, opened in 1977 and spans between 8th and 10th Streets in downtown Philadelphia, with direct connections to the subway station at 8th Street. Development includes four levels of retail, two major department stores (one 400,000 square feet and one 800,000 square feet), 8 million square feet of office space, and a plaza at 9th Street with landscaping and lighting. The Gallery project connects the subway to the regional commuter rail line at the Reading Terminal station. A Mall Maintenance Corporation was established to bear responsibility for the upkeep of all common areas, including station-area lobbies. A later phase, Gallery II, opened between 10th and 13th Streets, including 170,000 square feet of retail space, a department store, and a 700,000-square foot office building. Gallery II also directly connects to a subway station at 11th Street. The Gallery projects received some funding from federal government (UMTA, ADA, and HUD) for urban renewal. Plans have been stalled and revised along the way, due to financial difficulties and opposition from some property owners.

Norristown Transportation Center. Norristown is located along the R6 regional-rail line, north of downtown in the suburbs. The station connects regional commuter rail, high-speed light-rail, and bus service. The station contains a bus loop, enclosed waiting area, kiss & ride, and passenger parking facilities. Peco Electric Company proposed and built a single 100,000 square foot office building near the terminal in the 1980s.

PITTSBURGH

Demographics and the Economy

Pittsburgh, with a 1990 regional population of 2.1 million, is located at the juncture of the Allegheny, Monongahela, and Ohio Rivers. Both metropolitan area and central city populations have declined substantially from 1960 to 1990; the central city, in particular, experienced a sharp drop of almost 35 percent.

Despite the recession in the early 1990s, Pittsburgh's economy is doing fairly well, although still feeling the effects of corporate downsizing and restructuring. A new Pittsburgh International Airport and the more diversified economic base that emerged in the 1980s have supported the region's economic climate. Modest growth has occurred over the past few years in employment and household income. Economic development funds have been established to foster and enhance economic growth. These funds, in aggregate total of approximately \$160 million, are to provide low-interest loans for projects encouraging the creation and retention of jobs in the Pittsburgh area.

The Real Estate Market

Despite relatively low interest rates, residential sales have remained fairly stable in the past few years. Reasons for this include long-term economic uncertainty on the part of prospective homebuyers, and imbalance of residential supply and demand. New suburban residential development has primarily been occurring in the north and west.

In both the downtown and suburban markets of Pittsburgh, retail activity is strong. Overall occupancy rates are above 95 percent, and rental rates in all markets have stabilized. No new multi-tenant office development has occurred in the downtown since 1988. Therefore, large blocks of contiguous space are limited. Several office projects have been proposed recently for the downtown. The suburban market for office space also remains tight. Demand for industrial space continues to grow as supply becomes more and more limited. New state environmental laws have eased the process of redeveloping abandoned industrial sites, or brown-fields, and may have the effect of encouraging developers to reuse these types of sites.

The Transit System

The Port Authority of Allegheny County, operating under the name Port Authority Transit, or PAT, serves as the primary transit agency in the Pittsburgh region. Pittsburgh's light-rail system, known as the "T," opened in 1985. In downtown Pittsburgh, the "T" consists of three underground and two above-ground stations, and then extends south from downtown to the outlying South Hills, making 14 stops along the 10.7 miles of trackway. Pittsburgh is also served by the Martin Luther King, Jr., East Busway, established in 1983, which extends eastward from the downtown into outlying suburbs. The busway provides access at points in the downtown and five other places along its route, servicing customers boarding directly at busway stations and customers using local bus service. High-occupancy-vehicle lanes, termed the "North Hills Busway," provide express bus service between downtown Pittsburgh and the North Hills. The "T" converges to meet both busways in Pittsburgh's downtown.

Pittsburgh Real Estate Markets		
	1990	1995
Population	2,403,700	2,435,700
Nonagricultural Employment	1,210,000	1,261,200
Unemployment Rate	5.1%	5.9%
Housing Market		
Annual Construction Units	4,417	6,500
- Detached Single-family	3,634	5,900
- Multifamily	783	600
Typical Sales Price		
- Detached Single-family	\$90,000 - 200,000	\$100,000 - 200,000
- Townhouses	—	\$85,000 - 150,000
- Apartment Condominiums	\$195,000 - 360,000	\$100,000 - 300,000
Typical Rent (new units)		
- One Bedroom	\$580	\$675
- Two Bedroom	\$700	\$875
Rental Vacancy Rate	—	—
Shopping Center Market		
Retail Sales (millions)	\$15,111	\$20,100
Annual New Construction (sq.ft.)		
- Regional Centers	1,214,152	200,000
- Nonregional Centers	453,403	200,000
Vacancy Rate		
- Regional Centers	10.0%	3.0%
- Nonregional Centers	12.0%	4.0%
Typical Rate for Leases	—	—
Office Market		
Annual Construction (sq.ft.)	17,000	150,000
Annual Absorption (sq.ft.)	980,000	400,000
Vacancy Rate	16.3%	16.0%
Typical Rate for Office Leases (per sq.ft.)		
- Downtown	\$16.69	\$17.50
- Suburban High Rise	\$15.54	\$16.80
- Office Park	\$15.54	\$16.80
Industrial Market		
Annual Construction (sq.ft.)	325,000	375,000
Annual Absorption (sq.ft.)	879,000	450,000
Vacancy Rate	18.2%	14.0%
Typical Rate for Industrial Leases (per sq.ft.)		
- High-Tech / R&D	\$8.00 - 10.00	\$5.00 - 7.00
- General Manufacturing	\$2.50 - 6.00	\$2.50 - 4.00
- Warehouse	\$2.50 - 3.25	\$2.50 - 3.00

Source: ULI 1996; BLS 1990, 1995.

Transportation and Land Use Planning and Policy

Pittsburgh's light-rail line has stimulated very little growth at its stations. The downtown Steel Plaza station area has seen new construction; outlying suburban transit stations, on the other hand, have not experienced much development. Explanations for the lack of growth at suburban transit stations include the absence of regional land use policies, unsupportive zoning codes, non-aggressive local governments, and an unfavorable economic climate.

More successful than the light-rail line, Pittsburgh's Martin Luther King, Jr., Busway, extending east from the downtown to the suburbs, has attracted a considerable amount of development at its stations. Fifty-seven new developments with a total value of \$302 million have occurred along and near the busway since its opening in 1983. A subtotal of \$105 million is estimated to have occurred in the form of clustered development at the downtown Penn Station. Both renovations and new construction have occurred, with no single land use dominating. Retail, offices, residential, medical, and theater land uses have clustered most heavily at the downtown Penn Station and the suburban Homewood and Negley stations.

The public sector intervened financially for some of the development along the busway, by providing tax abatements, tax credits, and tax-increment financing. However, local and regional land use policies directing development along the Martin Luther King, Jr., Busway are absent. At some of the outlying stations along the busway, significant growth has occurred because the stations located near local markets, or in areas where development had existed prior to construction of the busway. Proximity to the downtown and low property costs attracted development along the busway in the Strip District, an area just north of the central business district near Penn Station. In addition, new stations improved the quality of local environments with new lighting, landscaping, and increase police surveillance, helping to make areas near the busway attractive to developers.

Development Examples

Steel Plaza Station. At one of the three subway stations in downtown Pittsburgh, the Steel Plaza/One Mellon Bank Center was completed in 1985 above Steel Plaza station. An office building, holding USX headquarters, connects to Steel Plaza station by walkways (paid by developers). The Mellon Bank headquarters building, a downtown branch of the Carnegie Library, a daycare center, and restaurants are also located nearby.

Potomac Station. In the suburbs south of downtown, a 37,029-square foot senior citizen complex was built on the park & ride lot of Potomac Station. The six-story, 43-unit building borders the station and includes a nine-space parking lot. Construction began in the summer of 1995. The U.S. Department of Housing and Urban Development is financing the \$2.5 million building for county residents 65 years of age or older who meet the income guidelines. Modest mixed-use residential and commercial development is found nearby.

Penn Station. Redevelopment of the Amtrak Station and apartments, as well as the construction of a new hotel, has occurred at Penn Station, the western entrance to the busway downtown. A Greyhound station, Federal office building, hotel, and the Convention Center are located nearby.

Negley Station. Development which has clustered at the Negley Station along the Martin Luther King, Jr., Busway includes medical professional offices, shops, and a supermarket. Shadyside, the surrounding com-

munity, is considered upscale, consisting of a mix of students and middle- and upper-income professionals. Negley Station located next to an existing commercial area in the community.

Homewood Station. Homewood Station is located on the eastern end of Martin Luther King, Jr., Busway, and serves a low-income residential community. Substantial new construction of single-family residences, new construction of a Community College, and redevelopment of a Farmers Market has occurred in Homewood, despite population loss in the area since the 1980s.

PORTLAND

Demographics and the Economy

Portland is located along the Willamette River near where the river meets the Columbia River, which serves as the border between Oregon and Washington. Prior to 1994, the Portland PMSA included four counties in Oregon: Clackamas, Multnomah, Washington, and Yamhill. After 1994, the PMSA was redesignated as the Portland, OR-Vancouver, WA, PMSA, and now includes Columbia County, Oregon, and Clark County, Washington. The 1990 Portland PMSA population was roughly 1.2 million. Both the PMSA and central city populations increased substantially from 1960 to 1990, with the PMSA in particular experiencing high growth of about 50 percent. During the same time period, the population of the central city grew just over 17 percent. Since 1986, nearly 40 percent of the in-migration to Portland came from California.

Portland's economy has traditionally been resource-based, as the city is surrounded by fertile farmland and dense forest. Portland's primary industry has been in forest products, including logging, pulp, and paper. Farm products and fishing have also been significant economic contributors. Since the 1980s, Portland's high-tech industry has experienced explosive growth, and is soon expected to surpass timber and agriculture as the area's dominant industry, if it hasn't already. Although 15,000 jobs have been lost in timber and related industries since 1990, the economic base has diversified well enough to hold the unemployment rate below four percent. Displaced workers have been retrained for jobs in automobile repair, carpentry, accounting, bookkeeping, and health care. Many of the region's largest employers are in the high-tech, retail, and health care industries. Tourism is also a significant contributor to the area's economy.

The region has developed a reputation as one of the most environmentally conscious metropolitan areas in the country, having been among the first to experiment with growth controls and transit-oriented development, and also due to the well-publicized struggles between logging interests and endangered species protection.

The Real Estate Market

The Urban Growth Boundary³ (UGB) surrounding Portland is intended to reduce the proliferation of urban sprawl by concentrating residential and commercial development within the boundary. Downtown residential densities and office occupancy rates are both increasing. The office market in Portland, both downtown and suburban, is strong; the downtown vacancy rate has been under 10 percent since 1994.

The volume of new residential construction in the metropolitan area has increased 20 percent between 1993 and 1995, mostly occurring in outlying areas. During the same period, the number of multi-family units constructed annually doubled. Mixed-use urban development, often including multi- and single-family homes, retail and services, and open space, is encouraged and is occurring.

³The State of Oregon enacted a state growth management law in 1973 that called for local governments to plan for development in conformance with state objectives, including the establishment of urban growth boundaries. Portland's UGB was implemented in the early 1980s.

Portland Real Estate Markets			
	1985	1990	1995
Population	1,222,600	1,289,800	1,453,600
Total Employment	562,900	665,200	853,300
Unemployment Rate	—	4.2%	3.8%
Housing Market			
Annual Construction Units	7,322	11,655	11,786
- Single-family Detached	3,534	6,083	7,380
- Multifamily	3,788	5,572	5,900
Typical Sales Price			
- Detached Single-family	—	—	\$148,000
- Apartment/Condominiums	\$33,451	—	\$54,400
Typical Rent (new units)			
- One Bedroom	\$417	\$406	\$476
- Two Bedroom	\$485	\$482	\$590
Rental Vacancy Rate	4.7%	5.2%	5.0%
Shopping Center Market			
Retail Sales (millions)	\$7,544,600	\$10,958,500	\$15,110,800
Annual New Construction (sq.ft.)			
- Regional Centers	0	0	0
- Nonregional Centers	805,073	1,142,235	564,445
Vacancy Rate			
- Regional Centers	—	—	4.5%
- Nonregional Centers	—	—	4.5%
Typical Price for Land (per acre)	—	\$394,096	\$386,410
Office Market			
Annual Construction (sq. ft)	—	—	391,405
Annual Absorption (sq. ft)	—	—	550,000
Vacancy Rate	—	—	8.5%
- Downtown	—	—	8.8%
- Office Park	—	—	8.2%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	—	\$19.00
- Suburban High Rise	—	—	\$18.50
- Office Park	—	—	\$17.00
Typical Price for Land (per sq.ft.)			
- Downtown	—	—	\$82.50
- Suburban High Rise	—	—	\$12.00
- Office Park	—	—	\$7.00
Industrial Market			
Annual Construction (sq.ft.)	—	—	2,262,360
- Industrial Space	—	—	1,672,548
- Hybrid Industrial/Office Space	—	—	589,812
Annual Absorption (sq.ft.)	—	—	3,000,000
- Industrial Space	—	—	1,900,000
- Hybrid Industrial/Office Space	—	—	1,100,000
Vacancy Rate	—	—	4.0%
Typical Rate for Industrial Leases (per sq.ft.)			
- Industrial Parks	—	—	\$3.84 - 6.85
- Hybrid Industrial/Office Parks	—	—	\$3.96 - 6.96
Typical Price for Land (per acre)			
- Industrial Parks	—	—	\$54,450 - 108,900
- Hybrid Industrial/Office Parks	—	—	\$141,570 - 163,350

Source: ULI 1996; BLS 1990, 1995.

Retail development continues to occur throughout the area. New retail construction has consisted of both big-box anchored "power centers" and neighborhood and community shopping centers. Within the UGB, older malls are being redeveloped and small retail shops are being renovated.

The Transit System

Portland's light-rail system, the Metropolitan Area Express (MAX), began operations in 1987. Operated by the Tri-County Metropolitan Transportation District (Tri-Met), this 15.1-mile segment, the Eastside MAX, includes 30 stations and connects downtown Portland to Gresham. Scheduled to open in fall 1998, the Westside MAX will extend the line to Hillsboro and add 18 miles and 21 stations. A 21-mile South/North line is also planned.

