



Comprehensive Station Plan  
**El Cerrito del**  
**Norte**

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**June 2004**

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# Acknowledgments

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We intended to include all those who supported the Planning Department in creating this plan; we apologize if we missed anyone.

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City of El Cerrito Redevelopment Agency

West Contra Costa Transportation Advisory Committee (WCCTAC)

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CFC Corporation

### Transit Agencies:

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WestCAT

Vallejo Transit

Golden Gate Transit

# What Is a Comprehensive Station Plan?

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BART stations are both transit hubs and valued community resources. Recognizing this, the BART Board of Directors in 2001 directed the Planning Department to undertake a thorough and integrated analysis of planning issues at every station. Called Comprehensive Station Plans, these documents are guided by BART's Strategic Plan, with recommendations reflecting the Strategic Plan's focus areas. Each Comprehensive Station Plan brings together the work of many BART staff, agency partners and members of the public.

Each Comprehensive Station Plan examines how effectively a station meets the present and future needs of its passengers and the surrounding community. The Comprehensive Station Plan does this by examining three key station elements:

- **Station Area Development**--how the station works in its surrounding neighborhood
- **Station Access**--how passengers get to the station
- **Station Capacity and Functionality**--how the physical components of the paid area function

BART staff use Comprehensive Station Plans to evaluate the scope and timing of a proposed station project or initiative, to seek grant funds, and to communicate with the public and other agencies. Partners and potential partners use the plans to evaluate the most effective way to work toward common goals.

A Comprehensive Station Plan can be updated or expanded as needed. As planning documents, they are living and flexible works, meant to be revised by section or overall as new information or direction becomes available. A Comprehensive Station Plan allows for revisions while it retains the station's collectively defined vision.

We invite your perusal, use, and comments.

## 1.0 Executive Summary

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A very active station already, El Cerrito del Norte has tremendous potential as the site of mixed-use transit-oriented development. As this potential becomes realized, however, the station must continue to meet its role as a regional transportation hub. To fulfill these very different roles will require a significant amount of attention from BART and partner agency staff, including working closely with the surrounding community.

The El Cerrito del Norte Comprehensive Station Plan describes the station's current and future needs and opportunities so today's actions do not preclude making the most of tomorrow's possibilities. The plan examines three major station elements to achieve this: Station Area Development, Station Access, and Station Capacity. Key findings from the Plan are summarized below.

### **Station Area Development**

The del Norte BART station area is poised for mixed-use development. To aid in developing a community vision for the area, the City, with the involvement of the public and other agencies, has undertaken a process to develop design guidelines.

The result is a vision for the area that the City's Design Review Board recently unanimously adopted and that the City Council is scheduled to consider this fall. The chosen approach called "Urban Village + Transit Hub" combines del Norte's regional transit role with a new community place for residents. The concept focuses on moving commuter traffic off San Pablo Avenue and establishing a walkable block system with mixed-use development. Several key issues remain, however, before this goal can be realized:

- Relocating parking spaces to free up acreage for development
- Ensuring adequate bus and lay-over parking while balancing the need for transit access against other valuable uses of station land
- Working with the City's density (45 dwelling units per acre) and height limits (45 feet) that may constrict a developer's ability to create a financially viable project
- Coordinating with partner agencies to ensure the success of any future development, since del Norte is a regional transportation hub
- Ensuring there is a genuine public involvement process designed to build community consensus.

### **Station Access**

So that patrons can comfortably and conveniently access the del Norte Station, the Plan includes station access recommendations designed to increase the attractiveness of transit, improve the bicycle and pedestrian environment and maximize the efficiency of the existing parking at the El Cerrito del Norte Station.

The El Cerrito del Norte Station access recommendations are as follows:

- Improve circulation for buses, automobiles and pedestrians into and within the El Cerrito del Norte Station.
- Provide alternative drop-off locations within the station area that are safe and convenient for BART patrons.
- Ensure that future development proposals adhere to BART's Access and Transit-Oriented Development Guidelines.
- Aggressively pursue grant and Measure C funds to improve pedestrian and bicycle access to the station.
- Work with local transit operators to improve the connections between bus and BART.
- Identify funding opportunities for improving wayfinding signage and transit information, including real time information for bus connections.

### **Station Capacity and Functionality**

The El Cerrito del Norte Station was analyzed as part of a systemwide assessment completed in early 2003 of BART station capacity needs in 2025. The Station Capacity section of this Plan is designed to identify and accommodate station construction priorities as ridership grows. The analysis of 2025 capacity needs resulted in the following recommendations for the del Norte Station:

- Expand the station paid area
- Add one set of stairs for each platform to increase vertical circulation
- Add elevators within the paid area
- Add fare gates and ticket vending machine equipment
- Expand both platforms to accommodate projected growth in ridership as well as additional vertical circulation elements
- Expand the concourse apron

The conceptual cost to implement the proposed plan is approximately \$40 million. The cost estimate includes all elements described above plus new staff facilities and a new bicycle pavilion.



## 2.0 Introduction

### 2.1 Vision

El Cerrito del Norte is an exciting station with tremendous potential. It is located on the Richmond line one block from Interstate 80 and is one of the two stations in the City of El Cerrito. As a regional transportation hub, del Norte is second only to downtown Berkeley on the Richmond line in daily exits and entries. Ridership over the next two decades is expected to mushroom as traffic demand on Interstate 80 continues to grow, and western Contra Costa County and Solano County respond to the demand for housing. Expected increases in express bus services will bring additional riders into the station. Planned highway and transit improvements are not likely to keep pace with increasing demands on capacity.



El Cerrito del Norte Station Exterior

BART's vision for the del Norte Station centers on its future role as a new mixed-use urban center in the City of El Cerrito, in keeping with the community's desires for "appropriately scaled" development. At the same time, the station must continue to fulfill its role as a regional transportation hub, serving as a magnet for San Francisco and Oakland-bound commuters from throughout western Contra Costa and Solano and Marin counties. The need to fulfill these very different roles will require a significant amount of attention from BART and partner agency staff. This Comprehensive Station Plan is a work in progress, and will likely need to be updated and revised as development of the station area moves forward. But this vision of the station as the site of mixed-use development and as a transportation hub will guide how BART and its partners plan for the future.

### 2.2 Station Goals and Objectives

BART's goals for the El Cerrito del Norte Station are an extension of the goals for the system as a whole and

serve to reinforce the policy direction set by the BART Board in 1999 when it adopted the BART Strategic Plan.

## **Strategic Plan Focus Area: The BART Customer Experience**

Comprehensive Plan Goal: Deliver quality transportation to El Cerrito del Norte Station BART riders.

Objectives:

- Provide convenient access to the station by every mode. Work with partner transit agencies, Caltrans, the City and the community to improve riders' access to and from the station.

## **Strategic Plan Focus Area: Building Partnerships for Support**

Comprehensive Plan Goal: Work proactively with the City, local businesses and residents, the development community, transit agencies and government partners to plan for the station and the station area's future.

Objectives:

- Move forward on station area development together with the City, the community and other governmental and transit agency partners.
- Improve access to the station through active partnerships with transit and governmental agencies.
- Seek opportunities for the enhancement of the surrounding area by applying for/supporting grants that promote smart growth.

## **Strategic Plan Focus Area: Transit Travel Demand**

Comprehensive Plan Goal: Alleviate crowding and congestion on the system through effective design and efficient access at the El Cerrito del Norte Station.

Objectives:

- Identify design issues that address capacity concerns such as width of platforms, expansion of fare gates, and increased vertical circulation.

Figure 1: El Cerrito del Norte Comprehensive Station Plan Goals

- *Deliver quality transportation to El Cerrito del Norte Station BART riders.*
- *Work proactively with the city, local businesses and residents, the development community, transit agencies and governmental partners to plan for the station and the station area's future.*
- *Alleviate crowding and congestion on the system through effective design and efficient access at the El Cerrito del Norte Station.*
- *Encourage and support transit-oriented development on-site and within the station area.*
- *Accommodate the needs of BART commuters and area residents for the next 25 years.*

- Support initiatives to alleviate peak period congestion through access programs such as additional midday parking or reverse commuting.
- Identify and implement creative ways to effectively utilize existing bus bays particularly for express bus services.
- Plan for access improvements to the station by all modes and work with regional partners to implement a set of access recommendations.

**Strategic Plan Focus Area: Land Use and Quality of Life**

Comprehensive Plan Goal: Encourage and support transit-oriented development on-site and within the station area.

Objectives:

- Work closely with the City of El Cerrito and the community on engaging a developer who
- can successfully deliver a financially feasible, mixed-use, transit-oriented development that is in keeping with the City's vision for the area.

**Strategic Plan Focus Area: Physical Infrastructure**

Comprehensive Plan Goal: Accommodate the needs of BART commuters and area residents for the next 25 years.

Objectives:

- Periodically evaluate the capacity and access needs at the El Cerrito del Norte BART station to ensure that it continues to serve the needs of BART riders.

**2.3 Comprehensive Station Plan Process**

The Comprehensive Station Plan process was initiated by the BART Board to coordinate the disparate planning efforts within and outside of BART that

affect stations. It was intended that the planning process would involve the input of internal and external stakeholders, a thorough review of plans and initiatives that impact the station, and a common vision for these efforts. Previous comprehensive station plan efforts included public outreach or visioning processes which led to concrete station goals shared among residents, BART riders, and governmental and transit agency staff. For this effort, BART relied upon past efforts and current planning to evaluate issues and opportunities at El Cerrito del Norte BART.

In developing this plan, BART staff analyzed station needs and developed recommendations in three areas of concentration: station area development, station access and station capacity and functionality. It should be noted that the El Cerrito del Norte Comprehensive Station Plan is being developed prior to the initiation of a development proposal. This process allows future developers to be aware of the capacity and access needs at the station both now and in the future and to accommodate them in the design and potential mitigation of the project. Nevertheless, this report remains a work-in-progress that must be revisited as development proposals move forward.

## **2.4 Partners and Stakeholders**

Some of the stakeholders that have contributed to the development of this Comprehensive Station Plan are:

- Local Government Agencies
  - City of El Cerrito Community Development Department
  - City of El Cerrito Redevelopment Agency
  - West Contra Costa Transportation Advisory Committee (WCCTAC)
- Private Developers
  - CFC Corporation
- Transit Agencies
  - BART
  - AC Transit
  - WestCAT
  - Vallejo Transit
  - Golden Gate Transit

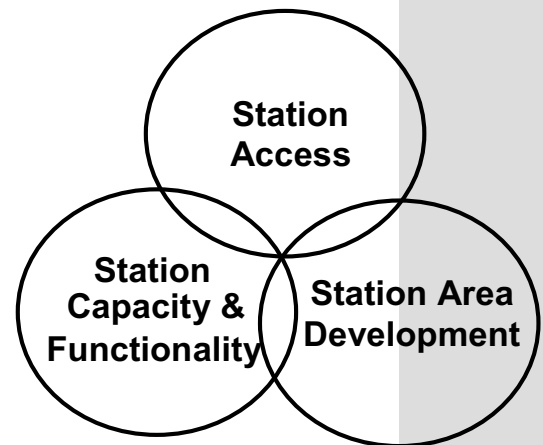


Figure 2: The Comprehensive Station Plan process incorporates three interrelated areas of concentration.

A wide array of BART staff and departments participated with the Planning Department to develop this Plan:

- Customer Access
- Government and Community Relations
- Maintenance
- Operations
- Operations Liaisons
- Police
- Real Estate
- Rolling Stock & Shops
- System Capacity
- System Safety
- Transit System Development
- Transportation

## 3.0 Existing Conditions

The El Cerrito del Norte BART station is a major regional transportation hub and will continue to serve this role well into the future. The El Cerrito del Norte Station serves as the de facto terminus of the Richmond line. The easy access off of the I-80 freeway (and the westbound HOV lane connecting directly to Cutting Boulevard) together with San Pablo Avenue as a major arterial and bus corridor make the El Cerrito del Norte Station the primary commuter and express bus transfer station in western Contra Costa County. The El Cerrito del Norte Station attracts local residents as well as commuters from western Contra Costa, Marin, Solano and Sacramento counties.



Figure 3: Map of Area Surrounding El Cerrito del Norte Station

Congestion on the portion of the I-80 corridor through Solano and Contra Costa counties is severe and unrelenting. The California Department of Transportation (Caltrans) forecasts that travel demand in this corridor will increase 30-50% over the next twenty years. Traditional commuting patterns in the corridor based on land use patterns--in the morning, westbound to San Francisco and downtown Oakland, and in the evening, eastbound--are expected to continue. Although significant bus and highway improvements are planned, such as a completed westbound HOV network and a regional express bus program, these improvements may not keep pace with increasing demands on capacity. Congestion and travel times are likely to worsen.

Currently, four transit operators provide local and regional bus service to and from the El Cerrito del Norte BART station. The station is also a transfer location for ADA paratransit services.

The El Cerrito del Norte BART station is a prime site for mixed-use, transit-oriented development. Unlike central city BART station locations, del Norte has a large area of undeveloped or underdeveloped land that

can serve both the BART station and support new development. Land values are also not as high as can be found in other central city areas. There is considerable City, community, and developer interest in a project at this location; the challenge will be to find the right mix of residential and commercial uses that will support a financially viable project in keeping with the community's vision for the area and will result in maximum benefits to the transit functions contained within the station area.

