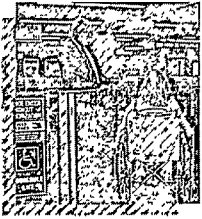


Increased Accessibility



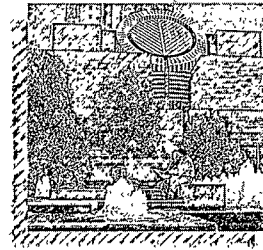
- BART represents an important regional link for seniors, youth, and disabled persons.
- Those riders make 7 million trips on the system every year.
- BART provides a high level of regional access for others who choose not to own an automobile or cannot afford to own an automobile.

Higher Residential and Commercial Property Values

- The average Alameda County home is worth about \$3,700 less for each mile distant from a BART station.
- The average Contra Costa County home is worth about \$3,200 less for each mile distant from a BART station.
- Apartments near BART stations typically rent for 15 to 26 percent more than apartments more distant from BART stations.
- The higher property values of BART-oriented homes and apartments result in higher property tax revenues for cities and counties.
- Rents at office buildings served by rail transit are 10 percent higher on average than their counterparts in other areas.
- Rents and occupancy rates are above average near BART stations in Walnut Creek, Oakland, Fremont, San Francisco, and Berkeley.
- Compelling information about BART and its impact on commercial property values was found in Alameda County.
- Data indicates the lessening effects of BART on property values as distance from service increases.

Retail, Tourism, and Entertainment

- Retail spending by office workers and others who ride BART into San Francisco is estimated at \$400 million annually.
- 39 percent of tourists of U.S. origin use BART as a primary or additional mode of transportation while staying in San Francisco.
- These tourists represent about 10 million of the 11.5 million visitors to San Francisco each year and contribute significantly to the economy of the city, where tourists spend \$3.8 billion annually.



- Many entertainment destinations, such as Sony's Metreon center and the new Pacific Bell Park, in San Francisco have limited automobile access.
- Estimates are that 50 percent of Metreon's 11,000 daily visitors will arrive by public transit.
- BART is a vitally important system for moving people to and from large events.
- Over 20 major annual events in San Francisco are accessible by BART, including the Bay to Breakers (70,000 runners), Carnival (160,000 visitors), Chinese New Year Parade and Celebration (200,000 visitors), the X Games (270,000 visitors), and the San Francisco Lesbian, Gay, Bisexual, and Transgender Pride Parade (700,000 visitors).
- The large number of people who attend these events could not be brought into San Francisco without the high-volume regional service of BART.
- 11,000 of San Francisco's 30,000 hotel rooms are within five blocks of a BART station.

Saving the Air and Roads



■ BART passengers travel about 892 million miles annually on the system. Without BART, most of those miles would be traveled on Bay Area roads and would result in additional pollution from motor vehicles.

■ There is a 99 percent reduction hydrocarbons, 99 percent reduction in carbon monoxide, and 60 percent reduction in nitrogen oxides for the same mileage traveled on an electric rail system versus in an automobile.

■ BART reduces road miles traveled more than any other rail system in the state with a regional ridership base.

Back-Up System in Emergencies

■ BART is an important back-up transportation alternative even for those who do not commute regularly on the system.

■ With the month-long Bay Bridge closure that followed the Loma Prieta earthquake, BART carried 75 percent of all transbay commuters, up from 35 percent before the bridge closure.

■ BART's service during this time helped avert a major economic disruption, tied to the 400,000 people who make the daily transbay commute.

Summary of KEY FINDINGS

Linking People to Jobs



■ BART is the preferred alternative when people otherwise face traffic congestion on the Bay Area's worst commute corridors and limited and expensive parking.

■ Bay Area residents who live within three-quarters of a mile of a BART station are five times more likely to use BART regularly to commute.

■ In San Francisco, it is estimated that 80,000 office jobs added since the 1970s could not have been accommodated without BART access.

■ San Francisco enjoys particularly strong benefits from BART because it is able to offer its unique urban environment with a convenient means of access.

■ The number of jobs near San Francisco BART stations increased by 23.6 percent from 1970 to 1990, compared to 19.7 percent at areas not near BART stations.

■ Office buildings built near BART stations in San Francisco averaged 365,000 square feet, compared to 208,000 square feet elsewhere in the city.

■ In the East Bay, the average office building near a BART station is 105,900 square feet, compared to 66,500 square feet for buildings not near BART.

In its 28th year of service connecting San Francisco with the East Bay, BART commissioned a study by Sedway Group to examine the positive impact that BART has brought to the quality of life in the Bay Area.

According to this study, BART has contributed to a wide variety of aspects of life here: thousands of workers have easier commutes, property values have risen near BART stations, and the system has facilitated "smart growth" development that reduces sprawl.

BART is also a crucial mode of transport for those who don't drive—seniors, the disabled, young people, and people who can't afford or choose not to own cars.

For large events, BART is indispensable. The system delivers thousands of people to events such as ball games and concerts at the Oakland Coliseum, and the Pride Parade, Bay to Breakers, and Chinese New Year Parade in San Francisco. It's also important as a back-up service in case of emergencies such as the 1989 Loma Prieta earthquake, when BART carried 75 percent of transbay commuters while the Bay Bridge was being repaired, up from 35 percent before the bridge closure.

In all, Bay Area residents make up to 99 million trips a year on BART, but the entire Bay Area has benefited economically, environmentally and comprehensively from the service it provides. The following is a summary of Sedway Group's findings prepared by BART. A full copy of the report can be obtained by contacting the BART Media and Public Affairs Department, 800 Madison Street, Oakland, CA 94604, (510) 464-6000.

"Smart Growth" and Quality of Life

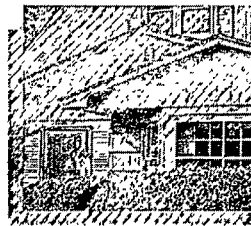
- BART provides a means of spatially directing real estate and economic development within the areas it serves in a way that facilitates "smart growth" and improves the quality of life for many Bay Area residents.
- More compact development is made possible by the high-volume service of BART, helping to create a less sprawling region.



- As the Bay Area's road capacity fills and open land continues to disappear, BART station areas are becoming even more important for new development.

- Many companies, including Clorox, Koret Corporation, Shaklee Corporation, and AirTouch, have opened offices near BART stations to ease employees' commutes and generally increase workers' quality of life.

Fannie Mae Mortgages



- Because of the excellent service provided by BART and local transit systems, the Bay Area was recently selected to receive 25 percent of \$100 million in funds dedicated to Fannie Mae's Location Efficient Mortgage pilot program.

Future Plans

The 8.7-mile BART extension in San Mateo County presents new opportunities for positive impacts due to extremely strong market conditions on the peninsula accompanied by serious local planning efforts and land assemblage.

San Francisco International Airport will benefit from the extension with a new direct transit connection. 10,000 daily auto trips to the airport are projected to be eliminated as a result of BART service.

Also on the new extension, the City of Millbrae has recognized the desirability of transit-oriented development and created a new specific plan around its planned station.

The City of South San Francisco is currently conducting a planning study for the area around its future BART station, and many other Bay Area cities served by BART are planning to support infill development in station areas.

Working together, BART and the San Francisco Bay Area's community leaders and citizens can continue to enhance the economy and quality of life here.

BART has been forging new relationships with cities and pursuing development opportunities with the private sector and community groups in planning for the future.

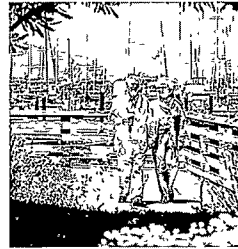
Currently, there is planned or proposed development activity at more than 28 BART stations in the Bay Area.

As the Bay Area heads into the future, it is critical that BART and all the communities it serves make plans that consider the system's benefits, contributions, and impacts.


