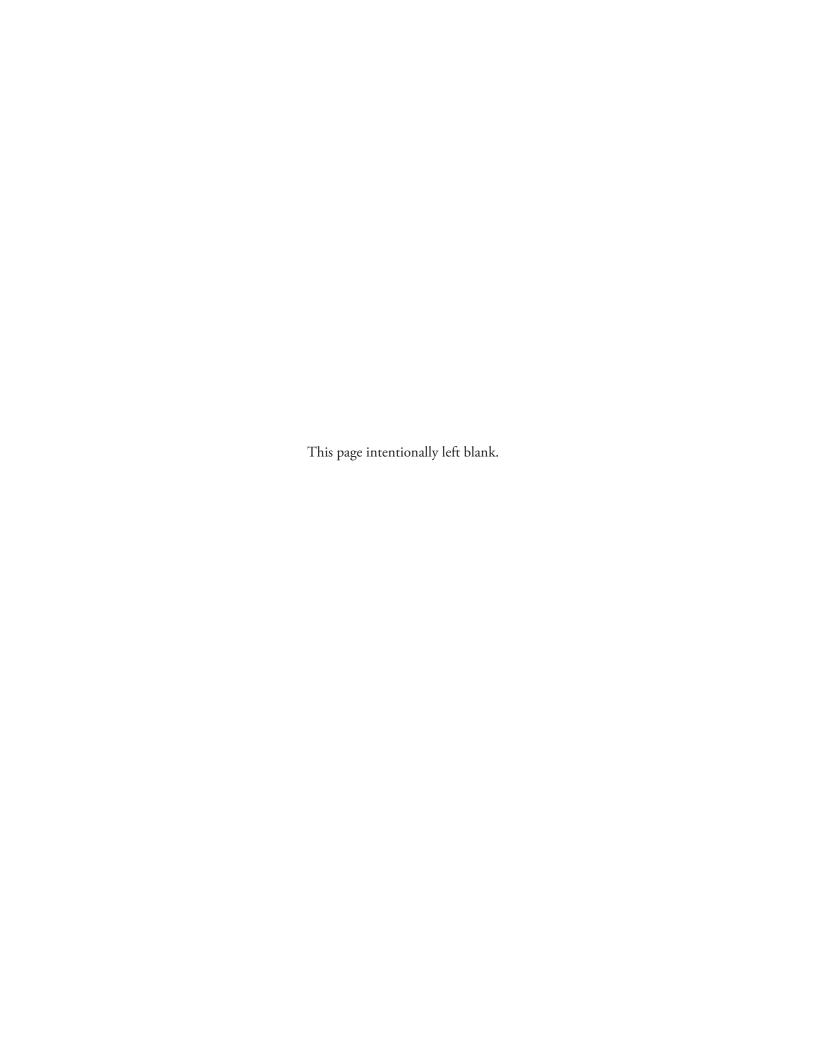


# Broadway/Valdez District Specific Plan

**Existing Conditions Report** 

DRAFT August 2009





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# **Chapter 1: Introduction**

# 1.1 Project Initiation

In 2006, the Oakland City Council made retail recruitment and development a high priority for the City. A consulting team led by the Conley Consulting Group evaluated retail enhancement opportunities citywide, and created an action plan to implement specific retail revitalization activities in shopping areas across the City. The resulting reports - The Citywide Retail Enhancement Strategy and the companion Upper Broadway Strategy – A Component of the Oakland Retail Enhancement Strategy identified the Broadway Retail Corridor as a key area in Oakland for comparison/life-style retail, in a mixed use development context with office and housing as well. Broadway was targeted for several reasons, including: its significance as the City of Oakland's "Main Street," the availability of transit service, its proximity to downtown, as well as its relationship to adjacent residential neighborhoods, the Kaiser and Summit/Alta Bates medical campuses, and the successful existing Piedmont Avenue retail district. In particular, the goal for the Broadway Retail Corridor is to re-establish a retail core with the type of comparison shopping that once served Oakland and nearby communities. As a key implementation recommendation of the Oakland Retail Enhancement Strategy, the Broadway/Valdez District Specific Plan will seek to capitalize upon Oakland's opportunities to capture retail tax leakage and build upon existing community assets. Through its comprehensive planning process, the Specific Plan will reconfirm the appropriateness of establishing comparison retail in the Broadway area, and determine the appropriate mix of retail and other land uses.

# 1.2 Project Objective

The Broadway/Valdez District Specific Plan and EIR (Specific Plan) will provide a vision and redevelopment strategy for transforming a section of the Broadway corridor just north of the Downtown into a regional retail destination. In addition to building economic opportunities, the Broadway Retail Specific Plan will seek to offer housing, retail, and transportation choices for Oakland residents while helping to reduce traffic, protect the environment, and enhance existing neighborhoods. The Specific Plan will articulate and quantify the future potential of the area for retail and transit oriented development. It will also provide a comprehensive set of development regulations and requirements for the area, including the distribution, extent, and location of market-ready land uses; urban design and infrastructure standards; and financing mechanisms for public improvements.

# **Study Area Setting**

The Broadway/Valdez District Project Area is located within the City of Oakland in Alameda County, California (Figure 1.1: Regional Vicinity Map). Regional freeway access to the project area is provided by Interstates 580 and 980. The Project Area is in close proximity to many existing neighborhoods and districts, as is shown in Figure 1.2: Local Context. The Uptown and Kaiser Center Office Districts of Downtown Oakland are located directly south of the Project Area. East of the Project Area, the topography becomes hilly and the street grid changes. This area is predominantly residential, and encompasses the Richmond Avenue, Harrison/Oakland Avenue, and Adams Point neighborhoods. West of the Project Area are Pill Hill (Summit Alta Bates Medical Center) and the Telegraph/Northgate

Neighborhood. A major activity center is located to the north, across I-580, which includes the Kaiser Permanente Medical Center and Mosswood Park. The southernmost boundary of the Project Area is located approximately 1/3 mile from the 19<sup>th</sup> Street BART station and the MacArthur BART station is located approximately <sup>3</sup>/<sub>4</sub> mile from the Project Area's northernmost boundary. In addition to BART, the area also benefits from AC Transit bus service along Broadway. The Broadway/Valdez District Project Area contains a large number of automotive uses, including car dealerships and service garages, encompasses most of the Broadway corridor that is currently and historically identified as "Auto Row."

As shown in Figure 1.3: Base Map – Aerial, the Project Area boundary extends 0.8 miles (4,020 feet) along both sides of Broadway from 23rd Street in the south to I-580 in the north. The Project Area is generally bounded by Valley and Webster Streets on the west and Glen Echo Creek on the east. South of 27th St., the boundary extends eastward to Bay Place. The boundaries of the Project Area generally were established to include those areas that were deemed most likely to change or be directly affected by the transition from the current emphasis on automobile sales and service to a future emphasis on destination retail. The Project Area includes 73.8 acres. Seventeen acres, or 23 percent of the total land area, is dedicated public right-of-way in the form of streets. The remaining 56.8 acres (77percent) contains 242 parcels of property, and about 225 structures.

# 1.3 Report Organization

This report documents the WRT team's initial existing conditions and "opportunities and constraints" analysis for the Broadway/Valdez Specific Plan Project Area. This report and the associated appendices are intended as working documents that establish the information baseline for the project and a common understanding among the WRT team and the City of existing conditions that may influence the planning for and future development in the planning area.

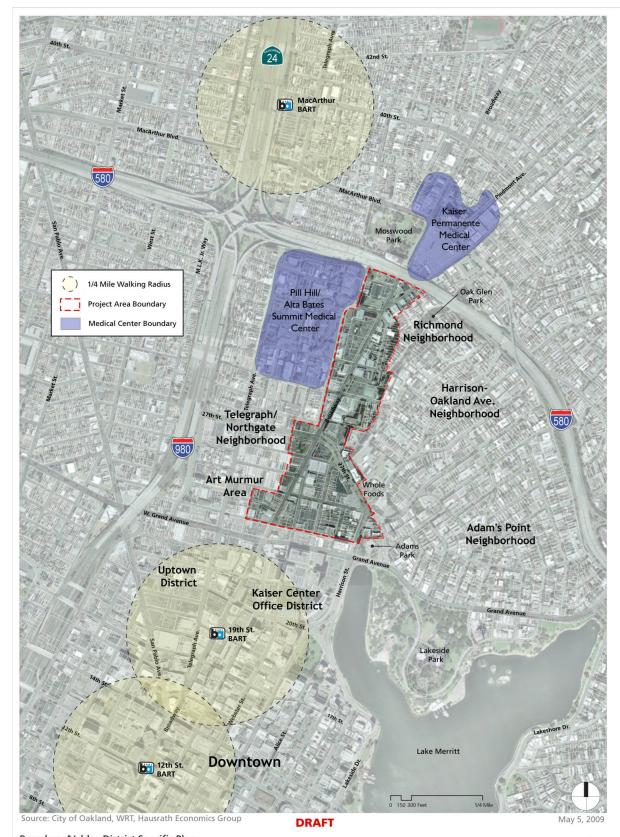
This report is organized into the following Chapters:

- 1. Introduction/Context
- 2. Land Use and Regulatory Context
- 3. Local Market Context
- 4. Community Character
- 5. Historic Resources
- 6. Environmental Factors
- 7. Transportation: Circulation, Access and Parking
- 8. Infrastructure and Utilities
- 9. Community Services and Facilities



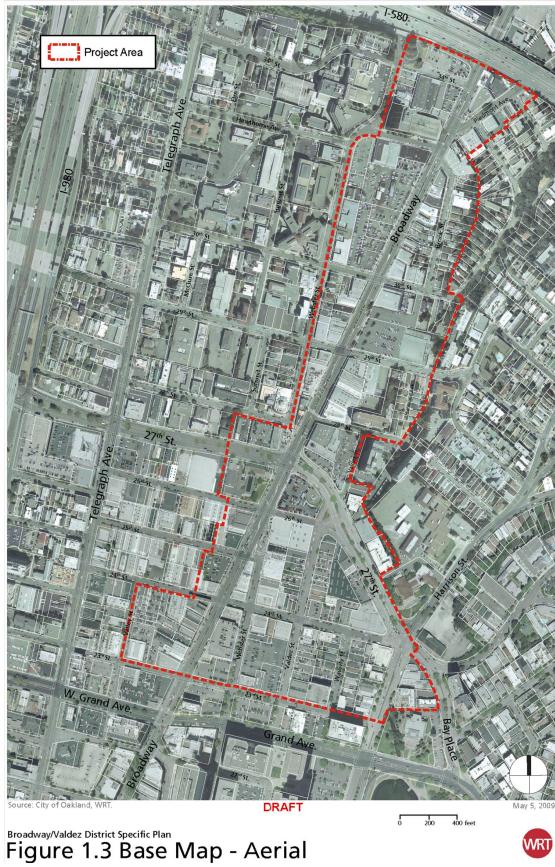
Broadway/Valdez District Specific Plan
Figure 1.1: Regional Context





Broadway/Valdez District Specific Plan
Figure 1.2: Local Context





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# Chapter 2: Land Use and Regulatory Context

# 2.1 Introduction

This chapter analyzes the existing land use setting in the Broadway/Valdez District Specific Plan Project Area. It includes a discussion of existing land uses, land ownership, development intensity, and recent and proposed development activity in the Project vicinity. It also includes a summary of the Project's regulatory context, including General Plan policy and land use designations, zoning, and redevelopment jurisdiction.

