NEWARK **AREA TWO CONCEPT PLAN**

DESIGN, COMMUNITY & ENVIRONMENT

newark california

Draft — July 7, 2008

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CHAPTER ONE: INTRODUCTION

This Concept Plan was undertaken as a collaborative effort between the City and landowners adjacent to a proposed Newark Station of the Dumbarton Rail Corridor. This is a unique opportunity for the City of Newark to create a new type of neighborhood that will provide housing, access to new rail transit, connections to open space and possibly community amenities such as a performing arts facility. This project will enable fallow "brownfield" land to be reclaimed into a new community that will provide citywide benefits. As planned, it will also serve as a model for a pedestrian-friendly, compact kind of development that will attract a variety of residents and retail. It has the potential to become a new destination within Newark which will draw visitors from within the City, neighboring communities and across the Bay.

Creating a Vision

The goal of the Area Two Concept Plan is to create a vison for a new neighborhood adjacent to the proposed Newark Station of the Dumbarton Rail Corridor. The neighborhood has the potential to become a vibrant community. Situated on the Dumbarton Rail Corridor, the neighborhood would have access to regional connections and local open space. The Plan is a collaborative effort between the City, local landowners and the community.

Aerial view of the Plan Area.

Community Workshop table map illustrating some community members ideas about a development alternative.

City of Newark Community Members sharing their ideas at a Community Workshop.

Background

In collaboration with Area Two landowners, the City of Newark began a planning effort in the fall of 2007 to explore potential development in Area Two around the planned Newark Dumbarton Rail Station.

Area Two includes around 600 acres of land that has contained various industrial, manufacturing, chemical processing and salt production facilities since the early twentieth century. Zoning for the Plan Area was updated in 1999 with the adoption of the Newark Area Two Specific Plan, which anticipated the construction of a Community College surrounded by multi-level office and R&D buildings. However, after adoption of that Plan, the Community College located elsewhere and the market for office space in southern Alameda County contracted. The planned Dumbarton Rail Corridor presents an opportunity to create a vibrant new transit-oriented center in Newark that will provide new housing while generating significant ridership for the Dumbarton Rail Corridor.

The planning effort undertaken for this Concept Plan included two public meetings that were used to gauge support among Newark residents for new types of development around Area Two. Three proposed development alternatives were presented and the community provided substantial input. Based on that input, City staff concluded that the next step should be to refine a conceptual land use plan and bring it to the Planning Commission and City Council for review. This was done in

March 2008; both the Planning Commission and City Council unanimously approved the ideas behind the Concept Plan.

As Mayor Smith and the City Council have stated, this Concept Plan is only a start. More work must be done to accurately assess the impacts of the development that it envisions on the City of Newark and the environment. Next steps will include refining the land use plan, analyzing the impact of replacing previously approved office development with residential development and proposing detailed land use regulations that will guide and facilitate transit-oriented development. This work will likely take the form of a new Specific Plan and associated General Plan and Zoning Code amendments, along with any environmental review required under the California Environmental Quality Act (CEQA).

Location of Area Two and the Concept Plan Area

The City of Newark is in southern Alameda County on the east shores of San Francisco Bay. The regional context is shown in Figure 1-1. Area Two is entirely within Newark city limits south of State Route 84 leading to the Dumbarton Bridge and west of Interstate 880. The relationship of Area Two to the City of Newark is shown in Figure 1-2. At a closer scale, Area Two is bounded by Thornton Avenue to the north, Enterprise Drive and Willow Street to the east, Perrin Avenue to the south, and salt production facilities bordering San Francisco Bay to the west, as shown in Figure 1-3.

Figure 1-2: Area Two within the City of Newark.

Figure 1-1: The City of Newark within the Bay Area regional context.

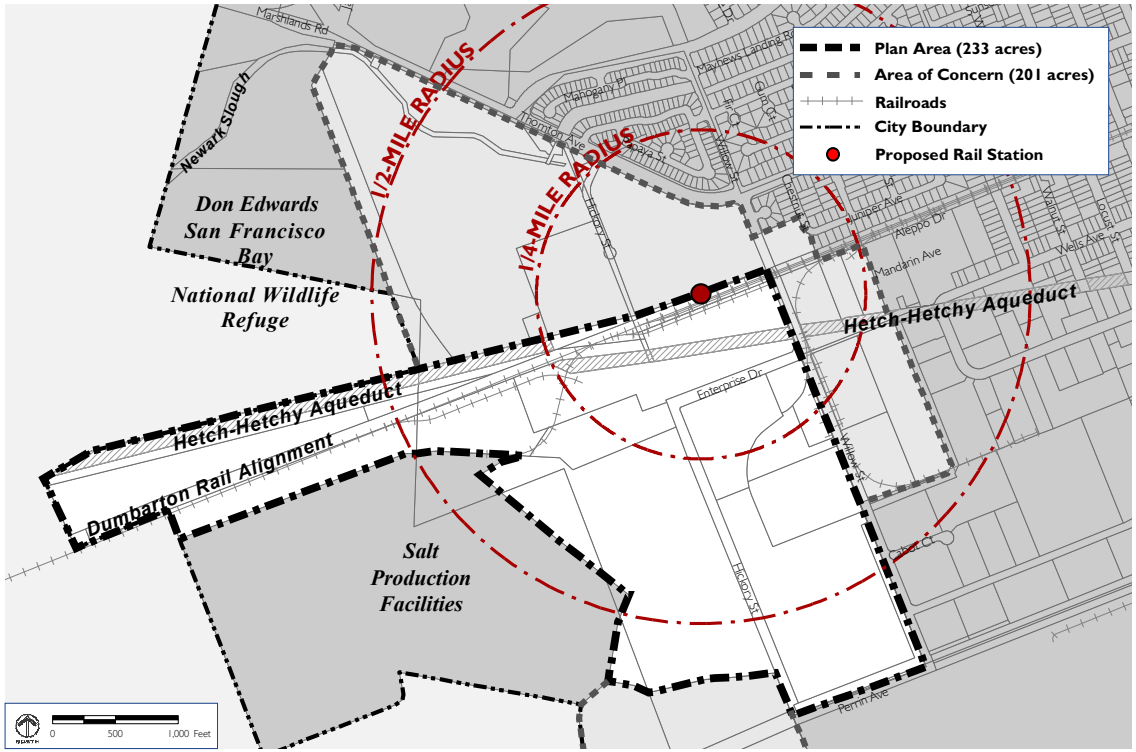


Figure 1-3: The Area Two Concept Plan Area and Area of Concern.

The primary focus of the Newark Area Two Concept Plan is an area covering 233 acres of land centered around the proposed Newark Dumbarton Rail Station. This is shown in Figure 1-3 as the Plan Area. However, the Concept Plan also considers all of the land that was part of the Area Two Specific Plan, adopted in 1999, as well as several parcels to the west of Willow Street that are included because these parcels may provide opportunities for supportive land uses or raise questions of land use conflicts. All land considered by the Concept Plan that is not in the Plan Area Boundary is designated as the Area of Concern as shown in Figure 1-3. Together, the Plan Area and the Area of Concern constitute Newark Area Two.

Figure 1-3 also shows the proposed location of the future Dumbarton Rail Station. The quarter-mile and half-mile radii are shown to illustrated pedestrian walking distances to the proposed station. A quarter-mile is considered to be a five-minute walk and a half-mile is considered to be a ten-minute walk.

Aerial view of the Dumbarton Rail Bridge.

Vacant industrial lands in Area Two.

Dumbarton Rail Corridor

The Dumbarton Rail Corridor project will extend commuter rail service across the South Bay between the Peninsula and the East Bay. The project aims to provide a critical link between the Caltrain lines in San Mateo County, and the BART, ACE, and Amtrak rail lines in Alameda County. The trains will run on rehabilitated and reconstructed rail facilities, shown in Figure 1-4.

Approximately $260 million has been secured relative to a total cost estimate for the Dumbarton Rail Corridor project of $595 million. This is enough funding to begin with a first phase of the project, which would include the Newark Station. A public review draft of the environmental review is expected to be released by January 2009 and rail service is anticipated to begin after 2012.

Figure 1-4: The proposed alignment of Dumbarton Rail Corridor.

The Dumbarton Rail Corridor will connect to Caltrain.

Existing Dumbarton Rail Bridge and Newark Slough.

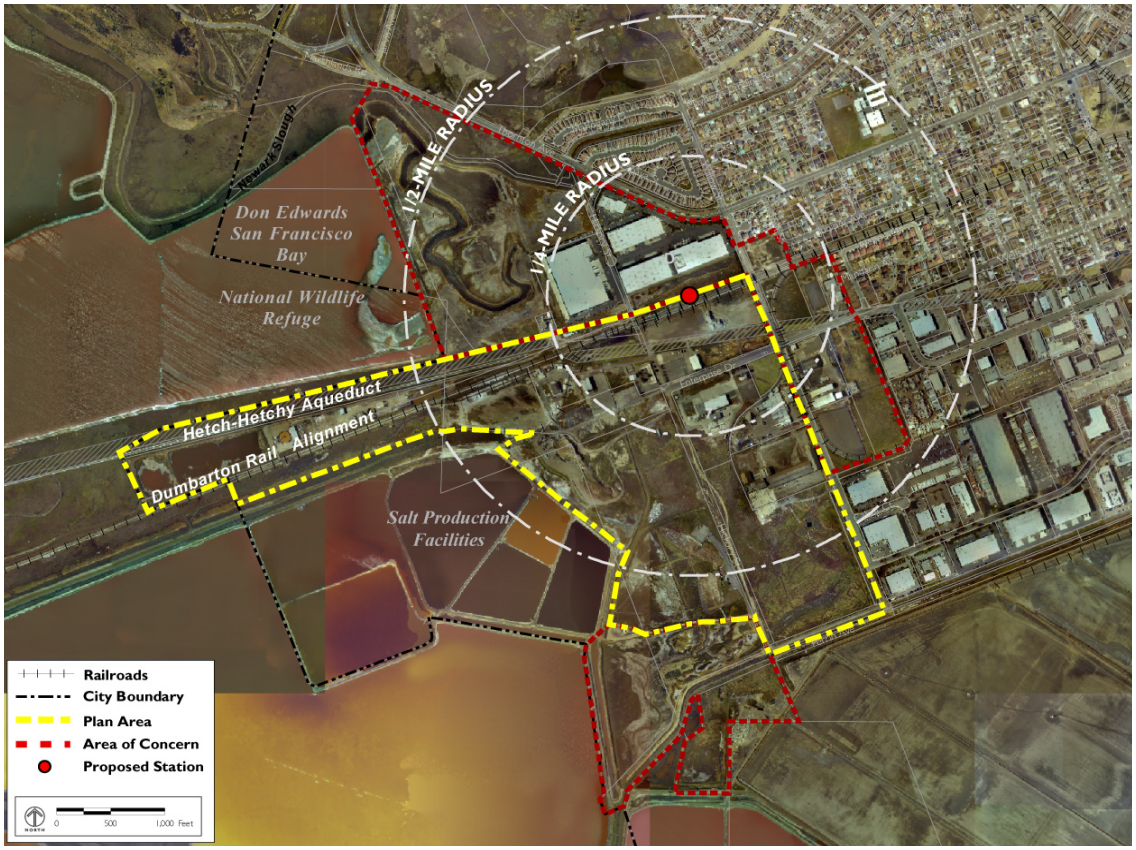


Figure 1-5: Existing development and the Newark Area Two Concept Plan Area within 1/4 and 1/2 mile radii of the proposed new Dumbarton Rail Station.

To help facilitate the creation of housing near transit stations and the attendant increase in transit ridership, the Metropolitan Transportation Commission (MTC) makes grants available for land use planning around station sites. Projects need to plan for a minimum number of housing units along the transit corridor. The threshold for commuter rail lines such as the Dumbarton Rail Corridor is 2,200 units within a half-mile radius of the station. About 750 dwelling units currently exist within a half-mile radius of the Newark station site.

Completion of a trans-bay commuter rail link will present significant opportunities for Newark. It will provide residents with greater transportation options and make major Bay Area employment centers more easily accessible from Newark. At the station site, the provision of a greater range of housing types, both rental and for-sale, could attract new residents that might otherwise locate in Fremont or across the Bay. Also significant is the focus that the transit station provides for the creation of a vibrant new place within the City.

CHAPTER TWO: PRINCIPLES OF TOD

Transit-oriented development (TOD) refers to the clustering of homes, jobs, shops and services in close proximity to rail stations, ferry terminals or bus stops offering access to high-quality transit services. This pattern of development typically involves compact housing, a mix of different land uses and amenities such as pedestrian-friendly streets and parks. This concept is not new: many historic neighborhoods in older cities such as Boston, San Francisco and Seattle developed as pedestrian-friendly "streetcar suburbs" before the advent of the automobile suburb in the 1950s.

