

Introduction

While researching the history of the Key System at the Downtown Berkeley Public Library, I came across reports from 1967 suggesting that several hundred housing units be built on the site of the future Ashby BART station. Living several blocks from the completed Ashby Station, I am well aware that none of these housing units exist. This paper is the result of my research into why these housing units were never built.

History of San Francisco Transportation

The San Francisco Bay Area has always been a unique place to live, full of resources and opportunity. An area which had originally been populated by indigenous peoples living in symbiosis with the environment around them, changed after Spanish colonization into a region devastated by disease while under Missionary control. During the 19th century, and especially after the Gold Rush, the California population rapidly increased. The growth in population during the late 1800's resulted in many new towns around the San Francisco Bay, settled predominantly by European, Asian, and immigrants from the Eastern United States.

The San Francisco Bay Areas largest asset is the bay itself, yet at the same time the bay provides challenges. While the protected bay is perfect for large volumes of shipping, the expanse of water between the City of San Francisco and most surrounding communities exacerbates transportation costs and time. Ferries and boat commuting have been the most enduring form of transportation for residents of the San Francisco Bay Area. Ferries have shuttled people, train cars, and automobiles across the bay for over 150 years. While ferry use now is not as popular as it once was, boats and ferries still contribute to the vitality and transportation needs of the San Francisco Bay.

At the turn of the 20th century, more and more people were beginning to live in the east bay. The cities of Oakland and Berkeley had their own docks, businesses and communities. While the population grew and expanded, the need for regular transportation to and from San Francisco, as well as between east bay cities, grew.

Francis Marion Smith was the man to fill the need. In 1903 he established the Key System: a system of horse car, cable car, and electric train services. His system served the Oakland, Piedmont, and Berkeley areas. In 1930, six trans-bay lines had been developed, all converging at the Emeryville pier for those heading in and out of San Francisco. Over time, the system grew, offering over 265 miles of track from Richmond to Oakland, and starting in 1939, across the lower deck of the Bay Bridge, ending at the San Francisco Trans-Bay Terminal.