# 2.2 Existing Land Use

# 2.2.1 Surrounding Land Use Context

The Project Area serves as the nexus for a series of neighborhoods and districts with land use patterns and intensities that are distinctly different from each other and from the Project Area.

- The Project Area is bounded on the south by the Uptown District of Oakland's Central Business District (CBD), an urban mixed-use area with significantly higher existing and allowable development intensity and a mix of office, retail, entertainment, and residential uses.
- To the east, the Project Area is bounded by predominantly residential neighborhoods that include a mix of single- and multi-family residential uses supplemented with institutional and limited commercial uses along Harrison Street, 27<sup>th</sup> Street, and Bay Place.
- The area to the west of the Project Area includes a more diverse mix of uses. The area south of 27<sup>th</sup> Street is the 25<sup>th</sup> Street Garage District which includes an eclectic mix of automotive services, light industrial, live/work and artist loft spaces. The area north of 27<sup>th</sup> Street is dominated by medical uses associated with the Alta Bates Summit Medical Center campus that occupies Pill Hill.
- To the north of I-580, the prevalent uses include the Kaiser Permanente Medical Center and commercial uses along the MacArthur, Broadway and Piedmont Avenue corridors.

Having adjoining neighborhoods with such diverse yet singular land use characteristics creates an interesting dynamic for the Project Area. The strongly institutional orientation of the districts to the west and north brings a large number of employees and visitors into the area daily. Similarly, the Uptown district to the south brings in a large number of office workers, but also provides a locus of restaurants, theaters, and other entertainment uses that serve as local and regional destinations. Finally, the neighborhoods to the east provide a resident base that perceives the area as home and occupies the area during the evenings and weekends when stores and offices are closed and workers are gone.

Other observations about the Project Area's larger land use context include:

- o The area has an unusually high number of churches and other places of worship, including:
  - Temple Sinai (Webster and 28<sup>th</sup> Street)

- First Congregational Church (27<sup>th</sup> and Harrison),
- Cathedral of Christ the Light (Grand and Harrison)
- First Korean Christian Church (Fairmount and 29<sup>th</sup>)
- St. Paul's Episcopal Church at Bay Place and Montecito
- 1<sup>st</sup> Presbyterian Church (Broadway and 27<sup>th</sup>) [in Project Area]
- Philippian Church (Webster b/w 34th and Hawthorne) [in Project Area]
- With two major medical centers in the immediate vicinity there is a strong institutional presence in the area. Other institutions of note in the Project vicinity include:
  - Westlake Middle School (2629 Harrison Street),
  - Street Academy (417 29<sup>th</sup> Street)
  - St. Paul's Episcopal School (116 Montecito Avenue)
  - Samuel Merritt University (370 Hawthorne Avenue)
- While being a very urban area, the Project vicinity includes a number of significant open space resources:
  - Lake Merritt and Lakeside Park located just southeast of the Project Area is a major public park and visual open space.
  - Mosswood Park, located just north of the Project Area, is a significant urban park with basketball and tennis courts, and a community center, in addition to open space.
  - Adams Park, located just south of the Project Area on the grounds of the Veterans Memorial, provides limited open space area along Glen Echo Creek with views across Grand Avenue to Lake Merritt.
  - Glen Echo Creek, which flows parallel to the Project Area eastern boundary south into Lake
    Merritt, provides a linear open space and bit of nature in the urban setting. Northeast of the
    Project Area, Oak Glen Park provides grassy, oak-shaded glades that extend along the banks of
    the creek.
  - The Kaiser Center Roof Garden is a 3-acre roof garden located atop the Kaiser Center's 5-story garage at 21<sup>st</sup> Street and Webster. The first roof garden built in the United States after World War II and, when it opened in 1960, the largest in the world, is open to the public during the week.

# 2.2.2 Existing Project Area Land Uses

The Project Area includes 73.8 gross acres of land, including 56.8 net developable acres (77 percent) in private ownership and 17 acres (23 percent) in public street rights-of-way. Consistent with its historic identity as Auto Row, the predominant land use in the area is commercial related to automotive sales and services (e.g., automobile dealerships, car rental retailers, repair service garages, etc.), which occupies nearly half the developable area. Non-automotive commercial uses and residential uses are the next most

prevalent in the area, but even when combined occupy less than 30 percent of the developable land area. Table 2-1: Existing Land Use Summary provides a summary of Project Area land uses and their corresponding acreages (Note: Land use data for the Project Area was derived from parcel data from the Alameda County Assessor's Office and was verified by a field survey conducted by WRT in April 2009. Assesor's land use data outside the Project Area has not been verified. It has been mapped to generally illustrate surrounding land uses, and is not included in Table 2-1.

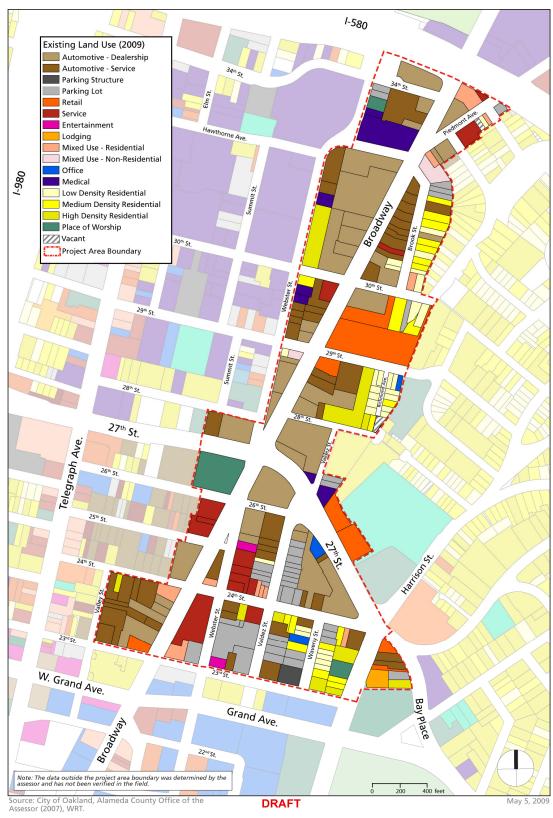
Table 2-1: Land Use Summary: Existing Project Area

	Land Use	Area (acres)	% of Net Area*	% of Total Area
Deve	elopable Area			
1	Automotive	28.1	49.5%	38.1%
2	Commercial	9.0	15.8%	12.2%
3	Residential	7.8	13.7%	10.6%
4	Parking	5.6	9.9%	7.6%
5	Medical	2.0	3.5%	2.7%
6	Mixed Use	1.9	3.4%	2.6%
7	Place of Worship	1.8	3.2%	2.5%
8	Office	0.4	0.7%	0.5%
9	Vacant Land	0.2	0.3%	0.2%
10	Open Space	0.0	0.0%	0.0%
	Total Developable	56.8	100.0%	77.0%
Publ	ic Right of Way			
	Streets	17.0	-	23.0%
Tota	l Overall	73.8		100.0%

Source: Alameda County Office of the Assessor, City of Oakland, WRT, 2009.

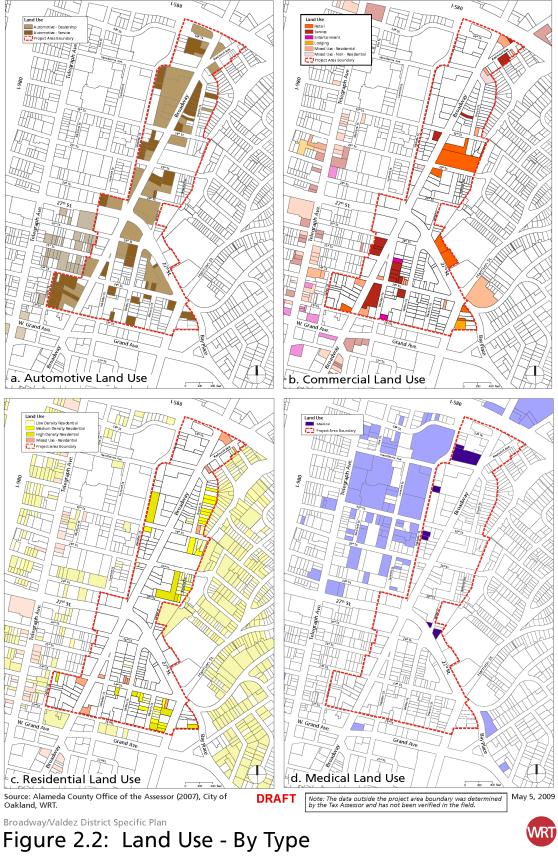
The distribution of current land uses within the Project Area is depicted in Figure 2.1: Existing Land Use. Most parcels with frontage along the Broadway corridor are occupied by automotive and commercial tenants. Residential uses are generally located east of Broadway in three clusters along the eastern edge of the Project Area. The first occurs along the east side of Brook Street. It is comprised of single-family homes and duplexes. The second concentration of residential uses occurs between 29<sup>th</sup> and 30<sup>th</sup> Street, and includes both high-rise senior housing, as well as single-family homes and duplexes along Richmond Avenue. The third concentration occurs in the southeastern portion of the Project Area, along Waverly and Harrison Streets, between 24<sup>th</sup> Street and 23<sup>rd</sup> Street, and also fronting 24<sup>th</sup> Street. This area contains a mix of housing densities.

<sup>\*</sup> Does not include public right-of-way (streets).



Broadway/Valdez District Specific Plan
Figure 2.1: Existing Land Use







There are two high-density residential complexes for seniors located within the Project Area – a high-rise tower located on 28<sup>th</sup> Street east of Broadway, and a low-rise assisted living complex located on Webster Street at 30<sup>th</sup> Street, adjacent to the Alta Bates Summit Medical Center.

The land use mix tends to be most diverse in the southern half of the Project Area (south of 27<sup>th</sup> Street), which is closest to Downtown. Non-automotive related commercial uses are scattered throughout the area, and do not have any specific focus. All but one of the area's eight restaurants are located in the southern half of the area, nearest to downtown. Medical uses, which consist primarily of office space, are generally located along Webster Street in close proximity to the Alta Bates Summit Medical Center. Otherwise, office use in the area is extremely limited. There is no dedicated public open space in the Project Area.

Parking, not including private structures attached to specific developments such as the YMCA and the Broadway Webster Medical Plaza or the surface areas used by auto dealers as display/storage areas, is the fourth most prevalent use in the Project Area. See Chapter 7: Transportation for map that illustrates the locations of off-street parking available within the immediate vicinity of the project area.

In order to more easily see the land use patterns, Figure 2.2a through 2.2d show the principal area uses by category (i.e., automotive, commercial, residential, and medical).

# 2.2.3 Existing Development Intensity

The intensity of development in the Project Area is quite varied ranging from surface parking lots that have no structures on them to high-rise structures that cover their entire parcel. In general, the development intensity is much lower than in the Uptown District and CBD to the south, and, if not lower, then at least much less consistent than it is in the neighboring areas to the east and west. The relatively lower intensity of development is a direct result of the area's historic use for automobile sales, which has resulted in numerous surface sales lots. Typically, two different metrics are used in planning to measuredevelopment intensity: net dwelling units (DUs) per acre for residential uses and Floor Area Ratio (FAR) for non-residential uses. Floor Area Ratio (FAR) is the ratio of total building square footage divided by the square footage of the site. The levels and distribution of residential density in the Project Area are shown in Figure 2.3: Development Intensity – Residential. The levels and distribution of non-residential use in the Project Area are shown in Figure 2.4: Development Intensity – Non-Residential.