In order to foster the creation of a vibrant, successful neighborhood, a TOD must serve a significant portion of trips by public transit, walking and bicycling. Enticing residents out of their automobiles starts with proximity to transit. According to the MTC, Bay Area residents who live within a half-mile of rail transit stops are four times as likely to use transit, three times as likely to ride a bike, and twice as likely to walk as those who live at greater distances. Proximity is not the only ingredient,

TOD and Mixed Use

TOD is not a new idea; it was a way of life before the invention of the automobile. Modern TOD planning provides multiple transportation modes, encouraging residents to be less reliant on their cars and utilize their local neighborhoood in meeting their daily needs. Greater densities and a multiple number of nearby uses entice residents to take advantage of walking on pedestrian-friendly street.

Historic streetcar suburbs contained the right mix of uses and development density to create a pedestrian-friendly, transit-supportive coummunity.

Alternative modes of transportation, encouraged by the increased density and multiple uses within a transit-oriented development.

Mixed-use development, with housing above retail.

Pedestrians enjoying the active street life encouraged by transit-oriented development.

however. Below are six principles that should be followed in the planning and design of new transit-oriented neighborhoods like Newark Area Two.

1. Provide a Mix and Variety of Uses

A healthy neighborhood is made up of a mixture of residential development, employment, locally-serving retail shops, community facilities (such as schools, daycare or performing arts) and public open spaces. This mix of uses will ensure that a variety of people will be present on the streets during a range of times of the day and week, including evenings and weekends. The potential exists for residents to drop off their children at daycare, to pick up dry-cleaning or get a coffee before heading to the train station, all on foot.

When people walk more, they tend to meet neighbors more and recognize them. Stopping in at the local grocer or café often means that there is a potential connection with others who shop or work there. This sense of "neighborliness" is not only pleasant, it can help to keep watch over the neighborhood and reduce crime.

When a mix of different types of housing is provided, there is a greater likelihood that individuals from different walks of life will be able to live as neighbors: seniors, young couples, single professionals and families. Inclusionary housing policies can further ensure that there is a variety of income groups living in the neighborhood. This is important for retaining local service

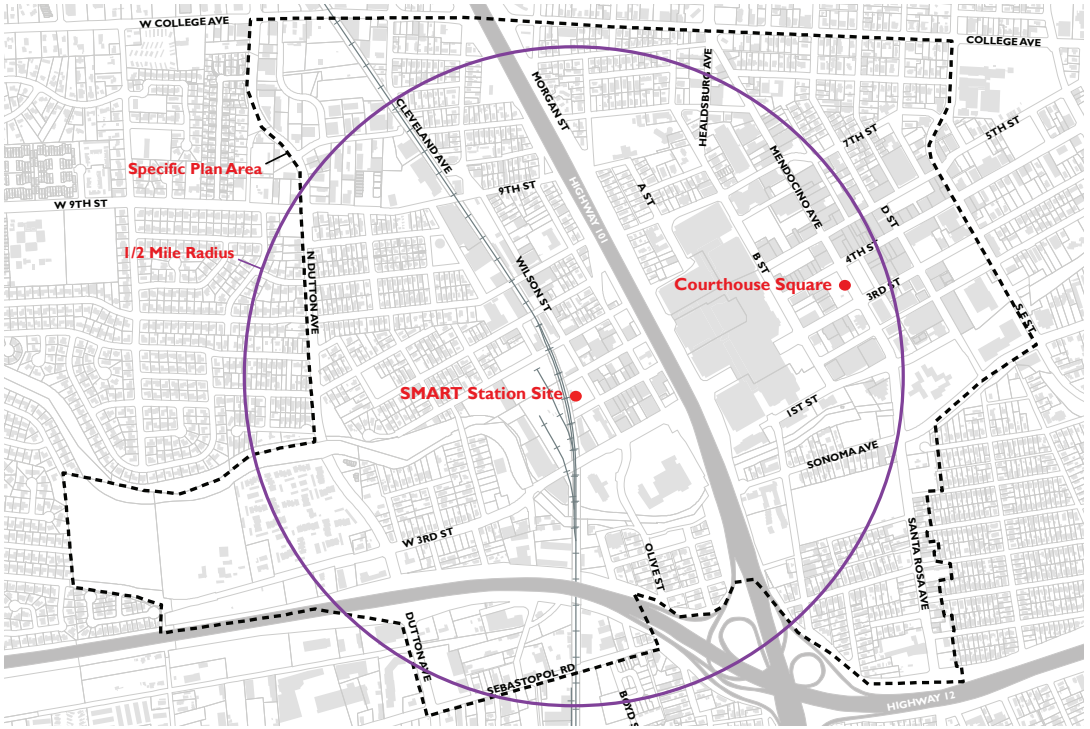
professionals including police and teachers, who are all-too-frequently priced out of expensive Bay Area communities. Every effort should also be made to include accessible housing for residents with disabilities, as well as "visitable" housing where all residences are fully accessible to visitors with disabilities.

2. Use Density to Support Transit

In a TOD, the densest residential development should be closest to the transit station. Denser housing will attract the kind of residents that tend to use transit more often, and placing this kind of housing near the station will encourage greater transit ridership. The conundrum of transit planning is that successful transit attracts higher density development, and higher density development enables successful transit. This is why the planners of transit corridors such as the Dumbarton Rail Corridor review development scenarios for station sites as part of the planning process for the transit line.

The planning principle for proximity of higher density residential is that the terminal should be located at the center of a five- to ten-minute walking radius to fairly dense development, which means about a quarter- to a half-mile radius.

Denser housing near the station will also provide additional support for shops and stores and increase the likelihood of successful retail. Retail uses succeed because there is support, and



Density supports transit. Diagram of a proposed commuter rail station in Santa Rosa showing existing development within a half-mile radius, which represents roughly a ten-minute walk, from the station.

Pedestrians enjoying the mixed use options provided by a transit-oriented street.

William Hezmalhach Architects

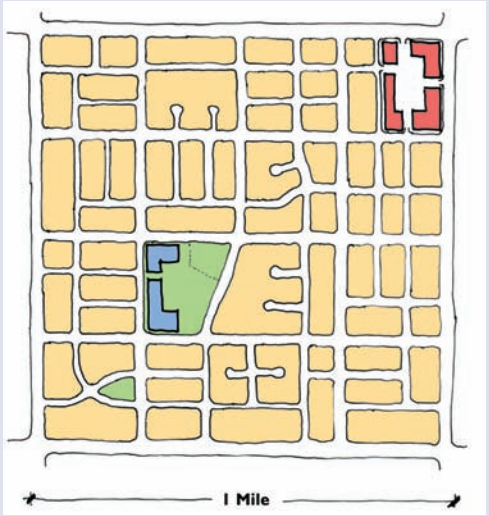
A design for a TOD with examples of mixed use neighborhood with lively, safe and exciting streets.

Connecting the Streets

Neighborhoods that are designed with multiple routes provide an abundance of choice for accessing the surrounding street network, thereby dispersing traffic and reducing congestion. Connector streets, residential streets and narrow residential lanes connect through the neighborhood, providing multiple routes to schools, parks and open space. Many streets connect to transit and retail areas so that residents can access these services on foot, by bike or by vehicle.

An example of a neighborhood designed for the automobile, with little thought given to creating pedestrian connectivity.

Bicycle racks on buses allow riders to link transportation modes and encourage ridership.



A pedestrian and bicycle friendly neighborhod design with short and well connected blocks.

support is calculated by "counting rooftops." In other words, the more existing residential units there are in a given area, the better the likelihood that retail shops will succeed.

In determining the types of residential development, and the type and amount of retail development, project planners should analyze market feasibility. Getting the mix and intensity of development correct is highly important to the success of the neighborhood.

3. Encourage all Modes of Transportation

In a transit-oriented development, streets should be designed for all users, including pedestrians, bicyclists, transit and vehicles. Connectivity to transit should be maximized within the neighborhood and in the surrounding context. Pedestrians in particular should feel welcome, and streetscape planning should include safe intersection design and "universal design" of sidewalks and transit stops to accommodate the young, old and physically impaired. Attractive streetscape design and active ground floor uses will also encourage walking.

The new neighborhood should have a fine-grained network of streets, with short, well-connected blocks. This type of street network will disperse traffic, encourage walking and bicycling, stimulate visual interest and allow the creation of quiet and intimate thoroughfares. Roadway space should be allocated and traffic signals timed for the convenience of walkers and cyclists. Traffic should be calmed, with roads designed to

limit speed to 30 miles per hour on major streets and 20 miles per hour on smaller streets. Clearly marked bicycle lanes and routes connected to a citywide or regional bicycle network will encourage bicycling. Clean, well-designed transit stations and shelters will attract new users to transit.

4. Manage Parking Effectively

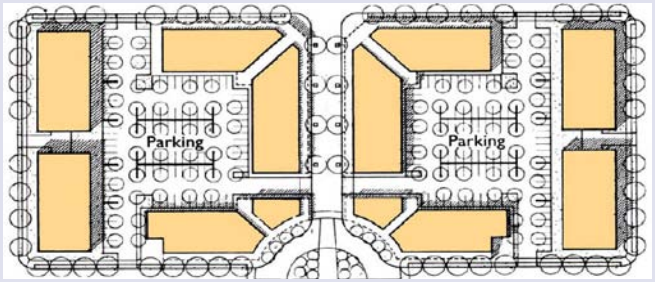
Too much land used for parking can increase development costs, and poorly designed parking facilities makes walking difficult and unattractive. In recent years many communities have developed innovative strategies to provide the appropriate amount of parking that accommodates needs efficiently, including Redwood City and Pasadena.

When considering design, parking lots should be located behind or inside structures, not along street frontages. Parking should be provided with a limited number of curb cuts interrupting the sidewalk. Projects should ensure convenient and abundant bicycle parking.

When considering the amount of parking, planners and municipalities should avoid overprovision of parking. This can be done by encouraging the sharing of parking between uses such as office and residential parking: when office use is highest residential use is low. "Unbundling" parking allows developers to sell parking spaces separately to residents, thereby allowing savings for home purchasers with one or no vehicles. Projects should be allowed to provide tandem parking solutions or car lifts for multi-family housing.

Pedestrian friendly and aesthetically pleasing parking area located to the rear of a residential development.

Parking should be located in the center of a block and visually de-emphasized from the street, as shown in this Redwood City parking structure.



Parking lots should be located behind buildings to allow buildings to front directly onto streets. This allows for more interesting and intimate pedestrian environments.

Parking Best Practices

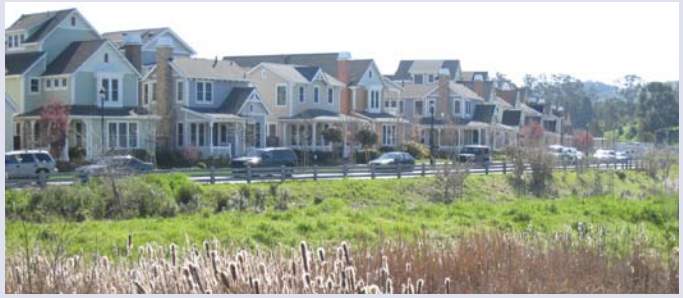
One of the key goals of transit-oriented development is to encourage people to walk or use transit rather than drive. In light of this, designing appropriate parking facilities is key to achieving sucessful TODs.

Parking should not be allowed to dominate the landscape. Parking lots should be located behind or inside structures. They should also be planned to encourage sharing of parking between uses and designed to be pedestrian friendly, environmentally sustainable and aesthetically pleasing.

Creating Places

Another benefit of creating a transit-oriented development is the opportunity to develop a new public space associeted with the transit station area. The area around a transit station should be designed to create an acive center that encourages public use and helps to define and communicate the character and identity of the community.

A new public square has the potential to create community identity and be a public gathering space for the whole community.



TOD neighborhoods should relate to the surrounding context to encourage people to make memorable connections to the place.

New public spaces should be designed to communicate the identity of the neighborhood.

Transit amenities should be well designed to meet the needs of transit riders and should be inviting and usable.

5. Build a Place, not a Project

As noted in *Ten Principles for Development around Transit*, published by the Urban Land Institute, new transit in a neighborhood presents an opportunity for a full-fledged transit-centered community, with attendant economic and cultural benefits. To emphasize this, the station area should become a place that people inside and outside the neighborhood identify with.

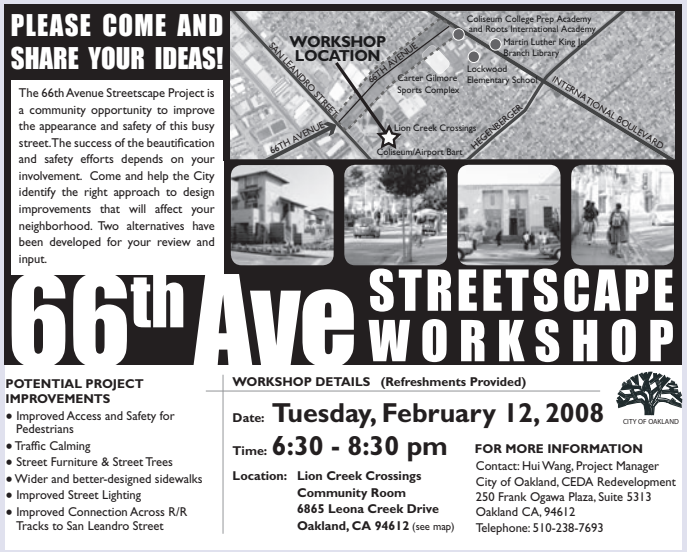
The transit station and surrounding area should be designed to create an activity center that surrounds the station on all sides. The resulting public space should have a high quality design that is inviting and usable. Experience tells us that a successful public space is easy to navigate while inviting users to sit and visit. It is frequently contained on all sides with attractive buildings that create walls for the public "room". It is in harmony with the elements – attractive protection from sun and wind. It also has "people attractors" such as good shops and cafes, water fountains and public art.