B A R T

Positive IMPACTS

*BART's contribution
to the Bay Area*



800 Madison Street • P.O. Box 12688
Oakland, CA 94604-2688 • 510-464-6000

 Printed on recycled paper



Amy L. Herman, AICP
Managing Director

SEDWAY GROUP

Real Estate and Urban Economics

505 Montgomery Street
Suite 600
San Francisco, CA 94111-2565

T 415 733 5382

F 415 733 5530

aherman@sedway.com

a CB Richard Ellis Company

300 Lakeside Drive, 18th Floor
Oakland, CA 94612
510.464.7110 office
510.464.7103 fax

BART

Fax

To: Lynn Sedway/Amy Herman

From: Mike Healy

Fax: 415.733.5530

Pages: 26

Phone: 415.733.5382

Date: August 5, 2004

Re: 1999 Sedway Report

CC:

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

● **Comments:**

TO: Lynn Sedway/Amy Herman

August 5, 2004

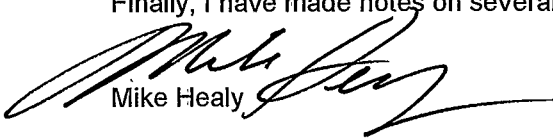
FROM: Mike Healy

Lynn/Amy,

Here are some brief comments on the draft update of the 1999 Sedway Report:

1. Should include map of 580 corridor showing Hacienda Business Park, adjacent Mall to Dublin/Pleasanton Station.
2. Planned development - West Dublin/Pleasanton - Hotel, Retail, Housing, BART Station.
3. BART serves over 3000 retail outlets (Note: This information was originally developed by a magazine that was designed to sell ads to retailers along the BART line. Is there any way to confirm this number or if it has grown? The data is over 10 years old. However, I included note to this effect on page 7.
4. Ridership - on page 9 - was actually 91 million for FY 04.
5. Since opening, BART has carried about 2 billion passengers over 25 billion passenger miles.
6. Inverse relationship between "back-up" commutes and productivity? That is, if BART were shut down for any reason and it added an hour to the average commute, how would this affect productivity. Probably hard to quantify but an interesting view of such an impact.
7. Page 12 - Since BART began, it has leveraged \$3.1 billion in federal and state capital dollars back to the region, money that probably would have gone elsewhere. Also, this is about four times the Bay Area's original bond issue investment in the system of \$792 million.
8. Replacement value of the BART system in today's dollars is estimated to be about \$20 billion.

Finally, I have made notes on several pages which I hope you will be able to decipher okay.


Mike Healy

Cc: Katherine Strehl

TO: Lynn Sedway/Amy Herman

August 5, 2004

FROM: Mike Healy

Lynn/Amy,

Here are some brief comments on the draft update of the 1999 Sedway Report:

1. Should include map of 580 corridor showing Hacienda Business Park, adjacent Mall to Dublin/Pleasanton Station.
2. Planned development - West Dublin/Pleasanton - Hotel, Retail, Housing, BART Station.
3. BART serves over 3000 retail outlets (Note: This information was originally developed by a magazine that was designed to sell adds to retailers along the BART line. Is there any way to confirm this number or if it has grown? The data is over 10 years old. However, I included note to this effect on page 7.
4. Ridership - on page 9 - was actually 91 million for FY 04.
5. Since opening, BART has carried about 2 billion passengers over 25 billion passenger miles.
6. Inverse relationship between "back-up" commutes and productivity? That is, if BART were shut down for any reason and it added an hour to the average commute, how would this affect productivity. Probably hard to quantify but an interesting view of such an impact.
7. Page 12 - Since BART began, it has leveraged \$3.1 billion in federal and state capital dollars back to the region, money that probably would have gone elsewhere. Also, this is almost three times the Bay Area's original bond issue investment in the system of \$792 million.
8. Replacement value of the BART system in today's dollars is estimated to be about \$20 billion.

Finally, I have made notes on several pages which I hope you will be able to decipher okay.



Mike Healy

Cc: Katherine Strehl

DRAFT

**BART'S CONTRIBUTIONS TO
THE BAY AREA:**

AN UPDATE

Prepared for:

**SAN FRANCISCO BAY AREA RAPID TRANSIT
DISTRICT (BART)**

JULY 2004

July 14, 2004

Mr. Mike Healy, Media Director
Bay Area Rapid Transit District
Mail Stop - LMA-4
800 Madison Street, 4th Floor
Oakland, CA 94604-2688

Re: Update Report on BART's Contributions to the Bay Area

Dear Mr. Healy:

Sedway Group is pleased to present this draft update of our 1999 regional study of BART's contributions to the San Francisco Bay Area. Our findings show that BART continues to enhance the Bay Area's quality of life and regional economy. BART's impacts and influences have especially grown in the intervening five years relative to air quality, smart growth, and housing affordability.

We were most pleased to work with BART on this most important project, and enjoyed updating and expanding our prior work. We look forward to your review of the report and welcome your comments. Please contact us at your convenience.

Sincerely,

Lynn M. Sedway, CRE
Executive Managing Director

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
BACKGROUND.....	1
SCOPE AND METHODOLOGY	1
SUMMARY OF KEY FINDINGS	2
IMPORTANCE OF MAINTAINING BART SERVICE.....	5
II. QUALITY-OF-LIFE IMPACTS	6
EASIER COMMUTES.....	6
PERSONAL COST SAVINGS	6
ACCESS TO SHOPPING, ENTERTAINMENT, AND CULTURAL VENUES	7
IMPROVED AIR QUALITY	8
IMPORTANCE OF MAINTAINING BART SERVICE.....	8
III. REGIONAL COMPETITIVENESS IMPACTS	9
SUPERIOR REGIONAL ACCESS AND RIDERSHIP	9
BART'S CONTRIBUTION TO BAY AREA BUSINESS ATTRACTION	10
REGIONAL EMPLOYMENT CONCENTRATION	10
BUSINESS RELIANCE ON BART	11
BART ACCESS TO AFFORDABLE HOUSING	11
LEVERAGING BART TO WIN ADDITIONAL BAY AREA INVESTMENT	12
IV. SMART GROWTH IMPACTS	13
SMART GROWTH DEFINITION	13
BART CONTRIBUTIONS TO SMART GROWTH.....	14
SMART GROWTH CONTRIBUTION TO HOME OWNERSHIP	15
V. DEVELOPMENT IMPACTS	16
OFFICE DEVELOPMENT	16
RESIDENTIAL DEVELOPMENT	18


ASSUMPTIONS AND LIMITING CONDITIONS

APPENDIX: EXHIBITS

LIST OF EXHIBITS

- Exhibit 1: BART Station Commute Shed Map
- Exhibit 2: San Francisco Offices Map
- Exhibit 3: East Bay I-880 Corridor Map
- Exhibit 4: East Bay I-680 Corridor Map
- Exhibit 5: San Francisco Office Space Inventory Chart
- Exhibit 6: San Francisco Average Office Building Size Chart
- Exhibit 7: East Bay Office Space Inventory Chart
- Exhibit 8: Average East Bay Office Building Size Chart

*Need - 580 Corridor Map
& Surrounding development.*

*Hacienda
Business Park* 

*Planned West Dublin/Pleasanton Station
development will include: BART Station
in Freeway median, Hotel, Retail, housing
on Dublin side.*

I. EXECUTIVE SUMMARY

BACKGROUND

The San Francisco Bay Area Rapid Transit District (BART) will celebrate its 30th anniversary of service connecting San Francisco and the East Bay in September of this year. The system first opened in 1972, but transbay service did not make BART a regional system until 1974.

In 1999, Sedway Group prepared a report that demonstrated BART's contributions to the San Francisco Bay Area. The report was in large part a compendium of numerous studies that had been conducted prior to that date regarding BART's impacts. Many of these studies were rigorous academic studies, some conducted in anticipation of BART's 20th anniversary. Select information from the 1999 Sedway Group report was included in public affairs documents prepared by BART to demonstrate the value of BART to the region.

Given the relative maturity of the BART system, the pace of academic study has slowed down, with some efforts diverted to assessing the impacts of newer transit systems, which seek to emulate BART's tremendous regional impacts. However, the impacts of BART have continued. For example, the past five years since completion of the last BART economic impact report have been marked by the following:

- the opening of the extension to the San Francisco International Airport;
- the start of detailed planning of the extension of BART from Fremont to the South Bay following the passage of additional sales tax measures in Alameda and Santa Clara counties, and
- the development of thousands of new infill housing units near existing (and planned) BART stations in many of the region's major cities, including Oakland, San Francisco, Berkeley, Concord, Dublin and San Jose.