One positive step in meeting this challenge is the City's development of Design Guidelines for the del Norte area. Several key concepts emerged from the process that will guide future development on the BART station site as well as in the surrounding area. These concepts include locating the station parking across San Pablo Avenue adjacent to the freeway in underutilized and vacant parcels, creating a landscaped pedestrian-only Esplanade that joins the parking to the station, and tiering the density and height of the development as it goes east to west towards the freeway.

With or without new development, the station area has many access and capacity issues that must be addressed. Pedestrian access is particularly poor, especially in crossing San Pablo Avenue. Bus access must remain a top priority at this station as thousands of daily BART riders are brought to this station by express bus services. As an aerial side platform station, Del Norte requires extensive expansion in order to accommodate increased ridership in the future.

The future of the El Cerrito del Norte Station is an exciting one. Station area development, with the support of the City, is likely to move quickly forward in the near future and transform the station area. BART's role will be to balance the desires of the local community with the needs of the BART riders and the system, as well as the pressures of increased demand for transportation services over the next 20 years.



El Cerrito del Norte Station Surface Parking



### 3.1 Local Land Uses and Community Character

The El Cerrito del Norte station area is one of three areas that have been identified in the City’s General Plan for future growth. The station area today consists of the commercial areas along San Pablo Avenue including low intensity commercial uses and some “big box” retailers such as Target and Walgreens. Fast food restaurants, car sales and local motels also line San Pablo Avenue. Directly north of the station is Del Norte Place, a mixed-use development that consists of three stories of residential units above ground floor retail uses. BART surface parking, the BART parking garage, and the bus intermodal area surround the station. Residential areas lie to the east of the station. The Ohlone Greenway, a major pedestrian and bicycle path that runs north-south through the City, lies directly east of the station between the station and the parking garage.



El Cerrito del Norte Station Area Retail

The del Norte area is well served by the regional transportation network. Interstate 80, San Pablo Avenue and BART contribute to the “infrastructure belt” that defines the area. Although these transportation facilities provide easy access to the regional transportation network for residents, the physical layout of this belt challenges east-west connectivity for both pedestrians and drivers.

Over the past decade, the City and BART have evaluated the potential of the del

Figure 4: El Cerrito del Norte  
Station Area Infrastructure





Norte BART station area for mixed-use development. Planning studies, community workshops and project proposals have been undertaken in an attempt to find a feasible project that will meet the City's desire for a livable and lively station area as well as BART's desires for appropriate station area development that will increase both revenue and ridership.

The community has long played an important role in defining future development at the del Norte Station area. Many long-time residents can remember a time when the BART station did not exist and ranchettes and fields dotted the area. They strive to maintain what they perceive as El Cerrito's "rural" nature and decry any notion of higher density development for fear the area will become "like San Francisco." Others advocate for higher density, mixed-use development that includes many amenities that are lacking in El Cerrito – local restaurants and cafes, a brewpub, and boutiques. Most residents want "something" other than the acres of surface parking and impersonal and sometimes shabby establishments that currently lie within the station area. Most want development that will help define El Cerrito, create a sense of place.

## **3.2 Ridership**

In Fiscal Year (FY) 2003, the average weekday daily exits at the El Cerrito del Norte BART station was 6,863, a whopping 23.4% decrease from FY 2001, the year ridership at El Cerrito del Norte peaked. Ridership data for FY 04 show that average weekday daily exits at this station have risen to 7,258, an increase of 5.8%. The fluctuating ridership at the station reflects the impact of the economic downturn in the Bay Area.

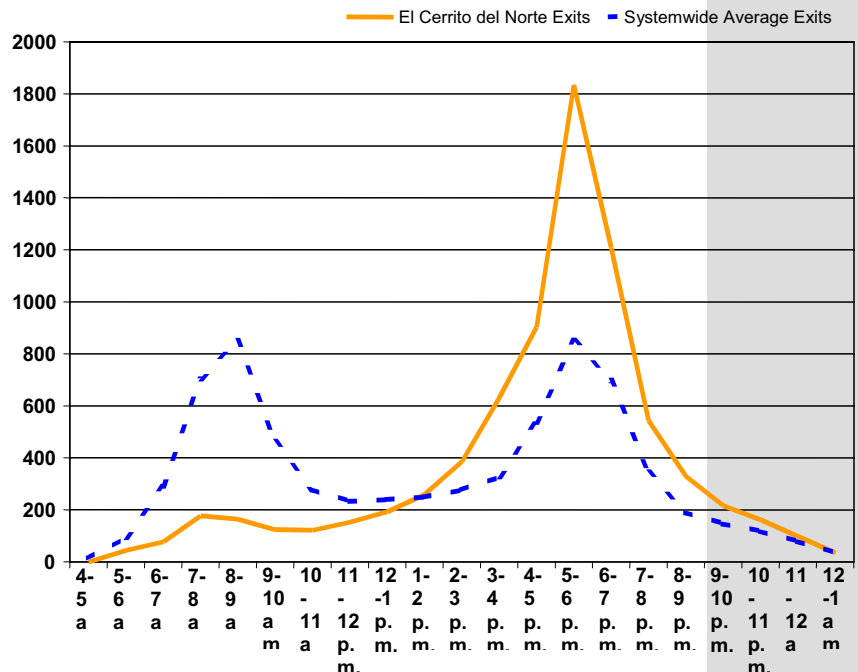
By 2014, based on population and employment projections provided by the Association of Bay Area Governments (ABAG), the El Cerrito del Norte Station ridership is projected to increase to 8,897 average daily exits, a 21% increase over current FY04 ridership, and nearly back to FY01 peak levels. The ridership projection does not include the proposed BART extension to Warm Springs, San Jose and Santa Clara,

which will increase ridership and access needs when it opens around 2015.

During the morning commute hours, El Cerrito del Norte BART is the point of entry to the system for many riders in northern El Cerrito and distant jurisdictions in Western Contra Costa and Solano counties. The 1998 BART Station Profile Survey showed that 39% of BART patrons entering during this time travel to downtown San Francisco, 15% to downtown Oakland and 13% to downtown Berkeley. Seventy-seven percent (77%) use BART to get to work and 23% for other purposes.

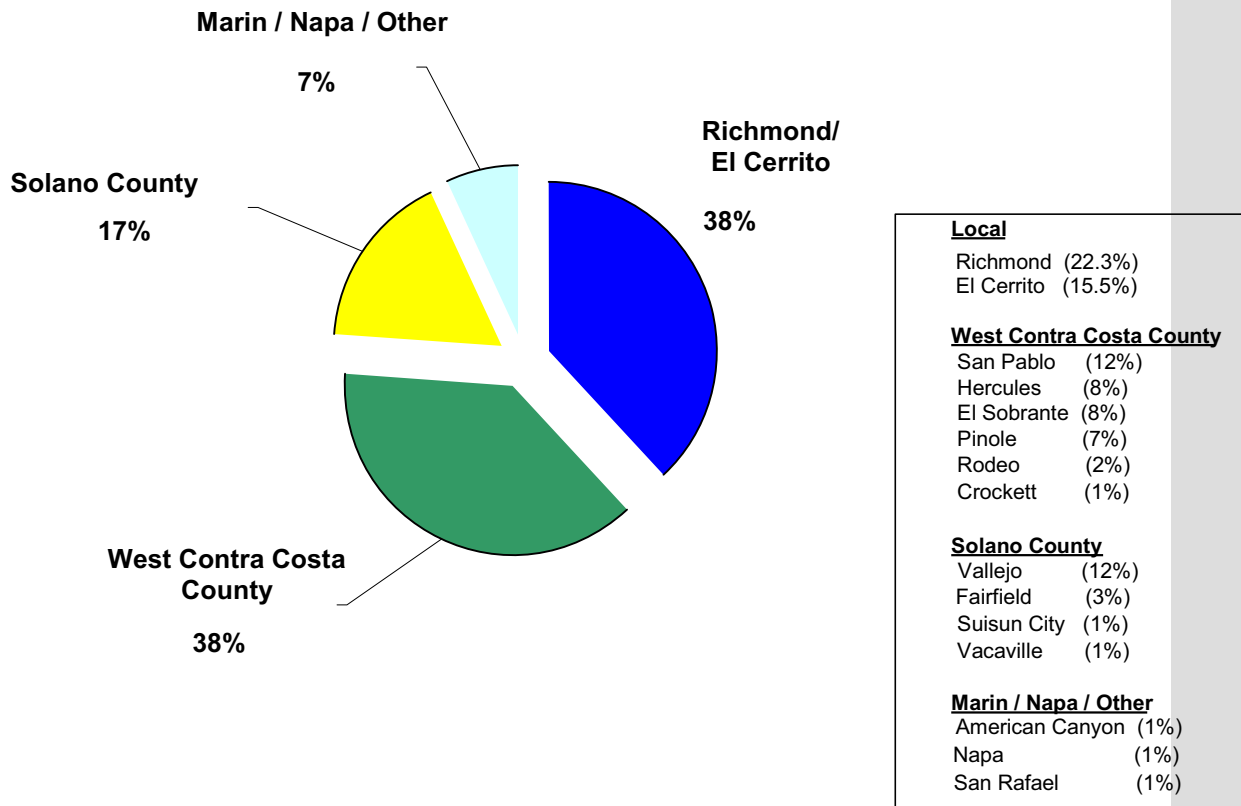
The chart below shows that del Norte is most congested during the afternoon peak commute hours (4:00-7:00 p.m.), far exceeding the system average during this time period. Del Norte ranks tenth in the system (of 43 stations) in exits. This peak creates considerable congestion along the stairs and escalators at the station and in the small paid area as riders are queuing to exit. It is unclear why p.m. exits exceed the system average while a.m. boardings are far below the system average. It is possible that many patrons use AC Transit Transbay or Rapid bus service, or casual carpool, to get to work in downtown San Francisco or Oakland in the morning and then return on BART in the evening. More investigation is needed in order to determine exactly what is transpiring at this station.

Figure 5: All Day Exits for El Cerrito del Norte Station and Systemwide



The chart below shows the home locations of morning commuters using the Del Norte Station. Seventy-six percent (76%) of the riders live locally – in El Cerrito, Richmond and other areas of western Contra Costa County. Seventeen percent of riders originate in Solano County, while only 1% originates in both Napa and Marin counties. This demonstrates that while many riders from other areas are using the del Norte Station, the station draws three quarters of its riders locally.

Figure 6: Home Origins for Passengers  
Entering El Cerrito del Norte Station (1998)



### 3.3 Demographics

The El Cerrito del Norte Station is located at the northern edge of the City of El Cerrito, near the boundary with the City of Richmond. The 2000

Census estimated that 21,620 people live within 1 mile of the station, of which approximately 18% are 65 years or older. The population of this area is diverse: 41% are White, 32% Asian, 16% Black and 8% Hispanic.

The following is a brief summary of the El Cerrito del Norte BART passenger demographic information (from the 1998 BART Station Profile Study):

- 46% of the riders are 25 to 44 years old. The second largest group is 45 to 64 which makes up 39%.
- 48% of the riders are White, compared with 60% systemwide; 27% of the riders are Black, compared with 14% systemwide.
- The proportion of Asian or Pacific Islander and Hispanic riders at del Norte BART is similar to systemwide percentages of 21% and 12%, respectively.
- 35% of the riders' household incomes are between \$30,000 to \$60,000 compared to 33% systemwide. The second largest share is 30% (\$60,000 to \$100,000 household incomes), compared to 43% systemwide.
- 10% of the riders identified themselves as having a disability.

### 3.4 Mode Split

As the access mode split table to the right shows, 64% of the riders at El Cerrito del Norte BART arrive by automobile with a large percentage driving alone. The share of riders taking transit (26%) is higher than the systemwide average, demonstrating the station's role as a transit hub for regional bus originating in western Contra Costa, Solano and Marin counties. The low walk share compared to the systemwide average reflects del Norte's suburban character.

Figure 7: Mode Split, del Norte & Systemwide

Mode	El Cerrito del Norte	Systemwide
<b>Walk</b>	<b>9%</b>	<b>23%</b>
<b>Bike</b>	<b>1%</b>	<b>2%</b>
<b>Transit</b>	<b>26%</b>	<b>21%</b>
<b>Drive Alone</b>	<b>47%</b>	<b>38%</b>
<b>Carpool</b>	<b>7%</b>	<b>11%</b>
<b>Drop-off</b>	<b>10%</b>	<b>5%</b>

Source: 1998 BART Station Profile Study

### **3.5 Safety and Security**

As at most BART stations, safety and security are important issues to customers. Although del Norte does not have a reputation as an unsafe station, it ranked ninth in the system for total crimes reported; this represents an 11% increase over the number reported in 2002. Within the BART system, higher crime rates often correlate with higher ridership and/or parking spaces. As with most BART-related crime, much of the crime at del Norte is associated with auto burglary and theft. Del Norte is the location of the R-line police substation, which patrols Richmond, del Norte and Plaza stations.