In order for a TOD to achieve an identity as a place, consideration should also be given to how the new neighborhood connects to surrounding area. Connections to natural resources such as open spaces and views of surrounding hills or water bodies will create memorable connections. The surrounding built context should be considered as well, particularly the historic character of a community.

6. Ensure Community Involvement

Planning for TOD should reflect the existing community's needs and values. To ensure this, involvement should come early in the process to inform the plan and build support for projects. The community engagement process should be open and transparent.

Outreach and education of the community on the benefits and costs of new development focused on transit is important. Local examples of similar development should be presented and reviewed by the community. In the end, the focus of the involvement process should be on desired outcomes and on ways to achieve consensus.



An example of outreach for a public workshop.

Effective Community Participation

Community participation is a key component of planning for a new transit-oriented development to ensure that the plan reflects the community's needs and values. The community process needs to include outreach and education to ensure that the community can make informed suggestions and decisions.

Community members participating in a a community workshop to discuss potential alternatives for a plan.

Community members presenting their ideas at a public meeting.

CHAPTER THREE: **SITE AND CONTEXT**

The Newark Area Two Plan Area is a unique site. Historically, it has contained a number of different land uses, many of which are a result of the Plan Area's location near San Francisco Bay. This chapter includes an overview of the location, key characteristics and existing conditions for Area Two. A list of references containing additional information may be found in the Appendix.

The first people to inhabit the eastern shore of San Francisco Bay were the Ohlone. Among other activities, native peoples gathered salt along the bay. The roots of modern Newark begin around 1850, when maritime landings along the Bay appeared. Most of the land in Newark was used in dairy and other agricultural production. Area Two was originally home to storage facilities for many of the agricultural goods produced nearby and was also a major center of salt production in the Bay Area.

Beginnings of Newark

Newark began as a center for agricultural production and has always been linked to the production of salt, which is produced by the bayfront salt ponds. The introduction of the railroad in the late 1880's, with Newark as the connecction point across the Bay, stimulated the city's economy which grew around the railroad station. The existance of the railroad also helped to solidified the city's role as an industrial center within the region.

Parade in Old Town.

REDWOOD, DUMBARTON, NILES

	5 15	‡	4 10	*	9 30	0	Lv.....	Redwood.....	Ar	9 00		3 40		4 35
f	5 35	f	4 18	f	9 38	3	Lv.....	Sweeney.....	Lv	f 8 53		3 32	f	4 25
f	5 40	f	4 22	f	9 42	4	Lv.....	Henderson.....	Lv	f 8 46	f	3 26	f	3 59
f	5 49	f	4 30	f	9 49	8	Ar.....	Dumbarton.....	Lv	8 38	f	3 18	f	3 39
	6 05		4 40		10 07	12	Ar.....	Newark	Lv	8 30		3 10		3 30
	6 50		4 45		10 12	15	Ar.....	Centerville.....	Lv	8 20		3 00		3 20
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†—Daily except Sunday. ‡—Sunday only.
to receive passengers s—Stops to discharge passengers.

1912 Timetable of the Dumbarton Rail Line.

Old Town today, Newark at the intersection of Thorton Avenue and Sycamore Street.

In the late 1800s, development in Newark was transformed by the presence of the South Pacific Coast Railroad that traveled from Dumbarton Point to Santa Cruz. In the 1870s a station was constructed and subsequently shops built up around the railroad near Thornton Avenue and Sycamore Street, forming Newark's economic center. The first crossing of San Francisco Bay was the Dumbarton Cutoff train bridge built by the Southern Pacific Railroad around 1910. This railroad line bisected Area Two and is the alignment for the planned Dumbarton Rail Project. The bridge carried freight trains from 1910 to 1982.

For almost a century Area Two has been a site for chemical and industrial production, including production of pesticides and synthetic rubber. During World War II, Newark experienced great expansion. At that time, several chemical companies located to Area Two; other companies already operating within Area Two expanded. However, industrial chemical operations were largely phased out by the 1990s, leaving the Concept Plan Area mostly vacant and underutilized.

Existing Land Uses and Ownership

The Plan Area includes 233 acres of land that has contained various industrial, manufacturing, chemical processing and salt production facilities since the early twentieth century. Much of the upland, which is located at the transition from the bay to the built environment, is vacant or undeveloped. The area's industrial operations were largely phased out by the mid-1990s, with only Cargill's salt production facilities remaining today. The primary landowners within the Plan Area include Cargill Salt, FMC, Torian, Ashland and SHH. See Figure 3-1 for ownership of parcels in the Plan Area. In addition the Plan Area is occupied by several rights-of-way and easements, which are described below.

The remainder of Area Two (the Area of Concern) consists of a variety of uses. To the north of the Dumbarton Rail right-of-way are two existing light industrial business parks, WorldPac and the Thornton Business Center. Also to the north is open space that is part of the Don Edwards San Francisco Bay National Wildlife Refuge, and other vacant or unused lands. To the east of Willow in the Area of Concern are several vacant parcels and a site being used for truck operations. At the southern border of Area Two are vacant lands including about 26 acres dedicated to a wetlands mitigation project, which will remain as open space. Finally, along the western edge of the site are salt production facilities which will remain in use by Cargill.

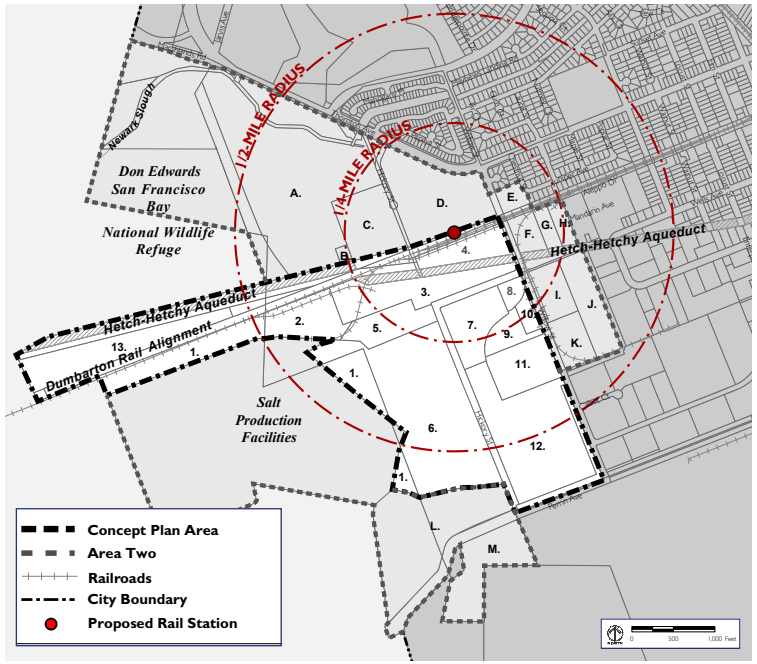


Figure 3-1: Land ownership within the Concept Plan area.

LAND OWNERSHIP

Plan Area (233 acres)

1. Cargill: 20.0 acres
2. FMC: 9.7 acres
3. FMC: 14.7 acres
4. FMC: 17.2 acres
5. FMC: 8.1 acres
6. Cargill: 46.9 acres
7. Ashland: 10.3 acres
8. FMC: 2.0 acres
9. SSH: 4.3 acres
10. SSH: 2.0 acres
11. Torian: 10.0 acres
12. Torian: 32.0 acres
13. Cargill (USD): 16 acres

Area of Concern (201 acres)

A. Cargill: 62.2 acres
B. USD: 0.7 acres
C. WorldPac: 12.0 acres
D. Thornton Bus. Ctr: 22.0 acres
E. FMC: 2.2 acres
F. FMC: 3.5 acres
G. Enterprise Drive LLC: 2.1 acres
H. Gallade Enterprises LLC: 2.4 acres
I. Jones Hamilton Co: 6.1 acres
J. Jones Hamilton Co: 9.3 acres
K. Jones Hamilton Co: 5.7 acres
L. Wildlife Refuge: 30.4 acres
M. Fries: 14.3 acres

Concept Plan Area
Area Two
Railroads
City Boundary
Proposed Rail Station

Vacant lands at the end of Enterprise Drive.

Thornton Business Center.

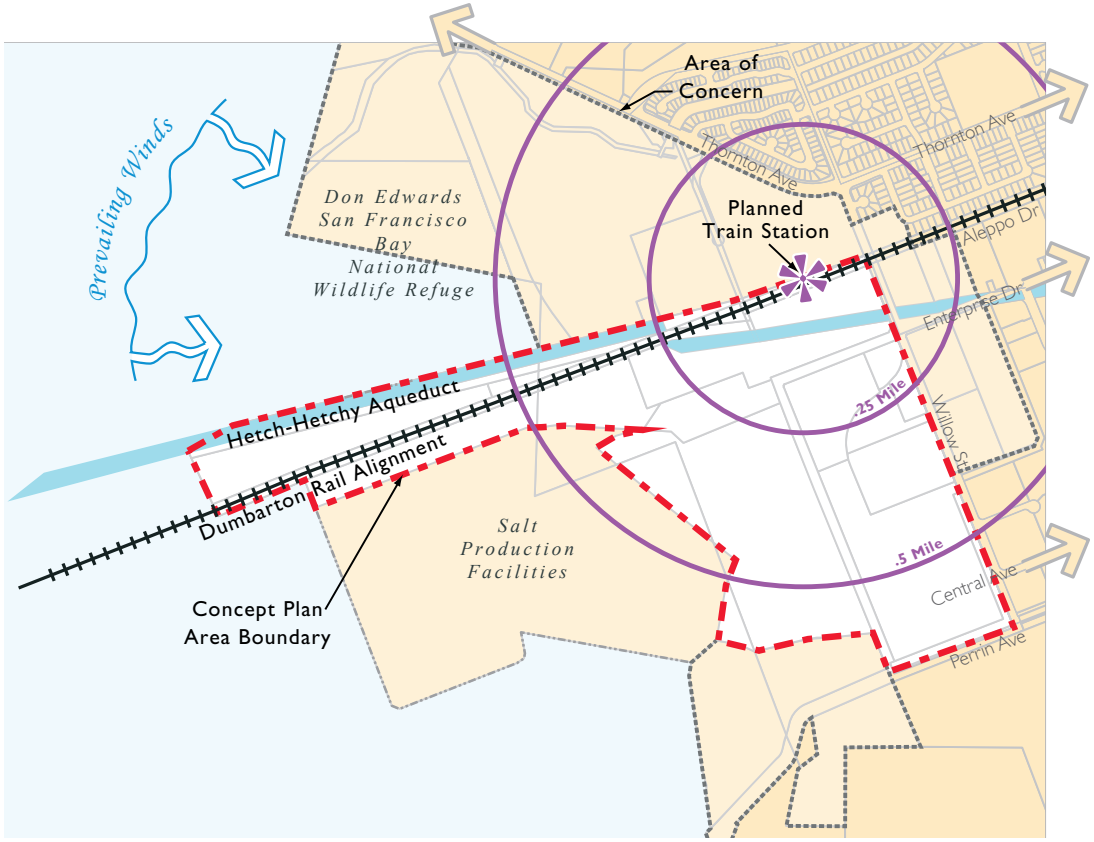


Figure 3-2: 1/4-mile and 1/2-mile walking radii from the proposed train station and the direction of the local prevailing winds.

The Dumbarton Rail Corridor right-of-way owned by San Mateo County transit.

The Dumbarton Rail Corridor right-of-way owned by San Mateo County transit.

Existing Physical Site Features

This section presents information on the geology, soils, air quality, biological resources, utility easements and environmentally impacted sites within Area Two. The information presented here summarizes findings made for the 1999 Area Two Specific Plan. Because this information has not been verified or updated it is useful for conceptual site planning only.

Wind Patterns and Air Quality

Newark is within the San Francisco Air Basin, a broad, shallow air basin ringed by hills with several sheltered valleys located along the perimeter. Prevailing winds on the site are from the northwest and west. These winds often carry pollutants released by automobiles and factories located upwind, especially during the summer months. Inversions also affect the Plan Area more than 90 percent of the time, both in the morning and afternoon.

Geology and Soils

Area Two is a relatively flat, low-lying alluvial fan. Average topographical elevations on the site range from roughly 4 to 15 feet above Mean Sea Level Datum (MSL). There are two bedrock outcroppings located on the western portion of the site.

Subsurface soil investigations conducted for the Thornton Business Center at the north end of Area Two revealed that the first five to thirteen feet below the surface is moderately expansive fill soil, including a layer of clay that is known as Bay Mud.

Below the Bay Mud or sand are layers of medium-stiff to hard silt and clay, as well as medium dense to dense sand and gravel, which are estimated to descend to a depth of 50 feet.