At the same time as BART has engaged in expansion efforts, the maturity of the core BART system has required BART to engage in major seismic retrofit efforts. Such efforts may require BART to seek voter approval for a seismic retrofit bond issue. Accordingly, BART seeks an update to Sedway Group's 1999 report to demonstrate the continued regional benefits provided by BART.

SCOPE AND METHODOLOGY

Sedway Group sought to update much of the data in the 1999 report and conducted a literature search to identify studies completed in the intervening five years. As referenced above, few academic studies have since been completed. Instead, many transit-oriented research efforts have been focused on exploring the impacts of systems newer than BART (such as Santa Clara County VTA) as well as the proliferation and benefits of transit-oriented development. Accordingly, Sedway Group sought to update data that were readily available or to conduct independent research on topics similar to those included in the 1999 report. As a result, this study includes quantitative and qualitative impacts on the following subjects:

Plans for rail connections to Eastern Contra Costa County and Alameda County along 580 corridor. Construction on planned connector system between BART and Oakland International Airport to begin in 05.

- quality of life
- smart growth
- regional competitiveness
- development trends

A summary of the findings relative to these topics follows.

SUMMARY OF KEY FINDINGS

Most of BART's contributions and impacts identified in the 1999 report have continued to benefit the region in the early 21st century. While most of these are stable, almost routine contributions, a few have become more important, such as BART's contributions to air quality, smart growth, and housing affordability.

Quality of Life Impacts

BART contributes significantly to the quality of life in the Bay Area. Highlights of these impacts are as follows:

- *Easier Commutes.* ^{Facilitates} ~~BART facilities~~ easier commutes for Bay Area residents. Residents who live within three-quarters of a mile of a BART station have historically proven five times more likely to use the system to commute regularly than residents who live farther away. Clearly, BART is the preferred alternative when people otherwise face traffic congestion on the Bay Area's worst commute corridors and limited and expensive parking options in places like San Francisco.
- *Personal Cost Savings.* BART riders reap tremendous personal cost savings. A representative East Bay commuter saves up to \$5,500 per year, not including tolls and parking, by choosing to commute via BART rather than with a car. Relative cost savings are reaped by other commuters, as well as people choosing BART for leisure travel purposes.
- *Access to Shopping, Entertainment, and Cultural Venues.* BART access greatly enriches the ability of the regional population to satisfy shopping needs and fill their leisure hours with a wide range of entertainment and cultural opportunities. This access also promotes tourism, with many regional hotel rooms within easy walking distance of a BART station.
- *Improved Air Quality.* BART ridership is associated with significant reduction in vehicle miles traveled and related air pollution. BART usage overall is estimated to eliminate over 27 tons of harmful emissions every day. Such emissions cause global warming, asthma, cancer, and other health concerns. Thus BART ridership minimizes damage to the environment and promotes the personal health of all Bay Area residents.

Regional Competitiveness Impacts

BART operations greatly enhance the regional competitiveness of the Bay Area. This occurs through strong ridership for work and personal purposes, the attraction and retention of area businesses, the facilitation of regional employment center growth, enhanced access to affordable housing, and the attraction of other funds that originate from outside of the region.

- 91
- **Superior Regional Access and Ridership.** BART continues to enjoy the highest level of ridership of any rail transit system in California. Sedway Group estimates that in 2003, with the extension of BART into San Mateo County, ridership averaged 33 rides per market area resident, with a total of 87.4 million rides. This greatly exceeds the next highest transit system in the state, Los Angeles County MTA, which totaled ridership of 30.7 million.
 - **BART's Contribution to Bay Area Business Attraction.** BART enhances the Bay Area's ability to attract and retain businesses, and thus compete against other major West Coast cities such as Seattle and Los Angeles. Labor depth and quality are among the most important site location criteria for expanding or relocating businesses. BART service expands the Bay Area's labor market potential within a reasonable commute shed by 17 percent. This is a significant enhancement, especially relative to metropolitan areas lacking a comprehensive public transit system.
 - **Regional Employment Concentration.** BART service has contributed to dominance of the Bay Area's regional employment centers. Both San Francisco and Oakland have significantly increased their employment bases since the advent of BART service. Much of this has been accomplished through increased public transportation ridership.
 - **Business Reliance on BART.** Businesses located within the 1/3-mile walking distance of a BART station benefit the most from BART's commuter service. Yet businesses not located within this radius demonstrably recognize BART's role in maximizing their accessibility to a quality labor pool. Thus many individual businesses or business consortiums support shuttles to and from BART stations. Examples include the Emery Go Round, which recently saw a 24 percent annual increase in ridership, and the shuttle to Bishop Ranch in San Ramon, which ferries more than 1,000 employees to Bishop Ranch daily.
 - **BART Access to Affordable Housing.** Not only does BART access deepen the labor pool for the Bay Area's large urban employment centers, it also helps urban employees find affordable housing in a region where housing prices continue to skyrocket. BART's connection to job centers makes it possible for regional workers to become homeowners, facilitating access to cities more distant from the urban cores where housing prices are more affordable, enhancing quality of life. *However BART is also an important planning tool for urban core housing as well*
 - **Leveraging BART to Win Additional Bay Area Investment.** As it has for the past two decades, BART gives the Bay Area leverage to capture investment from outside the region. As with the SFO Extension, the planned South Bay Extension from Fremont will generate significant state and federal investment in the region, further enhancing the region's competitiveness. *high density*

Smart Growth Impacts

BART is a leader in the smart growth movement, which strives to promote more livable and functional communities. BART has achieved this through extensive efforts at promoting transit-oriented development, with the communities served by BART as well as individual developers. Highlights of these efforts include the following:

- **Smart Growth Strategies.** The Urban Land Institute has identified smart growth strategies that could have significant impact on future growth patterns in the Bay Area. Among these, infill development, transit-oriented development, mixed-use development, and compact development

feature prominently. These are exactly the strategies that BART's station area and transit-oriented development efforts support.

- **BART Contributions to Smart Growth.** In the past five years, BART's smart growth efforts have become more pronounced and the general public has become both more aware and supportive of this type of development. Many new smart growth projects have been built and many more are in planning. Among these are numerous housing projects near existing and planned BART stations, adding thousands of housing units within easy walking distance of BART. Yet additional developments focus on enhancing access to cultural institutions, shopping venues, offices, and hotels. This has resulted, and will continue to result in land use patterns and development trends that preserve our natural resources, greatly enhancing the livability of the Bay Area.
- **Smart Growth Contribution to Home Ownership.** Because of the excellent service provided by BART and local transit systems, the Bay Area was selected in the late 1990s to receive 25 percent of \$100 million in funds dedicated to Fannie Mae's Location Efficient Mortgage (LEM) pilot program, a program designed to increase the number of households that can afford to buy a home in transit hubs. To date, around 20 LEMs have been issued in the Bay Area, helping households acquire homes in transit-rich neighborhoods. This comprises up to 25 percent of the available funds, demonstrating the ~~success~~ ^{potential} of smart growth principles in the Bay Area.

Development Impacts

BART has significantly contributed to the form of development in the region as well as enhanced property values. These impacts are most notable among office and residential development, summarized as follows.

- **Office Development.** Following the development of the BART system, office development in the Bay Area's urban cores has intensified. This is most pronounced in San Francisco and Oakland, the region's dominant employment centers, but is also evident in select East Bay locations. Office development has become increasingly concentrated near BART stations in these areas, consistent with prevailing smart growth principles, and buildings are larger than those more distant from BART, concentrating employment density and facilitating local spin off benefits like support for downtown retail and associated local sales tax benefits.
- **Residential Development.** Past studies have demonstrated positive residential value impacts in the Bay Area associated with proximity to a rail transit station. The results of the latest Bay Area Poll conducted by the Bay Area Council, with 25 percent of respondents rating transportation the single largest problem facing the region, surpassed only by the economy, explains why this is the case. Current analysis regarding rental housing suggests that the residential value impacts of BART persist. This analysis indicates that a significant amount of new rental housing development occurs within walking distance of BART and that rental rate premiums can approach 37 percent in select communities. This demonstrates the value of BART proximity to residents seeking a high quality of life in the Bay Area.
- **Transit Availability Affordability Impacts.** BART proximity conveys benefits that enhance housing affordability. Recent research indicates that condominium units without dedicated parking can sell for at least a 10 percent discount relative to units with parking. This implies that parking requirements in communities served by BART can be reduced in order to make more efficient use of land and increase housing affordability. Thus the presence of BART can directly enhance

Where did 37% come from?