One factor that may contribute to the del Norte crime statistics is the recent problem of teenagers getting into fights in the del Norte station area. Several AC Transit routes that serve the local middle and high schools also serve the station; teenagers disembark at the station to change buses. This convergence of teenagers has led to fights among kids of rival schools. BART police, AC Transit, city officials and staff of the West Contra Costa Unified School District met several months ago to address the issue; as a result, the school district altered several of its “bell times” so that large groups of teenagers are no longer converging on the station at the same time. This appears to have helped the situation.

Another issue of concern to BART patrons is safety along the Ohlone Greenway. Crimes that occur off of station property are not reported to BART; however, there have been reports of crimes committed close to the station along the Greenway. This greatly deters pedestrians and bicyclists.

## 4.0 Station Area Development

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Over the past decade, BART in conjunction with the City of El Cerrito has worked to create a development proposal that would be acceptable to the City and the community. Until recently, BART had an Exclusive Negotiating Agreement (ENA) with a developer, CFC Corporation, to create a mixed-use transit-oriented development on the BART station site. Despite several attempts, CFC Corporation was unable to put together a successful proposal. Most recently, BART and the City rejected CFC's proposal because it did not appear to have the financial backing necessary for a successful project. BART and the City have terminated the agreements with this developer and are engaged in the process of evaluating next steps.

The del Norte station area is a valuable site for mixed-use development for a number of reasons. First, the BART station area and several additional parcels in the immediate vicinity represent the largest undeveloped or underdeveloped parcels remaining in El Cerrito. Second, land values are not as high as at other city center locations. Third, the proximity of El Cerrito del Norte to I-80 makes the del Norte BART station unrivalled in its ease of access in terms of regional commuter traffic in this corridor.

Numerous studies have been conducted to help define the mix of residential, retail and commercial development at this location, and to create a vision for the area that includes development while providing a sense of "place" for the community.

The local community is very involved in the debate over the type and density of development of the del Norte station area. Although more and more local residents are aware of and supportive of transit-oriented development, many long-time residents remember the days before BART was built; ranches and a local market (Mayfair) defined the area. These residents advocate for keeping intact the "rural" nature of El Cerrito, and fear that the station area will be

developed at an unacceptably high density. Other residents want future development to create a neighborhood center, and provide amenities such as upscale restaurants and services that will attract both local and regional users. Most want future development to be for-sale products only (no rental units), with a density level more in keeping with the residential area east of the station. Overwhelmingly, local residents do not like what's there now – a sea of surface parking – although finding the right mix of development and amenities at this site will be a challenge.

## 4.1 Design Guidelines

To aid in the development of a community vision for the del Norte BART station area, the City undertook a process to develop design guidelines. The purpose of the guidelines is to aid the City, developers and the community in creating a unified vision for the area and to serve as a tool for evaluating future development proposals. The consulting firm of Field Paoli analyzed existing and future conditions for the area, proposed a number of scenarios for future development, and finally proposed a recommended vision for the area, as described below.

The Design Guidelines encompass a planning area bounded by I-80 to the west, Key Boulevard to the east, Knott Avenue to the north and Potrero Avenue to

Figure 8: El Cerrito del Norte Planning Area



the south. San Pablo Avenue—a state highway—runs north-south through the area. The area is currently characterized by strip development along San Pablo, surface parking at the BART station and some commercial uses and disconnected single-family residences. The area feels outmoded and dilapidated.

Through a series of public workshops, meetings with transit operators and Caltrans, and public sessions with the City’s Design Review Board (DRB), the consultant team proposed four approaches to development of the del Norte area. The chosen approach, called “Urban Village + Transit Hub,” combines del Norte’s regional transit role with a new community place for residents. The overall plan is based on the notion of moving commuter traffic off of San Pablo Avenue and establishing a walkable block system with mixed-use development.

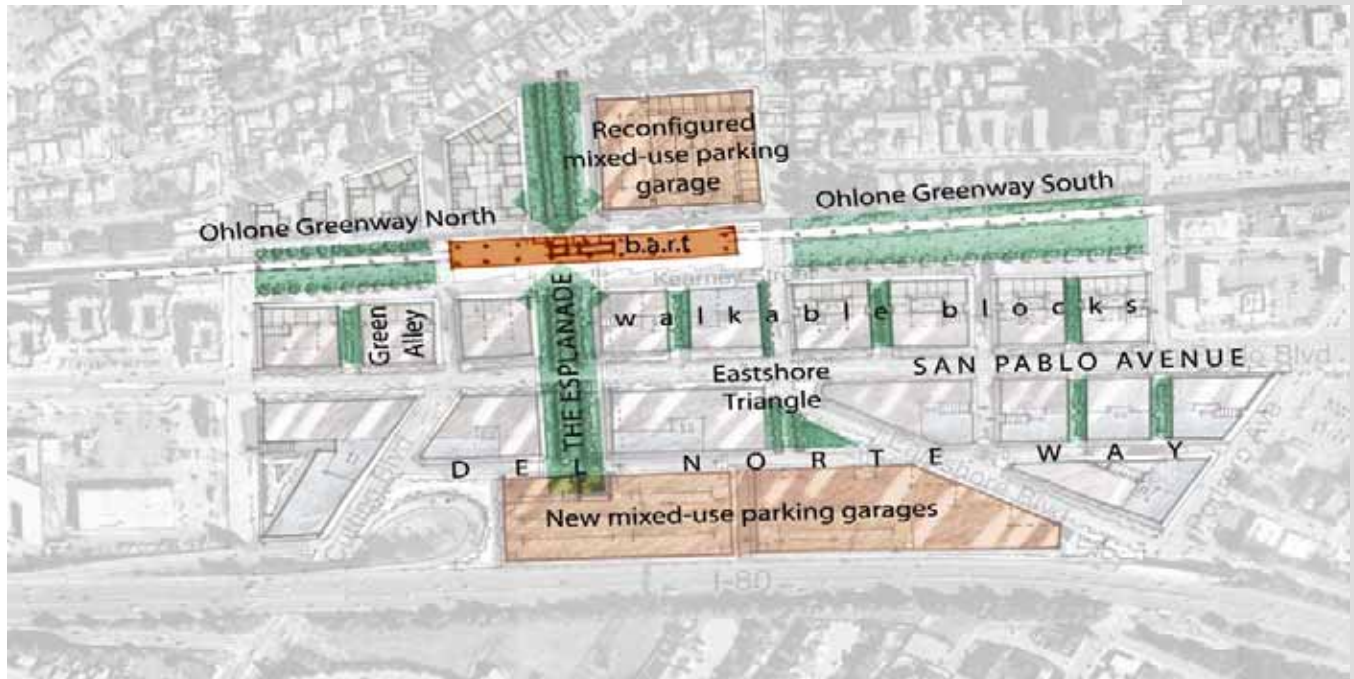
Recognizing that the del Norte BART station will continue to draw regional commuters from the East Bay as well as counties to the north and east, the plan proposes to develop new and replacement station parking on property located adjacent to the freeway, across San Pablo Avenue from the BART station. A landscaped “esplanade” from the parking garages to the BART station provides a direct link for commuters channeled through commercial development, creating revenues for the city and a potential destination for the neighborhood and the region. The guidelines propose that the current BART parking garage be moved next to the freeway in the distant future as its value as a fixed asset decreases over time. A mid-block crossing and a larger median in San Pablo Avenue will provide increased pedestrian access from the westside.

In addition to moving BART parking, the guidelines propose “walkable blocks.” Block sizes and building footprints would increase in size and density as the development moves north to south and east to west. This preserves a lower density closer to the residential areas of El Cerrito while allowing for larger scale closer to the freeway and towards the larger commercial development in Richmond. The plan also calls for new public open spaces, additional green spaces adjacent to the Ohlone Greenway, pocket parks



and alleyways to serve as public amenities and buffers. Finally, the plan proposes a new north-south street -- called Del Norte Way -- inserted between and parallel to I-80 and San Pablo Avenue. This new street would provide direct access for morning freeway commuters to the BART parking garages, removing traffic from San Pablo Avenue. This new street also creates a potential office corridor separate from the retail uses.

Figure 9: Design Guidelines Preferred Plan



Proposed Design Guidelines Preferred Plan, Field Paoli, November 2003

The Design Guidelines present a clear understanding of the type of future development the City and community would like to see. To accomplish this vision, the City must work closely with BART, Caltrans and other partners. These guidelines were recently adopted unanimously by the City's Design Review Board and are scheduled for consideration by the City Council sometime this fall.

## 4.2 Key Issues for Future Development

The del Norte BART station area is poised for mixed use development and pressure for creating this development will come on many fronts: the

development community that recognizes its potential, the surrounding community that would like to see an aesthetically pleasing development that serves local needs, BART which would like the additional revenue and ridership transit-oriented development generate, and the City which is interested in balancing the desires of the community with revenue-generating uses.

In light of this pressing interest in development of the del Norte area, several key issues remain in realizing the goal of a pedestrian-friendly, mixed-use development.

#### **4.2.1 Replacement parking**

As at many stations within the BART system, the issue of one-to-one replacement parking is critical at del Norte. Currently there are approximately 880 surface parking spaces on the eight acres surrounding the del Norte Station. Past development proposals have proposed that replacement parking be underground; that option, however, has been thoroughly reviewed and has been found to be extremely expensive given the City's high water table. The concept of locating the parking adjacent to the freeway will likely require buying out the lease of the abandoned HomeLife store, also an expensive option. In addition, the successful relocation of the parking across San Pablo Avenue will require the development of the esplanade and access improvements along Hill Street. BART is willing to consider creative ways to fulfill the replacement parking requirement such as shared parking or satellite parking – implementing these concepts may make a development possible at this station.

#### **4.2.2 Bus bays and lay-over parking**

Bus bays and lay-over bus parking can require substantial amounts of station land and must be carefully located to balance transit access against other valuable uses of station land. As a regional transit hub, the del Norte Station is a major bus-rail transfer location for commuters coming from western Contra Costa, Marin and Solano counties. Given del Norte's proximity to I-80 and the absence of any plans to extend BART or BART-like rail service north of Richmond, it is likely that this role will continue into

the future and will expand with planned additional express bus service in the corridor. Future development must accommodate this growth. BART will work with the City and all transit agencies to ensure adequate bus and lay-over parking, and to explore off-site lay-over parking if it cannot be accommodated on-site.

### **4.2.3 Density and height requirements**

Although the City recognizes the del Norte BART station area as a mixed-use commercial area, the maximum density currently allowed within the station area under the City's General Plan (1999 update) is 45 dwelling units per acre, with City incentives. According to the General Plan, the City has allowed more substantial density increases for projects for the elderly and disabled. The height limit of 45 feet prevents buildings higher than four stories. Coupled with the potentially high cost of replacement parking at this site, the City's density and height limits may constrain a developer's ability to create a financially viable project and limit BART's ability to secure development that would maximize BART ridership and revenue.

### **4.2.4 Coordination with partner agencies**

Because of del Norte's role as a regional transportation hub, the success of any future development will depend upon the coordination among various governmental partners: BART, the City, Caltrans, and bus and paratransit operators. Other agencies such as the West Contra Costa Transportation Advisory Committee (WCCTAC), the Contra Costa Transportation Authority (CCTA) and the Metropolitan Transportation Commission (MTC) are interested in and supportive of transit-oriented development and can lend support as well as grant funds to various aspects of a project.

### **4.2.5 Community interest**

For any future development to be successful, there must be a community consensus – to the extent possible -- around a proposed project. Although there are many residents who simply fear change and do not want any development at this site, effort must be made

to listen to and respond to the concerns of residents. No development will be successful without a genuine public involvement process.

## 5.0 Station Access

The purpose of this chapter is to focus on increasing the attractiveness of transit, improving the bicycle and pedestrian environment, and maximizing the efficiency of the existing parking at the El Cerrito del Norte Station. A summary of access issues and recommendations by mode are described below, with a chart detailing the recommendations at the end of this chapter. It should be noted that all access improvements will be designed to be in compliance with the Americans with Disabilities Act (ADA).

One of the key issues in any evaluation of development at del Norte is the circulation of traffic into and out of the BART station – including bus, neighborhood and regional automobile, and pedestrian traffic. Access to the BART station for commuters coming from the north requires traffic to cut across the already busy San Pablo Avenue, creating long left turn lanes into the BART station. Pedestrians crossing San Pablo must endure long wait times at intersections, and those coming north must use a circuitous route to cross. Many pedestrians choose to jaywalk across six lanes of traffic endangering both themselves as well as drivers. Access is especially difficult for pedestrians in wheelchairs and those pushing strollers.



San Pablo Avenue

Another key issue is that BART does not control connecting transit or land outside of the immediate station area. Therefore, BART must work cooperatively with other transit operators, the City and Caltrans in order to make improvements in bus access and connectivity, as well as pedestrian and bicycle facilities.

## 5.1 Walk

The pedestrian environment around the El Cerrito del Norte BART station is quite poor, with the exception of the Ohlone Greenway, a major north-south bicycle and pedestrian pathway. Access to the station from the residential areas east of the station is adequate, although many sidewalks are cracked and buckling primarily due to street trees lining the station area.