Currently, the Eastside MAX carries approximately 24,600 riders per weekday, only 40 percent of which are commuters. Residents and tourists making downtown shopping, recreation, and personal business trips make up the other 60 percent of MAX weekday ridership. Interestingly, the heaviest daily ridership on MAX occurs on Saturday. Public transit captures 6.0 percent of all work trips made by Portland residents, a share somewhat higher than the national share of 5.3 percent. However, the light-rail system carries only 6.8 percent of the work trips made by transit, or 0.4 percent of all work trips.

Transportation and Land Use Planning and Policy

Of all the cities in the United States, Portland has probably been the most aggressive in integrating land use and transit to create compact urban development. The State of Oregon, Portland Metro (the region's MPO), and Tri-Met (the region's transit agency) have all been active in trying to concentrate growth in urban areas, and specifically in transit corridors and station-areas, as have many local governments. Numerous policies, ordinances, incentives, programs, and plans are in place at each level of government - state, regional, local, and even community - to influence development patterns.

Tri-Met has a strong commitment to land use planning, despite having no land use authority. Goal Six of Tri-Met's Mission Statement is aimed directly at land use in the region: "Using public and private partnerships, help assure that a majority of all new housing and jobs inside the region's urban growth boundary are served by the primary transit network within a 5-minute walk." Moreover, every MAX station has a station-area master plan developed by Tri-Met in and the local jurisdictions. The station-area master plan is usually included as part of the local area's other plans. The station-area plans dictate pedestrian-oriented and transit-supportive development within a one-half-mile radius of the station. Furthermore, developers are prohibited from providing parking with any new development occurring along the downtown MAX line. Following the philosophy that a successful land use and transit strategy requires a working partnership between local governments and the transit district, Tri-Met has fostered cooperative working relationships with Metro and the area's many local governments. In addition, active citizen participation at the local and neighborhood level has provided Tri-Met with valuable station-area planning input.

Strong state, regional, and local support for transit-oriented development, along with cultivated, long-term relationships between regional and local agencies, has led to substantial transit-oriented development, particularly in anticipation of the new Westside MAX line. Tri-Met has realized the most pronounced development response around MAX stations when the following conditions have been met:

- (1) developable land was consolidated under single ownership,
- (2) multiple public and private objectives were being pursued,
- (3) implementation tools were in place and available, and
- (4) stations were well located in places with development potential.

Tri-Met publicizes potential development opportunity sites in a series of leaflets called "Light-Rail Station-Area Development Profiles." These profiles stress that development within a one-half-mile radius of the station will be pedestrian-oriented and transit-supportive.

Development projects along the Eastside MAX line have predominantly been in-fill or redevelopment, heavily constrained by existing development. At the time the Eastside line was planned, there was only one large vacant site available for development along the entire line. Also in the late 1980s, there was some local resistance (both apathy and political opposition) to zoning the areas around the suburban stations in Washington County for higher densities. The combination of geography and existing development left small and difficult-to-develop parcels. Tri-Met has been engaged in influencing new development in these areas through joint development efforts, in particular, by purchasing parcels adjacent to Tri-Met-owned land (often very small parcels), creating a single parcel large enough for development, then selling assembled land to a developer.

In contrast, the Westside MAX line was built through virtually all vacant land, with far more opportunity for new development. Local governments and area citizen groups in these areas reportedly have been receptive to higher-density, mixed-use, transit-oriented development. Tri-Met and Metro have been far more effective in influencing the location and design of development on the Westside MAX line.

In many of the projects that are listed below, the development process included a series of discussions bringing together representatives from Tri-Met, Metro, the city and/or county government, and the private developer. Typically, these discussions explored and evaluated development potential under different development scenarios. More than just meetings, the relationships cultivated in these discussions often evolved over time, developing trust among stakeholders, and opening up a forum for introducing new or creative ideas for development.

Development Examples

Gresham City Hall. When MAX first opened in 1987, Gresham offered the only large vacant site available for development on the Eastside MAX line. In 1990, Winmar Company submitted design plans for the over-100-acre site. The plans called for a \$100 million, 900,000-square foot regional shopping mall, which would be built over and incorporated directly into the light-rail line. The mall would have been a joint project with Tri-Met, and, according to one transit official, would have been "on the cutting edge of suburban development." However, in 1992, Winmar backed out of the project for financial reasons, as national recession weakened the prospects for any new projects. After holding the vacant land for over 10 years, the developer was once again ready to develop in the mid-1990s. Tri-Met, Metro, the City of Gresham, and the developer negotiated and now jointly sponsor a mixed-use, transit village proposal, the Gresham Civic Neighborhood Plan District, a master plan for 130 acres west of Gresham City Hall. Winmar's development includes 300,000 square feet for retail, office, theater, and hotel use, 265 units of second-floor residential over the commercial space, and 400 to 700 units of multiple family housing. The City of Gresham and Tri-Met are constructing new infrastructure to support the plan, including a new MAX station and a plaza, and an updated street grid.

Lloyd District — Rose Quarter Transit Center, Convention Center, 7th Avenue, and Holladay Park. Of the \$1.3 billion worth of development adjacent to the MAX line, \$767 million of it (nearly 60 percent) has been in the Lloyd District, across the Willamette River from downtown Portland. Regional attractions in the Lloyd District include the Lloyd Center itself (Portland's largest mall), the Oregon Convention Center, and the Rose Garden (a sports arena). The Bonneville Power Administration, Portland Metro, the Port of Portland, the State of Oregon, and Tri-Met all have offices located in the Lloyd District.

Convention Center. Located in the Lloyd District, the 400,000-square foot Convention Center was designed to front onto the MAX station. The MAX station link was important enough to the Convention Center that they paid for the MAX station. The Convention Center design is so MAX-focused that parking for the 40,000 seat arena is limited to 4,000 parking spaces, and there is no door from the Convention Center directly facing the parking garage.

Civic Stadium. Tri-Met and the Portland Development Commission are joint-developing a project on the 22,000-square foot Civic Stadium station block. The project will include 135 units of multi-family housing and ground-floor commercial space.

Beaverton Creek (formerly Murray West). Two of the region's largest employers, Nike and Tektronix, along with the Beaverton Creek Business Park, a 25-tenant office park, are located within walking distance of this future station. Tri-Met is planning to construct a 400-space park & ride lot next to the station, and has assembled the land for a mixed-use development adjacent to the park & ride lot. Tri-Met brought together the four landowners and Metro to jointly formulate the 122-acre, \$344 thousand master plan which calls for 1,325 residential units, retail and office space facing the park & ride lot, and natural area.

Orenco/NW 231st Avenue. Over 200 acres of currently vacant land surround this future station, most of which is zoned for industrial uses. With a number of major employers, including KOEI America, MTI Inc., Technology Electronics America, Intel Corp., Lattice Semiconductor Corp., and Toshiba Ceramics, in the area, Tri-Met convinced one developer his land would be worth more if rezoned from industrial to residential. The developer is currently planning a project to include 1,800 residential units and retail, office and commercial space.

Downtown Hillsboro — Government Center, Hillsboro Central/SE 3rd Avenue, Tuality Hospital/SE 8th Avenue, and Washington Street/12th Avenue. Downtown Hillsboro is planning to revamp the entire downtown area in conjunction with the future light-rail construction.

Downtown Beaverton — Beaverton Central and Beaverton Transit Center. Conversion of the old sewage treatment facility into a \$55 million mixed-use project is planned near these future stations.

Goose Hollow — 20th and Jefferson, 18th and Jefferson, and 18th and Salmon. Tri-Met owns three properties around the neighborhood's three new light-rail stations. The City of Portland, the Goose Hollow Foothills League, and Tri-Met have established a Local Development Committee (LDC). In conjunction with consultants to provide technical expertise, the LDC's responsibility is to direct a process of project identification and developer selection and provide clear, pre-approved direction for the projects.

SACRAMENTO

Demographics and the Economy

The Sacramento metropolitan area includes the City and County of Sacramento as well as Placer, El Dorado, and Yolo Counties. The population of the metropolitan area is expected to reach 1.5 million persons by the end of 1997, an increase of almost 11 percent since the 1990 census, and a 32 percent increase since 1985. The communities of Roseville, Folsom, Rocklin, and Laguna experienced the largest growth during 1996.

Sacramento's employment reached an estimated 800,000 jobs in 1996 and continues to experience strong economic growth. According to *ULI Market Profiles 1997*, the region's percentage gains in employment, population, income, and retail sales outpaced the State of California. The expansion in this area is largely due to the amount of developable land and the relative affordability compared to other metropolitan areas. Unemployment in the Sacramento metropolitan area was 6.0 percent in 1996, up from 4.4 percent in 1990, but significantly improved from the 1993 rate of 8.2 percent.

The Real Estate Market

The housing market in Sacramento has benefited from the region's affordability and an influx of jobs into the area. New construction consists almost entirely of single-family homes whose median prices are rising again but still remain below 1990 levels. Despite a 20 percent increase in sales of existing homes since 1995, median prices of these homes are \$114,975, 6 percent lower than 1995 levels. Rental vacancy rates fell slightly to 7.2 percent in 1996, but are still above 1990 levels. Apartment construction rates are at the lowest since 1980 but, according to ULI, job growth and demand for housing for single persons may reverse this trend.

In 1996, 1.75 million square feet of retail space were constructed, with just over half occurring in non-regional centers. According to *ULI Market Profiles 1997*, the majority of retail development in the Sacramento area consisted of power centers over 300,000 square feet, including big-box retailers and movie theaters. Vacancy rates in 1996 were 15 percent in regional centers, up from 4.4 percent in 1995. Non-regional centers also saw an increase of nearly 2 percentage points to reach 9.1 percent in 1996. Retail sales in the Sacramento metropolitan area remain just below 1990 levels at \$9.8 billion in 1996. *ULI Market Profiles 1997* expects that high construction costs will cause an increase in absorption in the lower rent spaces.

Office development activity in the Sacramento region remained stagnant in 1996, with construction decreasing from prior years to about 400,000 square feet, about one-quarter of 1990 levels and one-fifth of 1985 levels. According to *ULI Market Profiles 1997*, the majority of new construction was Class B speculative office space in suburban markets. Higher absorption rates in 1996 were a result of large companies entering or expanding in the market. Despite the amenities offered by the downtown office market, including accessibility to Downtown Plaza Mall, Old Town, and the light-rail, the vacancy rate has increased in the last three years and no development has occurred.

The Sacramento industrial market experienced increased activity in 1996 compared to prior years, with over 3.6 million square feet of primarily warehouse industrial construction. About one-third of this construction was speculative. Absorption rates remained steady at 5.5 million square feet, but flexible space accounted

Sacramento Real Estate Markets

	1985	1990	1996
Population	1,138,200	1,353,600	1,476,700
Nonagricultural Employment	438,300	555,900	800,000
Unemployment Rate	—	4.4%	6.0%
Housing Market			
Housing Inventory	371,805	400,198	442,554
- Single-family	367,500	397,930	441,454
- Multifamily	7,305	2,268	1,100
Typical Sales Price (new units)			
- Detached Single-family	\$ 66,316	\$ 181,511	\$ 174,409
- Townhouses	—	\$ 122,267	\$ 107,240
Typical Rent (new units)			
- One Bedroom	\$ 448	\$ 512	\$ 604
- Two Bedroom	\$ 521	\$ 595	\$ 702
Rental Vacancy Rate	5.1%	6.9%	7.2%
Shopping Center Market			
Retail Sales (millions)	\$ 6,292	\$ 9,900	\$ 9,800
Annual New Construction (sq.ft.)			
- Regional Centers	0	0	820,000
- Non-regional Centers	—	956,991	930,000
Vacancy Rate			
- Regional Centers	—	—	15.0%
- Non-regional Centers	—	9.8%	9.1%
Typical Rate for Leases (per sq.ft.)			
- Regional Centers	\$ 28.00	\$ 26.00	\$ 24.00
- Non-regional Centers			
Supermarkets	\$ 7.00	\$ 7.00	\$ 8.00
Cleaners	\$ 16.20	\$ 18.00	\$ 18.00
Office Market			
Annual Construction (sq.ft.)	2,100,000	1,500,000	400,424
Annual Absorption (sq.ft.)	—	3,041,647	800,000
Vacancy Rate			
- Downtown	—	11.5%	11.9%
- Suburbs	—	13.2%	10.4%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$ 21.00	\$21.00 - 30.00	\$20.40 - 26.40
- Suburban High Rise	\$17.40 - 19.80	\$19.80 - 22.20	\$19.20 - 22.80
- Office Park	\$12.60 - 15.00	\$13.20 - 15.60	\$13.20 - 16.20
Industrial Market			
Annual Construction (sq.ft.)	1,750,000	21,000,000	3,656,294
- Warehouse	1,450,000	1,900,000	3,331,152
- Flex	300,000	200,000	325,142
Annual Absorption (sq.ft.)	4,500,000	6,120,000	5,500,000
- Warehouse	3,500,000	5,500,000	4,250,000
- Flex	1,000,000	620,000	1,250,000
Vacancy Rate	8.20%	9.80%	9.30%
Typical Rate for Industrial Leases (per sq.ft.)			
- Small Warehouse	\$ 3.12	\$ 3.36	\$ 3.24
- Bulk Warehouse	\$ 2.40	\$ 2.40	\$ 2.52
- Flex	\$ 5.40	\$ 6.00	\$ 7.68

Source: ULI 1997; BLS 1990, 1995.

for an increased share of the newly absorbed space. Vacancy rates are expected to continue to fall, and several industrial buildings plan to complete construction in 1997.

The Transit System

Sacramento's light-rail system initiated service in March 1987 with the opening of the Northeast Corridor. Operated by the Sacramento Regional Transit District (RTD), the system includes one 18.3-mile route with 28 stations. In 1993, a 20-year transit master plan was adopted, calling for light rail extensions as well as a new line within the next 10 years, and further extensions plus service in three new corridors within the next 20 years. In 1993, the light-rail system had an annual ridership of 6.6 million passengers. In 1990, transit captured an extremely low 2.4 percent of all work trips, of which the light rail system carried only 12.8 percent, or 0.3 percent of all work trips.