The Plan Area is not located within an Earthquake Safety Zone for active earthquake faults, so there is little likelihood of actual ground rupture on the site during a seismic event. However, the Silver Creek Fault, a minor but potentially active fault, is approximately a half mile east of the Plan Area.

Rights-of-Way and Easements

Several rights-of-way and easements for transportation infrastructure and utilities exist within the Plan Area that will affect the type and arrangement of development that can occur. See Figure 3-3. These include the following:

- **The Hetch-Hetchy Aqueduct**, a 110-foot-wide right-of-way owned by the San Francisco Public Utilities Commission, which runs east/west through the northern portion of the Concept Plan Area. All crossings or other uses are tightly controlled by the San Francisco Water Department. The aqueduct runs underground through the east half of the Plan Area, transitioning to the surface after crossing to the north side of the rail right-of-way.
- **The Dumbarton Rail Corridor (DRC)** also runs in an east/west direction through the northern portion of the Concept Plan Area, almost parallel to the Hetch-Hetchy Aqueduct. The DRC is a 100-foot wide right-of-way owned by San Mateo County Transit.

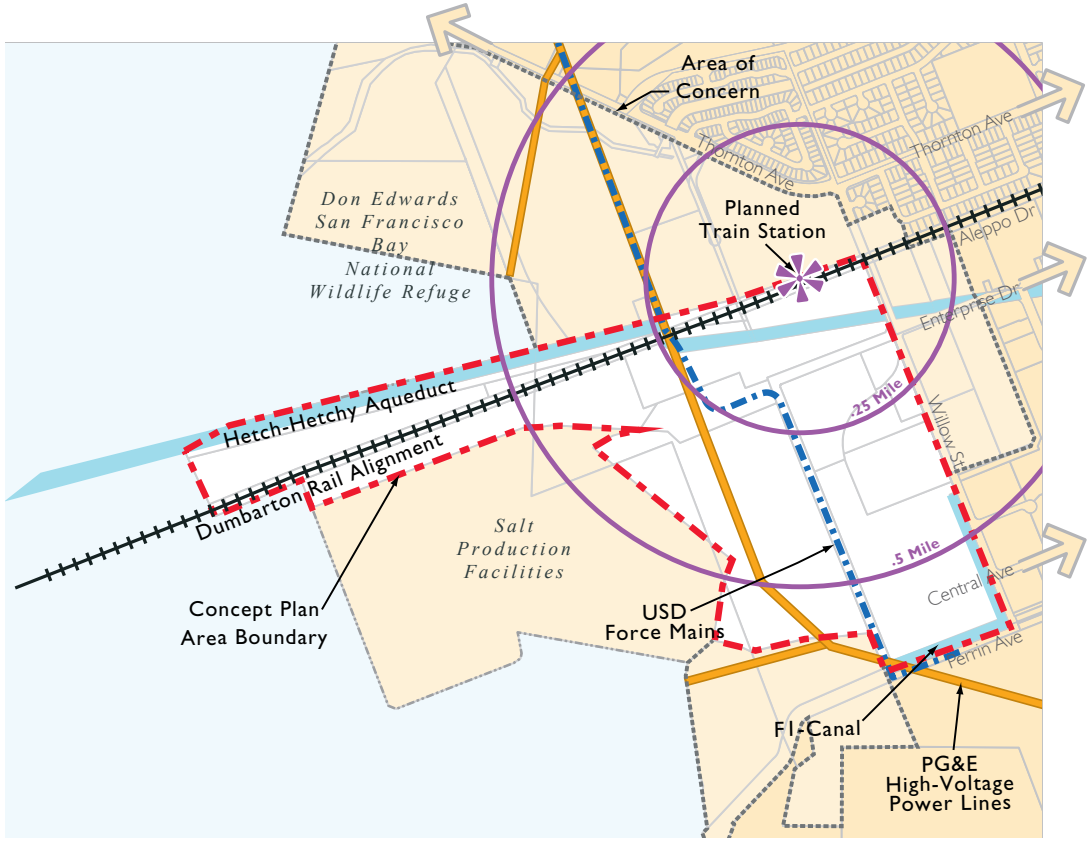


Figure 3-3: Area Two easements and location of utilities.

- **The East Bay Dischargers Authority (EDBA)** Two 36-inch sanitary force mains serving the City of Newark run through the Concept Plan Area, within an easement under the Hickory street right-of-way. Special conditions on construction within this easement may need to be imposed to preserve the integrity of the mains.

PG&E high voltage tower within Area Two.

- **The Alameda County Flood Control F-1 Canal**, which flows from east to west along the Plan Area's southerly boundary, provides the main drainage outlet to San Francisco Bay for a large part of the City of Newark. A tributary of this canal, the F-6 Ditch runs north along the west side of Willow Street for a distance of about 1,300 feet.
- **PG&E Transmission Lines** traverse the Concept Plan Area from north to south. PG&E maintains strict control regarding use of a 60-foot-wide easement underneath the lines and surrounding the towers that support the high voltage lines. Buildings may not be constructed within this right-of-way, and the ground may not be filled if it reduces the existing line's clearance to less than 32 feet. A representative of PG&E reports that it should be possible to either relocate or raise the existing transmission lines and towers if they conflict with future development plans, although the associated costs would likely be high.

Biological Resources

Newark Area Two contains a variety of habitats that are home to numerous different species of plants and animals. These habitats appear to include upland grassland, unvegetated areas, seasonally ponded areas, seasonal wetlands, tidal salt marsh, and constructed channels. The majority of the land in the Concept Plan Area is composed of developed or highly altered terrain. More research needs to be done to determine precise locations of habitat within the Concept Plan Area and the impact of development on those areas.

Environmentally Impacted Sites

As one might expect from an industrial area that has been the site of chemical production for 50 years or more, existing environmental contamination must be factored into the future redevelopment of Area Two. One form of contamination is a dissolved chemical plume that exists in the upper groundwater beneath portions of the Plan Area. The San Francisco Bay Regional Water Quality Control Board (RWQCB) is directing mitigation of this groundwater plume in collaboration with the Alameda County Water District (ACWD). Additional investigation will be necessary to determine what impact, if any, the plume could have on the redevelopment of Area Two.

Preliminary review indicates that there are three additional sites that are impacted by hazardous substances. Those sites are shown as "Development Limited Areas" in Figure 3-4. All of these sites are either undergoing cleanup or have already undergone cleanup in compliance with the RWQCB or the Department of Toxic Substances Control.

Given these environmental constraints, redevelopment of the Concept Plan Area will best be accomplished by providing for land uses that would either create enough value to absorb remediation costs or be compatible with existing site conditions. Investigations are ongoing regarding whether certain elements of the Concept Plan are feasible in light of these challenges and constraints, including existing land use restrictions. Engineering and institutional controls (such as deed restrictions) may be necessary for certain areas of the Concept Plan Area to adequately protect human health and the environment form any residual hazardous substances.

Infrastructure and Utilities

Wastewater

The Union Sanitary District (USD) provides wastewater services for the cities of Newark, Fremont and Union City. USD's Alvarado treatment plant is located in Union City. Because the Concept Plan Area is mostly located within the existing service area, and because it was already zoned for development in 1989, the treatment and disposal impacts resulting from development of the Plan Area based on the 1999 Area Two Specific Plan have been incorporated into long term expansion plans for the District.

Two existing gravity sanitary collection lines, on Enterprise and Willow, currently serve the Concept Plan Area. It is unknown how much excess capacity for future development is available in either the Willow or the Enterprise sewer lines. If a new off-site sewer line is required, it will be the responsibility of the project sponsor to provide it.

Water Service

The Alameda County Water District provides potable water service for the Cities of Newark, Fremont and Union City. The entire Plan Area is located within the District's boundaries, so all properties are eligible for service at this time. The water district has three basic water sources: the State Water Project, local groundwater aquifers, and the San Francisco Public Utilities Commission, which operates the Hetch Hetchy Aqueduct. Because these supplies are currently considered to be adequate, proposed plans are not expected to have constraints placed on them.

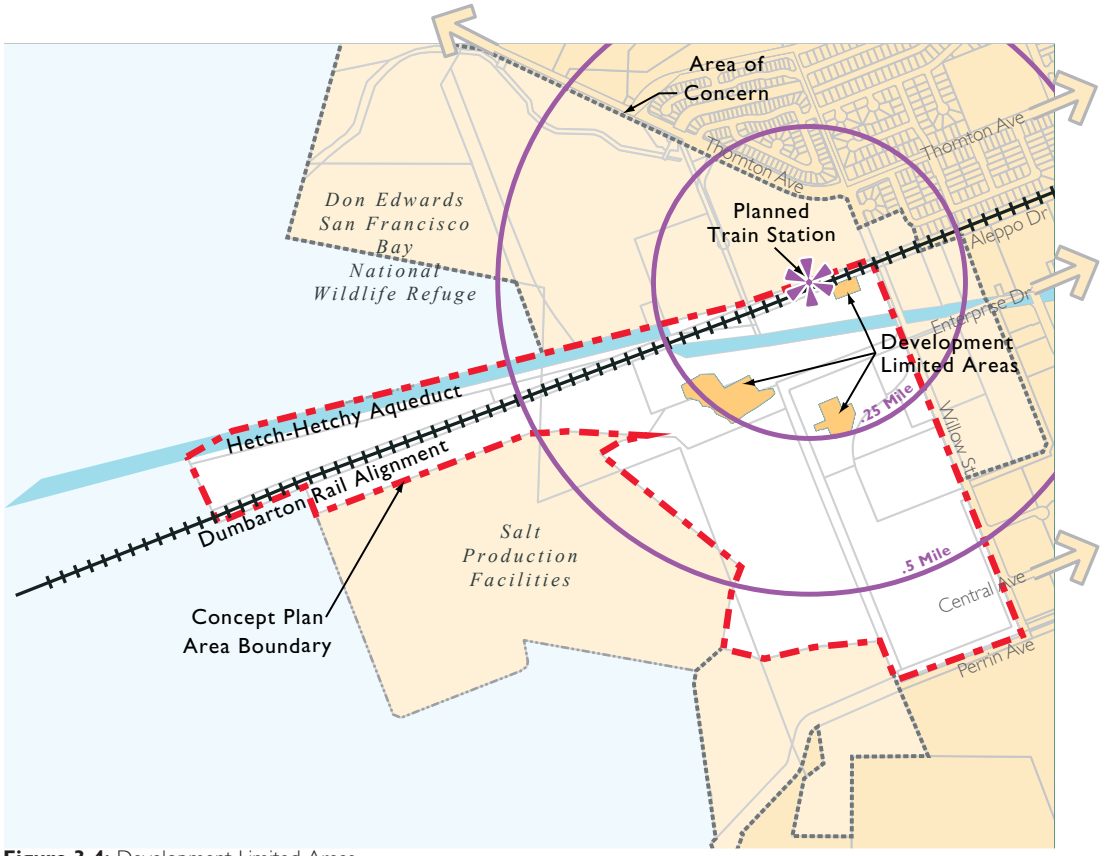


Figure 3-4: Development Limited Areas.

Stormwater Drainage

The 100-year flood elevation throughout the project vicinity is 8 feet National Geodetic Vertical Datum (NGVD). According to the Federal Emergency Management Agency Flood Insurance Rate Map for the City of Newark, some of the Concept Plan Area located west of the Hickory alignment currently lies within a Flood Hazard Zone, which indicates ground elevations are lower than 8 NGVD. The Newark General Plan and Municipal Code require that the finished floor of all new

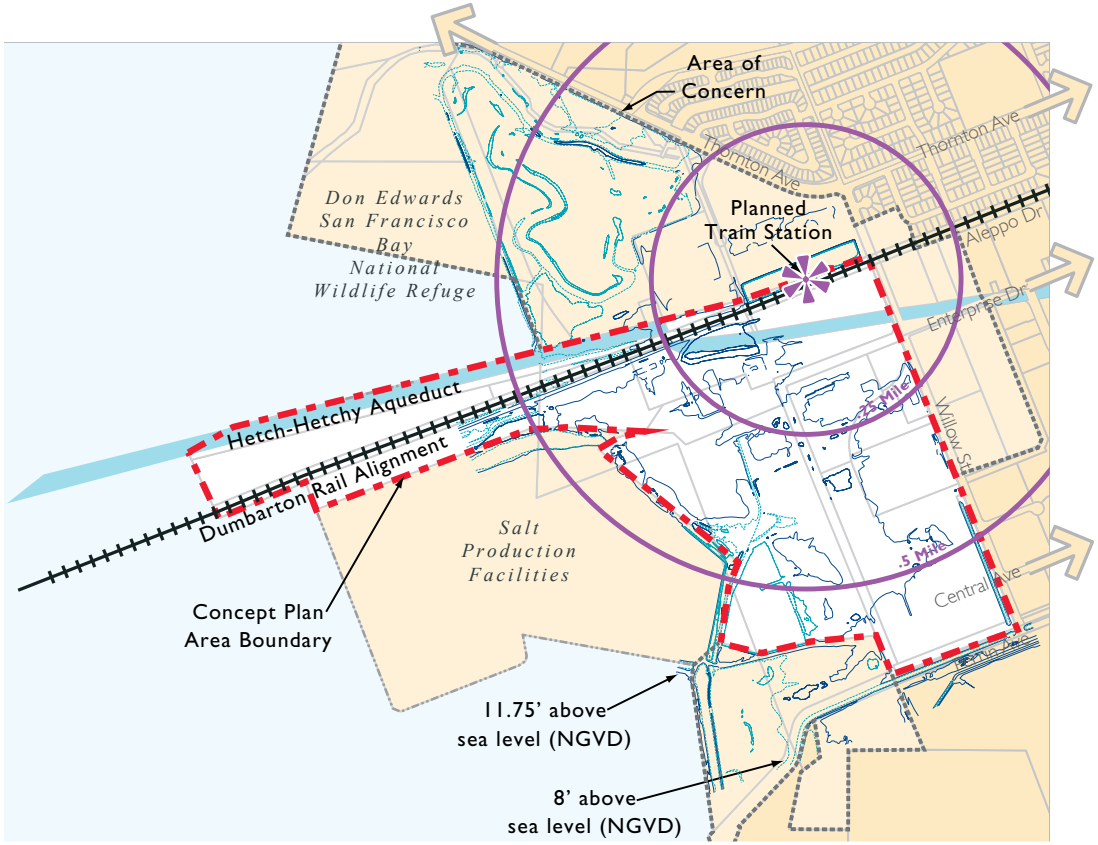


Figure 3-5: Elevations of land within the Concept Plan Area.

residential buildings in the Area Two vicinity must have a minimum elevation of 11.75 NGVD. For commercial buildings, finished floors must only be higher than the designated flood elevation of 8 NGVD. However, the Municipal Code contains provisions that permit construction of floors below this elevation if they meet standards for waterproofing.