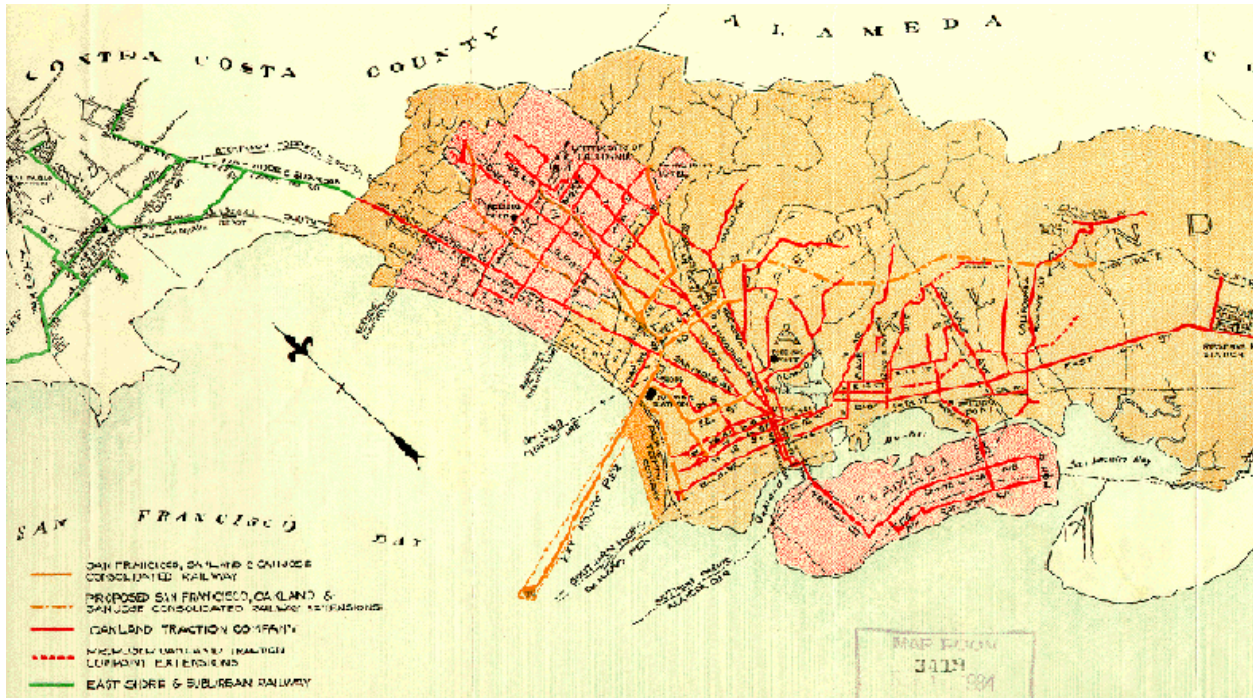


Sadly, the Key System became fraught with difficulties. As Key System service expanded, so did the use of the car. This created three large problems for the Key System. One, as private auto ownership increased, the Key System's rider-ship dwindled. Second, the increase

¹ Photo of Key System train on Lake Shore Avenue found at: <http://www.bayarearailfan.org/gallery/keyroute>

in private auto ownership resulted in freeway and road investment, while the Key System suffered from disinvestment. Thirdly, the Key System was forced to compete with cars on city streets causing delays in Key System service.

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By 1955 the Key System had been bought-out by National City Lines, a Delaware based corporation, financed by General Motors, Standard Oil, and Firestone Tires and Rubber. The new owners of the Key System requested that the California Public Utilities Commission grant the Key System permission to abandon its two Bay Bridge rail service lines. As a result, in 1958, the last Key System train crossed the Bay Bridge. Soon after, the Key System trains were shipped off to become part of Argentina's Federal Railway, and the train lines were replaced with buses (made by General Motors, that used Standard Oil fuel, and ran on Firestone tires). In 1960, due to reduced service and a sharp decrease in rider-ship, the mangled Key System was bought out and turned into a public agency known today as AC Transit.

² Key System map found at: <http://www.bayarearailfan.org/gallery/keyroute>

BART Is Born

The 1960's opened with no comprehensive transit service for trans-bay commuters, yet futuristic dreams for an underwater high speed transit tube serving San Francisco and the east bay had already begun to take shape. In 1947 a joint study done by the United States Army and Navy suggested that commuting time between San Francisco and Oakland needed to be reduced. The study also recognized the need for increased capacity of transportation systems due to the ever expanding population all around the San Francisco Bay. In order to accommodate the need for quick and efficient commuting, as well as increased numbers of commuters, the study recommended building a tube at the bottom of the bay between San Francisco and Oakland. The study got a lot of press for about a week, and was promptly forgotten. In 1947 the Key System was still running and the Bay Bridge had not yet had its tenth anniversary, a commuter tube at the bottom of the bay was not a high priority.

In 1951, California Governor Earl Warren signed legislation to create the San Francisco Bay Area Rapid Transit Commission. The commission was to study the transportation needs of the San Francisco Bay Area. Nine counties were included in the project: San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Solano, Sonoma, Napa and Marin. The commission took five years to complete the study, and in 1956, concluded that without a comprehensive rapid transit system, the bay area was headed towards a transportation disaster. The study suggested building a Monorail, or electric train system, that would eventually contain over 300 miles of track.