Transportation and Land Use Planning and Policy

The City of Sacramento Zoning Ordinance allows mixed-use development near transit stations in the downtown area. The code permits a variety of uses on adjacent sites (horizontal diversity) and single sites (vertical diversity) through the use of small, integrated zoning districts and general districts which allow for different yet compatible uses. The code also contains two designations which specifically permit mixed-use development. RMX zones allow apartment buildings to contain ground-floor office and commercial that comprise up to 30 to 50 percent of the building's total square footage. Neighborhood Commercial Zones allow residential uses "as a matter of right" in commercial districts and grant height and density bonuses to residential projects with ground-floor commercial. The 23rd Street Station area contains two blocks of RMX zoning, and the quarter-mile surrounding the 16th Street Station is zoned Neighborhood Commercial.

RTD actively works with city planners, community members, and local interest groups to generate high-density development around its light-rail stations. RTD has also enacted a set of design guidelines, Draft Transit & Land Use Coordination Guidelines, to promote transit-supportive development in station areas.

RTD officials report that the policy with the greatest impact on light-rail usage is the state of California's requirement that all offices leased or purchased for state use must be accessible to transit. In downtown Sacramento, the state of California is the single largest occupant of office space.

Examples

R Street Corridor. RTD is currently working with the city on formulating plans for mixed-use development around four transit stations on R Street. The plans are to include high-density residential, retail, and office uses. The city recently blocked a proposed office development in an area of the corridor which had been reserved for residential and retail uses.

59th and 65th Street Stations. Friends of Light-Rail, a private organization which acts a liaison between RTD and the Sacramento business community, recently organized a workshop for transit personnel, community leaders, local residents, and city officials to formulate station design plans and neighborhood development policies for these two stations. The focus area covers 22 acres of land in East Sacramento which is currently either vacant, occupied by the Sacramento Municipal Utilities District, or used for storage by Caltrans.

Rancho Cordova. RTD will be extending the light-rail line beyond Butterfield station and further into Rancho Cordova in the near future. To capitalize on this opportunity, Sacramento County is creating a model community planning program to generate a plan for transit-related development. The county is attempting to assemble two focus groups, each comprised of 10 to 12 community leaders, which will spend two years formulating development plans for the station areas. The county wants the groups to expand on the concept of developing "pedestrian-friendly mini-blocks" around the stations.

Mather Field. Mather Field will be the first new station on the RTD extension of the light-rail line. RTD is planning on moving the historic Mills Station building to the site in addition to constructing a pedestrian plaza to help anchor development. The station is due to be completed in 1998.

There have also been several housing developments within walking distance of rail stations. Most of the projects in downtown Sacramento were sponsored by either the joint City/County Sacramento Housing and Redevelopment Authority (SHRA) or the state-chartered Capitol Area Development Authority (CADA). The transit agency did not play a role in the developments. Below is a sample of the projects.

Brannan Court. Brannan Court is a 40-unit apartment complex located in downtown Sacramento with 32 market rate units and eight affordable units. The neighborhood residents are primarily singles and young married couples of moderate income who work downtown. CADA developed the building with 95 percent financing from the California Housing Finance Agency.

Stanford Park. Stanford Park is a 50-unit townhouse complex located in downtown Sacramento. The neighborhood residents are primarily professional singles and young married couples of moderate to upper income who work downtown. The developers and financiers were private parties.

Riverview Plaza. Riverview Plaza is a mixed-use highrise located in downtown Sacramento with 123 units of affordable senior housing and 23,000 square feet of office/commercial space. The neighborhood is primarily comprised of government and commercial buildings, with limited residential facilities. SHRA developed the project with funding from the federal, state, and local government.

Capital View Apartments. Capital View Apartments is a 40-unit complex in downtown Sacramento with 32 market-rate units and eight affordable units. The project is a infill redevelopment which was designed as a condominium, but is currently being rented out. The neighborhood is ethnically diverse and contains a mix of older, lower-income residents and younger, high-income residents. The project was developed by a private developer in partnership with SHRA. SHRA sold and took back the land at least twice. The project was financed by a combination of private capital and SHRA funds.

Windsor Ridge. Windsor Ridge is a 112-unit garden apartment complex located near the Butterfield station in Rancho Cordova. The neighborhood residents represent a wide range of ages and incomes. The development and financing were private. The developer performed a transportation analysis before selecting the site and was influenced by the location of the Butterfield station.

SAN DIEGO

Demographics and the Economy

San Diego, a major Pacific coast port, is located just north of the Mexico border. A 1990 MSA population of roughly 2.5 million placed San Diego in the mid-range of the major U.S. cities in terms of population size, although the central city population was at the high end of these mid-size cities. Notably, both MSA and central city populations grew tremendously from 1960 to 1990, with increases of roughly 142 percent and 112 percent, respectively, over that time period. However, that extreme population growth was spread over the large area of San Diego County, yielding relatively low 1990 population densities for both the central city (229 persons per square kilometer) and the MSA (1,309 persons per square kilometer).

San Diego's major industries include tourism, high-tech manufacturing, biotechnology, professional services, and government. The regional economy is currently rebounding from deep recession and the severe contraction of the aerospace industry. Due to defense spending cutbacks, industry mergers, and consolidations, 18,000 aerospace jobs were lost in a period of five years, beginning in 1990. During the recession, construction fell to post-World War II lows, home prices dropped 15 to 20 percent, and commercial buildings were nearly 20 percent vacant and were often sold at a loss. The construction industry was hit so hard by the recession that more jobs were lost in construction than in the dismantling of General Dynamics. However, economic rebound appears imminent: increases in San Diego's gross regional product, employment (newly created jobs, especially in high-tech industries), and population are predicted for the coming years, as are decreases in the unemployment rate and in apartment vacancy rates.

The Real Estate Market

While it may still be many years before markets absorb the oversupply of commercial and industrial real estate from the 1980s, the downtown office space market is slowly rebounding. Some suburban office tenants have been lured downtown with attractive economic packages, and vacancy in the 14 Class A high-rise buildings has fallen well below the regional average of around 20 percent to just under 10 percent. Some new development is occurring primarily in the suburbs. Virtually all new development in the retail market is driven by large scale (big-box) retailers and suburban regional centers. The residential real estate market is still relatively soft, and the downtown area is experiencing even less residential development than the outlying areas.

The Transit System

San Diego has had a relatively long history of fixed-rail transit. The first 15.9-mile segment of the San Diego Trolley light-rail system, operated by the Metropolitan Transit Development Board (MTDB), opened in 1981. Extensions have opened every few years since 1986, for a light-rail system consisting of 38.9 miles of trackway and 38 stations. An additional 6.1-mile, nine-station extension into Mission Valley is planned to open in late 1997.

San Diego is one of the few cities that has experienced a clear increase in transit usage during the last 15 years. Since 1981, transit ridership has risen about 60 percent and passenger miles have risen almost 70 percent. Still, transit captures only 3.2 percent of work trips made by San Diego residents. The system has an average daily ridership of 50,000 passengers.

San Diego Real Estate Markets

	1985	1990	1995
Population	2,080,300	2,498,300	2,738,000
Nonagricultural Employment	768,600	966,600	952,800
Unemployment Rate	—	4.7%	6.4%
Housing Market			
Annual Construction Units	39,121	15,796	3,881
- Single-family Detached	—	—	2,741
- Multifamily	26,329	2,297	1,140
Typical Sales Price			
- Detached Single-family	\$120,000	\$243,240	\$209,900
- Townhouse	\$95,000	\$147,430	\$131,979
Typical Rent (new units)			
- One Bedroom	\$439	\$541	\$582
- Two Bedroom	\$505	\$665	\$701
Rental Vacancy Rate	4.70%	3.20%	3.75%
Shopping Center Market			
Retail Sales (millions)	\$10,846,900	\$15,099,300	\$17,210,000
Annual New Construction (sq.ft.)			
- Regional Centers	1,300,000	0	430,000
- Nonregional Centers	—	4,000,000	1,762,645
Vacancy Rate			
- Regional Centers	—	—	3.2%
- Nonregional Centers	—	—	10.0%
Typical Rate for Leases (per sq ft)			
- Regional Centers			
Women's Ready-to-Wear	\$18.95	\$24.00	\$28.00
Men's Wear	\$20.23	\$24.00	\$23.00
Family Shoes	\$28.73	\$24.00	\$24.00
- Nonregional Centers			
Supermarkets	—	\$15.00	\$12.00 - 15.00
Cleaners	—	\$18.00 - 24.00	\$15.00 - 22.00
Typical Price for Land (per acre)			
- Regional Centers	\$348,000 - 436,000	\$348,000 - 600,000	\$261,000 - 348,000
- Nonregional Centers	\$436,000 - 523,000	\$436,000 - 648,000	\$348,000 - 522,000
Office Market			
Annual Construction (sq. ft)	—	1,779,763	200,000
- High Density	—	602,700	0
- Low Density	—	1,177,063	200,000
Annual Absorption (sq. ft)	—	2,009,952	950,000
Vacancy Rate	—	17.3%	15.2%
- Downtown	—	16.7%	18.5%
- Suburbs	—	—	12.0%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	\$ 21.00	\$12.00 - 20.00
- Suburban High Rise	—	\$ 15.00	\$13.00 - 26.00
- Office Park	—	\$ 14.84	\$12.00 - 15.00
Typical Price for Land (per sq.ft.)			
- Downtown	—	\$60.00 - 200.00	\$30.00 - 70.00
- Suburban High Rise	—	\$54.00 - 73.00	\$15.00 - 75.00
- Office Park	—	\$5.00 - 9.00	\$13.00 - 35.00
Industrial Market			
Annual Construction (sq.ft.)	—	3,723,994	686,117
- Industrial Space	—	2,801,904	423,433
- Hybrid Industrial/Office Space	—	922,090	262,684
Annual Absorption (sq.ft.)	—	3,320,202	1,667,210
- Industrial Space	—	3,060,780	1,347,928
- Hybrid Industrial/Office Space	—	259,422	319,282
Vacancy Rate	—	12.9%	7.7%
Typical Rate for Industrial Leases (per sq.ft.)			
- HighTech/R & D	\$7.80 - 12.00	\$8.40 - 12.00	\$8.00 - 12.00
- General Manufacturing	\$5.40 - 7.80	\$6.00 - 8.40	\$6.00 - 7.30
- Warehouse	\$5.40 - 7.90	\$4.80 - 6.00	\$4.80 - 7.00
Typical Price for Land (per sq.ft.)			
- Industrial Parks	—	\$500,000	\$130,000 - 217,000
- Hybrid Industrial/Office Parks	—	—	\$174,000 - 305,000

Source: ULI 1996; BLS 1990, 1995.

Transportation and Land Use Planning and Policy

Along with transportation system development, MTDB, the City and County of San Diego, and the San Diego Association of Governments (SANDAG) have pursued an aggressive campaign to promote transit-oriented development. Their effort has included conferences and community workshops, and has produced design guidelines and locally generated station-area plans. Both the City of San Diego and SANDAG have formally adopted policies endorsing transit-oriented developments. SANDAG has also adopted a growth-management strategy recommending a minimum housing density of 20 units per acre in areas near major bus routes or light-rail stations. SANDAG's "Transit Oriented Development Design Guidelines" have been incorporated into city and other jurisdictions' policies, regulations, zoning, ordinances, and community plans.

While MTDB does not directly produce station-area plans, MTDB does encourage and work with municipalities to incorporate transit-oriented development policies into local government plans and zoning ordinances. MTDB's manual for municipalities, "Designing for Transit: A Manual for Integrating Public Transportation and Land Development in the San Diego Metropolitan Area," stresses the importance of linkages between transportation and urban form. The manual promotes transit-oriented communities, a balanced transportation system that invites people to use alternative modes, especially walking and transit, and the policies and design elements necessary to achieve those goals.

Transit-oriented developments in and around trolley station-areas have included commercial joint development, transit-based housing, and transit-oriented mixed-use developments. The general success of these projects has stimulated emulation, and transit-oriented development is already occurring in Mission Valley in anticipation of the opening of the Trolley extension in 1998.

While transit-oriented development is progressing, it has predominantly occurred at the single-project level. This is despite the city, county, and transit district policies which advocate larger area plans for development. One transit official characterized the region as having good policies in place, but only spotty, limited results. (So far, this may in part be attributed to San Diego's economy being hard hit by recession and military cutbacks since 1990.)

Development Examples

Imperial & 12th Transfer Station. The San Diego Regional Building Authority, a joint-powers agency comprised of representatives from the County of San Diego and MTDB, in partnership with Starboard Development Corporation, opened the James R. Mills Building in 1989. Half of the first two floors of the 180,000-square foot, 10-story building are the enclosed intermodal transfer station. The station opens onto the building's ground-floor lobby, which has 6,500 square feet of retail shops and eateries. The remaining nine floors of the building house government offices, including MTDB and the County of San Diego. Adjacent to the building are a 15-story landmark clock tower in an open plaza, and a six-story, 1,020-space parking structure. The entire project cost \$43.6 million; MTDB donated the land and transit infrastructure, Starboard Development Corporation financed the building construction.

American Plaza Transfer Station. A 912,000-square foot, mixed-use high-rise with the Trolley and bus transfer station integrated into the building was opened in 1992. The 34-story tower houses a 272-room hotel, the San Diego Museum of Contemporary Art, a ground-level retail galleria, food court, restaurants, and outdoor plazas. A four-level, 1,250-space parking structure is adjacent to the tower. Nearly 80 percent of the \$5.2 million capital cost for the station was funded by Starboard Development Corporation, the project's developer.

47th Street. Creekside Apartments is a 144-unit, below-market-rate, garden apartment complex with 100 two-bedroom and 44 three-bedroom apartments adjacent to the 47th Street Trolley station. The complex also houses a 3,000-square foot daycare center and a play area which can accommodate 44 children. Residents are predominantly minorities and single women with children. The four-acre site is on a 50-year lease from MTDB. Transit captures over 35 percent of all trips, for work or otherwise, made by residents of Creekside Apartments. This is unusually high transit mode share, as transit captures only 3.2 percent of all work trips in San Diego, roughly 10 percent of all work trips from residents of other transit-based housing projects, and even less for non-work trips.

Amaya Drive. The Villages of La Mesa is a 384-unit, market-rate, transit-based housing project that opened in 1987 adjacent to Amaya Station. The La Mesa Community Redevelopment Agency assembled the 19-acre parcel and sold it to the developer. The agency also funded \$2.75 million in local infrastructure costs using tax increment financing. Once the project was designed, MTDB relocated the station site and traded land with the developer for better station access for residents and others walking to the station.