Existing ground elevations within most of the Plan Area are high enough to drain against the 100-year flood elevation, but detention storage for stormwater will likely have to be provided for the lower areas now located within the flood zone. This storage could be provided within relatively small ponds that serve individual properties, or in one or more large, area-wide ponds. Alternatively, the land could be filled enough to raise it out of the flood zone to provide positive drainage.

Power and Communications

Existing power lines extend throughout the Plan Area. These lines have been installed to serve the mix of industrial uses that first located in this area of Newark. As a result, the existing power grid consists of 21 kilovolt lines that have sufficient capacity to serve all likely development scenarios.

For natural gas supply, it is likely that new development within the Concept Plan Area will be served by an existing low pressure two-inch line that runs along Willow Street from Central to just south of Enterprise.

Communications within the Plan Area are currently served by overhead AT&T lines on Enterprise Drive and underground lines on Central Avenue. In addition, fiber-optic cable exists along part of Willow Avenue. AT&T anticipates that it will continue to expand its fiber-optic network on an as-needed basis, so it can be anticipated that full "high end" phone and data services should be available to meet the needs of future development within the Plan Area.

There are no existing Comcast facilities within or immediately adjacent to the Plan Area. However, according to a company representative, Comcast is very interested in providing new development in this part of Newark with a full range of entertainment and communications services.

Policies and Regulations Concerning Area Two

Newark General Plan

The General Plan, which was adopted in 1992, foresaw "limited" and "general" industrial and open space use for Area Two. The "limited" industrial designation, which was assigned to parcels immediately west of Willow Street and to lands immediately southwest of the intersection of Willow Street and Thornton Avenue, is intended to serve as a transition zone between the residential areas to the northeast and the pre-existing industrial uses that were operating within the Plan Area at the time of the General Plan's adoption.

1999 Area Two Specific Plan

The 1999 Area Two Specific Plan anticipated the construction of a campus of Ohlone Community College on 56 acres owned by Cargill in the center of the Plan Area. The Plan called for high-density, multi-level office and R&D buildings that would be similar in nature to the now-vacant 1.5-millon square-foot Pacific Research Center, which is located one mile north of the site near the intersection of Thornton Ave and SR 84. Land uses envisioned under the 1999 Specific Plan are shown in Figure 3-6.

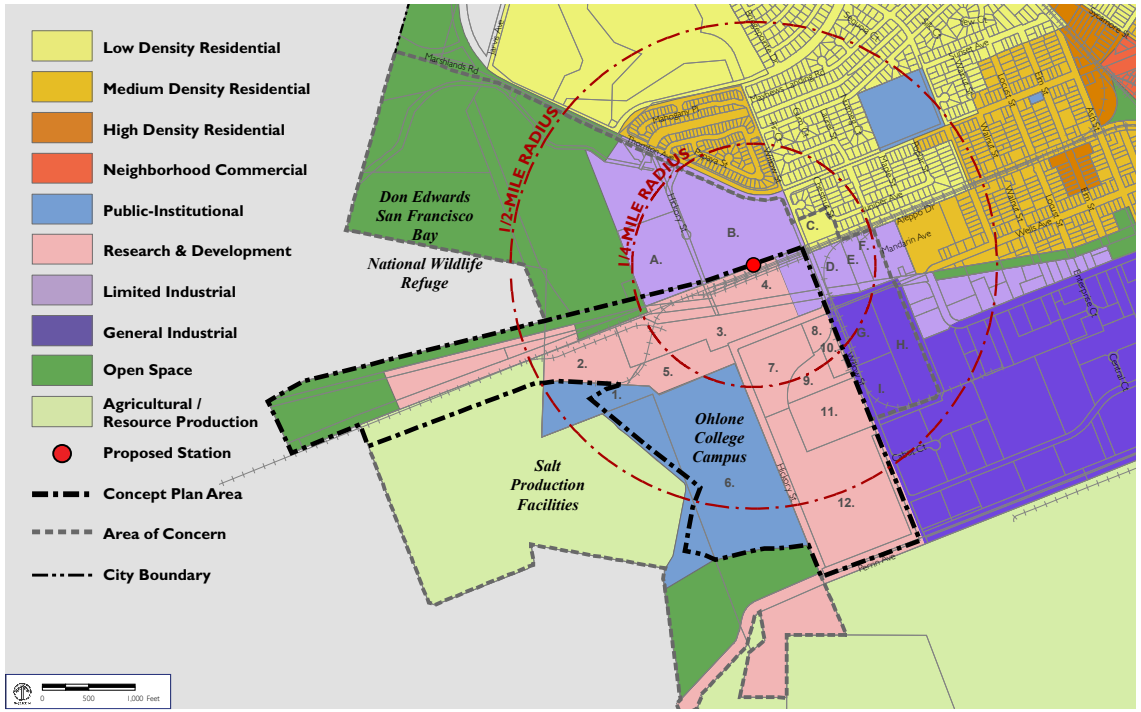


Figure 3-6: 1999 Area Two Specific Plan land use concept.

Zoning Code

As a result of the changes proposed by the 1999 Specific Plan, the majority of the parcels within the Plan Area are currently zoned for high technology uses, as shown in Figure 3-7. Additionally, some of the low-lying areas along the bay front are part of the San Francisco Bay National Wildlife Refuge and are zoned as open space.

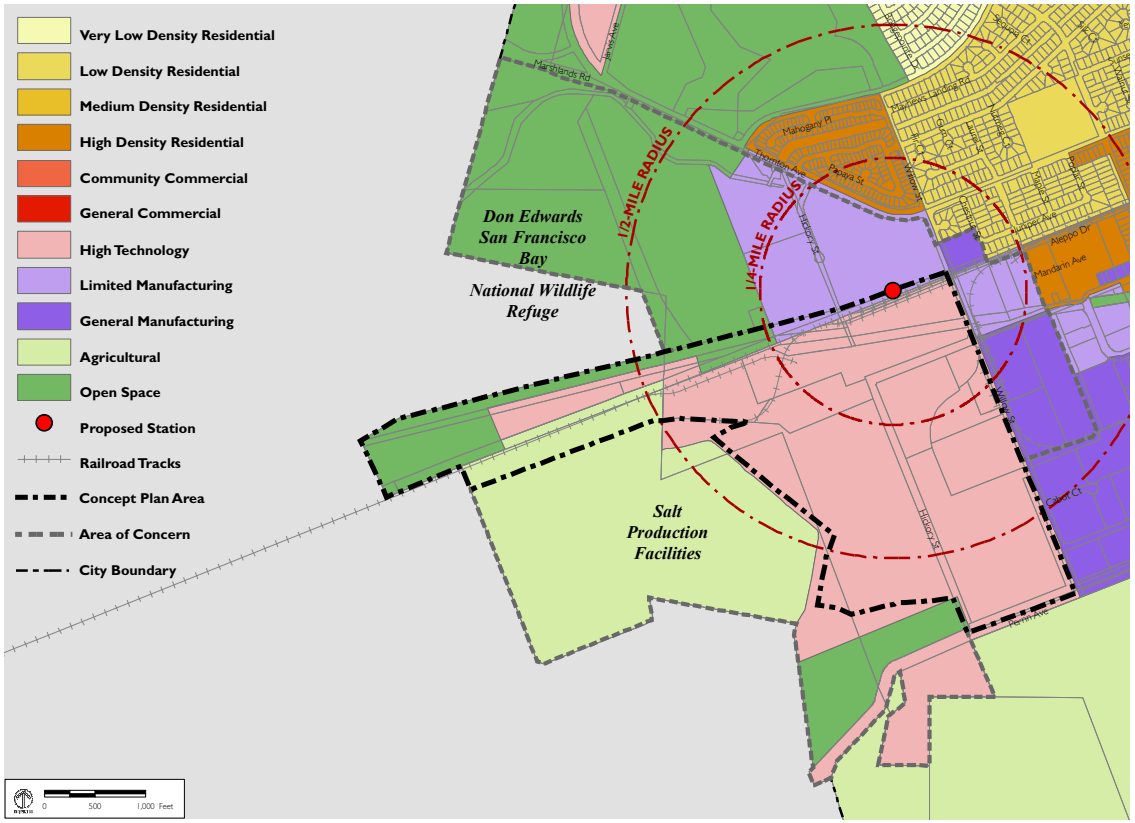


Figure 3-7: Area Two zoning designations as of 2007. Source: City of Newark GIS information.

The San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) regulates development on land that is within 100 feet of the shoreline. The location of the shoreline is defined by BCDC and has historic considerations. BCDC's primary goals include minimizing filling of the bay and protecting uses that must be located along the shoreline such as environmental preserves, water-related recreation, as well as port and water-related industry.

MTC's Transit-Oriented Development Policy

In order to guarantee transit-supportive development around terminal stations, the Metropolitan Transportation Commission has instituted a TOD Policy which sets thresholds for residential and employment densities around new transit stations. This policy is part of the Regional Transit Expansion Program which was adopted as Resolution 3434 in 2001 and updated in 2006.

Resolution 3434 includes funding for 19 rail and bus transit expansion projects including the Dumbarton Rail Corridor (DRC). In order to qualify for funding under Resolution 3434, the DRC must meet an average density of 2,200 housing units within a half-mile radius of all stations along the rail line. The current number of housing units within the half-mile radius of the proposed Newark Station is around 750 units, meaning that a minimum of 1,450 units would need to be built for the Newark station area to help maintain the average threshold.

Newark Public Services

Newark School District was formed in 1965. The district boundaries encompass about eight square miles. The school closest to Area Two is the August Schilling School, located approximately ¾-mile away at 36901 Spruce Street in Old Town Newark. This school is a K-6 school serving approximately 540 students. Schilling School was identified as a California Distinguished School in 1995. The Newark School District had an enrollment of around 6,800 students in 2006/2007. Enrollment overall has been dropping over the last several years.

The Newark Center of Health Sciences and Technology, part of the Ohlone Community College District, is about three and a half miles to the southwest of Area Two, on Cherry Street. Located in a new "green" campus designed to receive a LEED Platinum rating, programs offered here include career programs in health and biotechnology. The campus can accommodate 3,500 students.

The Newark Police Department is located at 37101 Newark Boulevard, about 2.5 miles from the Concept Plan Area. There are currently 42 uniformed officers. The Department does periodic surveys to determine response times to high priority calls (crimes underway) and they have found that the average response times for these calls in Newark is two minutes or less.

The Newark Fire Department maintains three fire stations, with the closest station, Fire Station #1, at 7550 Thornton

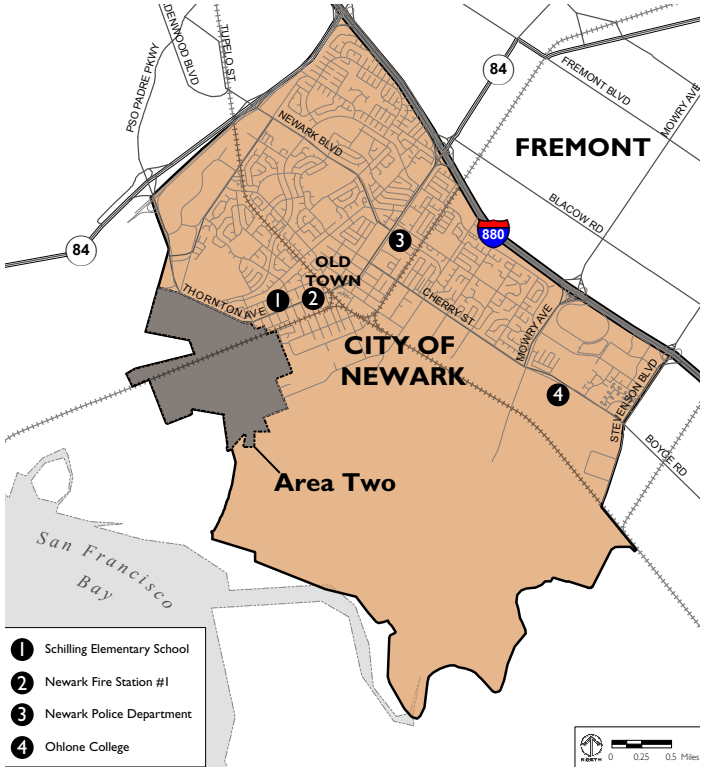


Figure 3-8: Newark public services in Area Two.