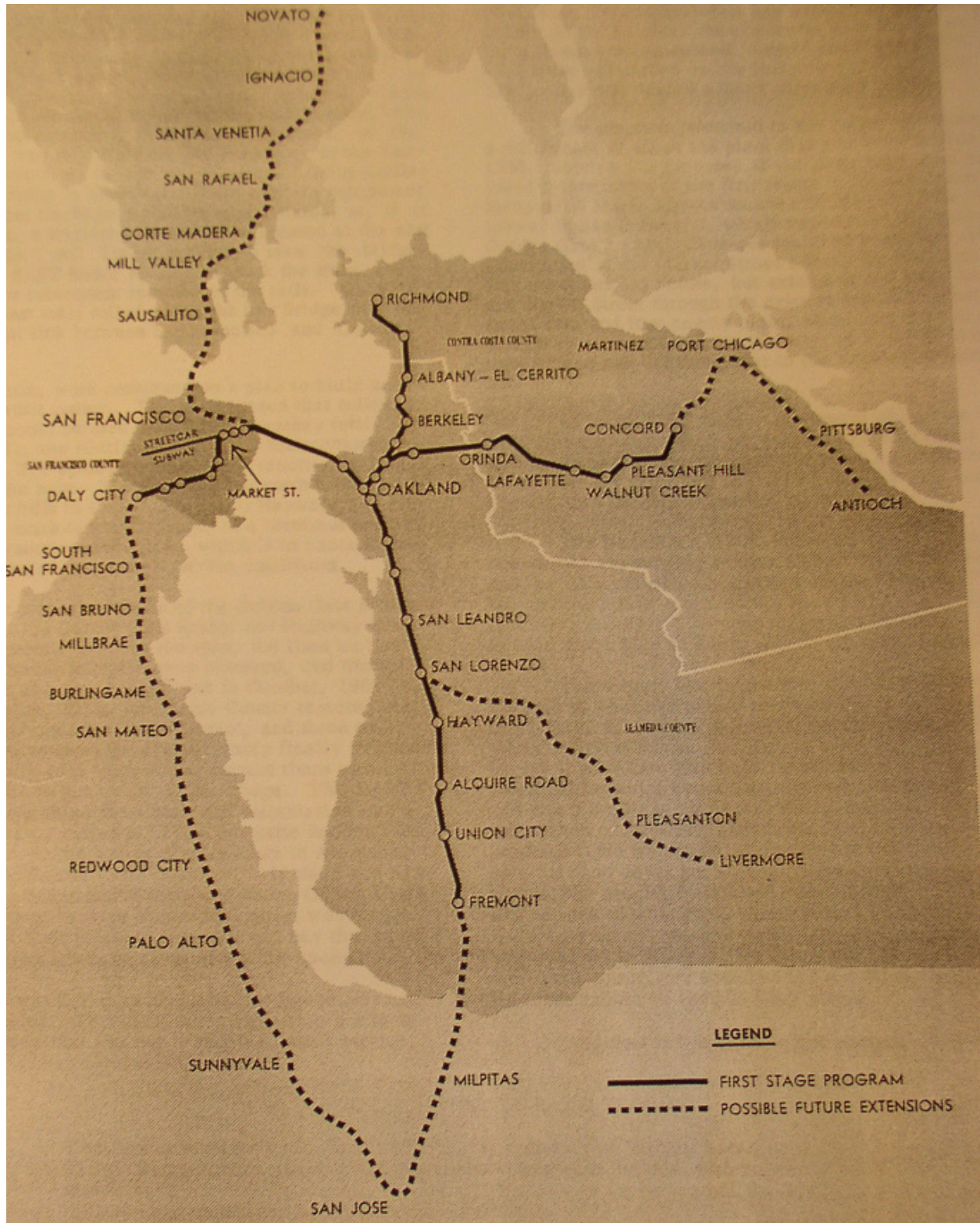
“Without rapid transit, the region will ultimately pay many times its cost in additional hours of travel time, in the additional cost of trucking goods over highways congested by automobiles, in diminished revenues from property depreciated by congestion or swallowed by automobile facilities, and in the premium costs of urban freeways and parking garages.

“We do not doubt that the Bay Area citizens can afford rapid transit; we seriously question whether they can afford not to have it.”³

As a result of the study, the Bay Area Rapid Transit District (BARTD, later referred to simply as BART) was formed in 1957. However, the counties included in the new BART district had dwindled to five. Sonoma, Santa Clara, Solano, and Napa were excluded from the district because they were predicted to grow more slowly than the rest of the Bay Area counties. On November 14, 1957 the BART district was officially activated at the first BART Directors meeting, and by July of 1958 the first taxes to support BART were being collected.