La Mesa Boulevard. The La Mesa Village Plaza is a mixed-use 244,000-square foot development which opened in 1991. The mid-rise development includes 95 market-rate condominium units, ground-floor retail, and 20,000 square feet of office space. The Trolley station opens up to the plaza and the ground-floor shops, restaurants, and services. The La Mesa Community Redevelopment Agency assembled the 5.4-acre site, and in the late 1980s issued RFPs for compact, mixed-use projects. A few projects were proposed; however, none came to fruition due to financing difficulties during a time of recession. The agency eventually discounted the land costs and accepted a relatively small amount of money (\$150,000) up front, with the remainder payable over time.

Barrio Logan. Approximately 300 yards from the Barrio Logan station are two development projects which together provide a planned mix of commercial, recreational, and residential uses. "Mercado Apartments" is an affordable housing development with 144 below-market-rate apartments opened in 1992. The "Mercado Commercial Center," to be opened in 1997, is a 100,000-square foot retail center, to be anchored by a supermarket. Additional uses will include other retail sidewalk vendors, a Mexican-American museum, and community college extension classrooms. Both projects were part of the Barrio Logan Redevelopment Plan initiated in 1991. The area between the "Mercado District" and the Barrio Logan Trolley station is currently vacant and weed-strewn, though there are plans for the property to be used for a large public plaza and built-up corridor lined with services and retail, including a community police office, a daycare facility, restaurants, and several two- to three-story office buildings.

Grossmont Center. Adjacent to the Trolley station is a 15.3-acre retail development with six major retailers and an eight-screen Pacific Theater Complex. The theater complex has an agreement with MTDB to share use of the MTDB-owned, 600 space parking (park & ride) lot. The agreement generates some revenue for MTDB. However, this arrangement is meant to be only an interim use of the 8.1 acres which are available for high-intensity office, retail, and/or residential uses. When development occurs, parking structures would be used to serve the trolley station, the existing retail/movie complex, and the new development. A privately developed, auto-oriented, 103-acre shopping mall with a massive parking lot is also in the station-area.

24th Street. The Sweetwater Union High School District is planning a multi-phase development project near the 24th Street Trolley station. In Phase I, the School District plans to build a two-story, 24,000-sqft. building to house 20 adult education classrooms, administrative office space, and a 2,000-square foot retail area. In Phase II of the project, the School District would convert surface parking into a mixed-use development with 30 to 40 housing units and more than 6,000 square feet of ground floor commercial space.

West Rio Vista. Although the West Rio Vista Trolley station on the Mission Valley line is not expected to open until late 1997, a 95-acre development is already under construction and partially completed. The total project was planned to have 325,000 square feet of retail space, 165,000 square feet of office space, and over 1,000 residential units. However, the project stalled in 1993 due to economic recession, then revved up again in 1995 in a different form. In response to market demands, the retail development became a typical auto-oriented suburban shopping development, no longer for small shops and restaurants but for big-box retailers, with a 1,038-space parking lot. A Spanish-style retail center with an open-air plaza is still planned for the station-area. The first phase of housing to be built will be 240 homes in three-story structures, approximately 600 to 700 feet from the station, for a residential density of 33 units per acre. The surrounding residential densities will be four to five units per acre, for a total of 1,000 residential units.

Santee. An entertainment complex is proposed for Santee Civic Square, a 50-acre city-owned parcel next to the trolley station at Santee's Town Center. The complex could include a 24-screen, 5,800-seat AMC movie theater, restaurants, music and book shops, a computer software store, a sporting goods outlet, and a department store. Santee's redevelopment commission would like the nighttime-oriented mall, centered around the trolley, to be the centerpiece of the 700-acre Town Center redevelopment area.

Otay Ranch. Otay Ranch is a proposed 23,000-acre, master-planned community in the foothills of south San Diego County. The project would create 12 "transit village centers" housing some 61,000 residents in about 21,000 dwelling units. Each village would contain residential and commercial/retail development, plus park and community facilities; some villages would have schools. The project also includes a potential university site and industrial, freeway, commercial, and open-space uses. MTDB staff have been involved in the planning process to ensure that adequate transit right-of-way is reserved; however, no funding source for the proposed light-rail line has been identified. Currently, plans for two of the 12 villages have been approved.

SANTA CLARA COUNTY

Demographics and the Economy

Santa Clara County, located at the southern end of San Francisco Bay, contains the cities of San Jose, Palo Alto, Mountain View, Cupertino, Sunnyvale, Santa Clara, and Milpitas, among others. Santa Clara County is the most populous county in the Bay Area. The 1995 population was 1.6 million, up 23 percent from 1980. In 1990, Caucasians comprised two-thirds of the San Jose PMSA population, with Asians accounting for another 20 percent. Between 1980 and 1990, the non-white population increased by 67 percent. San Jose's 1989 median household income of \$48,115 was among the highest in the country; the populace also is well-educated.

Santa Clara County, also known as Silicon Valley, is world-famous for its vibrant, technology-based economy. The regional economy is led by the computer, semiconductor, electronics, aerospace, telecommunications, software, and biotechnology industries. After a downturn in the early 1990s, the economy has rebounded of late and added more than 125,000 jobs since 1992, with 60,000 being created in 1996 alone.

The Real Estate Market

With the employment boom, there is currently great demand for housing in Santa Clara County. Since 1992, the economy has added 125,000 jobs, but only 26,000 new housing units have been built. In 1995, apartment vacancy rates were a low 1.7 percent. Rents have also increased 23 percent over the last four years. According to the Urban Land Institute, several major housing projects are planned for San Jose in the next few years.

The office market was dramatically overbuilt in the mid-1980s, leading to vacancy rates of 29 percent by 1985. The market has gradually recovered, and the vacancy rate stood at 11.8 percent at the end of 1995. The market is expected to continue strengthening over the next few years.

The Transit System

Santa Clara Valley Transportation Authority (VTA), formerly known as the Santa Clara County Transit District (SCCTD), operates a 21-mile/33-station light-rail line (Guadalupe Light Rail) and a 1,160-mile/72-route motor-bus system. The motor-bus system carried 88 percent of the transit riders in 1990. Light-rail ridership has increased since its inauguration in 1987. In fiscal year 1994-95, the light-rail line averaged 18,000 passengers a day. The first segment of the 12.4-mile/17-station Tasman Light Rail Line is currently under construction.

Transportation and Land Use Planning and Policy

The cities of San Jose, Milpitas, Sunnyvale, Mountain View, and Los Gatos have supported high-density development around transit stations by taking such actions as amending zoning ordinances and participating in the formulation of station-area concept plans.

San Jose Real Estate Markets

	1985	1990	1995
Population	1,415,300	1,509,700	1,633,100
Nonagricultural Employment	766,200	814,500	794,200
Unemployment Rate		4.0%	5.0%
Housing Market			
Annual Construction Units	501,049	540,240	559,010
- Single-family	283,807	303,212	310,242
- Multifamily	198,054	216,202	228,149
Typical Sales Price			
-Detached Single-family	\$197,100	\$497,800	\$399,200
-Townhouse/Condominiums	\$120,200	\$215,900	\$212,500
Typical Rent (new units)			
- One Bedroom	670	\$760	\$800
- Two Bedroom	790	\$905	\$1,050
Rental Vacancy Rate	3.3%	3.6%	1.7%
Shopping Center Market			
Retail Sales (millions)	\$9,743	\$11,966	\$13,172
Annual New Construction (sq.ft.)			
- Regional Centers	0	0	0
- Nonregional Centers		707,800	30,000
Vacancy Rate			
- Regional Centers	—	—	5.0%
- Nonregional Centers	5-7%	5-7%	6-8%
Typical Rate for Leases (per sq. ft)			
- Regional Centers			
Women's Ready-to-Wear	—	\$28.00 - 35.00	\$24.00 - 45.00
Men's Wear	—	\$28.00 - 35.00	\$19.00 - 35.00
Family Shoes	—	\$28.00 - 35.00	\$19.00 - 35.00
- Nonregional Centers			
Supermarkets	—	\$12.00 - 15.00	\$12.00 - 16.00
Cleaners	—	\$18.00 - 21.00	\$18.00 - 21.00
Typical Price for Land (per acre)			
- Regional Centers	—	\$217,800 - 348,480	\$217,800 - 348,480
- Nonregional Centers	—	\$609,840 - 740,520	\$435,600 - 653,400
Office Market			
Annual Construction (sq.ft.)	3,800,000	466,100	150,000
Annual Absorption (sq.ft.)	3,958,700	114,500	555,844
Vacancy Rate			
- Downtown	29.0%	21.3%	14.7%
- Suburbs	29.0%	15.7%	11.2%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	—	\$20.00 - 28.00	\$19.00 - 24.00
- Suburban High Rise	—	\$14.00 - 32.00	\$15.00 - 37.00
- Office Park	—	\$14.00 - 32.00	\$16.00 - 28.00
Industrial Market			
Annual Construction (sq.ft.)	4,004,402	3,245,600	202,070
Annual Absorption (sq.ft.)	3,951,126	311,600	7,132,911
Vacancy Rate	32.0%	11.90%	6.0%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech / R&D	—	\$5.00 - 14.00	\$6.00 - 25.20
- General Manufacturing	—	\$5.00 - 9.00	\$4.80 - 13.80
- Warehouse	—	\$3.00 - 5.00	\$2.40 - 7.80

Source: ULI 1996; BLS 1990, 1995.

San Jose

San Jose Housing Initiative. This program encourages the production of high-density housing and complementary uses near transit stations. In 1990, the city approved two General Plan Amendments to facilitate higher-density housing adjacent to nine rail stations along the Guadalupe line.

Midtown Specific Plan. This station-area plan, which encompasses 210 acres adjacent to the Cahill Station, attempts to foster the creation of a vital, mixed-use community with a strong pedestrian orientation. The plan envisions joint development atop a transit/public parking facility. It also attempts to create a pedestrian link between the station and the Sports Arena by promoting ground-floor retail/restaurant uses along Montgomery Street.

Tamien Station-Area Plan. In 1995, the city adopted the Tamien Specific Site Plan. The plan, which covers a 140-acre area surrounding the station, anticipates a mixed-use community oriented to transit facilities.

Intensification Corridors. As part of its General Plan Update, the city designated five "intensification corridors" that are suitable for higher residential densities, more intensive non-residential uses, and mixed uses. The corridors extend 500 feet in each direction from planned and existing light-rail lines and major bus routes.

Greenline. In April 1996, San Jose adopted a greenline that prohibits development beyond the city's current borders. The city now spans 17 square miles and contains a large amount of incorporated land that has yet to be developed.

Milpitas

General Plan Amendments. The city of Milpitas has conducted a Housing Sites General Plan Amendment Study to investigate a proposed change in land use designations along the Tasman light-rail corridor from commercial/industrial to multi-family/high-density residential. One 30-acre area, comprised of three parcels of surplus land owned by Santa Clara County, could yield 500 housing units. Another 17-acre site of underdeveloped land could yield 340 units if constructed at 20 units/acre, as proposed.

Sunnyvale

Downtown Development Plan. Sunnyvale has completed a redevelopment plan for the area surrounding a proposed downtown station. The village concept plan envisions a mix of commercial, retail, and high density housing.

Fair Oaks Station.. The city rezoned the station area from industrial and commercial to high-density residential.

Mountain View

Evelyn Corridor Specific Plan. Mountain View created a multi-faceted plan which calls for a multi-modal transit hub, an integrated network of streets and roadways, commercial development along Evelyn Avenue, four multi-unit residential developments, and a lower-density single-family residential development.

Champion Court Station/Renaissance Village. The city rezoned the area around this station from industrial to high-density residential to enable the construction of approximately 1,500 housing units, a daycare facility, and commercial uses.

Downtown Precise Plan. The city formulated a plan for a pedestrian-oriented district situated around a multi-modal transit station.

Los Gatos

Vasona Corridor. Los Gatos has proposed General Plan amendments to permit residential densities of up to 40 dwelling units/acre and structures that exceed three-stories in height in areas along the proposed Vasona light-rail line.

Development Examples

Private developers have been attracted to sites within walking distance of transit stations. Approximately 20 housing developments, three office projects, a convention center, and a museum have been constructed by the private sector. In addition, VTA has participated in three joint developments.

A 1995 study revealed that the transit modal split for people residing within walking distance of transit stations on the Guadalupe corridor was 15-20 percent in comparison to 3 percent for the entire county. The study also indicated that proximity to transit was a factor in the housing decisions of 40 percent of the people who moved into the Guadalupe corridor after the line was constructed (approximately 73 percent of the respondents moved to their current address after the line was in operation).⁴

Tamien Station. VTA constructed a 9,600-square foot child care center at this multi-modal location. The construction cost was \$2.5 million, \$1.6 million of which was provided through ISTEA funding. The center accommodates 137 children between the ages of six weeks and 12 years.

The park & ride lot has also been earmarked as a site for future joint development. In 1995, the city of San Jose adopted the Tamien Specific Site Plan, which covers an 140-acre area surrounding the station. Currently, the city, VTA, and the San Jose School District are formulating a station-area master plan which will include housing and a neighborhood school.

Ohlone-Chynoweth Station. VTA is participating in a land-lease, joint development of a 200-unit affordable housing complex in the park & ride lot of this station. After noting that only 25 percent of the 1,170 parking spaces in the lot were being utilized, VTA sought out a private developer to build and manage a mixed-use complex. The project will be comprised of two- and three-story townhouses, a retail space adjacent to the station, a child-care center with facilities to serve 75 children, a community center/recreation building, two swimming pools, and a basketball court.

The project is proposed to be entirely affordable and intergenerational. However, VTA has encountered neighborhood opposition to the affordable housing aspect of the project, the proposed density, and the potential traffic congestion. VTA has attempted to overcome these objections with educational measures about who would be eligible for affordable housing. The project is still undergoing the approval process.

Almaden Station. VTA has leased 7.1 acres of excess land in this park & ride lot for the construction of 250 rental housing units. Eighty percent of the units will be market rate, and 20 percent will be affordable. There has not been any neighborhood opposition to the project, as there is little residential development nearby.