Station Area Buckled Sidewalk

San Pablo Avenue acts as a significant barrier to persons wishing to walk to the BART station from the west side. Crossing San Pablo Avenue is circuitous; not all intersections have direct crossings. Many pedestrians choose to jaywalk across six lanes of traffic in order to avoid waiting for traffic signals. Crossing times are sometimes too short for persons in wheelchairs or with mobility issues, requiring them to wait in the median for the next signal cycle. In addition, the long blocks and windowless buildings (such as Target) discourage residents from walking to BART along this route. The diagram below, created by Field Paoli as part of the Design Guidelines process described in Section 4, shows the circuitous walking routes to the BART station across San Pablo Avenue.

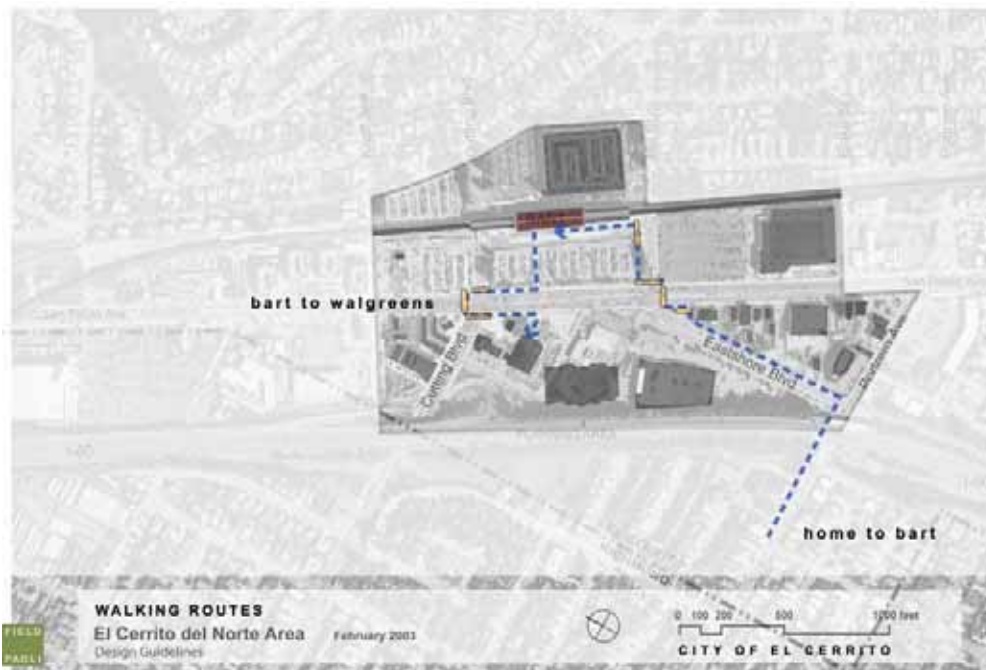


Figure 10: Walking Routes, del Norte Area

A study currently underway by the Traffic Safety Center at University of California, Berkeley, is evaluating pedestrian and bicycle safety along the San Pablo Avenue corridor from Rodeo in western Contra Costa County to downtown Oakland. From 1997 to 2001, over 175 bicycle and 207 pedestrian accidents occurred on this arterial, some of them fatal or causing severe injury.

The City of El Cerrito, with the support of BART, Caltrans and AC Transit, has submitted a grant request for funding from the Metropolitan Transportation Commission's Traffic Engineering Technical Assistance Program (TETAP) for a study to explore a mid-block crossing of San Pablo Avenue between Hill and Cutting Boulevards. The City is also working with Caltrans to explore relinquishing of San Pablo Avenue (State Highway 123) to the City. If San Pablo Avenue moves under the City's control, the City will be able to more easily modify the street and crossing environment to the benefit of pedestrians.

Key strategies for increasing the walk mode share are:

- Aggressively pursue grant and Measure C reauthorization funds to improve the pedestrian environment in and around the station area, including wayfinding signage to and from the station.
- Work with the City on resolving the issue of the sidewalk destruction from tree roots.
- Ensure that future development provides significant pedestrian amenities (such as adequate lighting, continuous sidewalks with curb cuts, signalized pedestrian crosswalks, street trees and wayfinding signs) along key pedestrian routes connecting the community to the station.
- Support the City's efforts to improve San Pablo Avenue, specifically a mid-block crossing.



## **5.2 Bicycle**

At the del Norte BART station, there are 28 bicycle lockers; the lockers are 89% reserved. There are also 128 rack spaces available for use.

For BART patrons accessing del Norte Station by bicycle, one important resource is the Ohlone Greenway. The Greenway, which provides a good north-south connection through the City, is popular with both bicyclists and pedestrians. One unfortunate by-product of this popularity is pedestrian/bicycle conflicts. Local community groups have pointed out that pedestrians often walk along the part of the path intended for bicycles because it is flatter and smoother. This sharing of one pathway has resulted in accidents. In addition, while most of the Greenway is on the BART right-of-way away from auto traffic, it does intersect with residential streets resulting in numerous conflicts. Other issues involving the Greenway include inadequate lighting on some parts of the Greenway and the lack of pedestrian pathway on the Greenway north of the station. Bicyclists accessing the station from the Greenway must cross the bus lane.

Key strategies for improving bicycle access are:

- Aggressively pursue grant and half-cent sales tax (Measure C) funds to improve bicycle access to and within the station area.
- Work with the City to create an east-west bicycle network connecting to the Ohlone Greenway and the station.
- Monitor demand and consider additional lockers to accommodate increased activity resulting from future station area development.
- Install bike stair channels at station entrances and between the paid area and platform.
- Incorporate BART's Bicycle Access and Parking Plan design guidelines into future station area development including adequate lighting and signage.
- Provide security cameras for bicycle parking areas.
- Provide wayfinding signage to and from the station.



Bicyclist at del Norte Station



### 5.3 Transit

The El Cerrito del Norte BART station is a regional transit hub for four transit operators in western Contra Costa, Solano and Marin counties: AC Transit, Golden Gate Transit, WestCAT and Vallejo Transit. Collectively, these transit agencies operate fourteen bus lines to and from the del Norte Station. El Cerrito del Norte is also a transfer point for ADA paratransit services.

AC Transit lines serve neighborhoods in El Cerrito and Richmond with service concentrated along major corridors. In addition to the local-serving routes, AC Transit operates two lines on San Pablo Avenue, Transbay line (L-Pierce) during the peak commute hours and the San Pablo Rapid (72 R), which serves Contra Costa College and the San Pablo corridor into downtown Oakland with limited stops. The 72M, along San Pablo Avenue, provides 24-hour service.

Currently, AC Transit estimates that approximately 2,160 passengers board AC Transit buses at del Norte while only 1,860 disembark at del Norte each weekday. Further study is needed, but one explanation is that over 300 people are parking at or near the del Norte Station, or are arriving by connecting bus, taking AC's Transbay or Rapid service into San Francisco or downtown Oakland, and returning on BART. This scenario could also explain why exits at this station far exceed the system average in the p.m. peak, and do not come close to meeting the system average in the morning peak hours.

Golden Gate Transit operates Route 40/42, which provides direct service to San Rafael in Marin County. Route 40/42 is partially funded by a consortium of transit operators and MTC in order to ensure transit access across the Richmond-San Rafael Bridge. The route was expanded several years ago to provide service for Richmond residents wishing to access jobs



Figure 11: Map of Transit Lines Serving del Norte Station

in San Rafael. Funding from MTC's Low Income Flexible Transportation (LIFT) program and the federal Jobs Access and Reverse Commute (JARC) program have helped support this service. Most service is via Route 42, which serves Richmond BART and commercial areas of San Rafael. Twenty-five percent of weekday trips are via Route 40, a direct service that makes limited stops. Annually, approximately 37,000 Route 40 passengers and 76,000 Route 42 passengers get on and off at the El Cerrito del Norte Station annually.

WestCAT provides local service in Pinole, Rodeo and Hercules and express bus service into del Norte. In FY02, WestCAT carried over 570,000 weekday passengers into del Norte and an additional 39,000 on weekends. WestCAT recently added an express bus stop in Pinole. Express bus service into del Norte runs at 15-minute frequency during peak hours.

Vallejo Transit provides express bus for commuters from Solano County at thirty-minute headways during peak hours.

Del Norte has 19 bus bays and is a layover point for many buses. Although the current number of bus bays appears adequate, there is congestion during peak periods, especially as bus operators attempt to meet BART train schedules. Potential AC Transit plans to change to a "pulse" schedule, in which large numbers of buses converge at a hub in order to make bus-to-bus and bus-to-rail transfers more convenient, could impact the intermodal area. In addition, AC Transit reports that its assigned bus bays are spread out throughout the intermodal area. Grouping bus bays by operator would be more convenient for patrons transferring from BART.

Key strategies for increasing transit mode share at del Norte are:

- Support efforts to enhance express bus/shuttle service in the I-80 corridor.
- Encourage/support bus service in the neighborhoods east of the station.
- Evaluate the functionality of the current intermodal area for capacity and functionality.

Identify creative ways to help the intermodal area function more efficiently. Explore alternative areas for bus lay-overs.

- Provide real-time arrival information to make transfers more convenient.
- Provide wayfinding signage and transit information to assist transferring passengers.
- Work with AC Transit on implementing owl service.

Figure 12: Bus Routes Serving El Cerrito del Norte Station

Route	Bus Line	Peak Frequency	Off Peak Frequency	Operating Hours
<b>AC Transit</b>				
7	Arlington	20 min.	30 min.	6:25 AM – 9:30 PM (WD) 8:00 AM – 6:00 PM (WE)
70	Appian	30 min.	30 min.	5:30 PM – 10:30 PM (WD) 7:00 AM – 8:50 PM (WE)
71	Rumrill	30 min.	30 min.	5:15 AM – 8:30 PM (WD) 6:00 AM – 8:40 PM (WE)
72/72 M	San Pablo Avenue/Macdonald	30 min.	30 min.	5:00 AM – 12:00 AM (WD)
72 R	San Pablo Rapid Bus	12 min.	12 min.	6:00 AM – 8:00 PM
76	Cutting	30 min.	60 min.	5:30 AM – 9:00 PM (WD) 7:00 AM – 8:00 PM (WE)
L (Transbay)	Pierce	Varies		6:00 AM – 9:30 PM
<b>Golden Gate Transit</b>				
40/42	San Rafael-del Norte BART	25 min.	30 min.	5:25 AM – 12:30 AM (WD) 7:00 AM – 12:00 AM (WE)
<b>WestCAT Transit</b>				
30Z	Martinez Link	30 min.	60 min.	6:04 AM – 8:04 PM
J	Hercules Transit Center/Pinole/Hilltop/El Cerrito del Norte BART	15 min. (WD) 40 min (WE)	30 min. (WD) 40 min. (WE)	4:47 AM – 12:30 AM (WD) 6:03 AM – 11:49 PM (WE)
JPX	Hercules Transit Center – El Cerrito del Norte BART	15 min.	60 min.	6:04 AM – 8:04 PM
JX	Hercules Transit Center/El Cerrito del Norte BART	15 min.		5:25 AM – 7:57 AM (WD)
<b>Vallejo Transit</b>				
80	Vallejo/El Cerrito del Norte BART	15 min.	30 min.	4:15 AM – 11:00 PM (WD) 5:45 AM – 11:00 PM (WE)
90	Suisun City/Fairfield/Vacaville/ Marine World/BART	30 min.	60 min.	4:55 AM – 8:01 PM (WD)

WD = weekday; WE = weekend

### 5.3.1 AC Transit's West County Service Plan

AC Transit is currently reviewing the service it provides in west Contra Costa County. Through automated passenger counting (APC) equipment, AC is able to track ridership levels on each of the routes that serve the Richmond and El Cerrito stations. Preliminary results show that routes serving these stations have adequate ridership; however, the agency may alter schedules to better reflect run times. The study will be completed in late summer 2004, and both AC Transit and BART will be able to review the results.



AC Transit Bus at del Norte Station

### 5.3.2 Regional Measure 2 and Measure C Reauthorization

In March 2004, the Bay Area voters passed Regional Measure 2, which raises the toll from \$2 to \$3 on the Bay Area's seven state-owned bridges. Regional Measure 2 provided \$65 million for the operation of owl bus service between BART stations as well as additional funding for express bus services in the I-80 corridor. Preliminary plans by AC Transit indicate that hourly service between BART stations may be provided during the hours that BART is not operating – namely, between 1:00 a.m. and 4:00 a.m. each weekday and longer hours on weekends. Providing owl service will increase the activity at BART stations during the late night and early morning hours and may have implications for BART operations, maintenance and police.

In November 2004, voters in Contra Costa County will vote on extending that county's current half-cent sales

tax measure, known as Measure C, for 25 years beginning in 2009. Although the expenditure plan has not been finalized, all transit providers have proposed projects for inclusion in the Plan. West County bus operators have proposed projects in addition to the programmed funding they receive for operating their services. The West Contra Costa Transportation Advisory Committee (WCCTAC), the regional transportation planning council for this subregion, has supported these requests. Additional projects are:

- For WestCAT: (1) operating and capital for enhanced feeder bus service (\$12.3 M); implementation of weekend and evening bus service and more frequent service on the 30Z (\$34.6 M); and restoring transit service to 2002 levels (\$9.2 M).
- For AC Transit: (1) Enhance Rapid Bus Service (\$36.2 M); (2) increased frequency and longer service hours (\$133 M); and (3) Low income student bus pass program (\$23 M).