1962 was a big year for BART. While five counties had been included in the BART district, keeping all five in the plan proved harder than originally anticipated. In order to provide Marin County with service, the plan was to have BART trains run across the Golden Gate Bridge. However, running BART trains across the Golden Gate would have compromised the number of cars able to cross the bridge, as well as the bridge’s structural integrity. As a result, the Highway District refused to issue BART permits for the project. The only other way to get BART from San Francisco to Marin County would be to build another trans-bay tube. However, with the depth of water exceeding 300 feet, combined with the extreme force of tides in this area, a tube would not be feasible. Subsequently, Marin was dropped from the project. While Marin County was forced to withdraw from BART because of engineering obstacles, San Mateo County chose to withdraw from BART the same year citing the high cost of BART, as well as the existence of commuter rail already connecting San Francisco to San Jose through San Mateo County.

³ Page 1, Chapter 1 of Interurban Special 31, BART at Mid-Point.



⁴ Map of BART as suggested in 1961, found in *Interurbans Magazine*, Volume 25, Issue 3

On November 6, 1962, the reformed, three-county BART District went to a public vote. BART needed sixty percent of voter approval in order to get the project started, it passed with sixty-one point two percent. This allowed for 792 million dollars in General Obligation Bonds, and the building of 75 miles of track.

The Ashby BART Station

While voters had approved BART, not all voters agreed with the specific plans for the system. The City of Berkeley, in particular, was very displeased with the way in which BART planned to build in Berkeley. Berkeley was to have three stations, North, Central (Downtown Berkeley), and South (Ashby Station). While the Central Station was to be built underground as a subway, the North and South Stations were to be above ground. The community was concerned that the elevated tracks would have a blighting effect on the neighborhoods they passed through. It was believed that the swath the tracks would cut, along as the noise generated from the elevated trains, would devastate local business, and reduce the quality of life of the neighborhoods bordering BART.

BARTs' original plan, either financial or physical, did not included for Berkeley to have a 'border to border' subway system as city leaders envisioned. As a result, the City of Berkeley had its own vote proposing that Berkeley have a border-to-border BART subway, with the residents taking on the extra financial burden. On October 4, 1966, 75 percent of Berkeley voters overwhelmingly approved 12 million dollars in bonds to be issued for BART to be underground

within the city borders. While this was an overwhelming victory for the residents of Berkeley, the victory came at a cost beyond the \$12 million in bonds⁵.

The vote delayed construction by over eighteen months. Both Oakland and the Albany through Richmond segments of BART tracks had been completed when Berkeley's stations were getting built, causing the opening of BART stations to be delayed system wide. Even after Berkeley's voter approval, certain station aspects were hotly contested.

The redesigning of the Ashby Station in particular proved to be problematic. The original subway design called for a different alignment from what exist today, and a system of skylights to bring light into the station. City Councilman, Ron Dellums, sued BART, saying that the system of skylights compromised the station into something that was not truly a subway design. The result was another redesign of the Ashby station, at further cost in time and expense. Eventually the station was redesigned without the skylights; instead the parking lot was terraced and lowered to below street level, providing natural light for the mezzanine and train platform in the station.