⁴Gerston & Associates. *Transit-Based Housing Survey — Executive Summary* (Prepared for Santa Clara County Transportation Agency and Santa Clara Valley Manufacturing Group). September 1995.

VTA initiated the project after studies identified the site as a feasible location for a joint development project. Groundbreaking is scheduled for late 1997.

The following projects are examples of private projects along the Guadalupe Corridor and within walking distance of a light-rail station:

River Oaks. A 2,000-unit complex comprised of condominiums, townhouses, and apartments.

The Colonnade (1987). A four-story complex with 215 rental units, ground-level retail, and three levels of underground parking. There are 32 affordable rental units.

Rosewalk at Waterford Park (1996). An upscale, gated community with 300 apartments. The complex has 96 one-bedroom/one-bath apartments, 192 two-bedroom/two-bath apartments, and 12 three-bedroom/three-bath apartments. It is situated on a 10.8-acre site.

Villa Torino (under construction). A 198-unit apartment complex with 85 affordable units.

Curtner Gardens Inn (1994). A 180-unit SRO project that has generated high ridership levels.

Park Almaden. A 606-unit condominium complex.

Villa Nueva (1995). A five-story, mixed-use facility with 63 affordable rental units, YWCA offices, day care, employment referral, fitness center, counseling center, and classrooms.

California Grove (1996). A development comprised of 116 small-lot single-family homes and 136 two-story attached townhouses. The project includes a child-care center and a new city park, and is within walking distance of a hospital, shopping center, library, and several major employers.

Development Unsupportive of Transit: Cisco Systems. This high-tech firm is constructing an 819,000-square foot campus which will employ 10,000 persons. According to VTA officials, the transit agency failed in its attempt to persuade Cisco to build a transit-oriented facility. Despite the campus's proximity to a rail station and an agreement from the city of San Jose to lower its parking requirements, Cisco refused to cluster its buildings around the station. Instead, the campus will be comprised of several three- or four-story buildings surrounded by islands of free parking.

SEATTLE

Demographics and the Economy

Seattle, with a 1990 central city population of 1.97 million and a 1990 PMSA population of 2.7 million, is one of the larger metropolitan regions in the country. The region's population has been expanding for several years. Between 1980 and 1994, the population grew by an average of 60,400 persons per year. The greatest increases have occurred on the suburban periphery, although the central city has also experienced growth. In 1990, 87 percent of the region's residents were Caucasian, with blacks and Asians each accounting for approximately 5 percent of the populace.

Seattle's economic base is composed of aerospace, defense, forest products, and international trade. In addition, the software, biotechnology, telecommunications, services, and tourism sectors are growing. In 1995, the unemployment rate stood at 5.4 percent, down .5 percent from 1994. For the fifth consecutive year, Boeing laid off workers. However, the expansion of the software industry, led by Microsoft, helped to offset those job losses.

The Real Estate Market

The Seattle CBD office market is booming. Vacancy rates are currently among the lowest in the nation at 6 percent, and rents are expected to increase 8-12 percent in the next two years.

The Seattle CBD is also undergoing a revitalization, with a \$400 million redevelopment of three city blocks that includes a new 500,000-square foot entertainment/retail center and Nordstrom's conversion of a vacant, 800,000-square foot department store into a new flagship store and corporate headquarters. Several other large projects are planned for the CBD, including a 150,000-square foot entertainment/specialty retail center named The Meridian and the renovation/conversion of a vacant 80,000-square foot I. Magnin store into a space for several retail tenants

The Transit System

Metro King County Department of Transportation (Metro) operates a 247-route motor bus system, a vanpool program, an 18-route trolley bus system, a monorail, and a light-rail tramway which primarily transports tourists around the waterfront area. Community Transit (CT) and Pierce Transit also operate minor motor-bus routes in the region. Bus trips comprise 69 percent of all transit trips in Seattle, while ferry service captures approximately 10 percent of the trips. The monorail runs one mile between two stations, and the tramway extends 1.9 miles over 10 stops. The vanpool program is the largest in the nation.

In November 1996, voters approved a \$3.9 billion, three-county, mass transit project.

Transportation and Land Use Planning and Policy

The bus system has not afforded much opportunity for station-area development. Metro has participated in one high-visibility, downtown tunnel project.

San Jose Real Estate Markets			
	1985	1990	1995
Population	2,625,500	2,970,300	3,270,100
Nonagricultural Employment	1,108,900	1,437,300	1,546,600
Unemployment Rate		3.7%	5.3%
Housing Market			
Annual Construction Units	24,671	38,435	22,086
- Single-family Detached	9,198	22,294	13,085
- Multifamily	15,473	16,141	9,001
Typical Sales Price (new SF units)			
- Detached Single-family	\$75,000	\$114,475	\$140,000
- Townhouse	\$71,725	\$111,000	\$119,400
- Apartment/Condominiums	\$66,525	\$90,500	\$116,292
Typical Rent (new units)			
- One Bedroom	\$409	\$528	\$644
- Two Bedroom	\$598	\$667	\$801
Rental Vacancy Rate	4.8%	4.2%	5.9%
Shopping Center Market			
Retail Sales (millions)	\$15,645,700	\$24,052,200	\$31,071,600
Annual New Construction (sq.ft.)			
- Regional Centers	705,500	0	1,259,446
- Nonregional Centers	2,251,200	966,000	2,159,503
Vacancy Rate			
- Regional Centers	1.3%	2.5%	2.7%
- Nonregional Centers	14.1%	15.4%	4.1%
Typical Rate for Leases (per sq ft)			
- Regional Centers (small shops)	\$25.00 - 30.00	\$28.00 - 40.00	\$30.00 - 40.00
- Nonregional Centers			
-small shops	\$12.00 -16.00	\$13.00 -14.50	\$13.00 - 16.00
-anchor tenants	\$7.40	\$9.25	\$11.50
Typical Price for Land (per acre)			
- Regional Centers	\$155,000	\$245,000	\$260,000
- Nonregional Centers	\$304,920	\$272,500	\$340,000
Office Market			
Annual Construction (sq. ft)	3,431,841	1,864,932	1,835,936
Annual Absorption (sq. ft)	2,657,094	2,933,209	1,917,079
Vacancy Rate	16.6%	13.8%	8.6%
- Downtown	15.6%	13.2%	7.1%
- Office Park	18.0%	14.7%	10.6%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$22.00	\$22.00	\$18.40
- Suburban High Rise	\$22.00	\$20.00	\$20.50
- Office Park	\$14.50	\$16.75	\$18.75
Industrial Market			
Annual Construction (sq.ft.)	3,966,967	3,513,936	5,311,129
- Industrial Space	2,965,738	3,164,148	3,693,610
- Hybrid Industrial/Office Space	1,001,229	349,788	1,617,519
Annual Absorption (sq.ft.)	1,816,050	3,817,758	6,372,362
- Industrial Space	1,660,969	3,156,973	5,172,281
- Hybrid Industrial/Office Space	155,081	660,785	1,200,081
Vacancy Rate	5.3%	4.7%	4.9%
Typical Rate for Industrial Leases (per sq.ft.)			
- Distribution	\$174,240	\$196,020	\$261,360
- Service Center/High-Tech	\$259,182	\$392,040	\$479,160

Source: ULI 1996; BLS 1990, 1995.

The recently approved mass-transit project is viewed by Metro staff as an opportunity for future transit oriented development. Station-area development will also be encouraged by the state of Washington's Growth Management Act that requires each city and county to establish growth boundaries.

Development Examples

Downtown Seattle Tunnel Project. Metro purchased an office building in Seattle's CBD and constructed a pedestrian entrance to its bus transit tunnel. Metro purchased the building in an out-of-court settlement that arose under the threat of an eminent-domain taking. After completion of the entrance and tunnel, Metro sold the building to a group for use as low-income housing for AIDS patients. Metro retained an easement for the transit tunnel entrance.

Suburban Park & Ride Enterprises. A few park & ride lots along bus routes have attracted coffee vendors during the morning rush peak. One vendor attempted to operate a video rental business at a park & ride lot, but failed after a few weeks. The primary problem with park & ride enterprises is that the morning and evening rush periods alone are unable to generate enough traffic to sustain a business. There is not a significant amount of pedestrian flow at other times.

ST. LOUIS

Demographics and the Economy

St. Louis, located on the border between Missouri and Illinois at the juncture of the Mississippi, Missouri, and Illinois Rivers, developed as a river port and rail center gateway to the West. The St. Louis MSA is comprised of 12 counties making up a small, moderately dense central city surrounded by a large area of low-density suburbs. A 1990 MSA population of roughly 2.4 million placed St. Louis in the middle range of the major U.S. cities in terms of population size; however, its central city population is one of the smaller among these cities. While the MSA as a whole experienced modest population growth from 1960 to 1990, at 14 percent, the central city population declined by almost 20 percent over the same period.

The St. Louis economy was hit less hard by recession than many other cities in the nation and remains relatively stable. The cost of living is the second lowest among the nation's largest cities. Unemployment was 4.7 percent in 1995. Since World War II, St. Louis has developed a diverse industrial base, with processing and manufacturing activities including brewing, food processing, and the manufacture of shoes, textiles, chemicals, electronic components, aircraft, rail cars, and automobiles.

The Real Estate Market

The St. Louis commercial real estate market is relatively healthy. As in most other cities in the nation, St. Louis' commercial real estate was overbuilt in the 1980s, though to a much lesser extent than elsewhere. Downtown offers 16 million square feet of Class A office space, with 16.9 percent vacancy; suburban Class A office vacancy is much lower at 6.5 percent. Most retail development continues to be in the renovation and expansion of existing centers, with some new development in suburban and rural areas.

Development in the residential market has predominantly occurred as new, detached, single-family homes built in established suburban subdivisions. With affordable single-family housing readily available, the multi-family housing market has seen no significant new development since the late 1980s. Recent multi-family residential projects have mainly consisted of the rehabilitation of existing infrastructure. The prolonged lack of new construction, coupled with the sustained demand for affordable rental units, has held apartment occupancy rates between 94 and 98 percent over the past several years.

The Transit System

Fixed rail transit service is new to St. Louis. The first two phases of Bi-State Transit System's MetroLink light-rail service opened in 1993 and 1994, and currently operate over 18 miles of trackway and 20 station stops. A 17-mile, eight-station extension into St. Clair, Illinois, is expected to be completed in 2001, and an additional nine miles of trackway and three stations on the same line sometime after that. If the MetroLink system is fully built out as planned, the resulting 94.3-mile light-rail transit system would be the largest light-rail network in North America.

Ridership on MetroLink has exceeded forecasts. With 40,000 riders per weekday, ridership is more than twice what was forecasted, and even higher than the year 2010 forecast of 35,000 daily riders. This unexpectedly high ridership is mainly attributed to non-work trips, which were underestimated in the forecasts and account for roughly half of MetroLink's riders. The mode split for people attending events at the

St. Louis Real Estate Markets		
	1990	1995
Population	2,494,000	2,533,000
Nonagricultural Employment	1,118,000	1,250,000
Unemployment Rate	5.8%	4.7%
Housing Market		
Annual Construction Units	7,500	11,320
Annual Construction (sq.ft.)	6,100	9,620
- Industrial Space	400	200
- Hybrid Industrial/Office Space	1,000	6,500
Annual Absorption (sq.ft.)		
Vacancy Rate	\$94,700	\$122,175
Typical Rate for Industrial Leases (per sq.ft.)	\$62,500	\$75,000
- HighTech/R & D	\$80,000	\$70,000
- General Manufacturing		
- Warehouse	\$600	\$500
- Two Bedroom	\$740	\$650
Shopping Center Market		
Retail Sales (millions)	\$18,178	\$24,132
Annual New Construction (sq.ft.)		
- Regional Centers	0	400,000
- Nonregional Centers	500,000	900,000
Vacancy Rate		
- Regional Centers	10.0%	8.0%
- Nonregional Centers	15.0%	8.0%
Typical Rate for Leases (per sq ft)		
- Regional Centers	—	—
- Nonregional Centers	—	—
Typical Price for Land (per acre)		
- Regional Centers	—	—
- Nonregional Centers	—	—
Office Market		
Annual Construction (sq. ft)	787,000	304,000
- High Density	93,000	0
- Low Density	694,000	304,000
Annual Absorption (sq. ft)	376,000	440,000
Vacancy Rate	18.9%	15.7%
Typical Rate for Office Leases (per sq.ft.)		
- Downtown	\$17.00	\$19.00
- Suburban High Rise	\$17.00	\$20.00
- Office Park	\$16.50	\$18.50
Industrial Market		
Annual Construction (sq.ft.)	4,140,000	1,680,000
- Industrial Space	3,990,000	1,610,000
- Hybrid Industrial/Office Space	150,000	70,000
Annual Absorption (sq.ft.)	—	2,360,000
Vacancy Rate	—	3.5%
Typical Rate for Industrial Leases (per sq.ft.)		
- HighTech/R & D	\$8.50	\$5.25
- General Manufacturing	\$3.75	\$3.40
- Warehouse	\$3.75	\$3.40

Source: ULI 1996; BLS 1990, 1995.

downtown stadium and the civic center is nearly evenly divided between transit and driving. Of all the days of the week, Saturdays have the heaviest ridership. While MetroLink has had significant impact on non-work trips and trips during off-peak times and days to the downtown area, MetroLink has had only marginal impact on mode split for work trips. Driving alone remains the predominant method for getting to work in St. Louis.

Transportation and Land Use Planning and Policy

According to local and regional agency staffers, community groups and local and regional government have been active in promoting transit, specifically MetroLink, and in encouraging development near transit. They say the city fathers of St. Louis would like to stimulate downtown activity by revitalizing the downtown with mixed-use commercial, retail, and residential development, especially near the downtown MetroLink stations. The East-West Gateway Coordinating Council (St. Louis' MPO) works to create situations and programs that decrease economic disparity and unemployment, and revitalize blighted areas through better transportation planning, including supporting transit-oriented development. Citizens for Modern Transit, a local transit advocacy group, lobbies local, state, and federally elected and appointed officials for support, and conducts outreach to local citizens. Also, informal groups of future station-area residents in St. Clair county are working to guide development to be more transit-oriented around the extension stations.