Ohlone College.

Area Two Surroundings

Area Two is surrounded by a variety of different land uses. Single and multi-family residences make up the majority of the buildings to the northeast of Area Two. Single story industrial buildings predominate to the east and southeast of Area Two, including a number of vacant industrial buildings. Directly to the west of Area Two are salt production facilities owned and operated by Cargill Salt; beyond which and to the north of the Area Two exists the Don Edwards National Wildlife Refuge.

Multi-family housing near Area Two.

Old Town Newark.

Industrial/residential interface east of Plan Area.

Avenue, less than 1 mile from Area Two. The Newark Fire Department provides services to residents in a 13 square mile area and responds to an average of 3,100 calls each year. The Department includes three engine companies; one squad/hazardous materials unit; and 51 full-time personnel. A firefighter/paramedic is on each of the Department's four response units.

Surrounding Context

The Plan Area is surrounded by a number of light industrial and R&D areas, residential neighborhoods and significant regional open spaces.

Immediate Context

To the northeast of Area Two, existing residential development predominates. Recent residential development, including medium-density and single-family residential units, has occurred on the southeast corner of Thornton Avenue and Willow Street and in areas located farther from the eastern boundary of the Plan Area. These newer residential developments tend to be more inward-facing and are located on streets that typically end in cul-de-sacs. Some of the newer housing developments are gated. Older residential neighborhoods are found on the blocks surrounding Enterprise Drive and its extension Wells Avenue due east of the Concept Plan Area. These consist primarily of modest one- to two-story single-family houses located on well-connected residential streets.

To the east and southeast of Area Two, industrial and light-industrial uses predominate. The blocks surrounding Central Avenue are built at a much larger scale than the residential neighborhoods described above. Blocks are much longer between cross streets and buildings are set back from the sidewalk. These characteristics make for a less pedestrian-friendly environment than the nearby residential neighborhoods. The existing light industrial buildings are generally simple single story buildings of tilt-up concrete construction. Many of these buildings are currently vacant.

To the west of Area Two, Cargill Salt owns and will continue to operate its salt production facilities. The salt is harvested and then refined at a plant that is located on Central Avenue.

To the north of Area Two, and partially included within its boundary, is the Don Edwards San Francisco Bay National Wildlife Refuge, as shown in Figure 3-9. The Refuge consists of roughly 30,000 acres of open bay, salt pond, salt marsh, mudflat, vernal pool, and upland habitats located throughout South San Francisco Bay. It is also part of the Pacific Flyway, a major migratory route for North American birds. The Refuge is managed by the U.S. Fish and Wildlife Service and has an interpretive center located one mile northwest of Area Two.

Additionally, the San Francisco Bay Trail (Bay Trail), a 240-mile network of bicycle and pedestrian trails, runs along the edges of Area Two. Though the trail currently has a number of gaps, it is ultimately envisioned as a continuous and fully interconnected 400-mile trail network that will encircle San Francisco Bay and San Pablo Bay. In the immediate vicin-

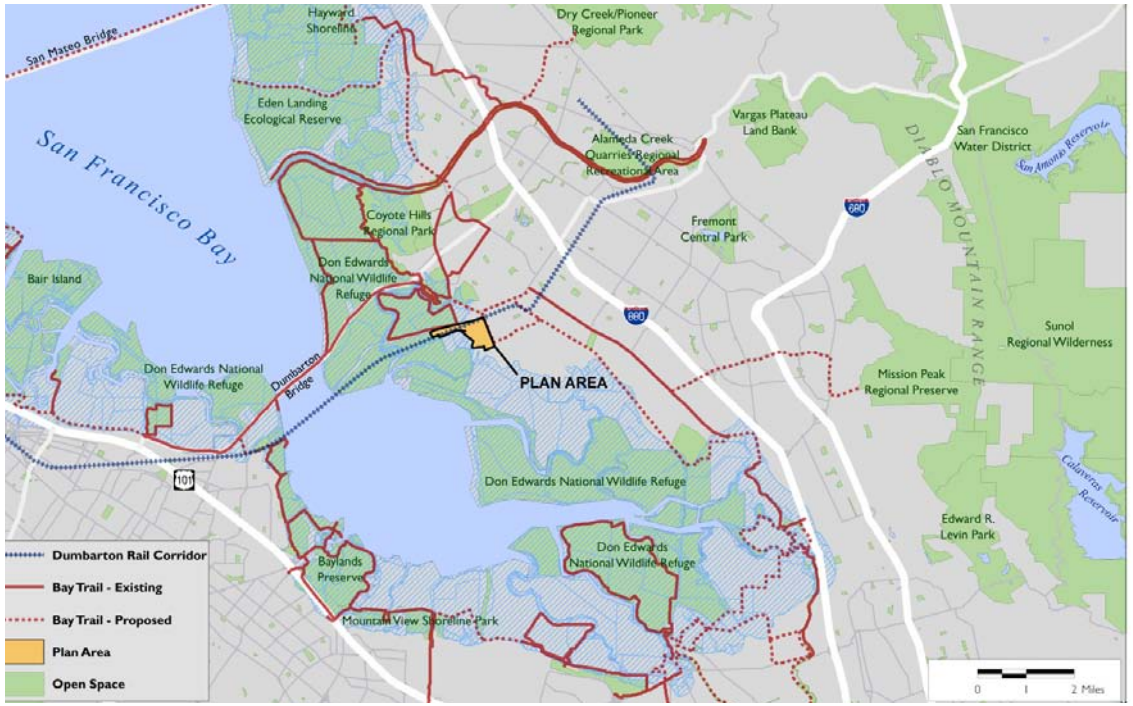


Figure 3-9: Regional parks surrounding Newark Area Two.

Coyote Hills Regional Park.

Don Edwards San Francisco Bay National Wildlife Reguge.

Salt production facilities adjacent to Area Two.

Newark Old Town.

The Pacific Research Center, north of Area Two in Newark.

ity, existing Bay Trail is developed on top of levees inside the northern part of Area Two, north of the railroad tracks. Plans call for it to be extended along Thornton Avenue, run down Willow Street and continue along Central Avenue to the east.

Broader Surroundings

As noted above, a number of significant open spaces offering opportunities for passive and active recreation are located near Area Two. Along with the Don Edwards San Francisco Bay National Wildlife Refuge, significant parks and open spaces located nearby include the system of Newark city parks (the closest to the Concept Plan Area is the 6-acre Jerry Raber Ash Street Park, about ¾-mile to the east), the Coyote Hills Regional Park operated by the East Bay Regional Park District, approximately 2 miles to the north, and several large regional parks in the Diablo Mountain Range, approximately 8 miles to the east.

Very important to the context of Concept Plan Area is the proximity to Newark Old Town, approximately 1 mile east on Thornton Avenue. The origins of the City of Newark are located in Old Town. The commercial core of Old Town is considered to be the blocks of Thornton Avenue centered on Sycamore Street between Ash Street and Cherry Street. This retail node includes a Starbucks coffee shop, a small supermarket and several restaurants. Much private and public investment has been made in Old Town in the past several years, highlighted by the handsome new Newark Fire Station #1. A recent planning project is underway to determine alternatives for new infill housing in Old Town.

1½ miles to the north of Area Two is a 1.4-million square foot Class A office and research and development campus originally built for Sun Microsystems. Now called the Pacific Research Center, it is currently being advertised for lease.

Existing Transportation Facilities

Roadway Network

Major regional vehicular routes accessible to Area Two are Interstate 880 and the Dumbarton Bridge (State Route 84). Local access to the site from the north is provided via Thornton Avenue, and from the east via Central Avenue, Enterprise Avenue, and Thornton Avenue. The existing roadway network serving the Plan Area is illustrated in Figure 3-10.

A review of existing calculations of traffic in Newark shows some local street intersections currently have higher levels of traffic than others, including Cedar Boulevard at Thornton Avenue, Cherry Street at Thornton Avenue, Cherry Street at Central Avenue and Cherry Street at Mowry Avenue. More analysis will need to be done to accurately assess Area Two traffic impacts.

An external impact on local traffic that has been reported is the long wait time required to allow freight trains to pass along the Union Pacific rail corridor. This affects traffic on the two major east-west routes to the site: Thornton Avenue and Central Avenue.

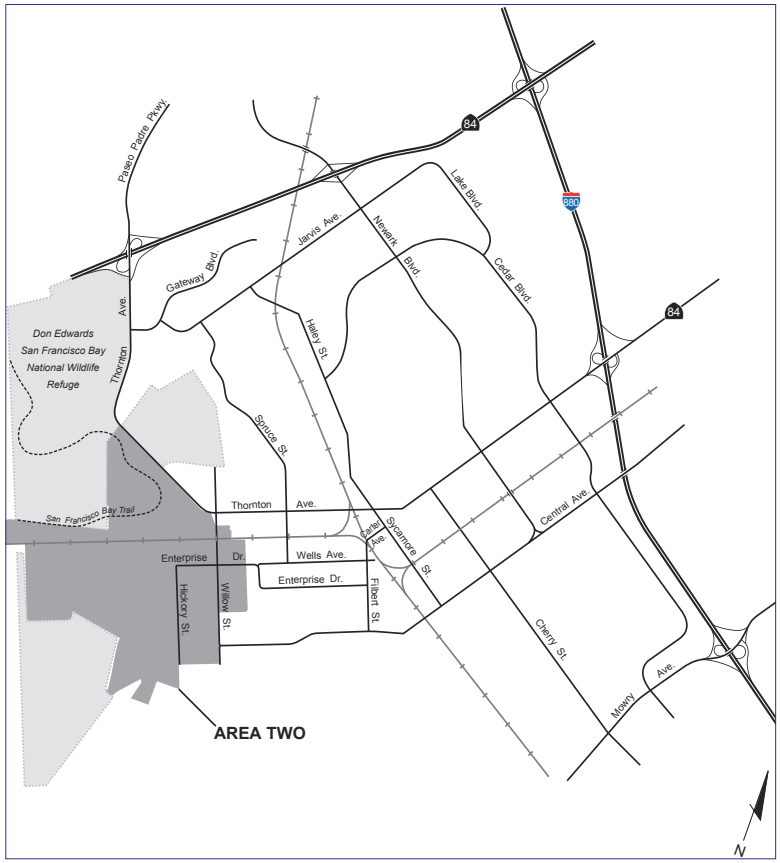


Figure 3-10: Transportation network in Newark.

Highway 84 looking west toward the Dumbarton Bridge.

San Francisco Bay Trail.

Pedestrian and Bicycle Facilities

Pedestrian facilities include sidewalks, crosswalks and pedestrian signals at intersections. The existing streets near Area Two generally have pedestrian facilities, although no sidewalks are provided on either side of Willow Street.

Bicycle facilities can be described as Class I off-street dedicated bike paths, Class II on-street lanes for bicyclists adjacent to vehicle lanes and Class III bike routes signed for bicycles but not separated from vehicle lanes. Near Area Two, there are Class III bike routes on Willow Street, Enterprise Drive, Central Avenue and on Thornton Avenue west of Willow. The closest Class II lanes are on Cherry Street, about one and a half miles from Area Two. The Bay Trail, described above, is a Class I bike path touching Area Two at the north end.

Existing Transit Facilities

AC Transit Route 218 is the only bus transit route that provides service near the Plan Area, with a bus stop located on Thornton Avenue near Willow Street. Other major transit facilities in the general vicinity of the Plan Area include several of AC Transit's Transbay bus routes, including DB, DB1 and DB3, Bay Area Rapid Transit (BART), which serves the Fremont and Union City stations, as well as the Altamont Commuter Express (ACE) and Amtrak's Capital Corridor train, both of which stop at the same station in Fremont Centerville.

Economic Context

As part of the Concept Plan process, a demographic and market study was done. This study looked at demand for housing, retail and other uses for Area Two. It also analyzed the types of households that would be likely to locate within the Plan Area. Conclusions are summarized below.

Residential

Newark's primary competitive advantage for residential development is its central location within easy commute distance of many of the Bay Area's largest jobs centers. By forecasting demand for housing based on projected job growth in the top four places where Newark residents work, ample demand for a variety of housing types is anticipated, both in the short-term and long-term.

The five Dumbarton Stations in San Mateo County already accommodate a significant number of office jobs, with about 16,000 jobs within walking distance of proposed stations in the year 2000. The large number of jobs at other stations along the corridor enhances the desirability of the Newark station as a place to live.