### 5.3.3 Owl Transit Service

Regional Measure 2, the additional dollar toll on Bay Area bridges, provides funding for “owl” bus service along BART corridors during the late night and early morning hours when BART is not operating. This service will provide transit for individuals working night or late swing shifts. One consequence of this service is the increased activity at BART stations at night. Over the next several months, BART and its partners will have to address the issues associated with increased activity and hourly bus service into station areas – such as cleanliness, safety and security.

### 5.3.4 MTC’s Transit Connectivity Study

MTC is currently conducting a Transit Connectivity Study, the purpose of which is to identify the region’s major transportation hubs and explore opportunities to promote better connections among transportation providers. Because del Norte is a transportation hub, the recommendations of this study are likely to be affected by it. Although this study is currently underway, several preliminary recommendations have emerged including the significant improvement and standardization of wayfinding signage at hubs, both to connecting transit as well as to local destinations, and



the improvement of transit informational displays. The study also recommends adding real-time bus information at all hubs. Long-term recommendations are to create a regionally planned system of transportation hubs, develop a marketing campaign around connectivity and develop a process for locating new hubs based on emerging markets.

## 5.4 Auto

Currently, there are 2200 parking spaces at the del Norte BART station, 1300 of which are housed in the garage, with the remainder in surface lots. Because the del Norte Station offers more parking than Richmond and El Cerrito Plaza combined, and because of its easy access off of I-80, del Norte serves as a de facto regional parking facility for commuters from western Contra Costa County and areas east. As a consequence, most of the spaces are filled by 8:45 a.m. each weekday. This station has 42 carpool, 45 mid-day, and 40 accessible/handicapped parking spaces.



Approach to del Norte Parking Garage

The City of El Cerrito has metered parking along the adjacent streets. Residential parking by BART patrons is a sore spot for many local residents. Residents report that BART patrons park well into the neighborhoods east of the station beyond the area where parking is metered.

The drop-off zone at this station is located next to the parking garage and adjacent to the Ohlone Greenway. This location is problematic in that it blocks traffic exiting the garage, and conflicts with pedestrians who are accessing the station from the east.

In June 2002, the BART Board voted to allocate up to 25 percent of the parking spaces at BART stations as fee-based monthly reserved parking. This plan allows BART customers the option of reserving a parking space until 10:00 AM for a monthly fee. There are currently 77 parking passes issued at this station, out of 111 reserved spaces.

While a primary goal of BART's Access Policy is to increase access to the stations for modes other than the automobile, the challenge at del Norte will be to accomplish this while at the same time gaining maximum efficiency from its location for advantageous automobile access. Therefore, recommended improvements focus on the circulation routes into and within the station, carpool participation and drop off facilities. Many of these key issues will be resolved once a plan and design for station area development is put forward. However this Comprehensive Station Plan offers the opportunity to recommend that certain issues be explored as new station area development is designed.



Surface Parking at del Norte Station

Key strategies for accommodating automobiles are:

- Provide one or more drop-off locations within any new development that provide convenient station access.
- Explore programs to increase carpooling and mid-day parking at this station.
- Resolve circulation problems entering the station and within the station area.

## 5.5 Access Recommendations

As a way of addressing the access issues identified above, the recommendations in this access plan focus on the following:

- Improve circulation for buses, automobiles and pedestrians into and within the El Cerrito del Norte Station.
- Provide alternative drop-off locations within the station area that are safe and convenient for BART patrons.
- Ensure that future development proposals adhere to BART's Access and Transit-Oriented Development Guidelines.
- Aggressively pursue grant and Measure C funds to improve pedestrian and bicycle access to the station.
- Work with local transit operators to improve the connections between bus and BART.



- Identify funding opportunities for improving wayfinding signage and transit information, including real-time information for bus connections.

# Del Norte Comprehensive Station Plan

Figure 13: El Cerrito del Norte Station Access Improvement Recommendations

Mode	Recommendation Map Reference Number and Description	S/M/L Term*	Lead	Funding Tier and Source**
<b>WALK</b>				
<b>Access to Station</b>	<p>W1: <b>Streetscape</b> – Pursue grant opportunities to improve the pedestrian environment particularly along San Pablo Avenue</p> <p>W2: <b>Wayfinding</b> - Provide wayfinding signs along San Pablo, Cutting and Hill and other residential streets, as appropriate.</p> <p>W3: – <b>Sidewalk Repair</b> -- Work with City to repair sidewalks damaged by due to tree roots.</p> <p>W4: <b>Amenities</b> – Ensure future development provides significant pedestrian amenities including lighting, continuous sidewalks with curb cuts, signalized pedestrian crosswalks, street trees and wayfinding signs.</p>	S-M  M  S, M  M	City, BART  BART  BART, City  BART, City, developer	Tier 3: MTC's TLC program, Measure C Renewal funds  Tier 3: BART, Regional funds  Tier 3: BART, City funds  Tier 3: Developer
<b>Future Development Opportunities</b>				
<b>BICYCLE</b>				
<b>Bike Routes</b>	B1: <b>Bike Routes</b> - Develop on-street east-west bicycle network connecting to Ohlone Greenway and station.	M, L	City	Tier 3: Regional or local bicycle/pedestrian programs, Measure C Renewal funds
<b>Bike Facilities/ Amenities</b>	<p>B2: <b>Stair Channels</b> - Install bike stair channels between paid areas and platform.</p> <p>B3: <b>Wayfinding</b> – Provide wayfinding signage to and from station.</p>	M  M	BART  BART	Tier 3: BART  Tier 3: BART
<b>Future Development Opportunities</b>	B4: <b>Access/Amenities</b> - Incorporate BART's Bicycle Access and Parking Plan into future station area development.	M	BART, City, developer	Tier 3: Developer
<b>Security</b>	B5: <b>Cameras</b> - Provide security cameras for bicycle parking area.	S	BART	Tier 3: BART

\* (S) Short Term = Up to 2005, (M) Medium Term = 2006 to 2010, (L) Long Term = 2010 and After

\*\* Funding Tiers: Tier 1 Existing BART Resources and/or Non-BART funds  
 Tier 2 Limited Parking Revenue Enhancement and/or Non-BART funds  
 Tier 3 Future BART Revenues TBD and/or Non-BART funds

# Del Norte Comprehensive Station Plan

Mode	Recommendation Map Reference Number and Description	S/M/L Term*	Lead	Funding Tier and Source**
<b>TRANSIT</b>				
Transit Service Improvements	T1: <b>Service Enhancements</b> – Support efforts to enhance express bus/shuttle service in I-80 corridor.	S, M	AC Transit, Golden Gate Transit, Vallejo Transit and WestCAT	Tier 3: Measure C Renewal funds, RM2 funds, regional funds
	T2: <b>Service Expansion</b> – Encourage/support bus service in neighborhoods east of station.	L	AC Transit	Tier 3: AC Transit
	T3: <b>Real-Time Information</b> -- Provide real-time technology for all buses.	S, M	BART, bus operators	Tier 3: BAAQMD
	T4: <b>Connectivity</b> – Provide adequate wayfinding signage and transit information to assist transferring passengers.	S, M	BART	Tier 3: Regional funds
	T5: <b>Owl Service</b> – Work with AC Transit on implementing owl service.	S	BART	Tier 1: Existing operations
	T6: <b>Intermodal</b> – Explore creative ways to make intermodal function more efficiently. Explore alternative sites for bus layovers.	S, M	BART, transit operators, developer	Tier 3: BART, transit operators, developer, WCCTAC

\* (S) Short Term = Up to 2005, (M) Medium Term = 2006 to 2010, (L) Long Term = 2010 and After

\*\* Funding Tiers: Tier 1 Existing BART Resources and/or Non-BART funds  
 Tier 2 Limited Parking Revenue Enhancement and/or Non-BART funds  
 Tier 3 Future BART Revenues TBD and/or Non-BART funds

# Del Norte

## Comprehensive Station Plan

<b>AUTO</b>				
<b>Access</b>	V1: <b>Circulation</b> – Explore alternatives to current circulation to avoid conflicts between automobiles, buses and pedestrians.	M, L	BART, transit operators, developer	Tier 3: Unknown, developer
<b>Demand</b>	V2: <b>Carpooling</b> – Explore program to increase carpooling and mid-day parking at this station.	S	BART	Tier 3: BART
<b>Future Development Opportunities</b>	V3: <b>Drop-off</b> – Provide one or more drop-off locations within any new development that are safe and convenient for passengers.	M	BART, developer	Tier 3: Developer
<b>ALL MODES</b>				
<b>BART Station Intermodal Information Center</b>	A1: <b>Information Center</b> - Designate a transit information center at the intermodal station. Display transit and bike maps, real-time transit information and other access brochures and publications.	M	BART, WCCTAC, developer	Tier 3: Regional funds, BART
<b>Future Development Opportunities</b>	A2: <b>Visual Improvements</b> - Provide landscaping and public art to beautify the station area.	M	BART, developer	Tier 3: Developer

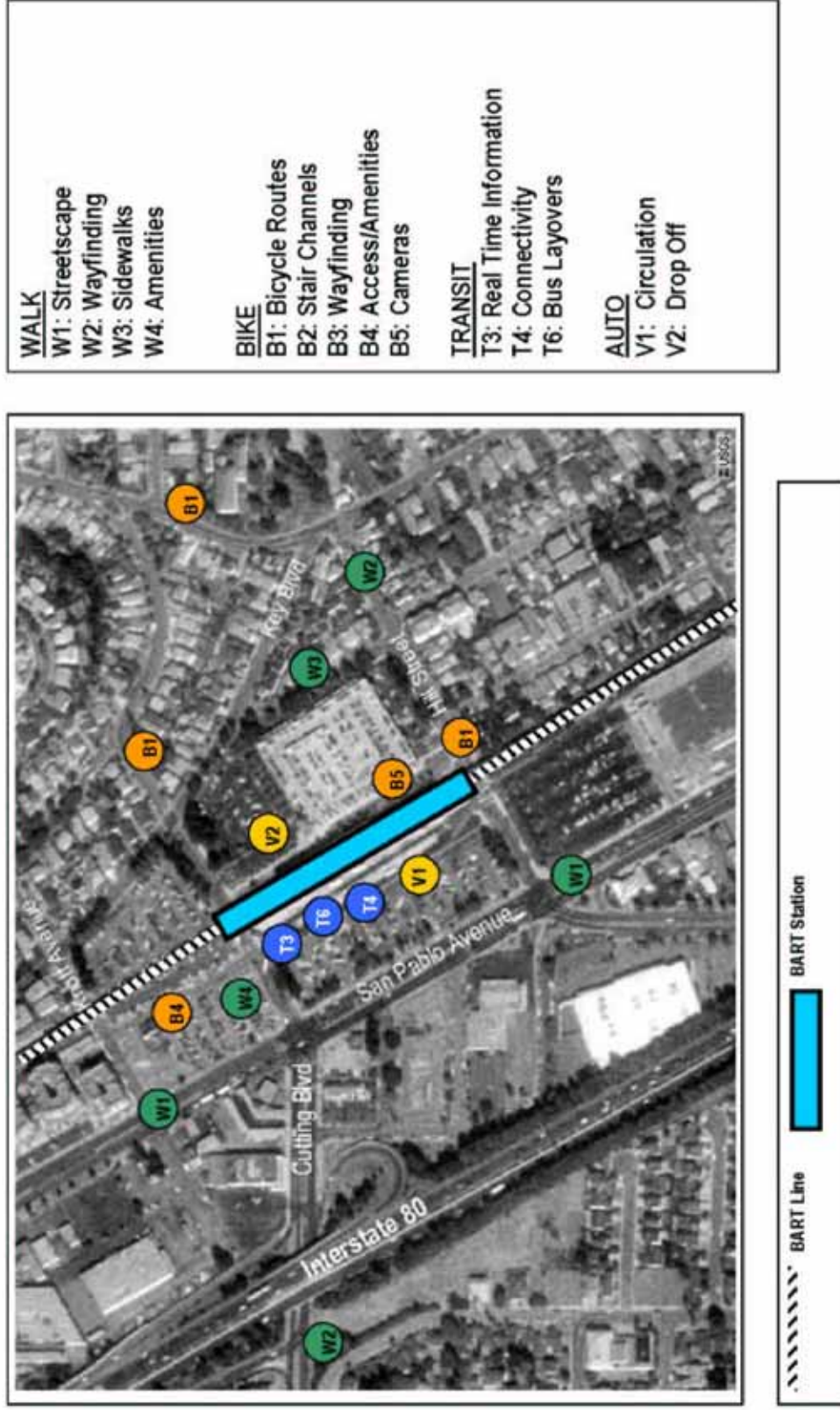
- (S) Short Term = Up to 2005, (M) Medium Term = 2006 to 2010, (L) Long Term = 2010 and After

- \*\* Funding Tiers:
- Tier 1 Existing BART Resources and/or Non-BART funds
  - Tier 2 Limited Parking Revenue Enhancement and/or Non-BART funds
  - Tier 3 Future BART Revenues TBD and/or Non-BART funds

Non-BART funds that may be available and appropriate for access improvements include Contra Costa County Measure C Reauthorization, MTC's Transportation for Livable Communities (TLC) and Low Income Flexible Transportation (LIFT) programs

Figure 14:

El Cerrito Del Norte BART Comprehensive Station Plan Recommendations Highlights



## 6.0 Station Capacity & Functionality

### 6.1 Introduction

The purpose of the Station Capacity Plan is to: Anticipate and accommodate the capacity needs of a station as ridership grows over time by:

- Informing pending and future development of the station area so as not to impede station expansions in the future;
- Identifying construction priorities and develop a conceptual understanding of the costs and time required to accomplish improvements;
- Coordinating the timing and implementation of the capacity improvements with other projects and development activities that may occur in order to minimize disruption to the BART customer.