As shown in Table 2-2, the average residential density of parcels within the Project Area that contain residential uses is 42 dwelling units per acre (du/acre). This number is deceiving however, given that the majority of the residential sites have single-family or small multi-family development with relatively low densities. Two thirds of the residential land area has densities less than 15 du/acre, and the median density of residential parcels is 23 dwelling units per acre. The density numbers are skewed by the few higher density projects, but particularly the Valdez Plaza apartment building that has densities approaching 450 du/acre.

As shown in Table 2-2, the average parcel FAR for the Project Area is 1.0, and the median FAR is 0.9. As with the residential numbers, these development intensity numbers do not reflect the unevenness of the development pattern in the Project Area, in which the highest FAR is almost ten times the average, and 12.53 acres (27 percent) of the non-residential land has an FAR of zero (i.e., no structures). The parcels with the highest development intensities include major parking structures: the Broadway Webster Medical Plaza, the YMCA, and the public parking structure at 23<sup>rd</sup> Street and Waverly Street.

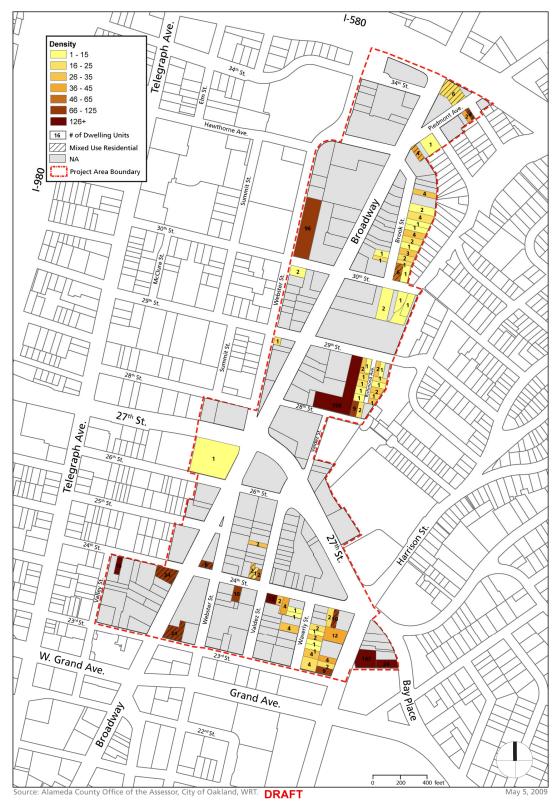
FAR is not a good indicator of the intensity of use as measured by factors such as level of employment or customers. The Project Area development intensity numbers can also be misleading given the number of automobile showrooms and service garages that have relatively high FARs because these uses have buildings with large floorplates, but typically generate relatively low employment and visitor numbers.

**Table 2-2: Development Intensity** 

	Residential Density (DU/acre)	Non-Residential Density (Floor Area Ratio)
Median	23	0.9
Average	42	1.0
Highest	450	9.7
Development Total	669 DUs	2,122,816 sq. ft.

Source: Alameda County Office of the Assessor, City of Oakland, WRT, 2009.

Note: Development Total for non-residential uses was calculated by multiplying the building footprint square footage of commercial uses by the number of stories. On parcels with multiple structures, the highest number of stories were applied to all buildings. On parcels with mixed use, only the ground floor building square footage was used. The total is a slight overestimate of usable SF.



Broadway/Valdez District Specific Plan
Figure 2.3: Development Intensity - Residential





Figure 2.4: Development Intensity - Non-Residential



#### 2.2.4 Underutilized Land

As suggested by the preceding development intensity discussion, the Project Area includes a number of parcels that might be considered "under-utilized" given the area's urban context and its development potential. Relative to the development intensity that is permitted in the area under the General Plan and zoning, all of the area might be considered under-utilized. However, just because land has unrealized development potential, it does not mean that it is necessarily a candidate for redevelopment. If land is already viably developed, there is often no incentive to redevelop, given the costs associated with such change. Under-utilized land tends to redevelop only when the viability of existing development/use is significantly out of line with the land's development potential and the market's demand for higher intensity uses.

Of course, whether land is considered "under-utilized" is also dependent upon the goals of the land owner and the City. In its time, a vibrant Auto Row, although it had a fairly low density, was viewed as the highest and best use for the Project Area. It is only in the context of a different time and economy and revised City goals that the current development pattern might be considered to be an inefficient use of land. The purpose of this analysis is to provide a sense of the area's potential for change, and to identify areas of potential opportunity.

Figure 2.5: Underutilized Parcels depicts parcels within the Project Area that might be considered significantly underutilized. For purposes of this analysis, under-utilized parcels include those that: are undeveloped or have no structures; are used for surface parking/auto sales lots; have an FAR of less than 0.33\*, or have buildings that are currently vacant. Based on these criteria, the analysis shows:

- Twenty-nine parcels, totaling 9.1 acres, are undeveloped or have no structures (e.g. automobile sales lots).
- Thirty-nine parcels, totaling approximately 4.9 acres, are actively being used as parking lots.
- Five parcels, totaling 3.0 acres, have a floor-area-ratio of less than 0.33.
- Fifteen parcels, totaling 3.93 acres, have existing buildings that are currently vacant.

Altogether, 20.93 acres of land, or 37 percent of net developable land within the Project Area, might be considered to be under-utilized.

<sup>\*</sup>Note: FAR's less than 0.35 are more typical of suburban settings, so from a land use standpoint are considered inappropriate and inefficient in this urban, downtown context. In addition, given the limited residential land in the project area and the planning focus on developing retail, residential lands were not considered in the evaluation of underutilized lands.



Broadway/Valdez District Specific Plan
Figure 2.5: Underutilized Parcels



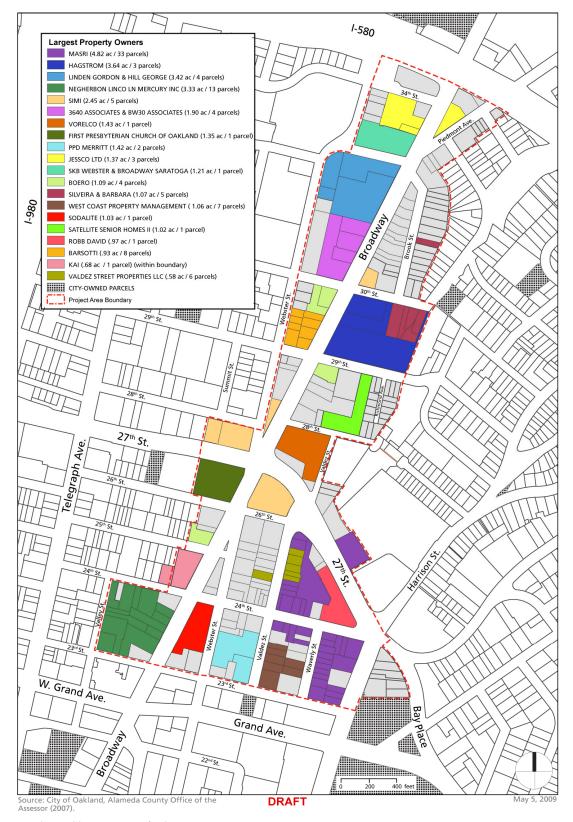
# 2.2.5 Existing Land Ownership

Land ownership is a key factor whenever considering the potential for change in land use or development patterns. Given this project's focus on planning for destination retail, which requires large parcels to accommodate large floorplate buildings and parking structures, the size of Project Area land holdings will be a significant factor. Altogether, the Project Area's 242 parcels are currently owned by 135 different landowners. The 20 largest property owners own 104 parcels, which includes 61 percent (34.8 acres) of the land area. That said, while several landowners own multiple parcels, none control major portions of the Project Area. The largest landowner owns less than 5 acres, and there are 121 landowners who own less than a quarter of an acre. The combination of a large number of both landowners and small landholdings will add to the difficulty and complexity of future redevelopment efforts because of the need to assemble larger parcels that can accommodate large scale retail development. The major ownerships and their land holdings are summarized in Table 2.3 and illustrated in Figure 2.6.

**Table 2.3: Largest Property Owners** 

	Property Owner	Area (acres)	# of Parcels
1	Masri	4.8	33
2	Hagstrom	3.6	3
3	Linden Gordon & Hill George	3.4	4
4	Negherbon Lincoln Mercury LLC	3.3	13
5	Simi	2.5	5
6	3640 Associates & BW30 Associates	1.9	4
7	Vorelco	1.4	1
8	First Presbyterian Church of Oakland	1.4	1
9	PPD Merritt	1.4	2
10	Jessco LTD	1.4	3
11	SKB Webster & Broadway Saratoga	1.2	1
12	Boero	1.1	4
13	Silveira & Barbara	1.1	5
14	West Coast Property Management	1.1	7
15	Sodalite	1.0	1
16	Satellite Senior Homes	1.0	1
17	Robb David	1.0	1
18	Barsotti	0.9	8
19	Kai	0.7	1
20	Valdez Street Properties LLC	0.6	6
	Total - 20 Property Owners	34.8	104
	Total Property in Project Area	56.8	242
	Percentage (of Total Property in Project Area)	61.3	43.0

Source: Alameda County Office of the Assessor, City of Oakland, WRT, 2009.



Broadway/Valdez District Specific Plan
Figure 2.6: Property Ownership

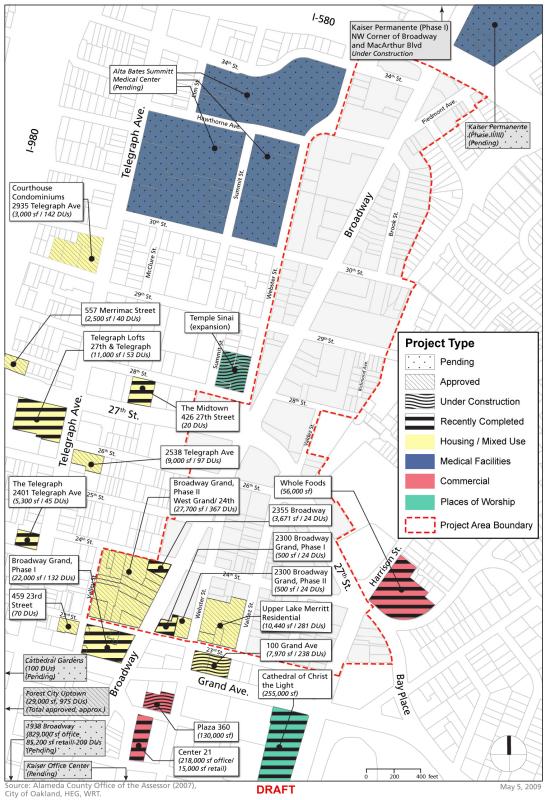


## 2.2.6 Approved and Pending Projects & Initiatives

As discussed in Chapter 3: Local Market Context, until the recent downturn in the economy, there were a number of development projects in the Project Area vicinity that were approved, constructed, or in the pipeline. While the economy has slowed or halted many of these projects for the time being, those that have been constructed have significantly contributed to increased levels of activity and enhanced development character in the Project Area vicinity. This is particularly true of the Uptown District and the southern end of the Project Area, where projects like the Broadway Grand mixed use project, The Grand apartment complex, the Cathedral of Christ the Light, and the new Whole Foods Market are transforming the character of the area. Figure 2.7: Proposed and Current Projects shows the location of recently completed, approved, and pending projects in the Project Vicinity.