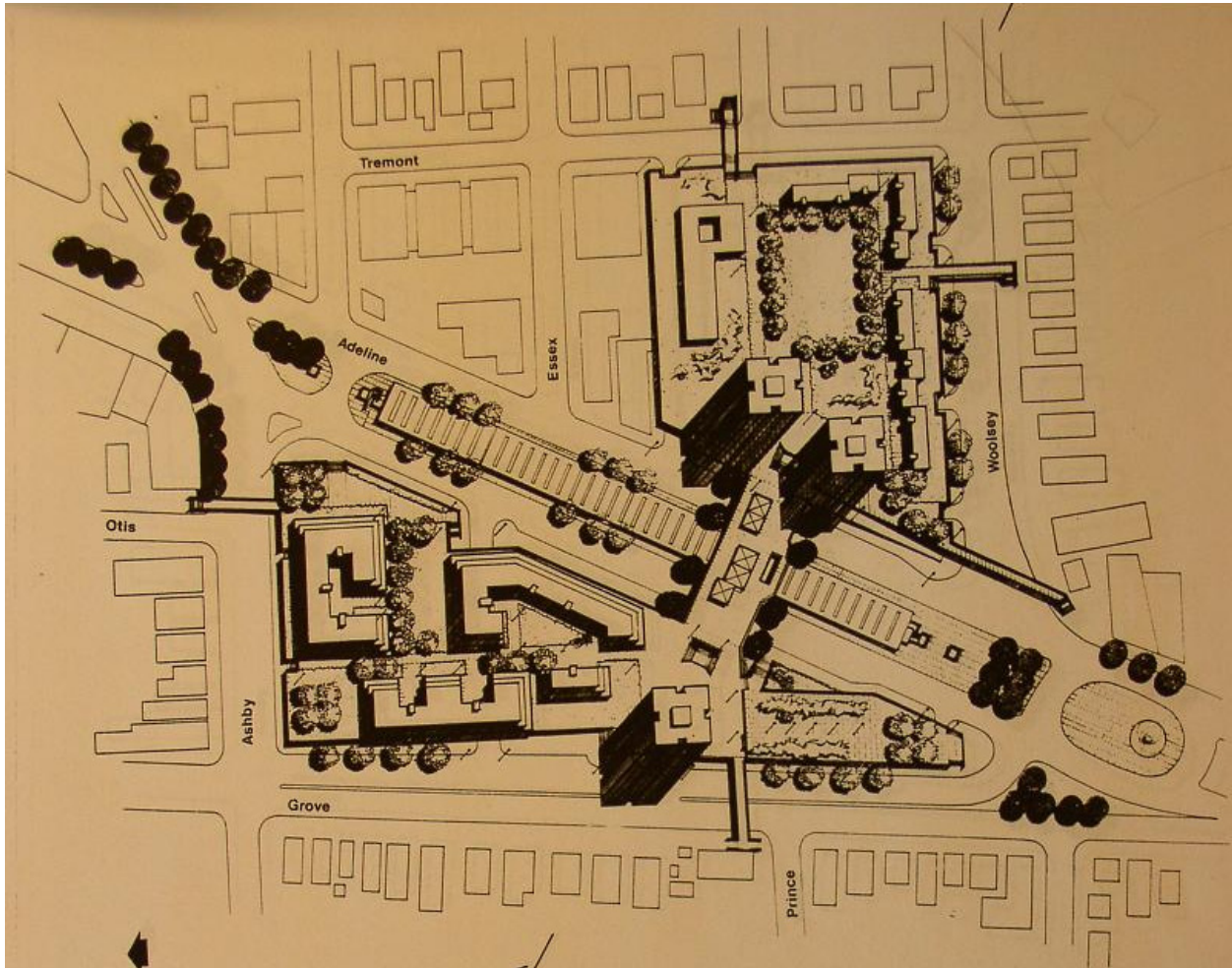
The Ashby BART Station debate was not limited to the Station itself, but extended to the surrounding property. In order to keep the station from becoming stagnant, and to help prevent any possible blighting impacts that may occur, dozens of ideas were put forth. These proposals included all of the "L" shaped property that is today the terraced parking lot. Housing, retail, and parks were the three main things suggested to surround the station. The question was how. What mix? What density? What were the needs of the neighborhood?

In 1967, the Berkeley City Council requested an Air Space Development Study for the North and South Berkeley BART Stations. The purpose of the study was largely to "assist the

⁵ According to BARTs' website, Berkeley Voters approved 12 million dollars in bonds, but according to A Bright New Day for the Bay Area, Published by BARTD in 1975, the City of Berkeley voted and "agreed to spend \$20 million," but fails to specify if that was a mix of bonds and other revenue sources.