Any data points on this?

housing affordability, increasing opportunities for home ownership in one of the nation's highest cost housing markets.

IMPORTANCE OF MAINTAINING BART SERVICE

The preceding findings demonstrate just some of the significant positive impacts contributed by BART to the San Francisco Bay Area. Without BART, many of these impacts would not be realized. A major earthquake on the Hayward and/or San Andreas faults is inevitable – a matter of when, not if. Thus it is crucial that BART implement the seismic retrofit program that was developed in the aftermath of the 1989 Loma Prieta Earthquake, pursuant to a significant investment of BART funds. Clearly, disruption of BART service when the inevitable earthquake occurs would dramatically impact regional quality of life, job productivity, and the entire Bay Area economy.

II. QUALITY-OF-LIFE IMPACTS

The provision of BART service results in many quality-of-life impacts for Bay Area residents. Among these are easier work commutes, personal cost savings, access to shopping, entertainment and cultural venues, and improved air quality. This chapter presents select findings relative to these impacts.

EASIER COMMUTES

Past studies have found that Bay Area residents living within three-quarters of a mile of a BART station are five times more likely to use the system to commute regularly than residents who live farther away, even though residents in most BART-served areas have relatively the same level of access to automobiles as residents in areas more distant from a BART station. Sedway Group estimates that about 113,000 office jobs have been added to San Francisco within 1/3 mile of Downtown San Francisco BART stations and another 16,400 office jobs have been added to Oakland within 1/3 mile of the Downtown Oakland BART stations since the 1970s. Many of these jobs could not have been accommodated without BART access, as BART is the preferred public transportation alternative for people facing traffic congestion on the Bay Area's worst commute corridors and limited and/or expensive parking options in regional employment centers like San Francisco and Oakland.

A recent study conducted by a University of California at Berkeley Ph.D. strongly demonstrates BART's commute-related benefits, by estimating the traffic impacts of BART service on the Highway 24 Corridor, extending from the East Bay to Downtown Oakland. This study, based on 2003 data, estimated that in the absence of BART, commute trip delays along the Highway 24 Corridor would increase by 40 to 50 minutes on average. Maximum delays could even increase up to an hour during the most acute time of the peak commute, with the commute period extending up to six hours under this scenario.¹ These findings indicate that BART service results in personal time savings for many commuters, who can choose to devote that time for personal or work purposes, both enhancing quality of life and job productivity.

PERSONAL COST SAVINGS

In addition to time savings, BART also offers commuters significant personal cost savings. A January 2004 study conducted for BART by the Institute for Local Self Reliance documented the personal cost savings associated with commuting on BART instead of by automobile. The findings were based on a typical East Bay commuter taking BART to downtown San Francisco instead of driving a mid-size car 40 miles round trip. The most dramatic finding from the study indicated that the typical East Bay commuter could realize up to \$5,500 in economic savings per year.² This savings takes into consideration the cost of gasoline, car maintenance, tire replacement, oil change, and depreciation. It is a conservative figure in that it does not factor in the cost of bridge tolls or the cost of parking, which can be high in downtown locations such as Oakland and certainly San Francisco.

While based on a San Francisco-oriented commute, the cost savings findings are relative and would apply to any automobile versus BART trips, adjusted of course for mileage and road conditions. Thus

¹"Traffic Impact Analysis: Absence of BART Service on Highway 24 Corridor," Jorge Laval, Ph.D.

²"Saving Money, Energy and Environment on BART," Institute for Local Self Reliance, January 2004, page 4.

regardless of location, there are significant personal cost savings associated with using BART versus automobile for a daily commute.

ACCESS TO SHOPPING, ENTERTAINMENT, AND CULTURAL VENUES

BART provides access to myriad shopping centers, entertainment venues, and other cultural centers throughout the Bay Area. In addition, the opening of BART service to the San Francisco Peninsula in June 2003 ushered in an era of greater travel accessibility for Bay Area public transit users, with two of the region's three international airports now accessible by BART (e.g., Oakland and San Francisco).

BART provides direct access to several of the Bay Area's largest shopping centers, including Bay Fair Mall in San Leandro, Tanforan Shopping Center in San Bruno, and the Union Square Shopping District in San Francisco. This access enhances the shopping opportunities for the many Bay Area residents who lack access to a car, for cost or personal reasons. Directly accessible by BART is the San Francisco Shopping Centre, whose current expansion will include the second largest Bloomingdale's store in the United States in a 1.5-million-square-foot regional shopping mall. With limited parking in downtown San Francisco near the center, BART undoubtedly played a major role in the project's approval and feasibility, greatly enhancing regional shopping opportunities. This center will also include a needed grocery store, which local residents can readily access via BART.

The Bay Area also offers premier entertainment and cultural opportunities, many of which are readily accessible via BART. Countless venues in San Francisco and other regional locations are directly accessible by BART or by BART supplemented by an additional transit mode. These venues enable the region's population to experience a rich array of leisure time opportunities. Using BART for transportation purposes avoids the stress that inevitably accompanies driving in the Bay Area, enhancing the overall leisure time experience. Some of the cultural, arts, entertainment, and recreational venues readily accessible via BART include the following:

- *BART now serves the San Francisco Airport directly.*
- **Shopping Districts/Centers:** Bay Fair; Tanforan; Union Square; San Francisco Centre; Castro Valley Village; Oakland Chinatown; Downtown Millbrae; Downtown Oakland; El Cerrito Plaza; Embarcadero Center; Bay Street in Emeryville *Overall, BART serves over 3000 retail outlets*
- **Cultural Arts:** San Francisco Opera, Symphony, and Ballet; Berkeley Repertory Theatre; Curran Theatre; Golden Gate Theatre; Metreon; Orpheum Theatre; San Francisco Museum of Modern Art; Yerba Buena Center *according to a survey done several years ago by a transit shopper -*
- **Arenas/Auditoriums:** Oakland Coliseum and Arena; SBC Park; Henry J. Kaiser Arena; Bill Graham Civic Auditorium; Oakland Convention Center; Moscone Center; The Chronicle Pavilion in Concord
- **Special Events/Festivals:** Carnaval; Gay, Lesbian, Bisexual, Transgender Pride Parade; Bay to Breakers; Chinese New Year Celebration and Parade; Shakespeare Festival in Orinda; Alameda County Fair

BART also provides direct access to many Bay Area Civic Centers, including San Francisco, Oakland, and Berkeley, facilitating civic needs and obligations of residents throughout the region. Moreover, BART access benefits not only regional residents. With nearly 13,000 hotel rooms within a quarter mile of BART in San Francisco alone, regional tourists can easily use BART to access many of its most popular attractions.

In short, the preceding list, which is by no means exhaustive, demonstrates how BART access greatly enriches the ability of the regional population to satisfy shopping needs and fill their leisure hours with a wide range of entertainment and cultural opportunities as well as promotes tourism.

IMPROVED AIR QUALITY

BART ridership, whether for commute or personal/leisure purposes, is associated with significant reduction in vehicle miles traveled and related air pollution. The Bay Area Quality Management District estimated that in 2003, BART ridership reduced estimated organic gases and nitrogen oxide emissions by nearly 5 tons a day. These pollutants are of particular importance in the Bay Area, as they are key components in ground-level ozone creation, the region's most prevalent air quality problem. When combined with the reduction of about 22 tons of carbon monoxide emissions per day, BART usage eliminates over 27 tons of harmful emissions each day. Such emissions cause global warming, asthma, cancer, and other health concerns. Thus each commuter choosing BART over an automobile for commute purposes is minimizing damage to the environment, their personal health, and society's health in general. In addition, the reduced emissions enable the region to avoid the loss of federal funds that could come with a failure to meet federal standards.