Within the Project Area, all recent construction and pending projects are residential mixed-use projects. Forty-eight new dwelling units have been recently constructed in two mixed use projects along Broadway between 23<sup>rd</sup> and 24<sup>th</sup> Streets. Two large residential developments have their approvals, but it is unclear whether they will be implemented given the economy: Broadway Grand Phase 2 (367 DUs), and Upper Lake Merritt Residential (281 DUs).

Other major development that is on-going in the Project Area is the State-required seismic upgrading and expansion of the area's two medical centers—Alta Bates Summit Medical Center and Kaiser Permanente Medical Center. The Kaiser Permanente Medical Center is more advanced with its plans and is nearing construction of its first building. Alta Bates Summit is currently in the environmental review process for its renovation and expansion plans.



Broadway/Valdez District Specific Plan
Figure 2.7: Proposed & Current Projects



# 2.3 Planning and Regulatory Context

A number of adopted planning documents and existing regulations influence the way development can occur in the Project Area, and should be considered in the development of the *Broadway/Valdez District Specific Plan*. These include but are not limited to the existing General Plan, Planning Code (Zoning Ordinance), Redevelopment Areas, etc. Reviews of the existing land use documents are intended to help the team determine the type of development encouraged or discouraged by existing development standards.

#### 2.3.1 General Plan

### General Plan Process

The current General Plan was adopted in 1998. It defines the City's long range goals and intentions regarding the nature and direction of future development in Oakland. The Community and Economic Development Agency, Strategic Planning Division, in coordination with the Planning Commission, maintains both the General Plan and the Planning Code (Municipal Code Title 17, i.e. Zoning).

General Plan elements include the Land Use and Transportation Element (LUTE), the Open Space, Conservation and Recreation Element (OSCAR), the Historic Preservation Element, the Environmental Hazards/Safety Element, the Noise Element, and the Estuary Policy Plan. The Strategic Planning staff is currently updating t the State-mandated General Plan Housing Element:

The City's land use vision is set forth in the LUTE. Current policies in the LUTE promote Smart Growth principles, including the creation of mixed-use zones, intensification of use around BART stations and neighborhood centers, and the protection of residential areas that are not located on main corridors or in a "Grow and Change Area" (explained below) from the incursion of high density development.

The General Plan's City Structure Diagram depicts the City's land use structure based on a series of placemaking land use/urban form categories: Showcase Districts, City Corridors, Neighborhood and Activity Centers, and Transit Oriented Districts (TODs). The Project Area is located in the Downtown "Showcase District," and is identified as a "Corridor" in the Central/Chinatown Planning Area. The Project Area is near two Transit Oriented Districts centered upon the MacArthur and 19<sup>th</sup> Street BART stations, and near the MB/Kaiser Medical Center/Mosswood Park "Activity Center." Portions of the Project Area generally along the length of the Broadway corridor also are identified as "Grow and Change" areas (versus "Maintain and Enhance"). The intent of these designations is as follows:

- "Showcase Zones" are, as Oakland's regional economic generators, areas identified for largescale growth.
- "Corridors" and "Activity Centers" are envisioned as mixed use urban environments with
  concentrations of commercial and civic uses in pedestrian-friendly environments directly linked
  to housing. Corridors in particular are characterized by strong transit accessibility and higherdensity housing.

• "Grow and Change" areas are targeted for significant changes in density, activity, or use, which are correlated to transportation and infrastructure improvements<sup>1</sup>. These areas are consistent with the Land Use Diagram, Transportation Diagram, and the Policy Framework and other Elements of the General Plan.

Key implementation strategies for the Central/Chinatown Planning Area include corridor revitalization; improving image, safety and accessibility; and targeting areas for community and economic development. Auto Row is identified as one of seven "Target Areas for Community and Economic Development" in the Planning Area for focusing public and private investment:

"Actions for this target area seek to support and enhance automobile dealership activities through physical improvements and development of complementary uses which will help retain this important sector of Oakland's economy. Where possible, include provisions for pedestrian and bicycle facilities."

Improvement strategies identified for areas adjacent to the Project Area include:

- Maintain and enhance the Richmond Boulevard and Adams Point neighborhoods (East).
- Maintain and enhance the Pill Hill institutional areas (Northwest).
- Revitalize the Telegraph Avenue corridor (West).
- Develop strategies for redevelopment of the MB Center, and link the Mosswood Park/MB Shopping center/Kaiser Permanente Medical Center area with Auto Row and the Piedmont Avenue commercial district.

# Current City Policy and General Plan Consistency

In 2006, the Oakland City Council made retail recruitment and development a high priority for the City. A consulting team led by the Conley Consulting Group evaluated retail enhancement opportunities citywide, and created an action plan to implement specific retail revitalization activities in shopping areas across the City. The resulting reports - *The Citywide Retail Enhancement Strategy* and the companion *Upper Broadway Strategy – A Component of the Oakland Retail Enhancement Strategy* identified the Broadway corridor as a key area in Oakland for establishing comparison/life-style retail, in a mixed use development context that includes office and housing. In December of 2007, City Council accepted staff's recommendation to endorse the vision set forth in Alternative #1 in the "Upper Broadway Strategy: A Component of the Oakland Retail Enhancement Strategy," and directed staff to issue a request for proposals to prepare a Specific Plan for the area. Alternative #1 sets forth a land use program that calls for urban mixed use development with major ground-level retail along Broadway, 27<sup>th</sup> Street and Valdez Street, with residential and/or office above.

Current General Plan policy that focuses on automobile sales as the primary use withinthe Auto Row Target Area is inconsistent with current City direction promoting a regional retail strategy for this location. Until otherwise amended, the adopted General Plan represents city policy. The Specific Plan will be the appropriate vehicle to identify amendments to the General Plan to ensure that all city policy is consistent or the General Plan will be amended concurrently with the adoption of the Specific Plan.

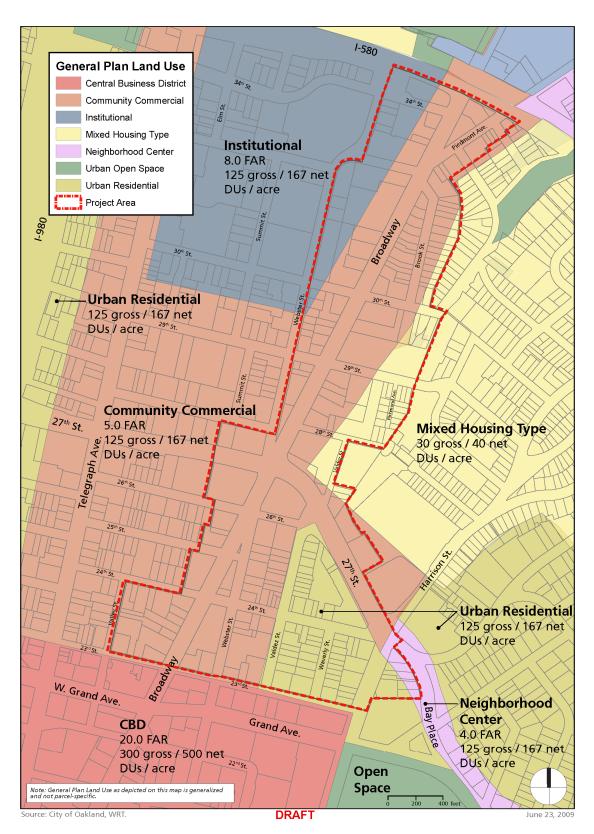
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<sup>&</sup>lt;sup>1</sup> Per the LUTE, the Strategy Diagram is illustrative only, and offers broad guidance for revised regulations.

#### Land Use Classification

The Land Use and Transportation Element (LUTE) of the Oakland General Plan describes the location, density and extent of land available for various land uses. The LUTE contains 15 Land Use Classifications, which are grouped into five broader categories: Corridor Mixed Use; Industry, Commerce and Institutional (ICI); Neighborhood Housing; Special Mixed Use; and Recreation and Open Space. These land use designations specify which land uses may be established in the future.

The project area contains five Land Use Classifications: Community Commercial, Urban Residential, Neighborhood Center, Institutional, and Mixed Housing Type (see Figure 2.8: General Plan Land Use). The first three fall under the broader "Corridor Mixed Use" category, and encompass the majority of land within the Project Area. The northwest corner of the Project Area near the Alta Bates Summit Medical Center is designated for Institutional uses. The fifth classification - Mixed Housing Type (Neighborhood Housing category), which is primarily for lower and medium density residential uses, covers the eastern edge of the Project Area north of 27<sup>th</sup> Street.



Broadway/Valdez District Specific Plan

Figure 2.8: General Plan Land Use



The following excerpts from the General Plan describe the intent of Project Area land use classifications:

#### **Corridor Mixed Use Category:**

Land Use Classifications within the Corridor Mixed Use Category are used to map the city's key corridors in a way that reflects the Policy Framework – promoting the creation and improvement of multiuse commercial districts linking segments of multifamily housing. The Corridor Mixed Use category also supports the confirmation and creation of neighborhood activity centers as focal points along the corridors. The three classifications – urban residential, neighborhood center mixed use, and community commercial – are also used at locations away from the corridors where the described mix of uses and densities is appropriate. Corridor land use classifications are generally supported by an arterial street designation.

#### **Community Commercial (Corridor Mixed Use)**

*Intent:* The Community Commercial classification is intended to identify, create, maintain, and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers.

Desired Character and Use: Community Commercial areas may include neighborhood center uses and larger scale retail commercial uses, such as auto related businesses, business and personal services, health services and medical uses, educational facilities, and entertainment uses. Community Commercial areas can be complemented by the addition of urban residential development and compatible mixed use development.

*Intensity/Density:* The maximum FAR for this classification is 5.0. Maximum residential density is 125 dwelling units per gross acre, or 167 DUs per gross acre.

#### **Urban Residential (Corridor Mixed Use)**

*Intent:* The Urban Residential classification is intended to create, maintain, and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services.

*Desired Character and Uses:* The primary future use in this classification is residential. Mixed use buildings that house ground floor commercial uses and public facilities of compatible character are also encouraged. If possible, where detached density housing adjoins urban residential the zoning should be structured to create a transition area between the two.

*Intensity/Density:* The maximum FAR for this classification is not specified. Maximum residential density is 125 units per gross acre, or 167 DUs per net acre. **Neighborhood Center Mixed Use** (Corridor Mixed Use)

*Intent:* The Neighborhood Center Mixed Use classification is intended to create, maintain, and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller-scale pedestrian-oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating and drinking places, personal and business services, and smaller scale educational, cultural, or entertainment uses.

Desired Character and Uses: Future development within the classification should be commercial or mixed uses that are pedestrian oriented and serve nearby neighborhoods, or urban residential with ground floor commercial.