City of Berkeley in renegotiating its agreement for the rights to the air space at the north and south stations based on a more detailed understanding of the feasibility of development, parking requirements, structural considerations, community interests, physical impact and other factors”.⁶
The Air Space Study resulted in a list of recommendations for the Ashby site, and four prototype designs for the Air Space.

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The recommendations included that the City of Berkeley acquire all of the air space in ensure city control, that parking requirements remain flexible, to increase height limits for the air

⁶ Page 3, Berkeley Transit Route and Air Space Development Study

⁷ Drawings of Housing Prototype D for the Ashby BART Station, 1967. Found in the Berkeley Transit Route and Air Space Development Study.

space, the reservation of at least one and a half acres for public open space, the creation of incentive plans for private developers, and to include a housing policy for the air space that would take into consideration the needs of the local surrounding community.

The needs of the South Berkeley Community were assessed by the study at a series of neighborhood meetings held with community groups. The residents preferences listed in the study include: housing to meet the needs of various income levels, larger apartments for families, excluding major retail development as to not create competition with preexisting area businesses, and a compromise of allowing higher buildings (up to 10 -12 stories) in order to provide more open space. Residents were also concerned about traffic flow, possible negative effects on local businesses, and the City of Berkeley continuing to be involved, and working with the community.

The Air Space recommendations, along with the community interviews, were taken into consideration to create four prototype designs that could be built to compliment the Ashby BART Station. (A) All town houses; (B) Five towers and terraced housing; (C) Three towers for the western side, terraced housing, town houses on the eastern side, and public open spaces; (D) Three towers, terraced housing, town houses, public facilities and open space. Housing units were to be affordable to the community, and the community facilities would include child care.

Additionally, all four prototypes included an emphasis on pedestrian access, safety, and enjoyment.

“A major feature of the proposal is an 80 foot wide bridge across Adeline, joining the two sections of the site. This bridge could provide an unusual pedestrian vantage point of Berkeley. Because of its central location, it would also be an ideal place for minor convenience shops. Such a bridge would be an adaptation of the concept of the Ponte Vecchio in Florence and the Rialto Bridge in Venice....Smaller 10-foot wide pedestrian overpasses are located on all sides of the site to link the site to surrounding blocks.”

While comparing a pedestrian bridge over a roadway to historic bridges over water is a little far flung, the idea of unimpeded pedestrian access to and from BART and the surrounding communities was the ultimate goal.

After all of the time and energy put into studies focusing on how to best utilize the Ashby BART air space, how did the site end up as a parking lot with none of the suggested development? The main reason is that parking spaces for BART patrons can not be compromised. This means that anything built in the Air Space of Ashby BART would have to be on top of parking spaces, necessitating either underground parking garages, or raised building structures. Any configuration such as these greatly increases the cost of any project.

The four prototype plans, for example, all suggest two levels of underground parking, 629 spaces for BART parking, and 563 parking spaces for residents. This seriously compromises the economic feasibility of any development in the air space of Ashby BART. Any development that goes in the air space of BART today must continue to provide at least 500 spaces of parking for BART passengers, while providing additional parking for whatever air space use that is built.

The affordable units that the surrounding community was hoping for could not be built without heavy government subsidies that exceeded the simple tax incentives suggested in the air space report. The building of 500 housing units, a one and a half acre park, along with approximately 1,200 parking spaces was not economically viable in 1967, nor is it today. Because of this, housing will not become a reality at Ashby BART until property values become so high (even higher than current rates), that it becomes more cost effective to develop housing along with a parking garage, than to buy housing at market rate. By this time, the congestion pendulum in the bay area will probably have swung so far, that providing between 600 and 1,200 parking spaces at a public transportation hub will seem unwisely extravagant. Many people who

subscribe to New-Urbanist and Smart-Growth ideals would say that this day is already here, and that housing should be built with maximum parking requirements, instead of minimum, because of the housing's proximity to BART and other public transit services.