Few transit-linked land use changes have occurred yet in or around the light-rail station-areas. The light-rail line alignment goes through urban areas that do not offer much opportunity for transit-oriented in-fill development, as these areas tend to already be developed, and, regardless of light-rail, there is very little new real estate activity occurring in these areas. Also, since the system only came on line in 1993, it may be too soon to see land use impacts. Agency staff note that real estate financiers and developers were skeptical that the light-rail system would be implemented successfully and were reluctant to commit to expensive projects that would rely on unproven ridership. Given the success of MetroLink's first phase, however, financiers, developers, planners, and zoning boards are now focusing attention on the areas surrounding future stations on the St. Clair extension.

There are no solid plans for any significant land use changes in existing station-areas yet, though a number of individual projects have been proposed. Most of these proposed projects are not specifically transit-oriented, and may have occurred whether or not the light-rail station was present.

Development Examples

Laclede's Landing. After the passage of a statewide gaming initiative in 1995, St. Louis attracted a number of riverboat casinos to its downtown waterfront on the Mississippi River. Casino patrons have increased transit ridership during off-commute times, and increased foot traffic and restaurant business in the downtown area. Currently, downtown activity on evenings and weekends is limited to the casinos and the sporting arena. The city fathers would like to stimulate further activity during these times through further revitalization of the downtown with mixed-use commercial, retail, and residential development. However, there has so far been little commercial or retail impact, and no housing or residential impact.

Wellston. The long-abandoned Wagner Electric Company facility adjacent to the Wellston station has recently been renovated and existing infrastructure restored. The facility houses the Cornerstone Project, an educational and job placement center for training unemployed unskilled workers and retraining unemployed former aerospace workers. Social and support services, including infant care, counseling, and mentoring, are also be offered at the facility. The \$6 million project was funded by a \$4.5 million grant

from the Department of Commerce and a \$956,000 grant from the FTA's Liveable Communities Initiative. The FTA grant provided for construction of improved transportation access from the Wellston neighborhood to the Cornerstone Project and to the MetroLink station.

Central West End. A new hotel is planned in conjunction with an existing hospital complex. It is not clear that the hotel would generate significant ridership for light-rail, or that the light-rail station played any role in site selection for the hotel.

TORONTO

Demographics and the Economy

Toronto, located on the northwestern shore of Lake Ontario and spanning 37 square miles, is Canada's largest municipality. Municipal population was 635,395 in 1990, more than 60,000 less than the city's historical high of 699,130 in 1942. Although the city has experienced significant urban-to-suburban migration in recent years, strong immigration from other parts of Canada to Toronto have contributed to a modest population growth rate since the early 1980s. The Toronto metropolitan area includes the municipality of metropolitan Toronto and four surrounding regions: Peel, York, and portions of Halton and Durham.

Toronto is considered the economic center of Canada; Toronto is the country's principal industrial center, principal financial and banking center, the largest metropolitan retail market, and the largest employment market. The region's diverse economic base consists of manufacturing, transportation, financial services, media and communications, and retailing activity. Toronto lost 200,000 jobs during the 1990-91 recession, accounting for 10 percent of Canada's national total, and has since been recovering slowly. In efforts to refine core activities, the federal government is expected to eliminate 45,000 public service jobs by 1998.

The Real Estate Market

Since the recession, housing construction and average resale prices have dropped. Decreasing apartment vacancies and affordable home-ownership have led first-time home buyers to control 60 percent of sales. In Toronto's suburbs, large tracts of undeveloped land are still available.

Throughout the 1980s an average of 1.95 million square feet of retail space was added to the market each year, mostly in the form of regional and strip-shopping centers. Since the recession, however, new retail development has essentially halted. Office vacancy rates are beginning to decline, marking a rebound from the devastating effects of the recession. Downtown Class A vacancy rates are among the lowest at 13.2 percent. The suburban office vacancy rates are higher at an average of 16.7 percent, and reaching as high as 28 percent in Etobicoke. However, government layoffs, downsizing of public utilities, and restructuring within the financial services and insurance industries will likely slow the recovery.

Toronto's traditional manufacturing base, still viable in the 1980s, is now gone. Warehouse distributors and custom manufacturers have taken their place. This transition has sparked a proliferation of design/build projects in the Toronto area. Companies seeking central locations are retrofitting some of Toronto's older buildings downtown. Buildings downtown are increasingly being converted into recreational and cultural complexes as well.

The Transit System

The Toronto Transit Commission (TTC) opened Canada's first subway line, the Yonge line, in 1954, and has been continually expanding the system ever since. Metropolitan Toronto is served by a 34.2-mile, 60-station, high-capacity, conventional heavy-rail subway fully integrated with 51.3 miles of tramway and light-rail lines and extensive bus services. TTC heavy-rail serves over 150 million passengers annually; TTC light-rail and tramways serve an additional 50 million. The TTC operates buses and transit throughout the central business district and metropolitan Toronto area, providing regional coverage, while GO

Toronto Real Estate Markets		
	1990	1995
Population	3,751,000	—
Nonagricultural Employment	1,765,000	2,117,000
Unemployment Rate	—	—
Housing Market		
Annual Construction Units	18,828	14,175
- Single-family	14,480	11,725
- Multifamily	4,348	2,450
Typical Sales Price		
- Detached Single-family	\$188,000 - 400,000	\$160,000 - 280,000
- Townhouses	\$146,000 - 400,000	\$110,000 - 235,000
- Apartment Condominiums	\$125,000 - 285,000	\$75,000 - 180,000
Typical Rent (new units)		
- One Bedroom	\$559	\$650
- Two Bedroom	\$689	\$800
Rental Vacancy Rate	—	—
Shopping Center Market		
Retail Sales (millions)	\$28,228	\$32,000
Annual New Construction (sq.ft.)		
- Regional Centers	770,000	0
- Nonregional Centers	1,153,000	—
Vacancy Rate	—	—
- Regional Centers	—	—
- Nonregional Centers	—	—
Typical Rate for Leases (per sq. ft)	—	—
- Regional Centers	—	—
- Nonregional Centers	—	—
Supermarkets	—	—
Cleaners	—	—
Office Market		
Annual Construction (sq.ft.)	9,484,000	0
Annual Absorption (sq.ft.)	5,048,000	1,542,000
Vacancy Rate	12.9%	16.7%
Typical Rate for Office Leases (per sq.ft.)		
- Downtown	\$44.00	\$33.00
- Suburban High Rise	\$35.00	\$20.00
- Office Park	\$18.00	\$14.00
Industrial Market		
Annual Construction (sq.ft.)	6,900,000	4,850,000
Annual Absorption (sq.ft.)	9,900,000	8,642,000
Vacancy Rate	7.0%	8.8%
Typical Rate for Industrial Leases (per sq.ft.)		
- High-Tech / R&D	\$4.75	\$4.25
- General Manufacturing	\$4.00	\$3.00
- Warehouse	\$4.00	\$3.50

Source: ULI 1996.

Transit primarily serves long-distance commuters with 223.7 miles of interregional rail service. Average weekday ridership on GO Trains exceeds 120,000 passengers.

Transportation and Land Use Planning

Traditionally, the TTC and GO Transit have focused on responding to growth patterns, rather than planning. The Metropolitan Toronto City Plan designates areas along the transit lines as suburban city centers, major, or intermediate. The local municipalities then conform to the Metropolitan City Plans and develop more detailed, secondary plans for city centers. Two stations designated as Major Centres, and discussed further below as examples, include the North York City Centre and the Scarborough Centre. These major centers are to serve as focal points of business, government, and community activity, and function as transportation hubs for local surface transit. The area between Kipling and Islington Stations in Toronto is designated as an Metropolitan Intermediate Centre. Intermediate centers are similar to major centers in focus, but smaller in scale. At Kipling-Islington, a 550,000-square foot Shipp Centre office and retail development was constructed in the form of two towers with direct access to the subway.

Toronto's rapid transit system has played a tremendous role in steering the location of new development. Research and statistics for the Toronto area show that in the 30-year time period since transit was initiated, from 1954 to 1984, "half of all new apartment construction was put in place within walking distance of rapid transit." 1987 estimates show that approximately \$30 billion in new buildings have been placed along and adjacent to Toronto's rapid transit lines. Between 1954 and 1984, approximately "90 percent of all new office construction occurred adjacent to downtown subway stations" and at stations just north of the downtown along the Yonge line.

A TTC study completed in 1987 titled, "Metropolitan Toronto: The Transit/Development Connection," researched the influence of Toronto's transit system in channeling and stimulating development. Developers cite proximity to Toronto's transit system as a very important consideration of future development locations, sometimes even an prerequisite for future development. Mayors of the municipalities which Metropolitan Toronto serves also recognize the important link between transit and urban structure and vitality. According to the same report, "Clearly, the consensus among leading spokespersons in business, real estate development and government is that Metropolitan Toronto has one of the world's premier transit systems which, in turn, has helped to make Metro the great city it is."

The TTC Yonge and University lines in downtown Toronto together with supportive land use policies have been quite successful in concentrating high-density building along transit corridors. The transit lines were initially placed in already well-defined commercial and streetcar corridors. Joint development projects (i.e. walkways, elevators, connections) have occurred primarily in the financial district downtown. Given Toronto's frigid winter climate, an "underground city" of pedestrian walkways and shopping areas linking much of the downtown development and the subway system is well utilized. Dundas and Queen Stations in downtown Toronto provide easy access to the Toronto Eaton Centre — an urban shopping center composed of over 300 shops and restaurants spanning two city blocks. In 1987, over 75 percent of the Eaton Centre's total customers were estimated to have arrived by transit.

Away from the downtown, development has been spotty. The subway has not brought any one distinct pattern of growth. The local government and developers play direct roles in station-area development, whereas the TTC is mainly responsible for the construction and operation of stations. Thus, development hinges on local politics and the abilities of developers to find and assemble land. At some stations, high-density development is not suitable, or is not permitted by local zoning controls. At a few stations, Eglinton and St. Clair, successful development has occurred because the station is located in traditional retail areas that were

already emerging as commercial centers. In high-end residential neighborhoods, Rosedale and Summerhill Stations for example, transit stations have had minimal impacts on development. In other stable residential areas, Runnymede Station, developers have had problems assembling land. In some low-density residential areas, such as North York and High Park, local municipalities have developed town-center Metropolitan plans of high-density "tower in a park" development focused around transit stations. Although the high-density housing certainly favors transit ridership, local residents have generally opposed the highrise apartments when first proposed, fearing "riffraff" and worsened traffic conditions. High-density housing in the form of fashionable three- to four-story condominiums seems to work better, as is the case at King Station. At suburban Yorkdale Station, the Yorkdale Shopping Centre, a major regional 1,300,000-square foot, 300-store shopping mall, is directly linked to the subway and regional bus terminal. Also, it is noted that many of Toronto's outlying transit stations feature commuter parking, kiss & ride loops, and smooth subway/surface transfer connections.

In 1991, GO Transit, the Ministry of Transportation, and Metropolitan Toronto directed a Metropolitan Toronto Commuter Rail Station Location Study to determine future land use and transit relationships. As stated in the study's final report, "The location of stations needs to be cognizant of operational considerations, but must relate primarily to two goals: the improvement of the total transit network; and the development of transit supportive land use patterns." The parties involved in the study focused on encouraging and increasing total transit usage, while taking advantage of existing and proposed facilities on both TTC and GO Transit networks. Wherever possible, connections between TTC and other local surface transit routes would be maximized. An important consideration in determining transit station locations is the potential for development opportunities and intensity. At locations where high densities are not permitted, shuttle bus services have been considered. The study recognizes that the ability to either walk or take a short, direct bus ride to a transit station enhances the attractiveness of transit as the preferred commuting mode. GO Transit planners have ultimately hoped that the transit system would serve both outbound and inbound commuting trips. "The combination of transit oriented development at the origin of a trip and transit oriented development at the destination would provide the best possible attractiveness for transit usage."

Development Examples

High Park Station. High Park station is located west of Toronto's downtown in the suburbs. At least six highrise (15- to 20-story) rental apartment buildings were constructed near the transit station during the 1960s in an otherwise single-family detached-home residential neighborhood — a "tower in a park" concept. Developers and the city put forth a cooperative effort, and the transit ridership impacts are considered very favorable. During the planning stages, however, the highrise apartment projects were not received well by community as a whole. Local residents disliked the thought of highrise projects and the injection of renters overloading schools and streets that would accompany. In the early 1970s, for example, a westward extension of the Quebec-Gothic highrise apartment complex became an item of contention. Concerns focused on land assemblage, demolition of existing houses, and the intrusion of further highrise development in an existing residential community. In 1974, the Quebec-Gothic Working Committee was formed by a group of representatives from local residents' associations, Gothic Developments Limited, City Planning Staff, and a local Alderman to resolve the various issues. Supported with funds from the city, an architectural consulting firm was also brought on board. After a year of negotiations, a compromise plan was reached in 1975 allowing the construction of three apartment towers, but significantly altering the original site plan. The new plan replaced the two proposed 25-story towers with 533 two- and three-bedroom units, while preserving an existing string of houses.

North York Stations — Sheppard, North York Centre, and Finch. The local municipality of North York, located north of Toronto's downtown along the Yonge subway line, proposed a city center plan in

the 1970s, and constructed the North York Centre Station between two existing subway stations, Sheppard and Finch, already located along the line. North York Centre Station was positioned adjacent to the North York City Hall and facilitated a \$250 million mixed development consisting of a 250-room hotel, two office towers, a shopping galleria, and a \$20 million library, all flanking a central open civic space. Most of the new developments are connected via underground pedestrian passages.

Scarborough Centre Station. At the Scarborough Centre Station northeast of Toronto's downtown in the suburbs, direct connections to a regional shopping mall and City Hall are in place. Offices and residential highrises are located next to station in an emerging commercial, retail, and municipal center. The plan was met with some local opposition, but residents in the area are further removed from the station site. Unlike the traditional grid pattern in North York, for example, Scarborough maintains a cul-de-sac street pattern. A possible line extension from Scarborough, complete with high-density mixed-use development, has been stalled due to lack of funding. According to TTC officials, the market seems to have shifted from highrise housing to three- and four-story townhouses.

King Station. At King Station in downtown Toronto, a market square atmosphere has evolved. The station is lined with upscale five- to six-story condominiums. The market for this style of housing downtown seems to be prospering.