IMPORTANCE OF MAINTAINING BART SERVICE

A major earthquake on the Hayward and/or San Andreas faults is inevitable – a matter of when, not if. Disruption of BART service when this happens would dramatically impact regional quality of life and job productivity. It would be hard to overstate the importance of BART to the regional economy in the aftermath of the 1989 Loma Prieta Quake. With the month-long Bay Bridge closure that followed the 1989 Loma Prieta earthquake, BART carried 75 percent of transbay commuters, up from 35 percent before the bridge closure. BART helped avert a major economic disruption tied to transbay commuters. Accordingly, BART has invested heavily in recent years to develop a seismic retrofit program that is designed to minimize any chance that BART's operations would be disrupted for any significant period of time during the next major quake. While BART has financed the planning for this important work out of its existing budget, the magnitude of the retrofit project will require voter approval of a critically important bond issue that will be on the ballot in November.

III. REGIONAL COMPETITIVENESS IMPACTS

BART's operations greatly enhance the regional competitiveness of the Bay Area. This occurs through strong ridership for work and personal purposes; the attraction and retention of area businesses, especially through expansion of the labor pool; the facilitation of regional employment center employment growth; the enhanced access to affordable housing; and the attraction of other funds that originate outside of the region.

SUPERIOR REGIONAL ACCESS AND RIDERSHIP

BART provides a strong regional public transportation resource, which enhances the Bay Area's competitiveness as an economic center. This is demonstrated by BART's continued achievement of the highest level of ridership per market area resident of any system in the state, which totaled 87.4 million rides in fiscal year 2003. This high ridership level within the market area is an indication of BART's importance to the Bay Area. The "market area" in this case is defined as cities that are directly served by the transit system.³ In 2003, BART's market area included approximately 2.66 million people who made an average of 33 trips per year on the system.⁴

Within California, total BART ridership in 2003 greatly exceeded any other commuter rail system. Total ridership on other systems in the state were as follows:⁵

- Los Angeles County MTA, 30.7 million
- San Diego Trolley, 25.4 million
- Sacramento Regional Transit District, 8.5 million (fiscal year 2002)
- Caltrain, 7.6 million
- Santa Clara Valley Transportation Authority, 5.5 million

BART's strong ridership demonstrates the regional reach of the system and strong reliance on the system for commute as well as personal use, unparalleled among other transit systems in the state. BART's ridership also rivals major transportation systems in other regions competitive with the Bay Area. For example, Sound Transit ridership in Seattle only totaled 267,000 in 2003. While the Dallas Area Rapid Transit achieved a much higher 17.0 million riders, this level is still substantially below the standard achieved by BART.

³ This includes all cities with a BART station, which is conservative as BART attracts riders from many additional surrounding cities and beyond.

⁴ This 2003 market area population figure includes a partial year allocation for the San Mateo County cities that started receiving BART service in mid-2003. This calculation is based on an estimated 87.38 million rides during fiscal year 2003.

⁵ Sources include the American Public Transportation Association and transit system websites. Data are for 2003 unless otherwise stated.

BART'S CONTRIBUTION TO BAY AREA BUSINESS ATTRACTION

BART enhances the Bay Area's ability to attract and retain businesses, and thus compete against other major West Coast cities such as Seattle and Los Angeles. Among corporate site locators, depth and quality of labor is one of the most important site location criteria for expanding or relocating businesses. This is the case almost regardless of the nature of the business seeking a business location, such as corporate headquarters, back office operation, or manufacturing facility. Labor availability is calculated primarily by determining the number of potential workers within a reasonable commute time, or commute shed, of potential sites, the size of which varies by location. In the Bay Area, businesses often look at the labor pool within a 60-minute commute shed.

BART expands the labor pool of many Bay Area job centers because BART travel is faster and more efficient than automobile travel for congested commute corridors, thus adding geographic depth to the region's pool of potential employees. Because labor availability is a key factor in business attraction and retention, BART is a very important factor in the Bay Area economy. Sedway Group reviewed comparative population data for cities in the San Francisco Bay Area within a 60-minute commute shed of downtown San Francisco and for cities outside a 60-minute drive time whose residents could access San Francisco within 60 minutes using BART (e.g., a maximum of 50 minutes on BART and a 10-minute commute to the nearest BART station). As shown in Exhibit 1, the Alameda County cities of Pleasanton and Fremont, and the Contra Costa County cities of Concord and Walnut Creek would be outside of San Francisco's range if not for BART.

According to population estimates prepared by Claritas, a national provider of demographic and business data, there are almost 3.0 million people located within a 60-minute driving commute of downtown San Francisco. BART access allows 621,302 additional residents to access downtown San Francisco in the same amount of time, expanding the labor pool by 17 percent. Similar figures would pertain to the downtown Oakland labor pool as well.

Other regions that compete with the Bay Area for economic development and do not have rail transit systems of the size and quality of BART are at a disadvantage. Seattle, Los Angeles-Long Beach, Houston, Dallas, and Vancouver represent regions that compete with the Bay Area for business and have inferior transit systems. Thus, BART, in combination with other amenities and strong locational criteria, contributes to the Bay Area's competitive edge in attracting new businesses over other major U.S. metropolitan areas.

REGIONAL EMPLOYMENT CONCENTRATION

This expansion of the labor pool is borne out by actual commute pattern data. In 1970, before BART transbay service was established, Alameda and Contra Costa county residents comprised 12.3 percent of the San Francisco labor force. These are the two counties with the most comprehensive BART access to San Francisco. According to U.S. Census Bureau data compiled by the Metropolitan Transportation Commission, this percentage has steadily increased over time, rising to 17.5 percent in 1980, 19.7 percent in 1990, and 20.9 percent in 2000. In the meantime, the share of population from within San Francisco dropped, from 62.6 percent in 1970 to 55.6 percent in 2000.

While the total number of San Francisco resident workers increased over the 1970 to 2000 time period, the increase was modest, at only 14 percent. In contrast, the percent of workers from Alameda

and Contra Costa County increased by 218 percent. While Alameda and Contra Costa county workers commuting into San Francisco use many modes of transportation, BART's penetration into these counties and strong ridership clearly indicates that BART is a strong contributor to the growth in San Francisco's economic base. Without these employees, growth within San Francisco's office sector would have been more constrained, limiting San Francisco's ability to become the economic center of the region and limiting employment opportunities for the region's labor force.

In like manner, Downtown Oakland has also experienced an increase in transit commuting. According to findings prepared by the Metropolitan Transportation Commission (MTC), Downtown Oakland is the second largest transit commute market in the Bay Area. From just 1990 to 2000 MTC reports that there was a 45 percent increase in the total number of transit commuters working in Downtown Oakland. This compared to an 18 percent increase in San Francisco. Thus Oakland is becoming increasingly attractive as a work location to transit commuters.

BUSINESS RELIANCE ON BART

Businesses not located immediately adjacent to a BART station nevertheless recognize the importance of BART as an economical and environmentally sound means of transportation for employees. For example, ridership on East Bay BART shuttles, supported by individual businesses or a consortium of businesses, has risen steadily in recent years. The Emery Go Round, which connects BART riders to corporate centers, retail districts, hotels, and schools in Emeryville, saw a 24 percent usage increase in March 2004 over the previous March. In like manner, users of the shuttle buses connecting the Walnut Creek and Dublin/Pleasanton BART stations to Bishop Ranch in San Ramon has risen steadily over time. Organizers of that program indicate that more than 1,000 employees at Bishop Ranch ride BART to work everyday. Hence area employers recognize the importance of BART as a primary means of transportation to maximize their accessibility to a quality labor pool.

What was the bus? Is it on Amundson? No?