*Intensity/Density:* The maximum FAR for this classification is 4.0. Maximum residential density is 125 units per gross acre, or 167 DUs per net acre. Vertical integration of uses, including residential units above street-level commercial space is encouraged.

#### **Industry, Commerce and Institutional Classification**

These classifications provide flexibility to accommodate changes in the economy and to encourage attraction of a wider range of economic development activities that can take advantage of Oakland's infrastructure and location. Because of this ever-changing nature of industrial and commercial activities, implementing regulations may change over time in order to include uses not listed below, provided they are consistent with the intent of the Plan.

Specifically regarding institutions, the General Plan acknowledges that:

Institutions are a significant resource of jobs and services to Oakland residents, and many of our institutions are nationally recognized for their excellence. Hospitals, libraries, schools and colleges, and government centers are important underpinnings of Oakland's continued economic health and the well being of its citizens. These type of operations, however, can have significant local impacts on neighborhoods, and must be planned carefully. [LUTE p.154]

#### **Institutional (Industry, Commerce and Institutional Classifications)**

*Intent:* The Institutional classification is intended to create, maintain, and enhance areas appropriate for educational facilities, cultural and institutional uses, health services and medical uses as well as other uses of similar character.

Desired Character and Uses: Future uses include educational and cultural facilities, institutions, health services, and medical facilities. Under certain conditions, mixed use housing and commercial development that supports these institutional areas may be allowed.

*Intensity/Density:* The maximum FAR for this classification is 8.0. Appropriate development standards that reflect the nature of the institutional facility and contain appropriate standards to address edge conditions adjacent to residential areas, and the need for expansion space, are all important factors that will be addressed by zoning.

#### **Neighborhood Housing Classifications**

The neighborhood housing classifications reflect key differences among types of neighborhoods. All of the classifications encourage quality and variety in building and landscape design, compatibility of use and form, and encourage school, community facilities, and "corner store" type of commercial activity, where appropriate.

#### Mixed Housing Type (Neighborhood Housing)

*Intent:* The Mixed Housing Type Residential classification is intended to create, maintain, and enhance residential areas typically located near the City's major arterials and characterized by a mix

of single family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate.

Desired Character and Uses: Future development within the classification should be primarily residential in character, with live/work types of development, small commercial enterprises, schools, and other small-scale, compatible civic uses possible in appropriate locations.

*Intensity/Density:* Development of single family homes, townhouses, small multi-unit buildings is allowable in this classification. Maximum allowable density in these areas is 30 principal units per gross acre, or 40 units per net acre.. Within these mixed housing type neighborhoods, there exist areas and pockets of lower density housing which should be preserved through appropriate zoning designations.

#### Special Mixed Use Classification - Downtown Oakland

The area immediately south of the Project Area is classified as Central Business District, which is one of the Special Mixed Use classifications. This classification permits significantly higher development intensity than permitted in the Project Area. The CBD classification allows 2.5 times the density, and up to five times the Floor Area Ratio (FAR) of adjacent Community Commercial and Urban Residential Classifications to the north.

#### Central Business District (CBD) to the South (Special Mixed Use Classification)

*Intent:* The Central Business District Classification is intended to encourage, support and enhance the downtown area as a high density mixed use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation in Northern California.

Desired Character and Uses: The CBD classification includes a mix of large-scale offices, commercial, urban (high rise) residential, institutional, open space, cultural, educational, arts, entertainment, service, community facilities, and visitor uses.

Intensity/Density: For sites in the CBD, the maximum FAR is 20.0, and the maximum allowable residential density is 300 units per gross acre, or 500 units per net acre. In some areas identified by the Policy Framework, such as the Broadway spine (outside of the Broadway/Valdez Project Area), the highest FAR may be encouraged, while in other areas such as near Lake Merritt and Old Oakland, lower FARs may be appropriate.

#### **Open Space**

Although the General Plan does not designate any Open Space within the Project Area, there are designated open space areas in the immediate vicinity, including Mosswood Park, Oak Glen Park, Lake Merritt and Lakeside Park (Note: Adams Park is not identified as Open Space in the General Plan.).

#### **Open Space**

*Intent:* The Urban Parks and Open Space Classification is intended to identify, enhance and maintain land for parks and open space. Its purpose is to maintain and urban park, schoolyard, and garden system which provides open space for outdoor recreation, psychological and physical well being, and relief from the urban environment.

Desired Character and Use: Urban parks, schoolyards, cemeteries, and other active outdoor recreation spaces.

*Intensity/Density:* The OSCAR generally describes facilities that may be included in urban parks and open spaces, which may include one caretaker dwelling unit per site, if needed. Otherwise, policies call for "no net loss" of open space. Standards for lot coverage will be included in the development of open space zoning.

### Housing Element Update

The Strategic Planning Division is currently updating Oakland's Housing Element. The last element was adopted in 2004 (1999-2006), and is required by law to be updated every five years.

The Regional Housing Needs Assessment (RHNA) requires that all California cities provide their fair share of the regional housing need for all income levels and special needs populations. The California Department of Housing and Community Development (HCD) determines the total housing need for a region, and the Association of Bay Area Governments (ABAG) is responsible for assigning a portion of this need to each local government in the Bay Area. According to the RHNA, Oakland is required to plan for 14,629 new housing units between 2007 and 2014. Of this total, 1,900 should be affordable to very low-income households, 2,098 to low-income households, 3,142 to moderate-income households, and 7,489 to above moderate-income households<sup>2</sup>.

Sites for future housing have been identified within the Project Area by the Strategic Planning Division (see Figure 2.9 2014 Housing Element--Housing Opporunity Sites).<sup>3</sup> As of this date, the number of dwelling units projected for the Project Area has not yet been determined.

# 2.3.2 Zoning and Design Review

# **Current Zoning**

Zoning is intended to implement the General Plan by interpreting its policies and maps on a parcel level. Oakland's zoning is included in the Planning Code, which is located in Chapter 17 of the Municipal Code. The zoning code identifies permitted land uses and development standards per zone. Each zoning district includes regulations that specify the types of allowable land uses and development standards for a particular property, including lot size, height limit, development intensity, setbacks, buffers, parking and open space requirements. The standards for zones found in the project area are summarized in Table 2.4: Planning Code Summary. Unless otherwise specified in the Planning Code, general parking requirements are set per use in Chapter 17.116 of the Municipal Code. Discrepancies between the Planning Code and the General Plan are discussed later in this section.

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<sup>&</sup>lt;sup>2</sup> Very low income is 50 percent or less of Area Median Income (AMI), low income is 50 to 80 percent of AMI, moderate income is 80 to 120 percent of AMI, above moderate is 120 percent or more of AMI. The official 2009 State Income Limit (from HCD) for Alameda County is \$89,300. For more info: (http://www.hcd.ca.gov/hpd/hrc/rep/state/inc2k9.pdf

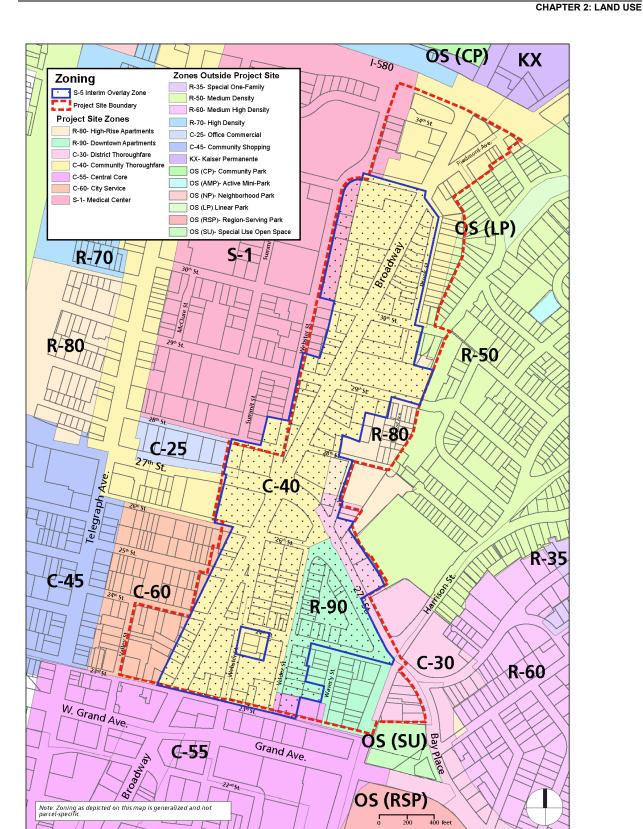
<sup>&</sup>lt;sup>3</sup> A draft map of housing opportunity sites within the Project Area produced by the City of Oakland has been added to the end of this chapter.

Current Zoning in the Project Area, as depicted in Figure 2.10: Zoning, includes:

- R-50: Medium Density Residential,
- R-80: High-Rise Apartment Residential,
- R-90: Downtown Apartment Residential,
- C-30: District Thoroughfare Commercial,
- C-40: Community Thoroughfare Commercial,
- C-55: Central Core Commercial,
- C-60: City Service Commercial, and
- S-1: (Summit) Medical Center