While the air-space study in 1967 failed to result in any development, it did result in the City of Berkeley acquiring the air-rights to the property. This gives the City of Berkeley control over any future development around Ashby BART.

Ashby BART Today, and in the Future

While the cost of building in the Ashby BART air-space is very expensive, there is no shortage of proposals for both the east and west sides of the station. The west side of the Ashby BART station has been a multi-use site for the past 25 years. Every weekend, in the north-west area of the parking lot, the Ashby Flea-Market is held. Over the past quarter century, this has become a community gathering place with artisans selling crafts, local merchants, food vendors and a lively drum circle. In 2001, it was suggested that the City of Berkeley should build housing for public employees (such as school teachers and librarians) that were essential to the function of the community, but due to rising housing cost, were priced out of living in Berkeley. The proposal came under fire, however, by those who claimed that the placement of housing on the western side of the Ashby BART station would displace the flea market- a thriving community institution. The outcry was so great, that the proposal was dropped, and subsequent plans have yet to be produced.

The eastern side of the Ashby BART station has only served as a parking lot, reducing the number of possible conflicts over future uses. For several years, The Center for Independent Living has been working towards building a new site, The Ed Roberts Campus, along the eastern

side of Adeline Street, on top of the eastern parking lot. The Center for Independent Living will house nine agencies, all specializing in services for those with disabilities.

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For several years, The Center for Independent Living has been working with neighbors to try and come up with plans that will fit in with the neighborhood. The neighbors of Ashby BART today have different concerns from the neighbors of Ashby BART in 1967. In 1967, South Berkeley residents supported having taller building in order to create more open space. Ten to twelve story towers were proposed in 1967 to make this happen. Today, a twelve story building at Ashby BART would never receive neighborhood approval. Today, neighbors are very much concerned with new structures being sensitive to the size and scale of the surrounding buildings. Because of this, the design for the future Ed Roberts Campus is not taller than any of the surrounding buildings, and also includes public open space in the form of a small park.

⁸ Current photo of the eastern parking lot at the Ashby BART Station, view from Adeline.

Meanwhile, all parking spaces that exist today will remain, and the website for the Ed Roberts Campus assures community members and BART commuters that no parking spaces will be lost, either during construction, or when building is completed.

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Conclusion

The loss of the Key System was a tragedy for the San Francisco Bay Area as a whole. The 265 miles of lost track was significant for several reasons. One, the lesson should be learned that a public asset should never be sold to an out of state interest that has no investment in the community it is supposed to serve. Two, the move towards private vehicles signaled more than a transportation shift, but a change in societal values from public and communal resources, to

⁹ Prototype photo of the Ed Roberts Campus, situated on top of the east parking lot of Ashby BART, along Adeline Street. Photo from <http://www.edrobertscampus.org>

private and individual priorities that have resulted in sweeping changes in American society in every realm of public policy from health care to education. Thirdly, the abandonment of the Key System was an infrastructure loss that has cost billions to replace in the form of BART and AC Transit. If the Key System had been valued and saved before its demise, public transit service, and indeed the face of the East Bay, would be unrecognizable today. If the Key System had been expanded and upgraded with the equivalent moneys that have been invested in creating and sustaining BART, the San Francisco Bay Area would have an exemplary public transportation system.

The creation of BART shows the potential challenges of building a new regional transportation system. Lessons of spending, planning, and political obstacles should be heeded by other regions that wish to construct new transportation infrastructures. Specifically, community concerns should be taken into consideration as early as possible in the planning process to avoid later delays.

The Ashby BART Station is an example of the strength of community planning, coupled with the failure of regional support. BART was envisioned in the 1950's as a regional transportation system that was to save the San Francisco Bay Area from overcrowding by the private automobile. However, BART has yet to be realized as such for the following reasons:

1. Despite the billions of dollars that have thus far been invested in BART, billions more have been invested in road construction that contradict and compromise the use of public transportation. While the Richmond BART line, which the Ashby BART station is a part of, was designed to reduce traffic congestion along the 80 Freeway heading into San Francisco, several lanes have been added to this freeway since BART has been built, accommodating more

automobiles. This public investment has taken away from potential public transit alternatives, and has only added to traffic congestion and environmental pollution.