Passengers at del Norte Station Platform

It is anticipated that the result of these efforts will be an improved customer experience leading to increased ridership of the BART system.

This conceptual plan is the result of an intensive examination of capacity issues at the El Cerrito del Norte BART station by an interdisciplinary team of BART staff and consultants, referred to here as the Plan Team. In addition to the on-site evaluation, the Plan Team reviewed Station Capacity Plans developed previously for other stations, along with ongoing systemwide capacity studies. A recently completed study evaluating potential impacts of the proposed San Jose extension on the “core” BART system, described below, is used here as the basis for anticipating future capacity needs.

## **6.2 Core Stations Capacity Study**

In early 2003, BART completed a study of station capacity needs for the core system of 39 stations in Alameda, Contra Costa and San Francisco counties. The “Core Stations Capacity Study,” conducted jointly with VTA as part of the Silicon Valley Rapid Transit Project, analyzed station capacity performance based on patronage projections for 2025 with the addition of the extension. The goal of the study was to determine station capacity performance at each of the existing 39 core stations and develop a systemwide capital improvement program to bring stations into compliance with regulations in anticipation of future ridership increases and to meet BART’s own capacity standards. Cost estimates for proposed capital improvements were also developed as part of the study effort.

Patronage projections for the horizon year 2025 generated specifically for the San Jose extension are more robust than BART’s 2025 forecast. As a result, the Core Stations Capacity Study provides a conservative estimate of station capacity needs. The analysis of 2025 station capacity needs was based upon two conditions producing ridership estimates: the core system “baseline estimate” including the recently approved 5.4 mile extension to Warm Springs, and the second with the proposed Silicon Valley BART extension to Santa Clara. The extension into Santa Clara County adds approximately 80,000 passengers per average weekday to the baseline estimate using the same 2025 horizon year.

When analyzing station capacity, two sets of patronage projections are necessary, “line load” and “station loads.” Line load projections refer to the number of passengers on a train passing through a station. Line load volumes are important when measuring platform space requirements, stair and escalator capacity, as well as emergency egress capacity. It must be capable of accommodating passengers forced to off-load a train or evacuate a station in the event of a delay or emergency. Station load projections are defined as the number of passengers entering and exiting a station. Station level projections are necessary to determine the size

and count of automatic fare collection (AFC) equipment such as fare gates, addfare machines and ticket vending machines. Station load passenger volumes also contribute to calculations of platform, stair and escalator capacity based upon established performance goals.

The Core Stations Capacity Study relied upon a methodology that analyzed station capacity needs on a systemwide basis and developed in-depth capital improvement programs at four prototype stations: Embarcadero, Balboa Park, Walnut Creek and Bay Fair. Capital improvements derived from the prototype station analyses were then applied to other existing stations with similar characteristics and anticipated growth to develop a conceptual/theoretical estimate of systemwide capacity impacts and costs.

The analysis of station capacity was based upon measures of capacity and congestion established by the National Fire Protection Association (NFPA 130), the California Building Code (CBC, Section 414), industry best practices and BART's own standards. These measures govern three station design elements: platforms (side and center), vertical circulation (stairs and escalators), and AFC equipment (fare gates, addfare machines, ticket vending machines). The table below summarizes station capacity measures.

Figure 15: Capacity Codes & Requirements

Element	Guideline	Source
Vertical Circulation Required for: Maximum Total Platform Exit Time	Must exit trainload and occupant load from platforms within 4 minutes (platforms act as a corridor under an emergency scenario)	NFPA 130 (2000), CBC (1998)
Vertical Circulation Required for: Time from Most Remote Point to a Point of Safety	Must exit trainload and occupant load from most remote point of platform to designated point of safety within 6 minutes	NFPA 130 (2000), CBC (1998)
Platform Delay Scenario: 12 minutes delay or one missed headway (whichever is greater) plus off-load train (in peak direction track)	5 square feet per passenger (off-load of train load to platform)	Industry Standard, BART adopted standard
AFC Gates	No more than 60-second delay at fare gate with one gate per array out of service in peak direction. No queue long enough to interfere with stair and escalator operations or general concourse circulation.	BART adopted standard

Source: BART Planning Department 2003



To adequately understand how a station functions and operates from a capacity standpoint, it requires on-site study of passenger behavior and analysis of specific station characteristics. Because the Core Stations Capacity Study used prototype stations to extrapolate capital improvements and costs onto the entire system, the study represents a theoretical estimate of capacity solutions at all but the four prototype stations themselves. The information contained in the Core Stations Capacity Study therefore is a starting point for the detailed analysis that follows.

### 6.3 Current and Projected Ridership

The estimate of future capacity needs at the El Cerrito del Norte Station was based on forecasts of future ridership determined by the Core Stations Capacity Study referenced above. These projections (presented below) anticipate a 130% growth in ridership from 2004 to 2025, from approximately 14,234 average weekday exits and entries in 2004 to 32,712 in 2025.

Figure 16: El Cerrito del Norte Station Average Weekday Ridership

	FY04*	2025**	
		Core Stations Impact Study	
		With San Jose Extension	Without San Jose Extension
Entries and Exits	14,234	32,712	32,142
Increase from FY04	--	130%	126%

\*Source: BART Draft Short-Range Transit Plan (February 2004)

\*\*Source: SVRT DEIR (October 2004)

## **6.4 Conceptual El Cerrito del Norte Station Expansion Plan**

The El Cerrito del Norte BART station is an aerial side platform station. A set of stairs and one escalator on each side of the paid area provide access to the two platforms. Elevators are located outside of the paid area. There are currently eight fare gates at this station, three at the south and five at the north end, two of which are reversible. Banks of AFC equipment are situated at both the southern and northern entrances. A 1280-space parking structure lies to the east of the station, with approximately 900 parking spaces in the surface lots to the west and northeast. Bike lockers and racks are located on both sides of the station. The Ohlone Greenway, a major bicycle and pedestrian path, lies directly east between the station and the parking garage.

The station “apron” – the concrete area outside the paid station area -- functions as an intermodal facility and is surrounded by waiting buses during commute hours. This configuration lends a sense of confinement to the apron. Walkways adjacent to the station center are quite narrow, particularly in the area of the existing elevators.

While this study analyzes conditions in the year 2025, certain deficiencies are already evident at El Cerrito del Norte and will take priority in phasing the capacity expansion program proposed later in this comprehensive station plan.

- There is a significant level of congestion on the platforms, both during the afternoon (PM) offboarding and morning (AM) boarding. The station’s ample parking and proximity to the I-80 freeway combine with bus transfers to create a substantial ridership level.
- The available length of platform for added vertical circulation is limited. Just north of the



View of Paid Area at del Norte Station

paid area, the utility building housing train control and other critical functions makes it impossible to expand the paid area in this direction or to add vertical circulation elements in this area.

- Queuing behind the fare gates in the paid area causes an unacceptable level of congestion especially during the evening peak.
- The station is a major intermodal transfer point for several East Bay bus services and Golden Gate Transit. The volume and density of bus activity impacts pedestrian access to and from the station.

## **6.5 Joint Development Context**

Recent efforts to move forward with a proposal for mixed-use, transit-oriented development at El Cerrito del Norte did not come to pass. As of this writing, no development proposal is pending, although there is much developer interest in working with BART and the City on a joint project. The parcels within the BART station area and owned by BART, as well as adjoining private property and property across San Pablo Avenue, are the largest undeveloped or underdeveloped parcels in El Cerrito and present a tremendous opportunity to create a mixed-use higher density development. A key concern for any future joint development project will be the location and type of replacement parking.

Future development proposals must consider the capacity needs of this station as outlined in this plan, and allow for the future expansion of the station including the concourse apron and the addition of emergency stairs which fall outside of the station area.

## **6.6 Proposed Station Capacity Plan**

The analysis of capacity needs at the El Cerrito del Norte Station has resulted in the recommendation of the following:

- Expand the station paid area

- Add one set of stairs for each platform to increase vertical circulation
- Add elevators within the paid area
- Add fare gates and ticket vending machine equipment
- Expand both platforms to accommodate projected growth in ridership as well as additional vertical circulation elements
- Expand the concourse apron

All improvements will meet BART's current Station Design Criteria, and ADA accessibility requirements.

### **6.6.1 Vertical Circulation**

Vertical circulation elements (stairs, escalators and elevators) serve two important and interconnected functions at BART stations: moving passengers between the fare gates and the platforms and evacuating passengers in the event of an emergency. Currently, vertical circulation at the El Cerrito del Norte BART station inadequately addresses both of these fundamental needs.

In the proposed plan, vertical circulation is improved by the addition of one set of stairs for each platform and by installing centrally located elevators. A new platform stair will be added at the south end of the expanded paid area (discussed below) to serve each platform. The location of the stairs is driven by the need to provide a new elevator for each platform. New ADA compliant elevators will be installed within the paid area and within sight of the station agent.

The addition of a set of stairs to the platform will ease passenger congestion in boarding and offboarding trains. Studies of passenger behavior show that trains are more evenly loaded when platform access is distributed along the length of the boarding area.

Existing elevators, which lie outside the paid area, will remain; however, these older elevators will be closed and only used when the new, centrally located elevators are out of service for maintenance or repairs.

### **6.6.2 Emergency-Only Stairs**

Although the new platform stairs will add exit width to the platform, an additional 200 inches of exit width is needed to meet the requirements of the California Building Code and NFPA 130. New emergency stairs are proposed to be placed at the far “outboard” ends of each platform and would be used only in the event of an emergency as they do not land in the paid area. These stairs will be enclosed to prevent unauthorized entry.

### **6.6.3 Platform Widening and Shelter**

The proposed capacity expansion plan includes the uniform widening of both platforms to ameliorate crowded conditions and to accommodate the additional width required by adding stairs.

Ridership projections for the year 2025 indicate the need for approximately 2,000 square feet of additional area for Platform 1. No additional area is required for Platform 2; however, it is necessary to widen specific portions of Platform 2 in order to accommodate the additional set of stairs and the emergency-only stairs. Because the particular constraints of the platform structure make local or asymmetrical widening relatively difficult, this proposal recommends widening the entire length of Platform 2.

Observation of El Cerrito del Norte passengers shows that patrons tend to concentrate in the wider, covered central area of the platform. During commute hours, queues form at each car boarding point. Because the platform width is limited, the queues arrange into parallel lines that eventually obstruct access to the ends of the platform. This pattern results in uneven boarding, and also can be hazardous to those queuing closest to the platform edge. Widening the entire length of both platforms to help mitigate crowding will enhance patron comfort and safety.

Windscreens and canopies are currently limited to the central platform area, covering the existing stairs and escalators. The addition of windscreen and canopy cover extending the entire length of the two platforms will also encourage passengers to move toward the

ends of the platforms. The windscreen and canopy configuration will meet NFPA recommendations to prevent smoke from being trapped in the platform area.

#### **6.6.4 Expansion of the Paid Area**

Station paid areas must be sufficient to handle passenger flow from the fare gates to the platforms and in the opposite direction. In addition, paid areas must house passenger amenities such as restrooms, transit transfer machines and parking validation machines. Station agent booths and staff facilities such as break rooms and meeting rooms are also needed, particularly at high volume stations where more staff is required. Finally, paid areas must serve as landing points for stairs, escalators and elevators from the platform.

Like many stations constructed as part of the original BART system, El Cerrito del Norte has a very small concourse paid area. The small footprint of the paid area currently results in congestion during commute hours. There is little space for patron amenities because even such basic elements as benches and trash receptacles are potential obstacles. Parking validation machines currently take up a large portion of the available floor area. In emergency situations, the limited capacity of the paid area may be a choke point.

Existing elevators are located outside the paid area, flanking the train control room. Although they are in direct view of the agent's booth, persons wishing or needing to use the elevators must first pass their ticket through a fare gate (usually with the help of the Station agent) before and after using the BART system. Not only is this inconvenient for patrons, this situation may result in lost fares as a result of individuals bypassing the fare gates. As mentioned earlier, the location of the elevators and the train control equipment prevents expansion of the paid area to the north.

Bringing new elevators and stairs into the paid area requires more than doubling its current area, from 3,900 to 7,686 square feet, and shifting the station's center to the south.

### **6.6.5 Fare Collection**

BART's "Priority Station Modification Reports for Rockridge, Daly City, and El Cerrito del Norte." dated August 2001, describes PM peak exit queuing time as "unacceptable." In addition to two new fare gates BART intends to add as a result of the report, this capacity plan recommends an additional nine fare gates to accommodate the demand the 2025 ridership projections generate<sup>7</sup>. Expanding the paid area, and moving the south gate array to a location where no columns exist allows greater flexibility for future expansion.