Table 2.4: Oakland Zoning Code within Project Area

	,	•					
	$\begin{array}{c} R-50 \\ \text{Medium Density Residential} \end{array}$	R-80 High-Rise Apartment Residential	R-90 Downtown Apartment Residential	C-30 District Thoroughfare Commercial	C-40 Community Thorough- fare Commercial	C-60 City Service Commercial	S-1 (Summit) Medical Center
Purpose	To create, preserve, and enhance areas for apartnered ling at merel ling and entered learning electrols, and is typically appropriate to areas of existing medium density residential development.	To create, preserve, and enhance areas for high-research and partial densi- tives in desirable extrust, and is typically appropriate to areas near major shopping and community certexs and rapid transit stations.	To create, preserve, and enhance areas for high three apartment living a tvey high densities in destable estings and is type, cally appropriate to area within, or in close proximity to, the Oakland central district.	To create, preserve, and enhance areas with a wide cange of refael establishments serving both shord and long term needs in convenient locations, and is typically appro- priate along major thoroughfares.	To create, preserve, and enhance areas with a wide traingly of hot heal and wholesale establishments serving both stort and long term needs in convenient locations, and is typically appropriate along major throughfates.	To create, preserve, and enhance areaswith a variety of commend servere with are seemtal to the economy of the city, but which are requently incompatible with the operations of a retail shooping or office area, and is typically appropriate to centralized areas near industrial concentrations.	To create, preserve, and enhance areas develoed primarily to medical facilities and availiary uses, and it sypically appropriate to compact areas around large hospitals.
Notes	Civic uses follow standards in Chapter 17.116 of the Oakland Zoning Code	Commercial and Civic uses follow standards in Chapter 17:116 of the Oakland Zoning Code	Commercial and Civic uses follow standards in Chapter 17.116 of the Oakland Zoning Code				
Land Use	Residential: Residential, SFU Residential Care, Semi-Transient     Civic Activities: Essential Service,     Limited Child Care, Telecommunications	Residential: Residential, SFU Residential Care, Semi-Harasient     Civic Activities: Essential Service,     Limited Child Care, Community Assembly Community Assembly Community Education, Nonassembly Cultural, Telecommunications	Residential, SFU Residential, SFU Residential, Care, Semi-Insorient     Civic Activities: Essential Service,     Limited Child Care, Community Assembly, Community Education, Nonassembly, Community, Education, Nonassembly Cultural, Telecommunications	Residential: Residential, SFU Residential, Care, Semi-Inavient     Curk Activities: Essential Service,     Limited Child Care, Community Assembly, Community Education, Nonassembly, Community Education, Nonassembly, Community and Vehicular, Telecommunications and Vehicular, Telecommunications     Commercial Activities	Residential, Residential, SFU Residential, Care, Semi-Insorient     CWC Activities: Essential Service,     Limited Child Care, Community Assembly, Community Education, Nonassembly, Community Education, Nonassembly, Community and Vehicular, Telecommunications and Vehicular, Telecommunications     Commercial Activities	Activites: Esential Service, Norassembly Cultural Utility and Vehicular, Telecommunications     Commercial Activities     Commercial Activities Nursery Nursery	Plessidential, Residential, SFU Residential, SFU Residential Care, Semi-Thansiert  Curk Activities: Esential Service, Limited Child Care, Community Massembly, Community Education, Nonassembly Community Education, Plescommunications  • Commercial Activities: Medical Service
Lot Size sf (min) width (min) frontage (min)	4,000 sf 25 ft (width) 25 ft (frontage)	4,000 sf Width: 25 ft Frontage: 25 ft	4,000 sf Width: 25 ft Frontage: 25 ft	4,000 sf Width: 25 ft Frontage: 25 ft	4,000 sf Width: 25 ft Frontage: 25 ft	No minimum lot area or width Frontage: 25 ft	4,000 sf Width: 25 ft Frontage: 25 ft
Height Limit	30 ft Accessory building: 15ft	None, except as limited by adja- cent zones	None, except as limited by adja- cent zones	Non-Residential 45 ft Residential: 40 ft (Allowable height increase of 2 feet for every foot of front or back seeback from the inner line of the minimum seeback	None, except as limited by adja- cent zones	None, except as limited by adjacent zones	None, except as limited by adja- cent zones
Density/ FAR (Maximum)	< 4,000 sf: 1 DU > or equal to 4,000 sf: 2 DUs	DU: 1/300 sf EU: 1/200 sf RU: 1/150 sf RY: 1/150 sf FAR: 3.5 (Residential and Nonresidential)	DU: 1/150 sf EU: 1/100 sf RU: 1/75 sf FAR: 2.0 (Residential and Nonresidential)	DU: 1 / 450 sf EU: 1 / 300 sf RU: 1 / 225 sf FAR: 3.0 (Nonresidential)	DU: 1 / 450 sf EU: 1 / 300 sf RU: 1 / 225 sf FAR: 3.0 (Nonresidential)	DJ / EU / RU / FAR: NA 3,000 st max for Ceneral Food Sales, Convenience Market, Fast Food Restaurant, Alcoholic Beverage Sales, or Convenience Sales and Service Commercial Activities	DU: 1/300 sf EU: 1/200 sf RU: 1/150 sf FAR: 4,0 (Residential and Non- residential)
Setbacks Front (min) Side (min) Rear (min)	15 ft (front) 4 ft (side) 15 ft (rear)	Front: 10 ft Side: None Rear: 10 ft	Front: 10 ft Side: None Rear: 10 ft	Front. None (On frontage with at least 50% residential, all zones must be at least 50% of residential zone's required front setback 50% to work (Nernesdential butting low to medium density residential must be 10th Rear. 10 ft (Only residential facilities)	Front. None (On frontage with at least 50% residentia, all zones must be at least 30% of residential zone's required front selback 546. None (Norresidential abstration pow to medium density residential must be 10 ft). Rear: 10 ft (Only residential facilities)	Front. None (On frontage with at least 50% residentia, all zones much per at least 50% of residentia I zone's required front setback) Side None (Norresidentia) abutting low to medium density residential must be 10 ft) Rear. None	Front 10 ft Side: None Rear: 10 ft
Buffers	Off street parking areas 5.5 foot high buf- for required. Strubs must be at least 3 feet wide. Side street and alley buffers must be at least 3.5 feet high, and 3 feet wide.	Off street parking areas 5.5 foot high buf- for regiment 5 hubb must be a least 3 feet wide. Side street and alley buffers must be at least 3.5 feet high, and 3 feet wide.	Off street parking areas 5.5 foot high buf- for required. Strubs must be at least 3 feet wide. Side arreet and alley buffers must be at least 3.5 feet high, and 3 feet wide	Commercial services must buffer adjacent residential areas, with 5.5 tool high buffer and 3 test wide or a 5.5 foothigh buffer and 3 test wide or a 5.5 foothigh fence. Side street and alley buffers must be at least 3.5 feet high, and 3 feet wide.	Commercial services must buffer adjacent residential areas with 5.5 foot high buffer and 3 feet wider or 3.5 foothligh fenous 5.6 test they have and 3.6 feet high, and 3 feet wide	Commercial services must buffer adjacent residential areas with 55 ofto thigh buffer and 35 feet wide or a 5.5 fookbild fence. Side street and alley buffers must be at least 3.5 feet high, and 3 feet wide.	Off street parking areas S.5 foot high buffer for required. Surbla make be a least 3 feet worke. Side street and alley buffers must be at least 3.5 feet high, and 3 feet wide.
Off-Street Parking (Minimum)	One DU: 15 spaces Two DUs, At least one space for the second- ary unit unless primary unit contains 3 spaces already Multifamily. One space per DU	One DU 15 spaces Two DUs, At least one space for the second. Two DUS, At least one space for the second. Spaces afready Multifamily: One space per DU	One DV 15 spaces  You DUS, All least one space for the second- your unites primary unit contains 3 spaces already  Multifamily. One space per DU	Residential, out, and commercial parking regulations are based on permitted land use and can be found in Chapter 17.116 of the Oakland Zoning Code.	Residental, civic, and commercial parking regulatives are based on permitted land use and can be found in Chapter 17.116 of the Oakland Zoning Code.	Residential, cwir, and commercial parking regulations are based on permitted land use and can be found in Chapter 17.116 of the Oakland Zoning Code.	Residential, civic, and commercial parking regulations are based on permitted land use and can be found in Gupter 17.15 of the Oakland Zening Code.
Open Space (Minimum)	200 sf public open space for two dwelling units (Private open space can substitute, but a minimum of 75 sf public space is required)	DU: 150 sf EU: 100 sf RU: 75 sf (Private open space can substi- tute)	DU: 150 sf EU: 100 sf RU: 75 sf (Private open space can substi- tute)	DU: 150 sf EU: 100 sf RU: 75 sf (Minimum public space per DU: 30 sf)	DU: 150 sf EU: 100 sf RU: 75 sf (Minimum public space per DU: 30 sf)	None	DU: 150 sf EU: 100 sf RU: 75 sf (Private open space can substi- tute)
Source: Oakland Mt	Source: Oakland Municipal Code. Last Updated November 2008. Notes: DU= Dwelling Unit. EU= Efficiency Unit. RU= Rooming Unit. FAR= Floor to Area Ratio.	er 2008. Notes: DU= Dwelling Unit. E	U= Efficiency Unit. RU= Rooming Uni	t, FAR= Floor to Area Ratio.			04/29/2009



Oakland Broadway Retail Corridor
Figure 2.10: Zoning



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The majority of the Project Area's 56.8 net acres falls within the *C-40*: *Community Thoroughfare* zone, which includes property on both sides of Broadway from 23<sup>rd</sup> Street to I-580. *R-90 Downtown Apartments*, which is the second largest zone, covers the Project Area east of Valdez Street and south of 27<sup>th</sup> Street. A small pocket of *R-80 High Rise Apartments* is designated for the eastern portion of the Project Area between 27<sup>th</sup> and 29<sup>th</sup> streets. The remaining zones cover small areas along the edges of the Project Area.

#### R-50: Medium Density Residential

Purpose: To create, preserve, and enhance areas for apartment living at medium densities in desirable settings, and is typically appropriate to areas of existing medium density residential development.

#### R-80: High-Rise Apartment Residential

Purpose: To create, preserve, and enhance areas for high-rise apartment living at high densities in desirable settings, and is typically appropriate to areas near major shopping and community centers and rapid transit stations.

#### R-90: Downtown Apartment Residential

Purpose: To create, preserve, and enhance areas for high-rise apartment living at very high densities in desirable settings, and is typically appropriate to areas within, or in close proximity to, the Oakland central district.

#### C-30: District Thoroughfare Commercial

Purpose: To create, preserve, and enhance areas with a wide range of retail establishments serving both short and long term needs in convenient locations, and is typically appropriate along major thoroughfares.

#### C-40: Community Thoroughfare Commercial

Purpose: To create, preserve, and enhance areas with a wide range of both retail and wholesale establishments serving both short and long term needs in convenient locations, and is typically appropriate along major thoroughfares.

#### C-55: Central Core Commercial

Purpose: To preserve and enhance a very high-intensity regional center of employment, shopping, culture, and recreation, and is appropriate to the core of the central district.

#### C-60: City Service Commercial

Purpose: To create, preserve, and enhance areas with a variety of commercial services which are essential to the economy of the city, but which are frequently incompatible with the operations of a retail shopping or office area, and is typically appropriate to centralized areas near industrial concentrations.

#### S-1: (Summit) Medical Center

Purpose: To create, preserve, and enhance areas devoted primarily to medical facilities and auxiliary uses, and is typically appropriate to compact areas around large hospitals.

### Citywide Zoning Update and General Plan Conformity

The adoption of an updated General Plan in 1998 created numerous discrepancies between the Current Zoning Code (adopted originally in 1965) and the new General Plan. Often this was due to changes in the allowable development intensities in certain areas of the city, but occasionally involved greater discrepancies when changes in land use were adopted (e.g. from manufacturing to residential uses). The City is currently undertaking a citywide Zoning Update to make the city's zoning consistent with the City's adopted General Plan policy. The focus of the update is on uses and development standards (e.g. height, setback, gross bulk/building envelope). Other standards relating to residential and commercial zones, such as parking, landscaping, buffering, and design guidelines, will be addressed after the base residential and commercial zones have been updated. To date, the Industrial, Housing and Business Mix, Central Business District, Open Space and Institutional Zone zones have been updated. The Zoning update process is currently addressing the residential, commercial/corridor areas, and the Central Business District.

When a conflict occurs between Zoning Regulations and the General Plan, the General Plan prevails. Chapter 17.01 General Provisions of Planning Code and General Plan Conformity, and the "Guidelines for Determining Project Conformity with the General Plan and Zoning Regulations (1988, last amended October 31, 2006)" describe the process to bridge the gap between the General Plan and the Planning Code. The following three criteria are used to determine whether a project is consistent with the General Plan:

- 1. Is the proposed activity and facility type permitted under the General Plan?
- 2. Is the proposed intensity (FAR for non-residential) or density less than or equal to the maximum permitted by the General Plan?
- 3. Is the project consistent with the relevant General Plan Policies?

If the project does not meet each of these criteria, the Director of City Planning must make a determination that the project is consistent with the written goals and policies of the General Plan to move forward in the process. If the project meets all three of the above criteria but is not consistent with existing zoning, a "best fit zone" must be selected, and the project proponent must apply for either an interim use permit or rezoning. Further guidelines and procedural details are included in "Guidelines for Determining Project Conformity With the General Plan and Zoning Regulations."