BART ACCESS TO AFFORDABLE HOUSING

Not only does BART access deepen the labor pool for the Bay Area's large urban employment centers, it also helps urban employees find affordable housing in a region where housing prices continue to skyrocket. As shown in the table below, BART access to employment makes it possible for regional workers to become homeowners, since the housing prices closer to San Francisco (cities on the left) tend to be too expensive for many households, far outpacing the regional median of \$506,000. More affordable housing prices can be found in cities like Fremont, Hayward, and Concord (cities on the right), where BART access allows workers to reach their jobs in a reasonable commute time.

Median Home Prices in Bay Area Cities, May 2004

City	Number of Sales	Median Price	City	Number of Sales	Median Price
Alameda	75	\$551,000	Fremont	422	\$518,500
Berkeley	70	\$649,250	Hayward	249	\$433,000
Burlingame	51	\$960,000	Newark	75	\$460,000
Lafayette	46	\$845,000	Livermore	210	\$506,250
San Carlos	42	\$715,000	Concord	232	\$400,000
San Francisco	735	\$640,000	Pittsburg	166	\$350,000
San Mateo	174	\$647,500	Martinez	99	\$422,000
San Rafael	103	\$675,000	Union City	146	\$465,250

Sources: DataQuick; and Sedway Group.

Thus BART enhances quality of life by enabling regional workers to achieve home ownership while minimizing time spent commuting to work as well as regional attractions.

LEVERAGING BART TO WIN ADDITIONAL BAY AREA INVESTMENT

The Bay Area regularly leverages its investment in BART to win other funds that originate outside of the region. This infusion of outside funding represents a net gain to the local economy that the Bay Area would otherwise not realize. Two recent examples of this leveraging include the revitalization of Center Street in Berkeley and the extension of BART to the San Francisco International Airport in San Mateo County. The same is true of the planned BART extension from Fremont to San Jose and Santa Clara.

IV. SMART GROWTH IMPACTS

In addition to BART enhancing the regional competitiveness of the Bay Area, BART is a leader in the smart growth movement, which strives to promote more livable and functional communities. BART has achieved this through extensive efforts at promoting transit-oriented development, with the communities served by BART as well as individual developers. Many of these efforts are documented below, demonstrating BART's continued contributions to enhancing the livability of the Bay Area.

SMART GROWTH DEFINITION

Smart Growth is a movement to foster responsible land use patterns, growth, and development that serves the economy, community, and environment. A recent Urban Land Institute (ULI) publication for the San Francisco Bay Area indicates that smart growth principles involve the concept of promoting more livable and functional communities (Smart Growth in the San Francisco Bay Area: Effective Local Approaches, June 2003). This publication suggests that advocates define smart growth communities as environments that:

- enhance mobility for all residents, not just those with automobiles, as they carry out daily tasks, such as traveling to work or school, shopping, and maintaining community ties;
- accommodate the need for new housing, employment growth, and population increase by making the most efficient use of urban land;
- preserve and protect important open space and species habitat;
- are respectful of the needs of neighboring jurisdictions and the region as a whole; and
- make the carrying out of smart growth practices by developers, lenders, builders, and other interested parties as simple and streamlined as possible.⁶

The ULI publication further identifies smart growth strategies that, if implemented, would have significant impact on future growth patterns in the Bay Area. These strategies are:

- infill development
- transit-oriented development
- inclusionary housing
- mixed-use development
- adaptive reuse
- jobs-housing balance
- compact development⁷

Even people who may not desire the type of compact, pedestrian-oriented, mixed-use neighborhoods that are advocated by smart growth principles can appreciate potential benefits of such policies. While a smart growth neighborhood may not be everyone's ideal, smart growth neighborhoods that are well-served by BART and other transit systems can serve as magnets for new development. By focusing

⁶ Smart Growth in the San Francisco Bay Area: Effective Local Approaches, Urban Land Institute, June 2003, page 2.

⁷ Ibid, page 3.

new development near transit and existing infrastructure, it will be easier to preserve open space and species habitat elsewhere in the region.

BART CONTRIBUTIONS TO SMART GROWTH

In the 1999 report it was stated "Most Bay Area communities have not yet adopted smart growth land use policies that help focus development around transit. Consequently, BART station areas to date have not served as focal points for much of the region's development." However, in the past five years that has changed. The understanding and appreciation of the importance of smart growth land use practices have increased dramatically. Bay Area communities are now among the leaders in this movement, to a large extent as a result of the BART system, which is the primary facilitator of smart growth in the Bay Area. The general public has become both more aware and more supportive of this type of development.

Today cities served by BART have adopted land use

The overall level of development in the Bay Area is not demonstrably different than it would have been without BART. However, more compact development is made possible by the high-volume service of BART, creating a less sprawling region than would be the case if all development were auto-oriented. This more compact style of development is a key principle of smart growth. The development of thousands of new housing units in the region's major cities is the most obvious manifestation of this trend. Many new smart growth projects have been built and many more are in planning. Among these are numerous new "infill" housing projects in Berkeley, Concord, Dublin, Oakland, San Francisco and San Jose that are near existing and planned BART stations. Taken together, these projects have added thousands of units within easy walking distance of these stations.

(5 specific plans, strategies, plans and station area plans for 26 out of 43 BART stations)

BART increasingly works closely with the communities served by BART to promote smart growth, especially with regard to transit-oriented development. Moreover, communities have become increasingly aware of the benefits of BART proximity to new development, with many leading the charge toward such development, including the formulation of supportive land use policies. Examples of transit-oriented development are now prevalent throughout the BART system, ~~much more so than five years ago when the 1999 report was completed~~. Perhaps the largest and most locally-driven example is the Fruitvale BART Transit Village, which is a mixed-use development built on 24 acres of land surrounding the BART Station, including the 10.43-acre BART surface parking lots. This project, which opened only this year, was developed as a public-private partnership by the Fruitvale Development Corporation, a support corporation of the Unity Council. BART was actively involved in the partnership. The Transit Village features a number of amenities including a commercial/retail shopping area, a large pedestrian plaza while providing comprehensive community services ranging from a state-of-the-art healthcare facility to a child care center. In addition, the Fruitvale Village will house the Unity Council's Headquarters, a public library, several community organizations, a computer technology center, a seniors' center, and 47 units of housing.⁸

Many of the new plans were begun before the 1999 report and are now coming to fruition.

Many other examples of transit-oriented development now abound throughout the BART system, with more in progress, as well as projects readily accessible to BART. Other recent examples, completed or actively under development, include the following:

⁸ Transit Village website of the Unity Council.

- the renovated Swan's Market building in downtown Oakland;
- the award-winning high density residential Gaia Building in downtown Berkeley;
- the well-respected Arts District in Berkeley, including expansion of the Berkeley Repertory Theater;
- an award-winning affordable housing project in Castro Valley;
- a mixed-use hotel, theater, and office project in Daly City;
- a "Smart Transit" mixed residential and commercial project in Fremont;
- retail and for-sale transit-oriented housing units in Hayward;
- the "Small Town Downtown" project in Lafayette, a mixed-use housing, retail and office development;
- senior housing development, mixed-use commercial office and single-family homes in San Leandro,
- additional affordable and market-rate (including luxury) housing development at or near many stations, including Oakland Coliseum, Colma, Concord, Richmond, and West Oakland.

This information indicates that BART, through partnerships with local communities, as well as individual developers, are actively engaged in promoting smart growth principles in the Bay Area. This has resulted, and will continue to result in land use patterns and development trends that preserve our natural resources, greatly enhancing the livability of the Bay Area.

SMART GROWTH CONTRIBUTION TO HOME OWNERSHIP

A step toward increasing smart growth's role in the Bay Area and enhancing competitiveness was made in the late 1990s by Fannie Mae, a mortgage lending arm of the federal government. Because residents of areas that are well-served by transit spend less of their income on automobile ownership and maintenance costs, Fannie Mae initiated a mortgage pilot program designed to increase the number of households that can afford to buy a home in transit hubs. The loans offered as part of the project are known as Location Efficient Mortgages. Under the program's unique mortgage qualification formulas, borrowers purchasing homes near efficient public transit are allowed to add dollars saved on automobile maintenance and upkeep onto their qualifying income. This is an important difference from standard mortgage qualification practices, which favor homebuying in outlying locations where homes are cheaper but transportation costs are higher. Factoring both home and transportation costs into the equation serves to equalize the homebuying potential of households in transit-rich and transit-poor locations.

