## 4. GROWTH-INDUCING IMPACTS

## 4.1 BACKGROUND

Transportation, economic growth and land development have always been major factors affecting the growth and character of industrial and post-industrial urban communities. Early American cities were created on major waterways. In the 19th century, railroads connected existing urban centers, and led to new urban areas beyond the waterways. In the beginning of the 20th century when cities were booming, transportation was chiefly put in place to serve promoters and developers. During the Depression and World War II, economic constraints drastically slowed the expansion of urban areas and reinforced the use of transit systems.

After World War II there were no shortages of capital, land, or raw materials (fuel, steel and rubber) and population expanded. Economic growth was manifested in the suburbs. Transportation by automobile was preferred and a lattice-like grid of local streets and arterials, regional thoroughfares, and inter-regional freeways were built to serve the expanding suburban areas. The growth of the highway system came at the expense of the old transit systems and the old central cities.

By the late 1960s, the conventional approaches of the suburban developers, planners and road builders came under scrutiny and public debate as air quality deteriorated, farmlands disappeared, and the old cities struggled to remain viable and healthy. Among the responses seen in the San Francisco Bay Area were proposals to stop freeways in particularly sensitive areas and to create a new regional rail transit system (BART) to increase accessibility to downtown San Francisco and Oakland.

## 4.2 TRANSPORTATION SYSTEMS AND LAND USE

The relationship between transportation systems and land use is multi-faceted and complex. The post-World War II suburbanization of America could not have occurred without cars and the development of roads and freeways. However, the roads and freeways would not have been built had there not been strong demand for residential, commercial and industrial activities plus active developers undertaking new projects.

The early proponents of the BART System, in the mid-1960s, believed that it would induce regional growth. Its tremendous increase in accessibility to downtown San Francisco and Oakland was expected to support large redevelopment plans and projects in both cities. In addition, the designers expected stations in suburban centers to attract major concentrations of offices and retail shops, while outlying stations would become surrounded by high-density housing and shopping facilities. While significant economic growth has occurred in the Bay Region since BART began operations, the studies on the impacts of the BART system have revealed that many factors (i.e., economic, social and physical) have been at work, and the overall effects of the BART system on growth were not as great as anticipated.

While BART has diverted automobile trips from freeways (although fewer than originally projected),<sup>2</sup> the system today carries only about 1.1 percent of the region's total daily trips and 3.2% of the total daily trips in its three-County service area. In 1990, BART carried about 231,000 passengers a day, while the nine-county Bay Area generated about 20,202,000 person trips a day. In 1987, there were approximately 6,908,000 trips generated each day in San Francisco, Alameda and Contra Costa counties.<sup>3</sup> BART carries about 16.3 percent of the entire region's transit trips.<sup>4</sup> Although population and job growth has greatly expanded in the region during the past 20 years, the rate of increase of overall mobility has been greater. A portion of the new trips in the region appear to be more a function of increased prosperity than the result of new transportation systems or new land development.

As predicted, downtown San Francisco has grown enormously in the time since BART service began, but there is no clear cause-and-effect relationship between the new transit system and the downtown's growth. In the 12 years after BART service began, San Francisco's high-rise office building expanded by 4,200 square feet for every 1,000 people in the region. In the same time Houston added 5,500 square feet per 1,000 people, Chicago added 4,550, and Dallas, 3,500.<sup>5</sup> The accelerating expansion of service activities during the past several decades has

Webber, Melvin, "The BART Experience - What have we learned?", The Public Interest, Fall 1976, p.82.

Webber reported that in 1976 thirty-five percent of the BART riders formerly made their trips by car. In 1961 BART was forecast to carry 258,000 daily riders by 1975. Webber, 1976, op. cit., p. 85. The system currently carries about 231,000 passengers a day.

<sup>&</sup>lt;sup>3</sup> Derived from data in Metropolitan Transportation Commission, Bay Area Travel Forecasts for Years 1987, 1999 and 2010, Technical Summary, Rand 1990, Table 7, p. 21.

<sup>&</sup>lt;sup>4</sup> Metropolitan Transportation Commission, April 1991, Regional Transportation Plan Environmental Impact Report, Tables 4.3 and 4.17.

<sup>&</sup>lt;sup>5</sup> Webber, 1976, op. cit., p. 89.

coincided with the strong determination of many cities to revive their downtowns. The theory that transportation capacity is a primary causal factor in the success of downtown growth does not explain why cities like Houston, Dallas, New York and Denver grew so much in the 1970s and 80s. Nor does it explain why Oakland, at the hub of the BART system, has grown much more slowly than any of these cities. Nor does it explain why Sonoma, Solano and Santa Clara Counties were the fastest growing counties in the Bay Area during the 70s while none of them had any major new freeways or transit systems.

Generally, transportation improvements support growth, while land use development generates new travel demand and hence the need for new transportation capacity. Some transportation improvements may not affect growth at all. Most Transportation System Management (TSM) programs would fall into this category, (such as High Occupancy Vehicle (HOV) lanes, express bus and congestion management). Some new interchange or freeway projects that provide access to areas where development is planned induce growth on a local scale, or at least, are effective in directing it's location. On a larger scale, however, few projects are likely to induce growth on an areawide basis which would not be expected and planned. The BART system was expected to have been such a project, but most analysts seem to concur that its effects on growth have not been large.