Fare collection functions must be continuously maintained during construction. The existing south fare gate array can remain in service during construction with appropriate phasing. Once the new gates are in place, the existing gates will be relocated to complete the south fare gate array. The proposed plan retains the current transverse orientation for both fare gate arrays.

Augmenting the expansion of the paid area and adding a new transverse fare gate array encourages access from both the east and west sides of the station. Each array will be provided with a full complement of AFC equipment.

### **6.6.6 Facilities for BART Staff**

The existing restricted concourse area affords no space to expand and improve facilities for BART employees. Staff facilities (agent's booth, staff restroom, break area) at El Cerrito del Norte Station fall far short of current BART design criteria. Providing suitable facilities, fully compliant with accessibility criteria, is one of the goals of this capacity plan.

Portions of the existing service "core," in line with the existing south fare gate array and containing various utility functions, must be removed to create an unobstructed paid area and improve sightlines between the new and existing agent's booths. New staff and public facilities are proposed adjoining the remaining utility rooms. These locations permit good visual supervision by the agent and permit the

widening of the central portion of the expanded paid area. New or temporary restrooms and staff facilities must be provided prior to removal of existing facilities.

### **6.6.7 Police**

Currently a police substation is housed in a portable building on the apron area north of the train control and utility rooms. It is anticipated that a permanent facility will be incorporated as part of future development of the station area. Should BART secure funds to begin capacity improvements before development occurs, the current BART Police Facility would have to be relocated to permit modifications to the apron and bus facilities. If development moves forward before BART secures funds for any capacity improvements, the developer should permanently relocate the BART Police Facility at no cost to BART within the private development.



Police Substation

### **6.6.8 ADA Accessibility**

All proposed improvements will meet the Americans with Disabilities Act (ADA) accessibility requirements. Extensive renovation of existing facilities will address a broad range of accessibility features, including:

- A new station apron and bus island
- An accessible pathway from buses to fare gates
- Fully accessible public and staff restrooms
- New fully accessible elevators
- Signage
- Fire alarm strobes and voice annunciators

### **6.6.9 Bus Intermodal Facility**

The density and volume of bus activity adjacent to the station is critical at this BART station. As noted earlier, thousands of passengers transfer to/from bus and BART each weekday, and this station serves as a regional transportation hub for buses from outlying counties.

In developing this station capacity plan, it became clear that the identified capacity needs –specifically, the need to expand the paid area and to add width to



the BART station apron -will make it impossible for future expansion of the bus bays in this area.

Working with the architect, BART staff and developer considered a series of design options to retain as many bus bays along the plaza as possible. One alternative was to provide two fare gate arrays north of the station and parallel to the station. This option proved inconsistent with the pedestrian orientation of the then-proposed development plan. The final proposal—to expand the paid area to the south—for an increase in space within the paid area while allowing for a minor increase in the number of bus bays directly adjacent to the station without compromising the pedestrian orientation of the proposed development.

### **6.6.10 Bicycle Access**

Currently, the apron south of the existing paid area includes bicycle lockers and racks. The flat terrain, coupled with the station’s proximity to the Ohlone Greenway bicycle and pedestrian trail make El Cerrito del Norte an important station for bicyclists. The existing bicycle facility will need to be reconfigured to permit construction of the new vertical circulation elements and paid area expansion. The proposal is to upgrade the lockers, racks and benches within this area within a “bicycle pavilion” consistent with BART’s current guidelines. Additional bicycle storage facilities will be added along the existing BART parking structure as part of the proposed development.

### **6.6.11 Station Design, Public Art and Customer Comfort**

With dramatic changes planned for the station and for future development on the station property, there will be significant opportunities to incorporate better aesthetic design, public art and customer amenities. While BART stations are functional and even beautiful in their own way, the opportunity presented by a station expansion also provides potential to incorporate design improvements that more accurately reflect the community that surrounds the station. In addition, customer amenities within and around the station should be recognized and

addressed as the station expansion and development move forward.

The area between the existing and future paid areas is an obvious focal point for public art with patrons entering fare gates at opposing ends of the station. A station sign (similar to the one at Richmond) in keeping with the design of any future development would be an asset to the station and would provide a transition from the development to the station area. Other amenities, such as adding windscreens and canopies to shield customers using the ticket vending machines and fare gates, relocating the newspaper kiosk to provide more open space within the paid area, and providing better lighting and public address system, should be considered as important station improvements.

### **6.6.12 Safety and Security**

Stations built prior to the 9-11 incident did not include a focus on security enhancements to the degree that we must impose in future station capacity planning. The Warm Springs Extension Station will be the first station designed with additional security enhancements, with consideration given to available funding. The following enhancements should be considered when designing changes to existing stations:

- using blast-resistant refuse cans
- adding cameras and monitors
- adding lighting
- providing clear lines of sight from Information Booths
- eliminating hidden alcoves in station area
- installing intrusion alarms

## **6.7 Constructability and Logistics**

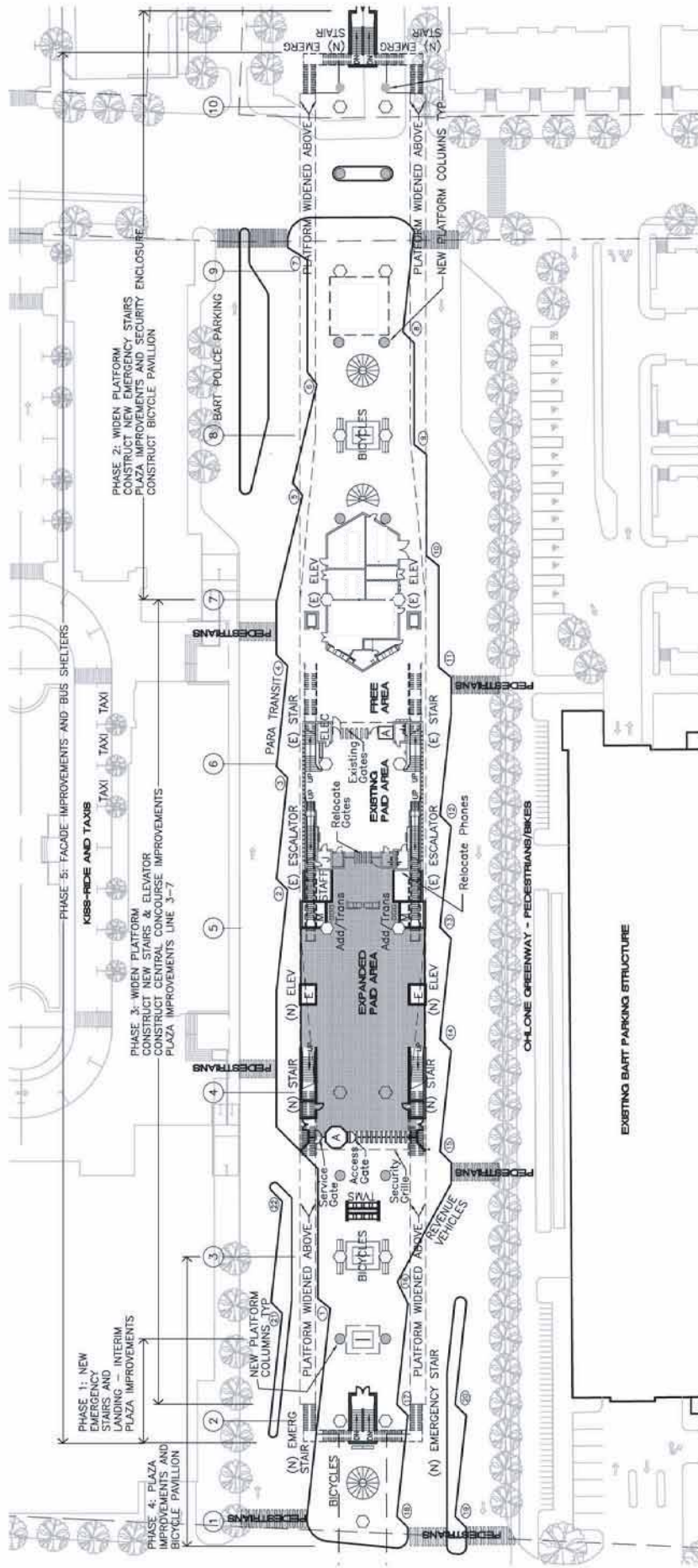
This section addresses in qualitative terms the issues that will inform the staging and phasing of construction at the El Cerrito del Norte Station. A detailed breakdown of planned modifications is included in the appendix to this plan.

An important criterion for the implementation of the proposed improvements is that the station be kept open and that service be uninterrupted during construction. Vertical circulation between the concourse and platform must be maintained at least at its present capacity at all times. Fare collection functions must also be continuously maintained. New or temporary restrooms and staff facilities must be provided prior to removal of existing facilities.

El Cerrito del Norte Station has a freestanding utility building north of the existing paid area. Train control, electrical switchgear, and other essential facilities are housed in this building. Because of cost and logistical problems associated with relocating these facilities, the proposed capacity plan retains these facilities in their current location. The freestanding traction power substation is aligned below the tracks south of the station.

The structural system of the existing station will also remain in place. Pairs of columns support both the trackway and the platform. The column spacing is 87 feet and six inches. The platform itself is constructed as a box beam, approximately seven feet in depth. The platform box is stiffened by internal beams at fifth points between the support girders. The platform width varies, tapering beyond the centroid. This structural system makes even local widening relatively difficult. A secondary set of columns and girders, positioned midway between the existing track/platform supports, is probably required. These supports will be major determinants of the layout of the new vertical circulation elements and the expanded paid area.

Figure 17: del Norte Station Concourse-Level Plan



## EL CERRITO DEL NORTE STATION CONCOURSE LEVEL PLAN

June, 2003

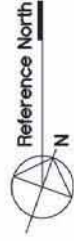
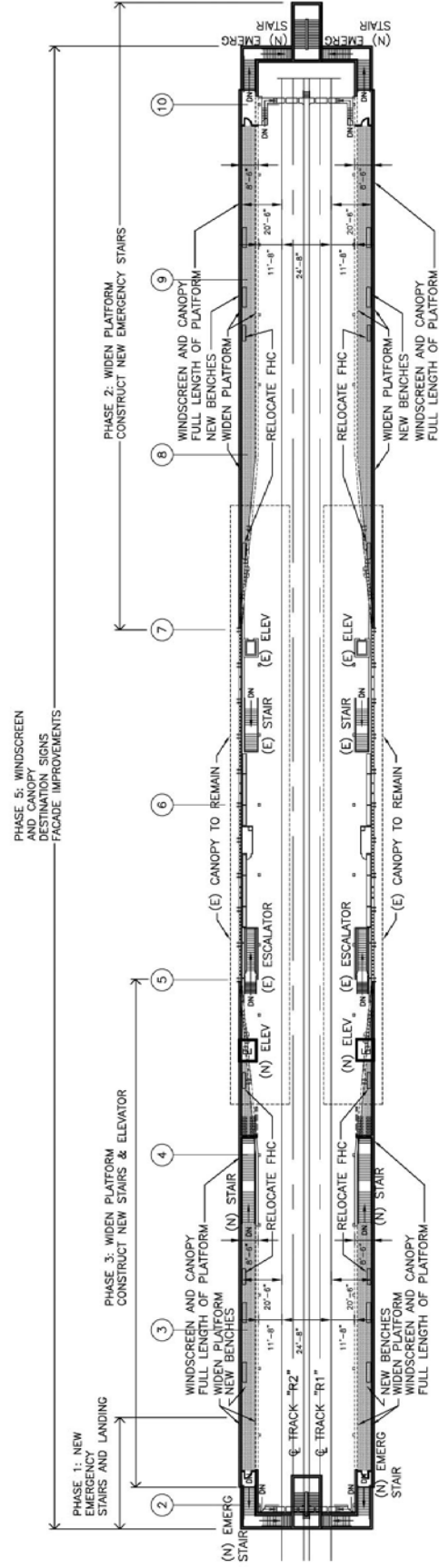
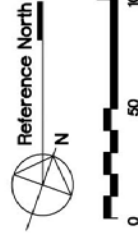


Figure 18: del Norte Station Platform-Level Plan



## EL CERRITO DEL NORTE STATION PLATFORM LEVEL PLAN

June, 2003



## **6.8 Preliminary Cost Estimate**

The conceptual cost to implement the proposed plan is approximately \$40 million. The cost estimate includes all elements described above: two new elevators, platform widening, concourse expansion, four emergency stairs with enclosures, new staff facilities, eight additional fare gates, four new ticket vending machines and six new add fare machines, expansion of the apron, and a new bicycle pavilion. The estimate also includes the cost of repaving, painting and finishing the concourse area, upgrading the fire sprinkler system, upgrading the station façade, and extending the weather cover and adding a new windscreen and overhead shelter. Costs associated with the removal of existing facilities, cleaning, and other miscellaneous tasks are also included as are contractor overhead, contingencies and BART project management.