In addition, the Newark station area is uniquely positioned to attract households with jobs in the South Bay who are seeking the quality of life benefits associated with transit and transit-oriented development. The addition of transit to the existing cross-bay connection of the Dumbarton Bridge will enhance the desirability of housing to those who would otherwise seek higher priced housing in San Mateo County.

Newark's residential market has traditionally focused on single family housing, but it is expected to experience demand for all types of housing in the short- and medium-term. Although demand for residential in all markets is currently flat or declining, future demand will be driven by regional job growth.

Office

Although office and R&D uses are showing signs of recovery, there is no short-term potential for new office development in southern Alameda County, primarily because vacancy rates are so high. In addition, Area Two is not likely to become a candidate for Class A office space, given that it is not visible from freeways.

Industrial

Although industrial activities may be appropriate current land uses for Area Two, they do not maximize the potential for revitalization of the site, and will not serve as a catalyst for reinvestment from property owners or investors.

Retail

An analysis of the market for retail potential indicates that Newark residents are traveling outside of city boundaries to shop at certain types of retail establishments, including large floor plate stores such as furniture and home centers. However, as mentioned above, the location of Area Two one-and-a half miles from Highway 84 and 2½ miles from Interstate 80 make it difficult to attract most types of large format retail without subsidies. However, if the future type, intensity and mix of uses were suitable, the Plan Area could support a modest amount of local-serving retail, such as cafes, dry cleaners and newsstands. The addition of new households in this location could also help generate demand for larger format convenience retail in the downtown area.

Performing Arts

There is significant community support for a new performing arts center that could serve as a venue for theatre and live music performances in Newark, possibly within Area Two. A performing arts center would bring a number of benefits to Newark. A study conducted by Americans for the Arts, "Arts

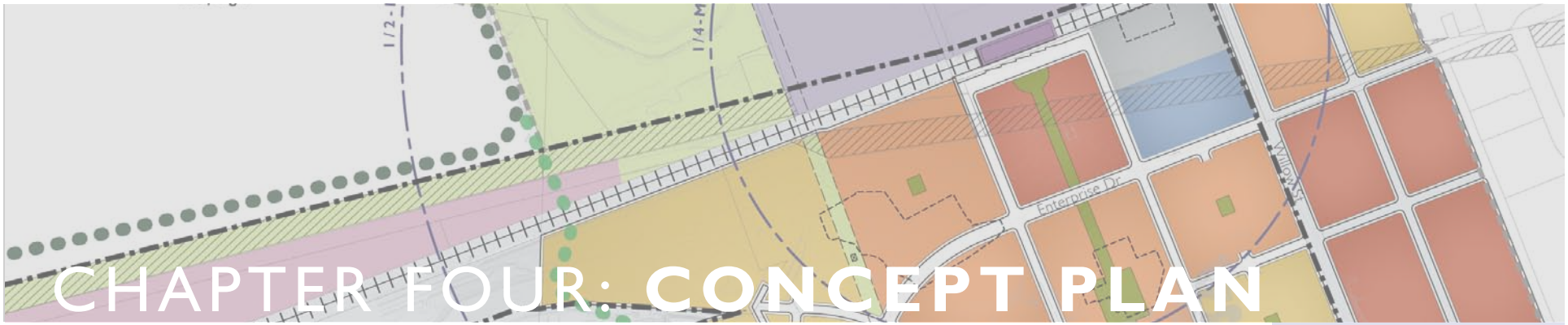
and Economic Prosperity III" lists the many benefits of incorporating nonprofit arts and culture enterprises into the fabric of the community, including: labor-intensive dollars earned by arts organizations tend to stay in the community; event-related spending by patrons support jobs and provides revenue to cities; and increased opportunities to attract visitors from outside the community. However, it is less clear whether Area Two represents the best location for such a facility, given that it is located at the periphery rather than in the center of the city. The two primary arguments that can be made in favor of siting the facility within Area Two include the following:

- The performing arts center would have the potential to contribute significantly to the identity of the new neighborhood.
- If constructed close to the commuter rail station, a performing arts center would be more easily accessible, both to motorists and non-motorists alike. There is an opportunity for the commuter rail station to share parking with the performing arts center because these two facilities experience peak demand at different times of the day and week.

More research and economic analysis should be undertaken to determine the feasibility of a performing arts center in Newark as well as the desirability of locating it at Area Two or another location.

Economic Feasibility Summary

Area Two offers Newark a major opportunity to leverage new development to achieve a number of important citywide goals, such as creating a performing arts center, enhancing the city's identity and establishing the necessary customer base to support an array of new shops and services. However, before development can proceed within Area Two, a number of significant challenges related to development need to be understood when making decisions about potential land use changes. In particular, cleanup and infrastructure costs will pose significant challenges to development. If these costs are to be absorbed by private investors, the intensity and mix of land uses allowed should generate enough land value to make clean up and development financially worthwhile for those investors. Although infrastructure and cleanup costs are not yet calculated, market evidence suggests that residential development at a range of densities will yield the highest return and therefore represents the most suitable type of development for the Plan Area from the standpoint of economic feasibility.



CHAPTER FOUR: CONCEPT PLAN

The proposal for a Dumbarton Rail Corridor station within Area Two of Newark presents a great opportunity to plan for a new lively TOD community. Chapter One discussed the process of developing this Concept Plan, which was undertaken as a collaborative effort between the City and landowners adjacent to the proposed Newark Station of the Dumbarton Rail Corridor. It should be remembered that significant additional analysis will need to be done before a final development concept can be agreed upon for Area Two. However, this plan is a carefully conceived first step that reflects knowledge of a broad range of issues and site conditions, described in Chapter Three. It also incorporates significant input from Area Two landowners, City staff and members of the community.

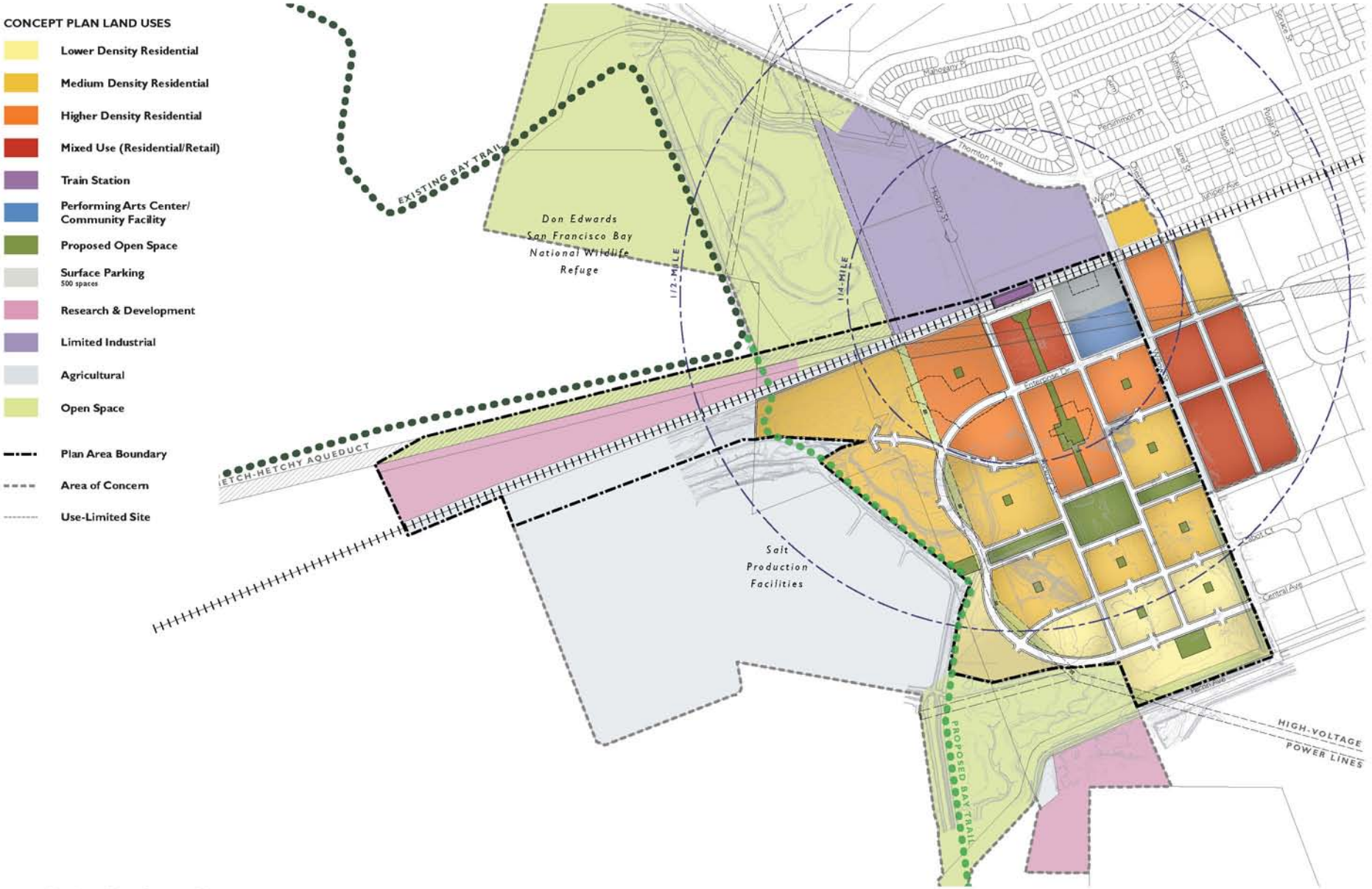


Figure 4-1: Area Two Concept Plan.

Plan Description

The Concept Plan is a direct outcome of the ideas generated and comments received at a community workshop regarding Area Two on January 30, 2008. At that workshop, three conceptual development alternatives were presented and discussed; subsequently, a refined alternative was developed. This refined alternative, shown in Figure 4-1, is a medium density transit-oriented residential neighborhood.

In this plan, higher densities of residential development are located within a ¼-mile radius of the rail station, including higher-density residential buildings with ground-floor retail development. Medium-density residential buildings, such as townhomes, are located within a half-mile of the station, and small lot single-family dwellings are located farthest from the station in the southern portion of the Plan Area. A variety of development types and densities can be accommodated within this plan, with a total number of housing units ranging from 1,500 to 2,500 units. Further study is required to determine the impacts of this range of residential units in order to set a precise density limit.

Blocks are generally short and pedestrian-oriented, offering pedestrians many different routes to walk through the neighborhood. Most streets are roughly equal in width, with the exception of a curving boulevard connecting the two major vehicular routes into the site, Central Avenue and Enterprise Drive. This is envisioned as a prominent green boulevard with a wide landscaped median.

Retail stores and shops are concentrated near the transit station in mixed-use buildings with apartments above. A handsome public plaza is nestled next to the transit station and surrounded by mixed-use development, including up to 65,000 square feet of retail. This plaza will serve as the active heart of the neighborhood, filled with benches, water features and public art. Mixed-use development with office use and larger floor plate retail could be accommodated on the east side of Willow Street in the Area of Concern. The plan also accommodates a Performing Arts Center or other community facility close to the transit station. The location shown for the Performing Arts Center can reasonably be used for mixed-use housing over retail if it is decided to locate this community facility elsewhere.

An example of a performing arts center similiar to the facility suggested in the Plan.


A well-loved public plaza similiar to that suggested in the Plan.

Figure 4-2: Open Space, active open space in dark green and passive open space in light green.

A successful interface of residential and regional open space.

An example of mixed use housing over retail.

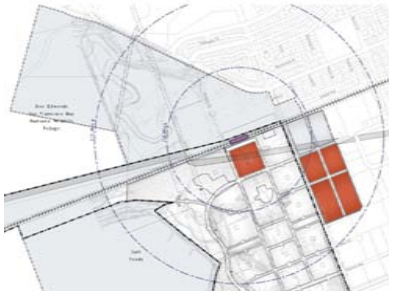


Figure 4-3: Mixed use housing over retail.

Santana Row, a local example of mixed uses, including retail and residential.

Green open space is concentrated in a three-acre central park in the middle of the Plan Area and a smaller bay overlook in the western portion of the site. Additional pocket parks will also be provided at individual blocks throughout the development. The major open spaces are linked by two pedestrian-oriented green spines, including a north-south spine connecting the Central Park to the transit station and an east-west spine connecting Willow Street with the bay overlook park. A new Bay Trail connection is proposed extending from the bay overlook to the north and south along the entire west side of the site. At the north end of the Bay Trail, a future connection across the railroad tracks to connect with the existing Bay Trail is planned.

Development Types

The development types envisioned for the Concept Plan Area include mixed-use housing over retail, multi-family apartments and condominiums, townhome and attached single-family residences and small-lot single-family detached houses. These development types are described and illustrated below.

Mixed-Use

There are two areas shown as Mixed-Use. The block closest to the transit station is envisioned as mixed use with housing and retail. This type of housing usually has a density range of 30-60 units per acre, with retail shops fronting garages on the ground floor. The height of this type of development is 3 to 5 stories

tall. This is a traditional pattern of housing that evokes a "main street" environment. Another similar housing and retail mixed use development type has multi-level parking structures in the center of a block, surrounded by residential buildings with ground floor retail on the perimeter of the block, thereby hiding the parking structure. The density can range up to 100 units per acre for 4- and 5-story buildings.