Most transportation projects are in the wide gray area between "no effect" and "growth-inducing". These projects may hasten growth in certain areas, retard it in others, intensify development in certain locations, or shift growth from one locality to another. Other factors, particularly local planning and community standards or environmental initiatives, may also direct the location and timing of transportation investments. For example, the 1970s "freeway revolt" in San Francisco stopped the extension of I-280 across the waterfront to the Golden Gate Bridge. Similarly, the Local Coastal Programs (under Proposition 20, the California Coastal Act) have led to the removal of some proposed highway improvements in coastal areas.

## 4.3 ANALYSIS

The economic and population growth that the Bay Area has witnessed in the past four decades is expected to continue. ABAG's *Projections 90* estimates that the nine Bay Area counties will experience population gains of about 1.4 million people between 1980 and 2000, comparable to the 1.5 million person increase between 1960 and 1980. Today there are more jobs in the nine

<sup>&</sup>lt;sup>1</sup> Association of Bay Area Governments, 1989, Projections 90, December, p. 55.

Bay Area counties than there are employed residents, leading to significant in-commuting from surrounding areas. This trend is expected to continue. While the shortage of housing could stifle job growth to some extent, it also will create a demand for the densification and infill of existing urban areas as well as for improved transportation between outlying areas and employment centers.

As the 71-mile BART system does not appear to have had a demonstrable regional growth-inducing effect, it is not predicted that the Proposed Project (at most, a 7.8-mile extension) or any of the alternatives would induce growth on a regional scale over what is already expected to occur.

Within the project area, ABAG projects substantial population and employment growth during the next two decades. The population of Fremont is projected to increase by 28,400 people (16 percent) and 39,400 new jobs may be created within the City between 1990 and 2005. This would be a 71 percent increase in employment; much of it would be located within the southern portion of the project area, between the Warm Springs and South Warm Springs stations. Today, Fremont has about 74 percent more employed residents than it has jobs. With the projected large job growth, the City is expected to reduce this to 25 percent more workers than jobs in 2005. Overall, it is projected that almost 120,000 Fremont residents will be commuting from home to work and that almost 95,000 employees will be working in Fremont by 2005. This level of activity will place a substantial demand on the transportation systems serving the area and surrounding communities. Today these systems are considered highly congested in some areas, particularly along I-880 between Fremont and San Jose.

On the local scale, some of the alternatives could actually constrain the timing or location of planned land use development and redevelopment in central and south Fremont, and would clearly have no local growth-inducing effect. (These alternatives are the two No Project alternatives and the TSM alternative.) ABAG has estimated that road capacity will be a potential short- and long-term constraint to growth in southern Alameda County (Fremont, Newark and Union City).<sup>2</sup> With the limited prospects for increased transportation capacity available under these alternatives, the demand for new private investments in industrial and residential facilities could be reduced as decisions are made to move industrial plants and offices to locations with less congestion and lower housing costs.

<sup>&</sup>lt;sup>1</sup> Ibid., pp. 104-5

<sup>&</sup>lt;sup>2</sup> Ibid., p. 92

The Proposed Project and all of the build alternatives for this extension would tend to support the plans for increased industrial, office, commercial and residential development in the central and southern part of Fremont. Land use plans for the area have, for over a decade, assumed that the BART system would be extended to the Warm Springs area. The level of development proposed has been influenced, in part, by the improved access that would be afforded by an extension of BART. (Also see 3.6 Land Use and Economic Activity, sections 3.6-2 and 3.6-5, for impact on land uses.)

Since planning projections indicate that significant, developable land resources are available in the Fremont-South Bay Corridor and job growth in the area over the next 15 years will greatly exceed the local growth in labor supply. The Proposed Project and Alternatives 6, 7, 8, 10, and 11 would have the greatest growth-inducing potential by providing transit access to the largest amounts of undeveloped land. This is tempered, however, by the fact that the project would not directly improve the transportation connection to any areas of high residential growth. Northern Alameda County, the area that would be the most reasonably accessible by commuters using BART, is presently a housing deficit area and is expected to remain so for the foreseeable future. Certainly the project would support and accommodate planned growth in southern Fremont, but it is not likely to induce growth beyond what is currently anticipated. (See also, Section 3.6.2, Land Use and Economic Activity Impacts.)

By allocating major capital investments for transportation improvements in southern Alameda County, the project may reduce the availability of capital for new transportation investments in outlying areas. Indirectly, therefore, it may have some influence on the location of future growth, supporting trends toward infill and intensification of development in the partially developed areas of southern Fremont, while potentially constraining the rate of development at the urban fringe.

The Proposed Project and all of the build alternatives would increase development pressure, primarily for high density residential and some commercial development in locations within approximately one-half mile of the station sites. The Fremont General Plan designates the area around the Warm Springs Station as a study area for the possible conversion of existing industrial and commercially designated lands to residential use. The Plan anticipates relatively slow redevelopment toward newer commercial and higher density residential development around the Irvington Station. Within the City as a whole, the highest residential density ranges found

<sup>&</sup>lt;sup>1</sup> City of Fremont, 1991, Fremont General Plan, Preliminary Draft II, p.3-20.

4. Growth-Inducing Impacts

in the General Plan's Land Use Policies are only permitted on lands within walking distance of BART Stations.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Ibid., Policy LU 1.5, p.3-29.