Nationally, \$100 million was dedicated to the program in the demonstration phase. The Bay Area, known throughout the country for its BART service, received 25 percent of national program funding. There are three other locations in the country with Location Efficient Mortgage programs – Seattle, Los Angeles, and Chicago. To date, around 20 LEMs have been issued in the Bay Area, helping households acquire homes in transit-rich neighborhoods. Unfortunately, because LEMs are a federal program, they are subject to a federal maximum mortgage limitation, which is \$300,700. For the Bay Area, this is a low limitation, with borrowers needing to make a down payment equivalent to the difference between the home price and the maximum available mortgage. Thus its applicability to the Bay Area is perhaps limited, although even at 20 LEMs up to 25 percent of the available funds have been successfully used to support transit-oriented home ownership, demonstrating the success of smart growth principles in the Bay Area.

V. DEVELOPMENT IMPACTS

BART has significantly contributed to the form of development in the region as well as enhanced property values. These impacts are most notable among office and residential development. This chapter reviews findings relevant to these land uses, including a review of how BART proximity influences the pattern of development.

OFFICE DEVELOPMENT

Drawing upon the methodology of a previous study by UC Berkeley's Institute of Urban and Regional Development entitled "BART@20: BART Access and Office Building Performance," Sedway Group analyzed BART's impact on office development in the Bay Area. To test the conclusions put forth in that study, which found that BART had a significant impact on nodes of office development in San Francisco, contributing to the regional prominence of San Francisco, Sedway Group evaluated development trends in cities with BART service. This evaluation was conducted through detailed analysis of a comprehensive database of all office buildings in San Francisco and Oakland, as well as the more suburban cities of Walnut Creek, Pleasant Hill, Concord, Richmond, Moraga, Lafayette, Berkeley, and others. The database included building location, size, and year built. The locations of all the office buildings included in the database are depicted on Exhibits 2, 3, and 4.⁹

Consistent with the findings of the previous study, Sedway Group found that office development in San Francisco has significantly benefited from BART, whereas office development in Alameda and Contra Costa counties (referred to collectively as the East Bay) has been less impacted by BART.

Sedway Group analyzed development trends for three periods:

- the years up to and including the 1962 voter approval of bonds to fund BART construction;
- the years of 1963 to 1974, during which BART was under construction; and
- 1975 onward.

By analyzing these periods, the study was able to track the influence of BART over time. BART's influence was found to be significant both after the system's completion (1975) and even during its construction period (1963 to 1974). During the construction period, many real estate developers were aware of route alignments and began to focus their development efforts in the areas that would be served by BART.

⁹ The database was obtained from CB Richard Ellis, Sedway Group's parent company. Due to data limitations, the database does not include buildings in communities south of San Leandro.

Trends in San Francisco

As shown in Exhibit 5, the inventory of office space within 1/3 mile (i.e., walking distance) of BART's four downtown San Francisco stations more than doubled space more distant from BART. This has not always been the case. When BART was approved in 1962, about 59 percent of San Francisco office space was within 1/3 mile of the four sites now housing BART stations. Since 1963, development near BART stations has increased dramatically, comprising 77 percent of total office construction in that period. Today, seventy percent of office space in downtown San Francisco is within 1/3 mile of a BART station.

There was very little office development in San Francisco during the 1990's, but 17 buildings have been constructed or renovated since 1999, totaling over 4.5 million square feet. Of that new space, 82 percent is within 1/3 mile of a BART station. This demonstrates that BART has a strong role in shaping San Francisco's compact urban form, consistent with prevailing smart growth principles.

should be noted that San Francisco Muni service contributes to growth as well.

Not only has development been increasingly concentrated near BART stations in downtown San Francisco since BART was approved, but the buildings near BART are much larger than those not near a BART station. Office buildings with BART access are on average twice the size of other office buildings, as shown in Exhibit 6. Prior to 1963, buildings in what would become the BART station areas were about 25 percent larger than buildings located elsewhere. Since then, the average building in a BART station area is 134 percent larger than the average building located elsewhere.

The larger office building sizes near BART results in concentrating employment density near BART. There is a very significant benefit to the City of San Francisco from this concentration, as workers in dense urban areas have greater workday retail expenditures than workers in more suburban locations. Sedway Group estimates that the BART proximate office space houses about 207,000 workers. Since office workers spent about \$3,500 per year on retail purchases in 2002, BART-oriented office space generated \$724 million in annual sales from workers alone.¹⁰ About half those dollars are spent on lunches, while 14 percent are spent after work. In 2002, taxable sales in San Francisco totaled \$8.64 billion. Thus office worker spending in just the BART proximate buildings accounted for 8.4 percent of all taxable sales in San Francisco. This benefits retailers in San Francisco as well as the City of San Francisco, which garnered an estimated \$7.2 million in sales tax revenue for the General Fund related to office worker spending (pursuant to 1.0 percent sales tax accruing to the General Fund). An additional \$7.2 million accrued to special districts in San Francisco, primarily for transit and educational purposes.

Trends in the East Bay

Comparable office development analysis was conducted for the East Bay during the same time periods as analyzed for San Francisco (see Exhibits 7 and 8). BART has also benefited office development near BART stations there. Most notably, buildings near BART in the East Bay tend to be larger because of leaner parking requirements afforded by BART. Yet the office development impacts of BART are not as pronounced in the East Bay as in San Francisco, in large part because suburban markets are more dispersed and have a more residential character. This residential character, however,

¹⁰ This figure is based upon figures reported by the International Council of Shopping Centers, updated to 2003 by Sedway Group.

provides fertile ground for testing BART's residential impacts, which are notable. These impacts are explored in the following section.

RESIDENTIAL DEVELOPMENT

Over the years, several studies have demonstrated the premium value of residential properties proximate to rail transit stations. Sedway Group's 1999 BART economic impact study cited reports whose results clearly indicated that BART provided a positive impact on the value of single-family homes, condominiums, and apartments in the Bay Area. Though the Bay Area economy has changed significantly since the original study, the importance of transportation has not -- the most recent Bay Area Poll ranked transportation as the second largest problem facing the Bay Area, surpassed only by the economy. Sedway Group found no recent data regarding BART's impacts on single-family home or condominium values, but did obtain and analyze data on apartment projects in select BART-served cities.

Value Impact Findings

The 1999 study cited many academic studies that demonstrated positive residential value impacts in the Bay Area associated with proximity to a rail transit station. For single-family homes, the studies indicated that home values in Alameda and Contra Costa counties increased with proximity to a BART station. This premium averaged about 4 to 5 percent for homes near BART relative to homes located about three miles from the same BART station. The premium was even higher relative to homes located further from the BART station. The studies reviewed in the 1999 report also indicated rent premiums associated with rental housing, ranging from a low of 12 to 15 percent to a high of 26 to 40 percent for select BART-oriented developments relative to other community developments.

Sedway Group engaged in exhaustive research to identify academic studies conducted since 1999 regarding BART's impacts on residential property values. This research did not uncover any such studies. However, as the preceding smart growth section indicates, significant new transit-oriented residential development has been occurring in the Bay Area. This alone suggests strong demand for such development, with the likely continuity of transit-oriented value premiums.

Role of Transportation

The results of the latest Bay Area Poll released by the Bay Area Council in December 2003 explains why many Bay Area residents are willing to pay premiums for housing near BART: 25 percent of respondents rated transportation as the single largest problem facing the region, surpassed only by the economy at 33 percent. Fueling the transportation problem, about 40 percent of respondents felt both the highway system and street/road conditions were worsening over the most recent year. However, only 25 percent felt public transportation was worsening. While this latter figure sounds daunting, it is balanced by 21 percent of respondents believing public transportation improved over the past year and 43 percent believing it stayed the same. Notably, among 14 quality of life indicators polled by the Bay Area Council, public transportation lagged only the supply of energy and environmental quality in the highest percentage of respondents indicating stability or improvement.