Queen, College, and St. Clair Stations. Queen, College, and St. Clair stations on the Yonge subway line are located along main streets with high commercial activity. Development is being encouraged along main commercial streets, where good street-level transit service is in place to feed the transit stations. By revitalizing the traditional linear streets with mixed use, planners aim to make best use of transit stations. However, eased parking requirements have been met with some local opposition, since parking along these commercial corridors is already scarce.

VANCOUVER

Demographics and the Economy

Vancouver is located in the southwest corner of the British Columbia mainland, just north of the Canada-U.S. border. The Greater Vancouver Regional District (GVRD) includes 20 municipalities: Anmore, Belcarra, Burnaby, Coquitlam, Delta, Langley City, Langley Township, Lions Bay, Maple Ridge, New Westminster, North Vancouver, District of North Vancouver, Pitt Meadows, Port Coquitlam, Port Moody, Richmond, Surrey, Vancouver, West Vancouver, and White Rock. After nearly 10 years, the steady wave of in-migration to Vancouver slowed in 1995, for a 1995 GVRD population of 1.8 million. The population is expected to increase 27 percent over the next 10 years to 2.3 million by 2006.

Business and personal services industries, especially financial services, have replaced primary resource industries as the region's most important economic sector. As a designated International Finance Center, Vancouver can offer tax incentives to attract international financial service corporations. With one of the world's largest ports, exports are also a significant contributor to the area's economy with major trading partners in the Pacific Rim, Europe, and the U.S. After a few years of post-recession economic growth in the early 1990s, economic growth is expected to slow in the mid 1990s.

The Real Estate Market

Commercial real estate markets — downtown and suburban, retail and office — all slowed in the mid-1990s. The office market has been relatively inactive, with no new construction and few new tenants. Office vacancy rates are near 8 percent and are expected to continue falling. Some new suburban office construction is anticipated.

Despite economic recession, retail sales remained strong through the early 1990s, experiencing four consecutive years of growth. Most of this growth was due to the success of big-box retailers. Other than big-box-anchored developments, there has been a general lack of new retail construction. Construction of regional shopping centers has hit an historical low. The retail market is expected to remain slow in the short term, but is expected to rebound with increased tourism and a revival of the housing market.

With relatively high interest rates and general economic uncertainty, the residential market also slowed in 1995. The residential market is expected to improve if interest rates fall. Meanwhile, the rental housing market remained competitive. While single-family homes and downtown condominiums have become increasingly oversupplied, the rental housing market supply has been contracting. With no new units built, and some units converted from apartments to condominiums, vacancy rates remained extremely low at 1.3 percent.

The Transit System

Transit service in Vancouver is governed by two agencies: British Columbia Transit (BC Transit) and the Vancouver Regional Transit Commission. BC Transit operates transit services including bus, trolleybus, suburban rail, and ferry service. The Vancouver Regional Transit Commission oversees policy and funding for transit in the Vancouver metropolitan area. Vancouver's Advanced Light Rapid Transit (ALRT) system, the SkyTrain, was completed in 1986, in time to serve visitors to Expo 86, the World Fair. Operated under

Vancouver Real Estate Markets

	1985	1990	1995
Population	1,337,000	1,543,000	1,817,000
Nonagricultural Employment	672,100	802,400	885,000
Unemployment Rate	—	—	—
Housing Market			
Annual Construction Units	11,315	18,228	12,864
- Single-family Detached	6,318	6,316	4,042
- Single-family Attached	248	591	537
- Multifamily	4,749	11,321	8,285
Typical Sales Price			
- Detached Single-family	—	\$289,000	\$379,433
- Townhouse	—	\$149,900	\$218,069
- Apartment Condominiums	—	\$125,000	\$167,613
Typical Rent (new units)			
- One Bedroom	\$400	\$548	\$628
- Two Bedroom	\$695	\$723	\$809
Rental Vacancy Rate	2.8%	0.9%	1.3%
Shopping Center Market			
Retail Sales (millions)	\$7,973	\$13,982	\$16,414
Annual New Construction (sq.ft.)			
- Regional Centers	708,000	0	72,000
- Nonregional Centers	1,242,000	0	38,000
Vacancy Rate			
- Regional Centers	—	—	2.8%
- Nonregional Centers	—	7.0 - 8.0%	2.8%
Typical Rate for Leases (per sq ft)			
- Regional Centers	\$25.00 - 45.00	\$30.00 - 50.00	\$41.50
Women's Ready-to-Wear	\$25.00 - 45.00	\$30.00 - 50.00	\$41.50
Men's Wear	\$25.00 - 45.00	\$30.00 - 50.00	\$41.50
Family Shoes	\$25.00 - 45.00	\$30.00 - 50.00	\$41.50
- Nonregional Centers			
Supermarkets	\$8.00 - 12.00	\$13.00 - 16.00	\$17.00 - 20.00
Cleaners	\$10.00 - 14.00	\$16.00 - 23.00	\$18.00 - 25.00
Office Market			
Annual Construction (sq. ft)	1,159,500	780,700	589,380
- High Density	—	468,389	368,000
- Low Density	—	312,311	221,380
Annual Absorption (sq. ft)	616,000	521,159	850,000
Vacancy Rate	18.6%	9.0%	10.1%
- Downtown	—	10.2%	12.0%
- Suburbs	—	8.0%	6.4%
Typical Rate for Office Leases (per sq.ft.)			
- Downtown	\$16.00 - 27.00	\$20.00 - 30.00	\$14.00 - 22.00
- Suburban High Rise	—	\$14.00 - 25.00	\$16.00 - 21.00
- Office Park	—	\$9.00 - 12.00	\$16.00 - 18.00
Typical price for Land (per sq.ft.)			
- Downtown	\$200 - 700	\$100 - 550	\$200 - 600
- Suburban High Rise	\$30.00 - 45.00	\$50.00 - 75.00	\$75.00 - 100.00
- Office Park	\$8.00 - 15.00	\$15.00 - 25.00	\$20.00 - 25.00
Industrial Market			
Annual Construction (sq.ft.)	—	4,200,000	3,853,191
Annual Absorption (sq.ft.)	—	3,799,712	4,250,000
Vacancy Rate	—	4.8%	4.0%
Typical Rate for Industrial Leases (per sq.ft.)			
- High-Tech/R &D	—	\$9.50 - 11.00	\$5.75 - 11.00
- General Manufacturing	—	\$4.00 - 4.75	\$4.75 - 8.00
- Warehouse	—	\$4.75 - 5.75	\$4.00 - 6.50
Typical Price for Land (per acre)			
- Industrial Parks	—	\$200,000 - 300,000	\$325,000 - 450,000
- Hybrid Industrial/Office Parks	—	\$500,000 - 550,000	\$650,000 - 750,000

Source: ULI 1996.

contract by the British Columbia Rapid Transit Company, the SkyTrain system consists of 17.7 miles of trackway and 20 stations. SkyTrain was designed to accommodate 100,000 daily passengers. However, during Expo 86, SkyTrain carried over 160,000 riders on some days, for a total of 32 million passenger trips in 1986. Since then, ridership has hovered around 20 million passengers annually.

Transportation and Land Use Planning and Policy

Vancouver, as well as the whole of British Columbia, has been very aggressive in integrating land use and transportation decision-making to create compact urban development. Recognizing that transit could have dramatic impact on Vancouver's future development, in 1981, five years prior to SkyTrain inauguration, the City Council assigned planning staff to enhance development opportunities near SkyTrain stations. Local area planning programs were established to prepare community plans for areas within a 10 to 15 minute walk of SkyTrain stations.

In 1996, a "concentrated growth option" won public support and eventually unanimous approval of the 20 communities in the Greater Vancouver Regional District (GVRD). Coupled with the "Livable Region Strategic Plan" (primarily a transportation plan) and British Columbia's Growth Strategies Act (passed in 1995), Vancouver is committed to a more compact and efficient metropolitan region and development that is focused on downtown areas and discouraged in outlying suburbs. Plans call for a 20 percent reduction in highway traffic, a 37 percent reduction in vehicle emissions, a 30 percent reduction in capital outlays for roads, and a 33 percent reduction in the conversion of rural land to developed land, by 2021. Strategies to meet these goals include:

- (1) development of a 'green zone' of parks, watershed, and farmland around Vancouver, that will serve as a long-term boundary for urban growth,
- (2) building of 'complete communities' focused around transit-connected town centers with housing and jobs in close proximity, and
- (3) transformation of the existing regional transportation system into 'a transit-oriented and automobile-restrained' system, with more light-rail and bus connections, road use priority for high occupancy and commercial vehicles, local streets that favor transit, bicycles and pedestrians, and letting congestion discourage some auto use.

At the local level, a number of cities along the SkyTrain line offer bonuses to developers for locating projects near SkyTrain stations. Bonuses have included relaxing the limit on the number of dwelling units per acre, relaxing the parking requirements, and increasing the allowable floor-to-area ratio. Cities have also worked with developers to rezone areas from industrial use to allow for residential and commercial uses.

While there is not a lot of development going on now, there was a tremendous amount of development during the late 1980s and early 1990s. In SkyTrain's first five years of operation, development and construction costs of projects (either completed or underway at that time) within a 10- to 15-minute walk of a SkyTrain station totaled over \$5 billion. These projects added considerable office, retail, hotel, restaurant, entertainment, and residential space to the city of Vancouver, revitalized downtown New Westminster, and created a new downtown in Burnaby.

Development Examples

Stadium. Pacific Place is a mixed-use development located on the 204-acre site of Expo 86. Two-thirds of the site is designated for residential use, including 7,600 dwelling units and three million square feet of commercial space, including office and retail space, and two hotels. The project also includes open space,

roadways, parking, and government-assisted housing for low-income residents. The project was planned to be phased in over 10 to 12 years; construction began in the early 1990s.

New Westminster and Columbia. In 1978, the waterfront area of the City of New Westminster was designated a redevelopment area. The city assembled the land, rezoned the area from industrial and port use to high-density residential use, and solicited development proposals. However, it wasn't until the mid-1980s that the waterfront area became attractive to developers and the area began to boom with residential condominium development. In 1988, additional land was rezoned (also from industrial to high-density residential) as part of a second phase of redevelopment. The waterfront area now has shops, hotels, office space, a public market with fish, meat, and produce vendors and other shops and stalls, a marina, restaurants, and numerous residential developments. Two of the residential projects in the area are: the Lido, a 148-unit condominium complex, and the Quayside II, a 1,400-unit housing development on 23 acres.

Gateway and Whalley. Due to land constraints in the Vancouver metropolitan area, the district of Surrey (15 to 20 miles southeast of downtown Vancouver) has been viewed as an area with high potential for future regional growth. The Gateway and Whalley stations are part of a large joint-development project with Intrawest Development. Intrawest paid BC Transit \$6 million in addition to paying for land acquisition for the stations and right-of-way. In return, Intrawest gained the right to develop the sites with high-density commercial and residential uses linked directly to the station. The 21-acre site includes 1.2 million square feet of commercial space, 1.3 million square feet of office space, and 1.4 million square feet of residential space (for 1,500 dwelling units, or about 7,500 people).

Bibliography

General

- Bureau of Labor Statistics, Local Area Unemployment Statistics. Selective Access 1990, 1995.
<http://stats.bis.gov/lauhome.htm>.
- Lamont, Juliet, Laura Melendy, Kaveh Vessali, and Elizabeth Deakin. "Metropolitan Profiles: Development Patterns, Socio-Economic Characteristics, and Transit Use 1960-1995." Working Paper No. 687. Berkeley, CA: IURD, June 1997.
- ULI — The Urban Land Institute. *ULI Market Profiles 1996: North America*. Washington, D.C.: ULI — The Urban Land Institute, 1996.

Atlanta

- Bernick, Michael, and Peter Hall. "The New Emphasis on Transit-Based Housing Throughout the United States." Working Paper No. 580. Berkeley, CA: IURD, August 1992.
- City of Atlanta, phone interviews.
- Community Activist, Lindbergh Station, phone interview.
- Cook, Nathaniel W. "Community; Brookhaven's a Hot Spot; Its Attractions, Plus Buckhead Crowding, Ignite a Boom." *The Atlanta Journal and Constitution*. All editions. Extra, 03E. Thursday, March 13, 1997.
- "In Your Neighborhood; Community Topics; The City." *The Atlanta Journal and Constitution*. All editions. Local News, 02B. Thursday, June 6, 1996.
- Metropolitan Atlanta Rapid Transit Authority (MARTA), phone interviews.
- Nelson, Arthur C., and Thomas L. Sanchez. "The Influence of MARTA on Population and Employment Location." Preprint, Paper No. 97-0133. Washington, D.C.: TRB, January 1997.
- Salter, Sallye. "Business Report; On Commercial Real Estate; Downtown Retail Space Plentiful." *The Atlanta Journal and Constitution*. All editions. Business, 02H. Sunday, September 22, 1996.
- _____. "Business Report; On Commercial Real Estate; Post Spends \$23 Million on New Sites." *The Atlanta Journal and Constitution*. All editions. Business, 02G. Sunday, September 1, 1996.
- Saporta, Maria. "Many Companies Use MARTA Program." *The Atlanta Journal and Constitution*. All editions. Business, 03E. Wednesday, February 12, 1997.

Baltimore

- Apperson, Jay. "Owings Mills transit hub seeks growth; Leasing air rights at Metro lot proposed for development; Increase in Ridership Seen; Glendening commits \$500,000 to study station area." *The Baltimore Sun*. Final Edition. Local (News), 1B. Monday, January 29, 1996.
- Maryland Mass Transit Administration (MTA), phone interviews.
- Morgan, David G. "Design/Build Goes Light." *Civil Engineering*, February 1997.
- "Planning for the 21st century; Anne Arundel County: Residents can help shape land-use maps at hearings this week." *The Baltimore Sun*. Arundel Edition. Editorial, 8A. Tuesday, April 23, 1996.

Boston

- Boston Redevelopment Authority, phone interviews.
- "Cable Cars to Shuttle Commuters to 'T,' offer a Mystic River View." *The Boston Globe*. Economy, 50. May 9, 1996.
- MBTA Home Page: <http://www.mbta.com>.
- Metropolitan Boston Transit Authority (MBTA), phone interview.
- Metropolitan Area Planning Council, phone interview.

Buffalo Sources

City of Buffalo, Division of Planning, phone interview.