2. The emphasis on private automobile parking at BART stations is contradictory to the supposed mission of BART, which is to get people out of their cars. Money used to build and maintain the extensive parking that is provided at most BART stations could have been used for other public transit that would provide service to BART. In order to get people out of their cars, it is necessary to deemphasize the role of the car.

3. Individual BART stations, such as Ashby, in effect were only partially completed. Parking lots surrounding public transportation stops reduce stations from potential vital community centers, to mere points along a path. While public demand during BART construction forced the creation of many parking lots, this killed the potential for BART stations integrating with the surrounding communities. If public funding, either locally or federally had provided for development such as suggested in the Ashby prototypes, the effect of the new transit line would have spurred local economies, rather than blighting them, subsequently making BART that much more a vital part of the community.

Appendix

The following chronology is directly adapted and modified from the <http://www.bart.gov> website. All dates and references have come directly from that site, except for the ones pertaining to the Key System and AC Transit.

1903: Key System founded by Francis Marion Smith, consisting of horse-car, cable-car, and electric train service.

1930: Key System has six trans-bay lines converging at the Emeryville pier to serve commuters going to and from San Francisco.

1939: Key System begins rail service across the lower deck of the Bay Bridge.

January 1947. Joint Army-Navy recommends action for underwater tube beneath San Francisco Bay.

July 25, 1951. California Legislature creates special commission to study Bay Area transportation problems.

1955: The Key System, now owned by National City Lines (financed by GM, Standard Oil, and Firestone tires and rubber) request that the CPUC grant permission to abandon its two Bay-Rail systems.

January 17, 1957. Nine-county commission recommends legislature to create Bay Area Rapid Transit District.

June 4, 1957. California Legislature approves creation of five-county Bay Area Rapid Transit District.

November 14, 1957. District officially activated with first Directors meeting.

1958: The Last Key System Train crosses the Bay Bridge.

July 1, 1958. First property taxes collected.

May 14, 1959. Parsons, Brinckerhoff-Tudor-Bechtel retained as engineering consultants for system design and construction.

July 10, 1959. State legislature authorizes use of Bay Bridge tolls to finance construction of Transbay tube.

1960: AC Transit, a public agency, is formed to take over the former Key System bus system which is suffering from extreme service cutbacks.

April 12, 1962. San Mateo County Supervisors officially withdraw the county from District, citing high property taxes and the existing Southern Pacific commuter line as reasons.

May 17, 1962. Marin County officially withdraws from District, citing inability of Golden Gate Bridge to carry transit vehicles and prohibitive cost of another underwater tube as reasons.

May 24, 1962. Three-County rapid transit plan adopted by Board of Directors; referred to Alameda County, Contra Costa and San Francisco County Boards of Supervisors for approval.

November 6, 1962. \$792 million General Obligation Bond issues approved by District voters for construction of 75-mile system, including 3.5 mile Muni Metro line. 60% voter approval needed, passed by 61.2%.

July 1, 1963. Full-scale design engineering begun by District engineering consultants. PB-T-B.

June 19, 1964, President Lyndon B. Johnson presides at official start of construction in Concord.

January 24, 1966. Construction begins in Oakland subway.

August 25, 1966. BART receives first federal construction grant.

October 4, 1966. Voters in the city of Berkeley approve \$12 million bond issue for construction of the BART system as a subway. The original plan called for aboveground rail lines in Berkeley, Ashby, and North Berkeley aboveground stations.

1967: City of Berkeley reviews proposals to build housing units on Ashby BART site.

September 11, 1972. Opening day of BART passenger service.

September 16, 1974. Transbay service began, representing a major milestone in placing the full 71.5 mile system in operation. With the advent of Transbay service, BART's patrons may purchase high value tickets at 264 branch banks through the three counties, and 13 branch banks in San Mateo and Santa Clara Counties.

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