BART Impact on Rental Housing

To probe the current impact of BART proximity on housing values and the rate of housing development, Sedway Group was able to engage in select research analyzing the effects of BART on multifamily housing development. This involved examining rental housing data in four communities served by BART: Fremont, Hayward, El Cerrito, and Union City. Two notable trends were identified from the research:

- a significant amount of new rental housing development occurs within walking distance (1/3 mile) of BART; and
- rental rate premiums near BART in select communities range from 15 to 37 percent.

The following table summarizes year built, rental rate, and occupancy data in the four surveyed communities with rental housing both near and distant from BART. The results are most pronounced in Fremont and Hayward, the two communities with the largest rental housing stock.

Since 1995, six apartment projects have been built in the City of Fremont. All of them are within one mile of the Fremont BART station, and three of them, including the most recently developed project, are within the 1/3-mile walking distance of the BART station. Occupancies within the 1/3-mile ring are nearly identical to the area outside the ring, despite the fact the newest project in town has not yet achieved full occupancy. However, rental rates within the 1/3-mile ring are 31 to 37 percent higher on average than rental rates outside it. This very strongly suggests the presence of a premium for BART proximity in Fremont. The premium is likely pronounced in Fremont because the city currently serves as BART's southern terminus in the East Bay.

Apartments in Select BART-Served Communities, Q1 2004

City	Number of Complexes	Number of Units	Median Year Built	Average Occupancy	Average Rent Range	
Within 1/3 mile of BART Station						
Fremont	3	964	1998	94.3%	\$1,522	\$1,678
Hayward	5	694	1987	95.0%	\$1,222	\$1,433
El Cerrito	1	135	1992	92.6%	\$1,285	\$1,135
Union City	3	490	1979	94.1%	\$1,119	\$1,135
More than 1/3 mile from BART Station						
Fremont	47	12,950	1972	94.7%	\$1,156	\$1,220
Hayward	33	6,613	1970	94.1%	\$1,062	\$1,120
El Cerrito	1	162	1988	93.8%	\$1,288	\$1,315
Union City	9	1,346	1979	95.2%	\$1,146	\$1,182

Sources: RealFacts, and Sedway Group.

Similar conditions prevail in Hayward, where rents at projects near BART are 15 to 28 percent higher than rents at projects outside the BART station area. While comparable trends are not noted in El Cerrito and Union City, there is generally rental rate parity in these cities and occupancy rates near BART are essentially equivalent to rates more distant from BART. This indicates that the BART proximate units are at least equally attractive to the units lacking such proximity.

The value impacts noted in Fremont and Hayward are likely not pronounced in El Cerrito and Hayward because these cities are not characterized by the same level and rate of rental housing development. Given current trends toward smart growth and transit-oriented development, it is likely

that the majority of new rental housing development in these cities will likely be proximate to the BART stations.

Transit Availability Affordability Impacts

While BART proximity appears to enhance the value of residential property, it can also convey additional benefits that enhance housing affordability. The 1999 study reviewed an earlier study regarding the impacts of off-street parking spaces on housing affordability in select San Francisco neighborhoods. The results indicated that homes/condominiums without parking sold for about 12 to 13 percent less than homes/condominiums with off-street parking. The conclusion was that the presence of BART and other transit makes it possible for some San Francisco households to live in a home without parking and still enjoy a level of regional access that would otherwise not be possible without an automobile. In this manner, BART proximity expanded the pool of households able to afford Home Ownership.

A similar study conducted by Sedway Group in 2001 indicated comparable results.¹¹ Using a paired unit analysis for condominiums with and without dedicated parking, Sedway Group's research indicated that units sold in San Francisco without a dedicated parking space sold for at least a 10 percent discount relative to units sold with one parking space. For select unit types, this discount was measured as high as 21 percent on average. The implications of these and the earlier findings suggest that for other communities that are served by BART, parking requirements could be reduced in order to make more efficient use of land and increase the affordability of new housing built within close proximity to a BART station. Thus the presence of BART can directly enhance housing affordability, increasing opportunities for home ownership in one the nation's highest cost housing markets.

¹¹ This study was conducted for Union Property Capital, Inc., report dated September 27, 2001.

ASSUMPTIONS AND GENERAL LIMITING CONDITIONS

Sedway Group has made extensive efforts to confirm the accuracy and timeliness of the information contained in this study. Such information was compiled from a variety of sources, including interviews with government officials, review of City and County documents, and other third parties deemed to be reliable. Although Sedway Group believes all information in this study is correct, it does not warrant the accuracy of such information and assumes no responsibility for inaccuracies in the information by third parties. We have no responsibility to update this report for events and circumstances occurring after the date of this report. Further, no guarantee is made as to the possible effect on development of present or future federal, state or local legislation, including any regarding environmental or ecological matters.

The accompanying projections and analyses are based on estimates and assumptions developed in connection with the study. In turn, these assumptions, and their relation to the projections, were developed using currently available economic data and other relevant information. It is the nature of forecasting, however, that some assumptions may not materialize, and unanticipated events and circumstances may occur. Therefore, actual results achieved during the projection period will likely vary from the projections, and some of the variations may be material to the conclusions of the analysis.

Contractual obligations do not include access to or ownership transfer of any electronic data processing files, programs or models completed directly for or as by-products of this research effort, unless explicitly so agreed as part of the contract.

This report may not be used for any purpose other than that for which it is prepared. Neither all nor any part of the contents of this study shall be disseminated to the public through publication advertising media, public relations, news media, sales media, or any other public means of communication without prior written consent and approval of Sedway Group.

APPENDIX: EXHIBITS

III. REGIONAL COMPETITIVENESS IMPACTS

BART's operations greatly enhance the regional competitiveness of the Bay Area. This occurs through strong ridership for work and personal purposes; the attraction and retention of area businesses, especially through expansion of the labor pool; the facilitation of regional employment center employment growth; the enhanced access to affordable housing; and the attraction of other funds that originate outside of the region.

SUPERIOR REGIONAL ACCESS AND RIDERSHIP

BART provides a strong regional public transportation resource, which enhances the Bay Area's competitiveness as an economic center. This is demonstrated by BART's continued achievement of the highest level of ridership per market area resident of any system in the state, which totaled 87.4 million rides in fiscal year 2003. This high ridership level within the market area is an indication of BART's importance to the Bay Area. The "market area" in this case is defined as cities that are directly served by the transit system.³ In 2003, BART's market area included approximately 2.66 million people who made an average of 33 trips per year on the system.⁴

Within California, total BART ridership in 2003 greatly exceeded any other commuter rail system. Total ridership on other systems in the state were as follows:⁵

- Los Angeles County MTA, 30.7 million
- San Diego Trolley, 25.4 million
- Sacramento Regional Transit District, 8.5 million (fiscal year 2002)
- Caltrain, 7.6 million
- Santa Clara Valley Transportation Authority, 5.5 million

BART's strong ridership demonstrates the regional reach of the system and strong reliance on the system for commute as well as personal use, unparalleled among other transit systems in the state. BART's ridership also rivals major transportation systems in other regions competitive with the Bay Area. For example, Sound Transit ridership in Seattle only totaled 267,000 in 2003. While the Dallas Area Rapid Transit achieved a much higher 17.0 million riders, this level is still substantially below the standard achieved by BART.

³ This includes all cities with a BART station, which is conservative as BART attracts riders from many additional surrounding cities and beyond.

⁴ This 2003 market area population figure includes a partial year allocation for the San Mateo County cities that started receiving BART service in mid-2003. This calculation is based on an estimated 87.38 million rides during fiscal year 2003.

⁵ Sources include the American Public Transportation Association and transit system websites. Data are for 2003 unless otherwise stated.



Janice Lee

07/13/2004 10:13 AM

To: Mike Healy/Lma/Oak/Bart@BART

cc:

Subject: Re: SFO Ridership 

Total ridership for FY04 is 91,042,192 .

Mike Healy

Mike Healy

07/13/2004 10:06 AM

To: Janice Lee/Msq/Oak/Bart@BART

cc:

Subject: Re: SFO Ridership 

Janice, thanks for the info. It was just what I was looking for. By the way, one more stat - what was total ridership for the fiscal year 04. thanks. Mike