Another area shown as Mixed-Use is the area to the west of Willow Street, which is envisioned as mostly office and retail mixed use. This area neighbors industrial uses to the southwest and this type of commercial mixed use will help to provide a transition from light industrial to the transit oriented development in the Concept Plan Area.

Office and retail mixed use development, Davis, CA.

Multi-Family Apartments and Condominiums

This type of housing usually has housing units facing the street, with common open spaces in the interior of the block. Garages are on the ground floor and at the rear. With an average height of 3 to 5 stories, this housing type achieves a density between 30 and 60 units per acre. It is important for this type of development to have housing units and entry lobbies facing the street on the ground level to provide a friendlier pedestrian environment than parking garages.

An example of multi-family apartments and condominiums.

Figure 4-4: Multi-family apartments and condominiums.

Figure 4-5: Townhome, live/work and attached single-family.

An example of townhomes found locally in the Richmond Transit Village.

An example of small lot single-family homes.

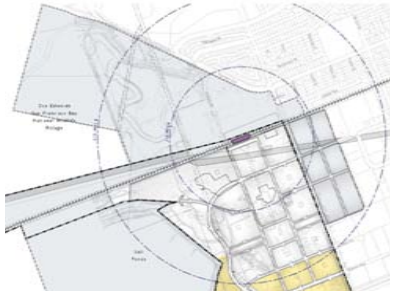


Figure 4-6: Compact small lot single-family.

An example of a "granny flat" unit above a garage.

Townhome, Live/Work and Attached Single-Family

This is a medium density housing type, with a range of 12-24 units per acre. Townhomes are attached at the sides and they usually have a separate garage for each unit tucked under the living spaces. A pedestrian-friendly development type includes a small ground floor office or workshop space facing the sidewalk with living space above. Variations on this development type include stacked townhomes which have two levels of townhomes in four stories, and "big house" housing which contains two to six units in single structures which have the architectural presence of stately residences.

Compact Small Lot Single-Family

There are many creative examples of housing that allows for high quality single-family homes to be built on smaller lots at densities ranging from eight to 16 units to the acre. Some examples include alley-loaded houses which have a garage in the rear along the alley and front doors with porches oriented toward the street. Other design elements that are popular in compact single-family residential neighborhoods include zero lot line or zipper houses that have side yards instead of backyards and "granny flat" units above garages.

Connections

This section considers connections for the Concept Plan Area at three different scales: within the site, to the city of Newark and to the region.

Inside the Concept Plan Area

Within the Plan Area, streets are well-connected to each other and there are multiple paths available to pedestrians, bicyclists and vehicles. This street pattern is efficient for vehicles because it has the potential to spread traffic throughout an area. In addition, emergency vehicles have multiple possible access routes.

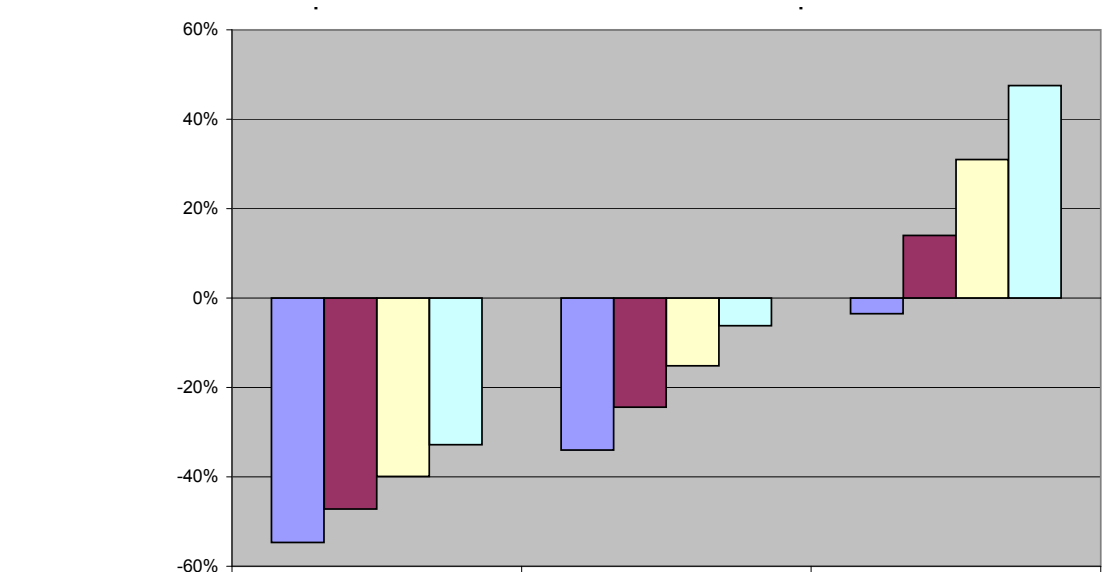
Major streets will have bicycle lanes next to vehicle lanes. These streets include Willow Street and the major street which curves to connect Enterprise Drive to Central Avenue within the site. Minor streets will be noted as bicycle routes where bicycles share lanes with traffic. The Bay Trail will be a separated Class I bike/pedestrian trail along the west side of the site.

In addition to streets as pedestrian connections, there will be internal pedestrian connections leading from the transit station to the Central Park in the center of the site.

Connecting to Newark

The major existing connections to the City of Newark are Willow Street to Thornton Avenue leading north, and three streets leading east: Thornton Avenue leading to Old Town, Enterprise Drive and Central Avenue. Analysis of existing

An example of a bicycle route where bicycles share the lane with traffic.



	AM Peak Hour	PM Peak Hour	Daily
Alternative 1 (1,500 d.u.):	-55%	-34%	-3%
Alternative 2 (2,000 d.u.):	-47%	-24%	14%
Alternative 3 (2,500 d.u.):	-40%	-15%	31%
Alternative 4 (3,000 d.u.):	-33%	-6%	48%

Figure 4-7: Trip generation comparison; comparison between 1999 EIR results and Area Two update.

and projected traffic needs to be done in the next phase to identify recommended mitigations and to ensure vehicular traffic continues to flow smoothly. However, it is interesting to compare traffic generated by the development approved in the 1999 Specific Plan with traffic generated by this Concept Plan. See Figure 4-7 for a comparison of differing levels of traffic generated by 1,500, 2,000, 2,500 and 3,000 residential units. Although the traffic generated by new residential development in the Concept Plan is higher than the office development anticipated by the 1999 Specific Plan over an entire day, the peak hour traffic is lower. In the case of 1,500- to 2,000-unit development, peak hour traffic volumes are significantly lower. This is because of the nature of vehicle trips generated by residential development which are more evenly distributed throughout the day, as opposed to office development, which is concentrated in the morning and afternoon peaks.

Bicycles will connect to the city primarily by using the existing Central Avenue or Enterprise Drive bicycle routes. As part of future planning, consideration should be given to a review of bicycle facilities in Newark. Better bicycle connections should be considered on Thornton Avenue leading east and connecting to Old Town. Additionally, a bicycle path alongside the rail right-of-way should be considered as far as Sycamore Street.

Pedestrian connections to Newark will probably be best made on Thornton Avenue leading east. Review of intersections along this path should be made to ensure crosswalks and corner ramps.

Increased transit connections should be made when Area Two development occurs. Extending the path of existing Route 218 into the site or adding additional routes to connect to the transit station should be considered. Consideration should also be given to reroute one of the AC Transit transbay bus routes DB, DB1 and DB3 to connect with the transit station. Currently the nearest bus stop for these transbay bus routes is located at the Ardenwood Park and Ride, about 3 miles to the north.

Regional Connections

The primary vehicular regional connections in Newark are State Route 84 to the east and west and Interstate 880 connecting north and south.

State Route 84 is a four-lane east-west freeway that provides a regional connection over the San Francisco Bay to the Peninsula. There is a direct connection with Interstate 880 via a full-access interchange at the northeastern border of the City of Newark. The peak direction of travel is westbound during the AM peak-hour and eastbound during the PM peak-hour, indicating that the peninsula is an employment destination for the east bay.

In the vicinity of Newark, Interstate 880 includes four lanes in each direction, including a high occupancy vehicle lane. Full-access interchanges are provided at Thornton Avenue and Mowry Avenue. The peak direction of travel is southbound during the AM peak and northbound during the PM peak.

The major transportation improvement proposed in this area, and one of the significant improvements for the entire south bay, is the proposed Dumbarton Rail Corridor project. Providing additional transportation options will be critical to alleviating future vehicular impacts for the entire region. The rail corridor is anticipated to be operational by 2012.

Additional transit routes and connections should be included in Area Two.

CHAPTER FIVE: **IMPLEMENTATION**

This Concept Plan is an early step in the overall process of achieving the vision for Area Two. The Concept Plan as presented here will need changes to existing General Plan land use designations as well as zoning designations. By California law, these changes will require environmental review. As part of this review analysis will be done to ensure that development impacts are considered. Some of the major impacts to be studied will include traffic, environmental health of these industrial sites, and needed infrastructure improvements.

Specific Plan Update

The next step in the progress of the Concept Plan will be to update the 1999 Area Two Specific Plan and EIR. In the process of updating the Specific Plan the following areas will need to be included or studied further. Note that the topics described below are not listed in chronological order. The Specific Plan Update will be an iterative process, which will include the analysis and refinement of multiple alternatives, leading to the final preferred plan.

Refine the Vision, Goals and Policies for the Project

This Concept Plan, approved by the Planning Commission and City Council, is a step forward to setting the vision for Area Two. Further public input following the review of impacts of this project on the City of Newark will solidify the vision and enable the drafting of goals and policies to govern development.

Distill the Land Use Plan

The land use plan contained in this Concept Plan will need to be reviewed in light of economic feasibility and impacts. Actual density ranges are yet to be settled and will be determined after reviewing impacts on infrastructure, public services and roadway circulation. The land use plan will include standards for intensity of residential and other uses, building heights and setbacks. It will recommend changes to existing General Plan land use designations and zoning designations.

Ensure Economic Feasibility.

Economic analysis will need to be done to ensure that the development proposals are feasible. Coordination with the desires and goals of the landowners in the Concept Plan Area will ensure that the Specific Plan Update is practical and moves forward. As part of the economic analysis, methods will need to be identified for funding necessary physical improvements, including infrastructure improvements as well as desired amenities such as a performing arts center or new parks and plazas. The Specific Plan Update should develop a phasing plan that will enable the site to be developed over time.

Potential sources of funds that will allow for the realization of the Concept Plan include the following:

- City of Newark Redevelopment Agency
- SamTrans/Dumbarton Rail Corridor
- City of Newark
- Area Two landowners
- Metropolitan Transportation Commission
- Development Impact Fees

Residential development can also contribute to City operating costs as the area develops. Some financing mechanisms that can be employed to assist with operational expenses include:

- Community facilities districts
- Private maintenance of streets

Infrastructure Improvements

After the buildout density of the project is determined, impacts will need to be identified, particularly on infrastructure. Necessary improvements to sewer and water supply needs to be identified. Stormwater drainage in particular will need to be addressed. Floor elevations of residential buildings must be above 11.75 NGDV minimum, as discussed in Chapter Three. Commercial floor elevations must be a minimum of 8 NGDV. Stormwater retention basins should be created or the site should be graded to ensure effective drainage to the Bay.

Circulation and Parking Impacts

The impact of projected Area Two development on traffic will need to be identified through a complete traffic analysis. Mitigations, if any, will be identified. Traffic models should incorporate transit and pedestrian oriented development factors. Parking should be analyzed and appropriate parking standards for this type of development proposed.

The installation of the bicycle and pedestrian path along the Bay should be coordinated with ABAG's Bay Trail Project, including a potential bike/ped overcrossing of rail tracks.

The design and layout of the street network should be coordinated with planning for the Dumbarton Rail Corridor, particularly around the transit station.

Design Standards and Guidelines

These will outline the design both of the public realm, including streets and open space, as well as the private realm, including private development. Guidelines need to be flexible and feasible.

Environmental Impact Review

Additional potential impacts will need to be closely considered as part of the Environmental Impact Report for the project. These could include air quality, noise, biological resources, geology and soils, hazardous materials, and public services such as police, fire and schools.

Additional Steps

Additional steps parallel to the Specific Plan Update process should be considered to move the vision forward. The City of Newark should work with property owners to reach consensus on the next steps and to discuss and resolve development issues relevant to their specific properties.

City staff should continue to work with planners for the Dumbarton Rail Corridor to ensure the transit station is coordinated with the proposed concept plan.

Community groups such as performing arts players should be approached in the early stages of the Specific Plan process, both for input into alternatives and to galvanize citizen support for chosen concepts.

Resources and Credits

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- City of Newark, 1999, Area Two Specific Plan Draft Environmental Impact Report, page 85.
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- Dunphy, Robert, Deborah Myerson, and Michael Pawlukiewicz. *Ten Principles for Successful Development around Transit.* Washington, D.C.: ULI-the Urban Land Institute, 2003.
- "Arts and Economic Prosperity III". Washington, D.C.: Americans for the Arts, 2007.
- Don Edwards San Francisco Bay National Wildlife Refuge: www.fws.gov/desfbay