#### **Zoning Overlays**

In addition to the base zones, newer "Combining Zones" or Overlay Zones (see Figure 2.11: Overlay Zones) have been adopted that reflect Oakland's goals for promoting design-oriented, mixed-use development. Two Overlay Zones apply within the Project Area: the S-4 Design Review overlay, and the S-5 Broadway Retail Frontage Interim overlay.

#### S-4 Design Review

The S-4 Design Review Overlay requires the design review procedure. According to the Municipal Code, the design review required by the S-4 Overlay Zone is intended to create, preserve, and enhance the visual harmony and attractiveness of areas which require special treatment and the consideration of relationships between facilities, and is typically appropriate to areas of special community, historical, or visual significance.

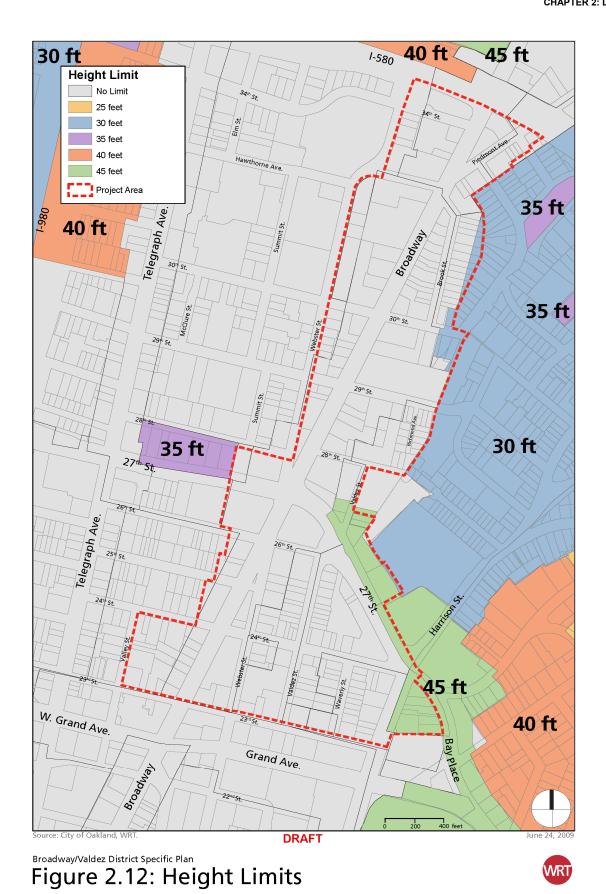
#### S-5: Broadway Retail Frontage Interim "Combining Zoning" Regulation (Interim Overlay)

The S-5 Broadway Retail Frontage Interim Combining Zoning Regulation (or "Broadway Interim Zoning Overlay") was adopted in January 2008, amended in February 2009, and will expire February 6, 2011 or when the City Council adopts permanent regulations (whichever happens first). It is intended to reconcile the current discrepancy between the City's intent to create a retail destination and the current zoning for the area. The S-5 overlay is intended to ensure that the ground floors of new and existing buildings are preserved for pedestrian-oriented retail business. It requires design review for new construction, limits automotive activities, and preserves the ground floor of buildings for storefront businesses that generate pedestrian activities such as retail sales, consumer service businesses, and medical services.

As shown in Figure 2.11, the S-5 Broadway Interim Overlay includes most of the Project Area. The S-4 Design Review overlay applies to very limited portions of the Project Area, including Piedmont Avenue, Brook Street, and the triangle of land between Harrison Street and Bay Place. Portions of the Project Area are not included in either the S-5 or S-4 overlay zone, includie Broadway north of Hawthorne Avenue, land zoned as R-80, and a portion of the R-90 Zone located south of 24<sup>th</sup> Street fronting Waverly and Harrison Streets.

Broadway/ Valdez District Specific Plan
Figure 2.11: Overlay Zones





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### Regulated Building Heights

Building heights are regulated by the zoning ordinance. As shown in Figure 2.12: Regulated Building Heights, building heights in the Project Area are only regulated in two small areas. The R-50 Medium Density Residential Zone on parcels terminating 30<sup>th</sup> St at Glen Echo creek, limits building heights to 30 feet. The C-30 District Thoroughfare Commercial Zone, which limits building heights to 45 feet, only affects parcels along the north side of 27<sup>th</sup> Street from Valdez Street to Harrison Street, and the triangle of land between Harrison Street and Bay Place. There are no building height limits in the rest of the Project Area, except where limited by adjacency to other zones. In those areas with no height limits, building heights are indirectly limited by the allowable development intensity, as measured by the Floor Area Ratio (FAR).

#### Design Review

Developments that require Design Review or any other planning permissions are overseen by the Planning Department staff. Project proposals are evaluated on their consistency with the General Plan land use policies as well as with the Oakland Planning Code (Municipal Code Title 17) and Subdivision Regulations (Municipal Code Title 16). The staff has discretion to interpret planning code when working with developers and architects. Where conflicts arise, the City applies the General Plan policies and land use designations. However, the General Plan generally is used to interpret land use and intensity, and not design. Currently, property within commercial zones generally does not require design review. However, the Citywide zoning update will require design review in all new commercial zoning.

Within the Project Area, the S-4 and S-5 Broadway Retail Frontage Interim zoning requires design review. All rescheduled developments and designs require design review throughout the planning area.

## 2.3.4 Redevelopment Areas

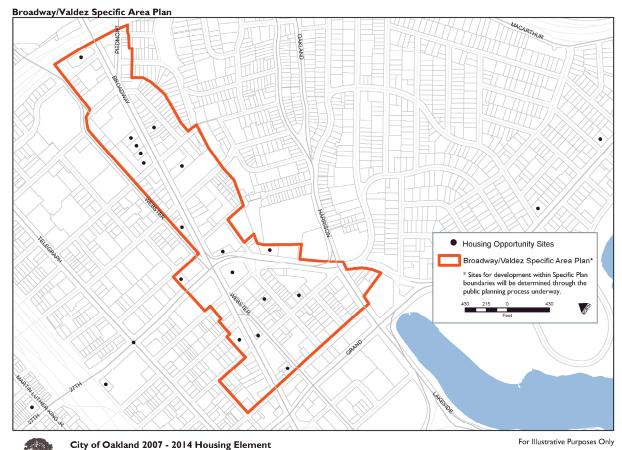
The Project Area lies in two Redevelopment Project Areas: the Broadway/MacArthur San Pablo Redevelopment Project Area and the Central District Redevelopment ProjectArea. The Redevelopment Division of the Community and Economic Development Agency is responsible for these redevelopment areas and works with developers, local businesses, and residents to build infill housing, retail and office projects, rehabilitate existing structures, and to upgrade streets, parks, and other public infrastructure. It is the goal of Oakland's Redevelopment Agency to facilitate infill development and catalyst projects to spur revitalization in the area.

The Broadway/MacArthur/San Pablo Redevelopment Project Area, comprised of 676 acres, consists of two distinct areas in North Oakland. The Broadway/MacArthur sub-area incorporates the Broadway Auto Row and Telegraph Avenue Corridors roughly between 27th and 42nd Streets. Within the Project Area, all parcels north of 28<sup>th</sup> Street and west of Broadway are included in this Redevelopment Project Area, as well as all parcels north of 27<sup>th</sup> Street that front onto the east side of Broadway.

The entirety of the Project Area south of 27<sup>th</sup> street is located in the Central District Redevelopment Project Area. This Redevelopment Project Area encompasses a 250-block area bounded by Embarcadero to the south, 27th Street to the north, Lake Merritt to the east and Interstate 980 to the west.

Housing Opportunities Sites (Figure C. 6)

CITY OF OAKLAND



June 3, 2009

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## **Chapter 3: Local Market Context**

## 3.1 INTRODUCTION

This chapter describes the existing local market context in the Upper Broadway area, including the Broadway/Valdez District (Project Area) and nearby and surrounding areas. It also identifies requirements for developing successful destination retailing in the area and considers the opportunities, constraints, and issues posed by existing conditions.

The text is organized into the following four sections:

#### **Existing Conditions**

Identifying (a) the mix of uses and activities that represent already established markets in the area, and (b) the amounts and types of employment and population in the area currently.

#### **Trends and Recent Changes**

Identifying market trends in the area as evidenced by recent changes in activities, new developments and new tenancies, and future plans and projects.

#### Objectives for Destination Retailing on Upper Broadway and Requirements for Success

Setting forth the reasons for the City's pursuit of destination retailing in the area and identifying requirements for its success. This section draws from the earlier *Upper Broadway Strategy* by the Conley Consulting Group and team.

#### Opportunities, Constraints, and Issues

Evaluating the suitability and desirability of existing conditions in the Project Area for destination retailing, identifying the opportunities offered as well as the issues and constraints to be further addressed.

This chapter focuses on the local market context of the Project Area and surrounding areas. It does not address the broader citywide and regional markets for destination retailing and the other uses envisioned for Upper Broadway in the future. Those markets are being considered in the next work task, addressing market demand and feasibility for the desired new development.

## 3.2 EXISTING CONDITIONS

## 3.2.1 Established Markets in the Project Area and Surrounding Areas

The Project Area has a long history and as a result includes a distinctive mix of uses and activities — some that are doing well, some that are waning, and others that are just emerging. Many serve citywide and East Bay market areas as well as the Project Area and surrounding areas. Market interest in the area has reflected a number of factors, including its central location within Oakland, its role as the historic center of auto dealerships along Broadway Auto Row, its location at the northern end of Downtown, its proximity to Lake Merritt and the neighborhoods and activities around the lake, the ease of access from

3. LOCAL MARKET CONTEXT

neighborhoods in the Oakland/Berkeley hills, and its adjacency to Oakland's Pill Hill. The established markets and activity centers within and surrounding the Project Area are briefly described below and depicted on the diagram in Figure 3.1. (Also see the map of existing land uses in the Land Use Chapter 2.)

#### Home of Oakland's Historic Broadway Auto Row

Broadway is central to the Project Area, and for nearly a century this section of Broadway has been the focus of automobile sales and service in the City and the inner East Bay, and a major generator of sales tax revenues for the city's General Fund.

As a result, automobile dealerships and services historically have been predominant within the Project Area, although automobile industry trends as well as the recent economic downturn are significantly reducing automobile related activities in the Project Area.