"Ideas for Area Around Arena Can Give Old Buffalo New Life; Planners Wisely See Potential in Antique Buildings." *The Buffalo News*. Editorial Page, 2B. July 11, 1996.

Niagara Frontier Transit Authority (NFTA), phone interview.

"Remaking Buffalo's Downtown Waterfront," Master Plan November 1996.

"Rail Transit in Buffalo," <http://cs1.presby.edu/~jtbell/transit/Buffalo/>.

"Small But Necessary Steps as Plans for the Inner Harbor Project Take Shape." *The Buffalo News*. Prospectus 197, 7PD. January 26, 1997.

"Waterfront Master Plan Advances with Approval by Development Downtown." *The Buffalo News*. Local, 6D. February 4, 1997.

Chicago

Cervero, Robert. "Transit-Supportive Development in the United States: Experiences and Prospects." Monograph No. 46, 65-74. Berkeley, CA: IURD, 1994.

Coen, Jeff. "Railway Plaza Plan Gets Further Study." *Chicago Tribune*. Metro Du Page Section. April 27, 1997.

Jane's Urban Transport Systems 1996-97, 15th ed. Chris Bushell, ed. Coulsdon, Surrey, UK: Jane's Information Group Limited, c1996.

Siewers, Alf. "Station Potential Crisscrosses Region." *Chicago Sun-Times*, February 25, 1995.

_____. "Neighborhoods Ride the Rails; City, Suburbs Alike Revisit Village Hub Idea." *Chicago Sun-Times*, February 25, 1995.

Steele, Jeffrey. "Neighborhood Spirit Flourishes in the Parks; Civic-minded Attitude Keeps Communities Vibrant." *Chicago Tribune*. North Park/Albany Park Section. March 19, 1997.

Cleveland

Bullard, Stan. "Waterfront Line already making waves in Flats." *Crain's Cleveland Business* 16 (September 18-24, 1995): 1, 33.

Greater Cleveland Regional Transit Authority (RTA), phone interviews.

Hagan, John. "Rapid Connects with City's Hopes; East Cleveland Praises Station, Day Care Plans." *The Plain Dealer*. Metro section. October 24, 1996.

Private developer, phone interview.

"RTA's Waterfront Line Update." *Waterfront Waves* 2 (Spring 1996).

"Tower City Center." *The Urban Land Institute Project Reference File* 24 (Jan-March 1994).

"Waterfront Line Has Big Impact Before Ever Leaving Station." *PreView* 2 (Spring 1996).

Dallas

Brown, Steve. "A Boom on the Quiet Side: Caution Marks a Thriving Industry." *The Dallas Morning News*. Home Final Edition. Business, Real Estate, 1D. Friday, January 3, 1997.

_____. "Equitable Negotiating to Sell Bryan Tower Highrise Targeted for Renovation, Brokers Say." *The Dallas Morning News*. Home Final Edition. Business, 1D. Thursday, December 5, 1996.

_____. "Housing Planned at Old Sears Site; Hotel, Offices Also Included in Renovation." *The Dallas Morning News*. Home Final Edition. Business, Special Report, 1D. Friday, September 20, 1996.

_____. "Partnership Purchases 4 West End Buildings, One Site to be Converted into Condominiums." *The Dallas Morning News*. Home Final Edition. Business, 1D. Tuesday, July 30, 1996.

_____. "Tracking DART's Impact: New Rail Line Catching Developers' Attention." *The Dallas Morning News*. Home Final Edition. Business, 1D. Friday, February 7, 1997.

Dallas Area Rapid Transit (DART), phone interviews.

DART. Transit System Plan, Approved November 14, 1995. Dallas, TX: DART, 1995.

_____. In Motion. Summer 1996. Dallas, TX: DART, 1996.

Williams, Melissa. "In Big D, Commuters Now DART to Work." Associated Press. SVRT, D5. February 24, 1997.

Detroit

City of Detroit, phone interviews.

Detroit Department of Transportation (D-DOT), phone interviews.

Detroit Free Press, phone interview.

Detroit Transportation Corporation (DTC), phone interviews.

Meredith, Robyn. "Motown Enters the Zone." *New York Times*. Business section. April 11, 1997.

Suburban Mobility Authority for Regional Transportation, phone interviews.

Houston

Houston Metro, Department of Real Estate, phone interview.

Houston Metro, Planning Department, phone interview.

Los Angeles

Chu, Henry, and Aaron Curtis. "Making way for transit town." *Los Angeles Times*. Part A. March 19, 1995.

Los Angeles County Metropolitan Transportation Authority (MTA), phone interviews.

_____. *MTA Joint Development Policies: Transit-Oriented Development, Direct Station Area Access and Connection Fees, Child Care Facilities, Land Use/Transportation Policy, Transit Village Development Planning Act.*

_____. *MTA Joint Development Accomplishments.*

_____. *MTA Joint Development-Project Development: Development Transactions Completed or Pending, Development Transactions in Formation, Station Area Developer Selection Process, Station Area Development Framework, Surplus Properties and Other Transit Oriented Development.*

_____. *MTA Joint Development-Project Development/Development Transactions in Formation: Hollywood/Western Metro Rail Red Line Station, Westlake/MacArthur Park Metro Rail Red Line Station.*

_____. *MTA Joint Development-Project Development/Station Area Developer Selection Process: Wilshire/Vermont Metro Rail Red Line Station, Wilshire/Western Metro Rail Red Line Station, Hollywood/Vine Metro Rail Red Line Station, Hollywood/Highland Metro Rail Red Line Station, Pasadena Del Mar Metro Rail Blue Line Station.*

_____. *MTA Joint Development-Project Development/Station Area Development Framework: Vermont/Beverly Metro Rail Red Line Station, Vermont/Santa Monica Metro Rail Red Line Station, Vermont/Sunset Metro Rail Red Line Station, Universal City Metro Rail Red Line Station, North Hollywood Metro Rail Red Line Station, Pasadena Chinatown Metro Rail Blue Line Station, Pasadena Fillmore Metro Rail Blue Line Station, Pasadena Sierra Madre Villa Metro Rail Blue Line Station, Metro Rail Red Line Segment 3-East Side Extension, Long Beach Metro Rail Blue Line Affordable Housing.*

_____. *MTA Joint Development-Transactional Models: Conventional Long-Term Ground Lease, Joint Powers Agreements with Public Agencies, Co-Ventures, Credit Enhancements, Other.*

TransitVision Report: Executive Summary. Santa Fe Transportation Center Community Charrette. September 19, 1995.

Miami

Bernick, Michael, and Peter Hall. "The New Emphasis on Transit-Based Housing Throughout the United States." Working Paper No. 580. Berkeley, CA: IURD, August 1992.

Burkowitz Development Group, phone interview.

Green Company, phone interview.

Metro-Dade Transit Agency (MDTA), phone interview.

Philadelphia

Pennsylvania Environmental Council, phone interviews.

Southeastern Pennsylvania Transit Authority (SEPTA), phone interviews.

ULI Downtown Development Handbook. Washington, D.C.: ULI, 1980.

Pittsburgh

"Municipal Roundup." *The Pittsburgh Post-Gazette*. South Edition. Metro, S9. Wednesday, May 3, 1995.

Port Authority of Allegheny County (PAAC), phone interviews.

Wohlwill, David. "Development Along a Busway: A Case Study of Development along the Martin Luther King, Jr. East Busway in Pittsburgh, Pennsylvania." Pittsburgh, PA: Port Authority of Allegheny County. nd.

Portland

1000 Friends of Oregon, phone interview.

Arrington, Jr., G.B. *Beyond the Field of Dreams: Light-Rail and Growth Management in Portland*. Portland, OR: Tri-Met, September 1996.

Bernick, Michael, and Robert Cervero. "Transit-Based Residential Development in the U.S.: A Review of Recent Experiences," Working Paper No. 611. Berkeley, CA: IURD, 1994.

_____. *Transit Villages in the 21st Century*. New York City, NY: McGraw-Hill, 1997.

Portland Metro, phone interviews.

Tri-County Metropolitan Transportation District (Tri-Met), phone interviews.

Tri-Met. *Light-Rail Station-Area Development Profiles*. Portland, OR: Tri-Met, various dates (Beaverton Creek, February 1996; Downtown Beaverton, June 1995; Downtown Hillsboro, June 1995; Lloyd District, June 1995; Orenco/NW 231st Ave., June 1995).

Sacramento

Bernick, Michael, and Peter Hall. "The New Emphasis on Transit-Based Housing Throughout the United States." Working Paper No. 580, 19-27. Berkeley, CA: IURD, August 1992.

Brilliot, Michael. "An Analysis of Opportunities and Zoning Barriers to Transit-Oriented Development in Sacramento and Recommended Zoning Changes." Professional Report for Master in City Planning Degree. Berkeley, CA: DCRP, Spring 1996.

Cervero, Robert. "Transit-Supportive Development in the United States: Experiences and Prospects." Monograph No. 46, 30. Berkeley, CA: IURD, 1994.

Chung, Candice. "New RT Route is Test Site for Planning Effort." *Sacramento Bee*. Neighbors Section. August 4, 1996.

Jane's Urban Transport Systems 1996-97, 15th ed. Chris Bushell, ed. Coulsdon, Surrey, UK: Jane's Information Group Limited, c1996.

"Light-Rail Design Event Set." *Sacramento Bee*. Metro Section. June 8, 1995.

Sacramento Regional Transit District (RTD), phone interview.

Sudermann, Hannelore. "Boosters Urge Homes, Stores Near Light Rail." *Sacramento Bee*. Neighbors Section. June 8, 1995.

San Diego

Bernick, Michael, and Robert Cervero. "Transit-Based Residential Development in the U.S.: A Review of Recent Experiences." Working Paper No. 611. Berkeley, CA: IURD, 1994.

_____. *Transit Villages in the 21st Century*. New York City, NY: McGraw-Hill, 1997.

Hall, Peter, and Michael Bernick. "The New Emphasis on Transit-Based Housing Throughout the United States," Working Paper No. 580. Berkeley, CA: IURD, 1992.

Harpster, David. "Santee Screened for Theater Complex." *The San Diego Union-Tribune*. Ed. 1, Local, B1. Thursday, February 1, 1996.

Metropolitan Transit Development Board (MTDB), phone interviews.

MTDB. Agenda for Executive Committee Discussion, Item No. C5, April 6, 1995, Subject: Otay Ranch Plan Update. San Diego, CA: MTDB, April 1995.

_____. Designing for Transit: A Manual for Integrating Public Transportation and Land Development in the San Diego Metropolitan Area." San Diego, CA: MTDB, July 1993.

_____. San Diego Trolley, Major Station Development Opportunities/MTDB Joint Development Project Sites. San Diego, CA: MTDB, no date.

Pierce, Emmet. "SANDAG for Higher Densities in Housing." *The San Diego Union-Tribune*. Ed. 2,3,4,5, Local, B2. Saturday, February 25, 1995.

Sevrens, Don. "Economic Forecast for 1996: San Diego Bounces Back." *The San Diego-Union Tribune*. Ed. 1,2, Opinion, G1. Sunday, December 31, 1995.

Santa Clara County

"Bay Apartment Communities announces four major financing accomplishments." *Business Wire*. December 19, 1995.

City of San Jose, phone interviews.

Gerston & Associates. *Transit-Based Housing Survey: Executive Summary* (Prepared for Santa Clara County Transportation Agency and Santa Clara Valley Manufacturing Group.) September 1995.

Housing Action Coalition Symposium. *Housing Tour Fact Sheet: Downtown San Jose Infill*. October 23, 1996.

_____. *Housing Tour Fact Sheet: Neighborhood Infill*. October 23, 1996.

_____. *Housing Tour Fact Sheet: Suburban Infill*. October 23, 1996.

Joint Venture: Silicon Valley Network, Inc. *Joint Venture's Index of Silicon Valley*. 1997.

Santa Clara Valley Transportation Agency (VTA), phone interviews.

_____. *Almaden Lake Village*. October 1996.

_____. *Guadalupe Light Rail*. August 1994.

_____. *Ohlone-Chynoweth*. October 1996.

_____. *Rail System TOD Program*. August 1994.

_____. *Tamien Child Care Center*. October 1996.

_____. *Tasman Corridor Project*. August 1994.

_____. *TOD Design Concepts*. July 1994.

Ybarra, Michael. "U.S. cities seek growth limits." *Rocky Mountain News*. June 23, 1996.

Seattle

Metro King County Department of Transportation, phone interviews.

Moriwaki, Lee. "Economic Boom Cuts Office Vacancies." *The Seattle Times*. P. E1. January 21, 1997.

St. Louis

Bernick, Michael, and Robert Cervero. *Transit Villages in the 21st Century*. New York City, NY: McGraw-Hill, 1997.

Bi-State Development Agency, phone interviews.

East-West Gateway Coordinating Council, phone interviews.

Toronto

City of North York, phone interview.

City of Toronto, phone interviews.

City of Toronto Executive Committee Report No. 35. City of Toronto Council Meeting, August 6-8, 1975.

IBI Group. *Metropolitan Toronto Commuter Rail Station Location Study*. Final Report. Toronto: March 1991.

"Info to GO." Quick Facts. Toronto: GO Transit, June 1995.

Jane's Urban Transport Systems 1996-97, 15th ed. Chris Bushell, ed. Coulsdon, Surrey, UK: Janes's Information Group Limited, c1996.

Kurian, George. *World Encyclopedia of Cities*. Santa Barbara, CA: ABC-CLIO, 1994.

"Metropolitan Toronto: The Transit/Development Connection." Toronto: TTC, 1987.

Municipality of Metropolitan Toronto, phone interviews.

Toronto Transit Commission (TTC), phone interviews.

Vancouver

British Columbia Transit (BC Transit), phone interviews.

BC Transit. *SkyTrain: A Catalyst for Development*. Vancouver, BC: BC Transit, 1989.

City of Vancouver. Planning Department. *Nanaimo/29th Avenue Station-Areas Plan, Summary*. Vancouver, BC: City of Vancouver, 1987.

Hall, Peter, and Michael Bernick. "The New Emphasis on Transit-Based Housing Throughout the United States," Working Paper No. 580. Berkeley, CA: IURD, 1992.

Pierce, Neal R. "Vancouver's 21st Century Growth Model." *Nation's Cities Weekly* 19(32): 2. August 12, 1996.