# Appendix: Capacity

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- Introduction
- Conceptual Cost Estimate
- Constructability & Phasing  
Implementation

## INTRODUCTION

### 1.0 Outline

- 1.1 The preliminary conceptual construction cost estimate (estimate) is comprised of the following integral parts:
  - A. Introduction
  - B. Conceptual Cost Estimate for three stations
    1. El Cerrito Del Norte Station
    2. Ashby Station
    - 2A. Ashby Station – Shutdown Option
    3. 16<sup>th</sup> Street/Mission Station
  - C. Constructibility for three stations
    1. El Cerrito Del Norte Station
    2. Ashby Station
    - 2A. Ashby Station – Shutdown Option
    3. 16<sup>th</sup> Street/Mission Station

### 2.0 Scope of Work

- 2.1 The estimate has been prepared based on the following information:
  - A. Conceptual floor plans for the three stations received 05/27/03.
  - B. As-built drawings for El Cerrito Del Norte, Ashby and 16<sup>th</sup> Street/Mission stations (reference only).
  - C. Observations during the site visits to El Cerrito Del Norte on 05/22/03, 16<sup>th</sup> Street/Mission on 05/23/03, and Ashby on 05/28/03.
  - D. Engineer's comments on station upgrade and enhancements (field notes from station visits).
  - E. Review comments from team members.
  - F. Various email information from architects.
- 2.2 For Ashby Station only, compare the cost of the multi-phased construction of the station expansion vs. a single phased or minimum-phased construction with station shutdown.

### 3.0 Assumptions

- 3.1 The estimate specifically excludes the following:
  - A. Costs for existing equipment or system upgrade
  - B. New radio communication, train control and SCADA system (assumed to use existing system)
  - C. Costs for right-of-ways and land acquisition if required
  - D. Costs for operation/maintenance
  - E. Costs for Environmental Impact Assessment if required
  - F. Seismic upgrade to existing facilities
  - G. ITS
  - H. Legal and accounting expenses
  - I. Community outreach
  - J. Escalation

It is assumed that the above items, if needed, are included elsewhere in the owner's overall project budget.

- 3.2 The estimate is based on one general contract for each station.
- 3.3 All costs are based on present worth costs at mid-year 2003.
- 3.4 Allowances have been used for items which are required but are not able to be defined at this time.
- 3.5 It is assumed that the quality of new construction will match with the existing BART Design Criteria, NFPA 130, and California Building Codes.



- 3.6 The unit prices are composite unit prices which include costs for material, labor, equipment rental and subcontractor/supplier's mark-ups.
- 3.7 A mark-up of 26.5% of direct construction costs has been used for general contractor's general conditions, overhead and profit. This rate is comprised of 15% for general conditions and compounded with a 10% for overhead and profit.
- 3.8 A 25% rate has been included for design development, construction and estimating contingencies due to the conceptual nature of the scope. This is deemed to be the minimum prudent allowance considering the level of scope development and information available at the time of the estimate.
- 3.9 BART soft cost for project development has been included at 41% of total estimated construction cost based on BART's historical record on various sizes of projects from small local projects to large extension projects. This is for design services, construction management services and BART project administration.
- 3.10 Items affecting the cost estimate include, but are not limited to, the following:
  - A. Modifications to the scope of work included in this estimate.
  - B. Unforeseen sub-surface conditions.
  - C. Special phasing requirements.
  - D. Restrictive technical specifications or excessive contract conditions.
  - E. Any specified item of equipment, material, or product that cannot be obtained from at least three different sources.
  - F. Any other non-competitive bid situations.
- 3.11 This estimate has been prepared using accepted practices and it represents our opinion of probable construction costs. We make no other warranties, either expressed or implied, and are not responsible for the interpretation by others of the contents herein the cost estimate.
- 3.12 Please note that the estimate has been based on very preliminary and limited information and it only serves as a general guideline for more specific and detailed studies in the future.

#### **4.0 Basis for Pricing**

- 4.1 In pricing the estimate, we have made references to the following sources for cost data:
  - A. Historical cost data for BART projects (for AFC equipment, elevators, escalators, stairways)
  - B. Historical cost data of similar projects (general use for building up unit costs)
  - C. 2003 RS Means Building Construction Cost Data by RS Means (general use for building up unit costs)
  - D. 2003 Current Construction Costs by Saylor Publications (general use for building up unit costs)
  - E. Cost Estimates for Pleasant Hill Station and Union City prepared by Manna Consultants, Inc
  - F. Conceptual Construction Cost Estimate, VTA Impacts on BART Core System Stations Phase One Preliminary Study, prepared by M. Lee Corporation, dated 2/28/03 (Rev 2)

#### **5.0 Abbreviations**

- 5.1 Abbreviations used in the estimates include the following:

EA	Each
CY	Cubic Yard
LF	Linear Foot
LS	Lump Sum
N/A	Not Applicable
SF	Square Foot
AFC	Automatic Fare Collection (Equipment)

**El Cerrito Del Norte Station  
Conceptual Cost Estimate**

Description	Quantity	Unit	Unit Price	Item Cost	Unadjusted Construction Cost
<b>Phase 1 - South Emergency Stairs</b>					
Widen platform ends (new support structure)	685	SF	\$ 550	\$ 376,750	
New emergency stair/encl.	2	EA	\$ 400,000	\$ 800,000	
Interim plaza improvements at stair terminis	1	LS	\$ 100,000	\$ 100,000	
Bicycle storage	1	LS	\$ 70,000	\$ 70,000	
Miscellaneous	1	LS	\$ 75,000	\$ 75,000	
				Subtotal Phase 1	\$ 1,421,750
<b>Phase 2 - North Platform Expansion</b>					
Temporary structures	1	LS	\$ 100,000	\$ 100,000	
Widen platform (new supports)	4,405	SF	\$ 550	\$ 2,422,750	
New emergency stair/encl.	2	EA	\$ 400,000	\$ 800,000	
Site improvements at stair terminus	1	LS	\$ 100,000	\$ 100,000	
New apron	10,000	SF	\$ 25	\$ 250,000	
Bicycle pavillion (partial)	1	LS	\$ 40,000	\$ 40,000	
Interim police facility	1	LS	\$ 25,000	\$ 25,000	
Firehose cabinets and benches at platform	1	LS	\$ 10,000	\$ 10,000	
Miscellaneous	1	LS	\$ 75,000	\$ 75,000	
				Subtotal Phase 2	\$ 3,822,750
<b>Phase 3 - Central concourse Improvements, South Platform Expansion</b>					
Temporary structure	1	LS	\$ 150,000	\$ 150,000	
Widen platform (new supports)	3,720	SF	\$ 550	\$ 2,046,000	
Construct new elevators (w/ machine rooms)	2	EA	\$ 500,000	\$ 1,000,000	
Construct new stairs	2	EA	\$ 650,000	\$ 1,300,000	
Remove existing service core (partial)	1	LS	\$ 200,000	\$ 200,000	
Construct new ADA compliant staff facilities	1	LS	\$ 50,000	\$ 50,000	
Construct new ADA compliant public restrooms	1	LS	\$ 150,000	\$ 150,000	
Extend weather cover (w/ finished ceiling)	4,165	SF	\$ 50	\$ 208,250	
Construct new floor in Paid Area Expansion	8,660	SF	\$ 100	\$ 866,000	
Provide new wall finishes in Paid Area Expansion	4,440	SF	\$ 50	\$ 222,000	
Construct new agent's booth	1	EA	\$ 135,000	\$ 135,000	
F&I for AFC Equipment					
Install new fare gates	7	EA	\$ 30,750	\$ 215,250	
Construct new accessible fare gate	1	EA	\$ 53,500	\$ 53,500	
Install new TVMs	4	EA	\$ 68,750	\$ 275,000	
Install new add-fare machines	6	EA	\$ 62,500	\$ 375,000	
Cabinet including patch panels	1	EA	\$ 10,400	\$ 10,400	
Design and Engineering incl'd spare parts	42.6%		\$ 929,150	\$ 395,818	
Install glass railing	1	LS	\$ 6,000	\$ 6,000	
Install new overhead grilles	1	EA	\$ 15,000	\$ 15,000	

**El Cerrito Del Norte Station  
Conceptual Cost Estimate**

Relocate existing TVMs and fare gates	1	LS	\$ 100,000	\$ 100,000
Remove existing agent's booth	1	LS	\$ 100,000	\$ 100,000
Repair floor finishes	3,800	SF	\$ 50	\$ 190,000
Clean existing paid area overhead and repair leaks	3,800	SF	\$ 15	\$ 57,000
Construct new apron	12,500	SF	\$ 25	\$ 312,500
Upgrade fire sprinkler system	3,800	SF	\$ 30	\$ 114,000
Miscellaneous	1	LS	\$ 100,000	\$ 100,000
Subtotal Phase 3				\$ 8,646,718

**Phase 4 - Renovate South BART/Bus Plaza**

Construct new apron	8,000	SF	\$ 25	\$ 200,000
Install new site furnishings	1	LS	\$ 150,000	\$ 150,000
Complete bicycle pavilion (from B)	1	LS	\$ 75,000	\$ 75,000
Miscellaneous	1	LS	\$ 50,000	\$ 50,000
Subtotal Phase 4				\$ 475,000

**Phase 5 - South Concourse Expansion**

Construct new windscreen	12,000	SF	\$ 25	\$ 300,000
Construct new overhead shelter	8,900	SF	\$ 40	\$ 356,000
Extend fire sprinkler system	8,900	SF	\$ 50	\$ 445,000
Upgrade station façade	1	LS	\$ 1,800,000	\$ 1,800,000
Miscellaneous	1	LS	\$ 50,000	\$ 50,000
Subtotal Phase 5				\$ 2,951,000

**Construction, Unadjusted Total** **\$ 17,317,218**

Mobilization @ 8% \$ 1,385,377

Adjusted for Mobilization \$ 18,702,595

General Contractor's General Conditions, Overhead and Profit @ 26.5% \$ 4,956,188

Contingency on Construction @ 25% \$ 4,675,649

**Construction, Total** **\$ 28,334,432**

Project Development @ 41% \$ 11,617,117

Design Services (12%)

Construction Management Services (4%)

Project Administration (BART) (25%)

**Total Project Budget Estimate (Present Worth)** **\$ 39,951,549**

Say **\$40 million**

**El Cerrito Del Norte Station  
Conceptual Cost Estimate**

Total of Adjustments on Unadjusted Construction Cost:

$$[(100\% + \text{Mobilization}) * (100\% + \text{General Contractor} + \text{Contingency})] * (100\% + \text{Project Development})$$

$$[1.08 \times 1.515] \times 1.41 = 2.31$$

**Summary of Project Costs**

Phase	Unadjusted Costs	Adjustment	Adjusted Cost
1	\$ 1,421,750	2.31	\$ 3,284,243
2	\$ 3,822,750	2.31	\$ 8,830,553
3	\$ 8,646,718	2.31	\$ 19,973,918
4	\$ 475,000	2.31	\$ 1,097,250
5	\$ 2,951,000	2.31	\$ 6,816,810
	<b>Total</b>		<b>\$ 40,002,773</b>
		<b>Say</b>	<b>\$40.1 million</b>

## **Constructability and Implementation**

### **1. South Emergency Stairs**

- Widen platform ends south of line 2.5 to create emergency stair landings, including new support structure.
- Construct emergency stairs and security enclosure.
- Construct interim plaza improvements at termination of emergency stairs, including bicycle storage.

### **2. North Platform Expansion**

- Temporarily relocate BART Police.
- Temporarily relocate bus waiting north of the existing paid area.
- Existing train control and service core remains.
- Maintain existing paid area and emergency egress routes during construction.
- Construct supports and widen platform north of line 7.
- Construct emergency stairs and security enclosure.
- Construct site improvements at termination of emergency stairs, including local modifications to BART surface parking.
- Construct new apron north of line 7.
- Construct bicycle pavilion

### **3. Central Concourse Improvements, South**

- Maintain existing paid area in operation during construction. After new gates are in operation, relocate existing gates to complete the new south gate array.
- Temporarily relocate bus waiting south of the existing paid area.
- Construct supports and widen platform south of line 5.
- Construct two new elevators and machine rooms.
- Construct new stairs.
- Remove portions of existing service core.
- Construct new staff break and restroom facilities south of existing paid area, ADA compliant.
- Construct new public restrooms, ADA compliant.
- Extend weather cover over Paid Area Expansion and provide finished ceiling (Lines 3.5 to 5).
- Provide new floor and wall finishes in Paid Area Expansion (Lines 3.5 to 5).
- Install new AFC equipment, fare gate array
- Install new agent's booth
- Repair floor finishes.
- Clean existing paid area overhead and repair leaks (Lines 5 to 6.5).
- Construct new apron (Lines 3 to 7).
- Upgrade fire sprinkler system.

### **4. Renovate BART/Bus Plaza**

- Existing expanded paid area remains and functions during construction. Maintain emergency egress routes during construction.
- Construct new apron south of line 3.

- Install new site furnishings.
- Complete bicycle pavilion.

#### **5. Platform Windscreen and Station Façade**

- Construct new windscreen and overhead shelter at platform level, full length both platforms.
- Extend fire sprinkler system to new sheltered area.
- Upgrade station façade to integrate new bus shelters and platform windscreen, lines 3.5 to 6.5.