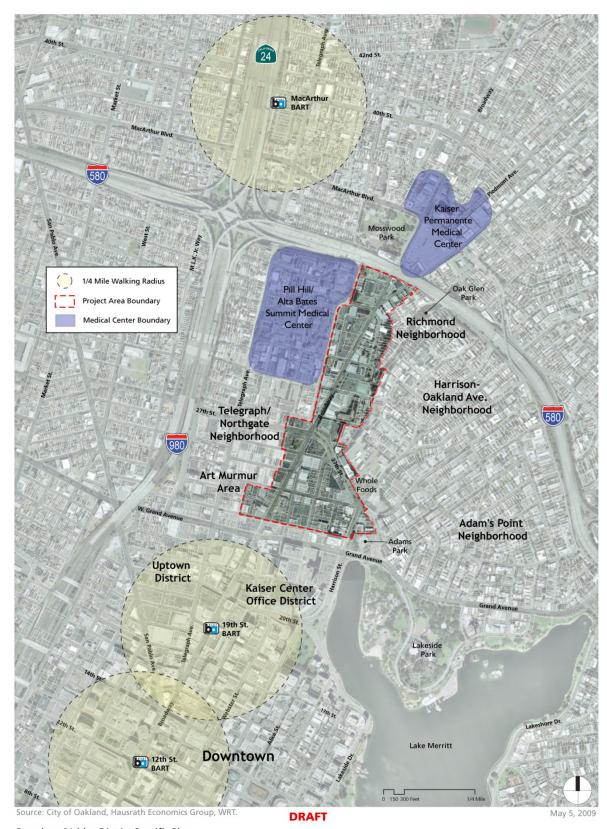
Currently, as of April 2009, there are nine auto dealerships offering numerous models of new cars, including: Honda, Acura, Mercedes Benz, Volkswagen, Audi, Mazda, Nissan, Chrysler Corp. (Chrysler, Dodge, Jeep), and GMC (Buick, Pontiac, Chevrolet, Cadillac). There also are used/pre-owned car dealers, auto repair facilities, and auto parts stores, as part of larger dealerships and as smaller, independent operations. In addition, there are several car rental establishments in the area. Most of the properties along Broadway, large frontages along 27<sup>th</sup> Street, and smaller properties on the side streets in the Project Area are, or were until recently, devoted to automotive and related uses.

#### **Major Hospital Medical Centers Nearby**

Healthcare also represents a well-established use in the area and a major employer. The Summit campus of Alta Bates Summit Medical Center is located adjacent to the northwest boundary of the Project Area in the area known as "Pill Hill." The 20-acre campus includes a hospital, outpatient services, and related medical uses and facilities, as well as a nursing college. Additional medical offices and related uses also are located in the surrounding area, including within the Project Area. In addition to Alta Bates Summit, a second major medical center, the Kaiser Permanente Oakland Hospital and Medical Center, is located just north of the Project Area, on the other side of I-580. Both medical centers bring a large number of employees, patients, and visitors into the area each day, many traveling through the Project Area. Both institutions are also in the process of expanding and incorporating state-required seismic upgrades to their facilities, and thus are making long-term commitments to remain in the area.

#### **Northern Edge of Growing Downtown**

The Project Area is located at the northern edge of Downtown Oakland and benefits from the increasingly positive energy, market interest, and new development that is taking place in nearby parts of Downtown. The Lake Merritt/Kaiser Center office district, which extends north to Grand Avenue directly south of the Project Area, is a major employment center within Downtown. A new office building was recently developed in this area (Center 21), and there are plans for additional office development on the Kaiser Center properties on Webster between 20<sup>th</sup> and 21<sup>st</sup> streets. There is also an emerging dining and entertainment district that includes the Uptown district and the area around Broadway and Grand Avenue.



Broadway/Valdez District Specific Plan
Figure 3.1: Local Context: Activity Centers



The entertainment portion is anchored by the Downtown's two historic theaters, the Paramount Theater and the recently re-opened Fox Theater. These are complemented by a growing number of restaurants, cafés, and bars including new establishments such as Luka's Tap Room, Franklin Square Wine Bar, Ozuma, Pican, and Mua which are clustered near the southwest corner of the Project Area. To a large extent, the vibrant nightlife and growing interest from commercial uses reflects the development over the last decade of new housing in Downtown, including the new Uptown neighborhood as well as several housing developments in the vicinity of Broadway and Grand Avenue (e.g., the Broadway Grand and 100 Grand).

#### **Housing Nearby and in Surrounding Areas**

In addition to the new housing being built in Downtown, there are long-established residential areas to the east, west, and north of the Project Area. These residential neighborhoods serve markets which value the area's proximity to: (a) employment in the Downtown and at the two medical centers, (b) Downtown entertainment and cultural activities, (c) recreational amenities of Lake Merritt, and (d) convenient regional transit to San Francisco and East Bay destinations via AC Transit and BART.

Housing in these neighborhoods is primarily in apartment buildings with five or more units (comprising 76 percent of all Downtown housing in 2000), while there also is a mix of lower-density, single family homes, duplexes, and three/four-plexes. Several enclaves of senior housing also are located in the area, including two high-rise complexes: Westlake Christian Terrace at Valdez and 28<sup>th</sup> and St. Paul's Towers southeast of the Project Area on Bay Place. The 'Harrioak' and Adams Point neighborhoods which occupy the hillsides east of the Project Area represent the most consistent residential pattern of generally higher-density apartments. There is housing in the Northgate neighborhood along Telegraph Avenue, on the west side of the Project Area, some of which is separated from the Project Area by Pill Hill. There are also established residential neighborhoods north of the Project Area, separated from it by the elevated I-580 freeway and bisected by commercial development along MacArthur Boulevard, Piedmont Avenue, and Broadway.

#### Institutional Uses

Institutional uses are prominent in the Project Area and nearby areas. They bring people to the area and provide visual landmarks that people associate with the area and its image. Because of the area's central location, several religious institutions have developed large facilities which serve congregations from surrounding areas and beyond. The largest of the religious institutions in the Project Area or immediate vicinity, include the First Presbyterian Church on Broadway at 27<sup>th</sup> Street, Temple Sinai at 28<sup>th</sup> and Webster Streets, the First Congregational Church on Harrison Street at 27<sup>th</sup> Street, the First Korean Christian Church at Fairmount and 29<sup>th</sup>, and St. Paul's Episcopal Church at Bay Place and Montecito. Just to the south of the Project Area, the newest addition is the recently constructed Cathedral of Christ the Light, covering two square blocks facing Lake Merritt, at Grand Avenue and Harrison Street. The Cathedral serves the Oakland Catholic Diocese, composed of Alameda and Contra Costa Counties, and includes a conference center and various parish facilities.

In addition to religious institutions, other institutions in the Project Area include the large YMCA facility on Broadway and 24<sup>th</sup> Street, and the Downtown Oakland Veterans Memorial building at Grand and

Harrison. The Veterans Building functions as a senior center and has an auditorium and classroom/meeting spaces used for a variety of community activities and functions.

#### **Commercial Uses**

Besides the many auto-related businesses in the Project Area, other commercial uses are relatively limited in the area. Existing commercial uses are of four types. First, there are larger citywide and regional service/commercial uses that have been in the Project Area for some time, including a plumbing repair/supply contractor, an electrical contractor, a paper supply company, and a label printing company. These value the area's central location. There also are two branch banks, and some smaller commercial uses in various locations along Broadway.

Secondly, there are newly emerging eating places and bars/lounges at the southern end of the Project Area which are part of blossoming nightlife in the Uptown/Upper Broadway area. New restaurants and bars/lounges have recently opened in locations on or around Grand/West Grand, Broadway, and Telegraph, and others are planned. There also are art galleries in locations between Broadway and Telegraph, and the monthly Art Murmur event (first Friday night of each month when galleries are open and street vendors and performers set up in the area) is centered at Telegraph Avenue and 23<sup>rd</sup> Street, just outside the Project Area.

Third, there is the new Whole Foods grocery store, recently developed just east of the Project Area, as an attractive renovation of an historic auto showroom building. The store is the newest and one of the largest grocery stores in Oakland. There also is a Grocery Outlet store in the Project Area, located on Broadway, in a former Safeway store. Fourth, to the west along Telegraph Avenue from 20<sup>th</sup> Street to 35<sup>th</sup> Street, there is a Korean business district that includes food markets, retail stores, and service businesses oriented toward the Korean population. The area serves nearby residents as well as people from a broader area.

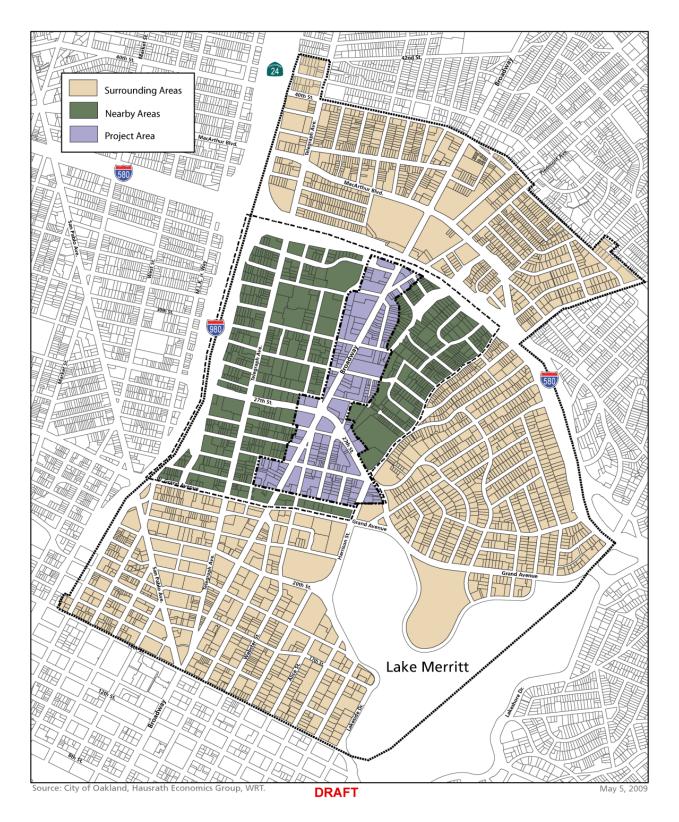
## 3.2.2 Employment and Population Currently

Employment and population data are available for the study areas as shown in the map in Figure 3.2. Because of its irregular boundaries, employment and population for the Project Area cannot be separately identified, but are reported with the data for Nearby Areas to the east and west on either side of Broadway. Data for Surrounding Areas are separately identified for areas in North Oakland (north to I-580 to approximately 40<sup>th</sup> Street), for the Adams Point neighborhood to the east, and for the nearby parts of Downtown (south of Grand Avenue to 14<sup>th</sup> Street).

### 3.2.2.1 Employment

#### **Project Area and Nearby Areas**

Employment in the Project Area and Nearby Areas totaled about 7,600 in 2005, as shown in Table 3-1. The following highlights points about employment in the Upper Broadway area including the Project Area and Nearby Areas.



Broadway/Valdez District Specific Plan

Figure 3.2: Economic Study Areas



TABLE 3-1 EMPLOYMENT IN THE STUDY AREA, 2005

	Employment, 2005						
		Medical	Other				
	Total	Services /a/	Services	Retail	All Other /b/		
Project Area and							
Nearby Areas							
East of Broadway	1,870	-	870	310	690		
Broadway to Telegraph	5,140	3,500	630	610	400		
West of Telegraph	<u>610</u>	<del>_</del>	380	80	150		
Subtotal	7,620	3,500	1,880	1,000	1,240		
Surrounding Areas							
In North Oakland	6,360	4,070	990	570	730		
Adams Point	2,880	-	2,110	180	590		
In Downtown	30,000	<del>_</del>	<u>13,870</u>	1,780	14,350		
Subtotal	39,240	4,070	16,970	2,530	15,670		
Total – Study Areas	46,860	7,570	18,850	3,530	16,910		
Total as % of Citywide	23%						
Citywide Total	207,640						

<sup>/</sup>a/ Estimated for major medical center areas for Kaiser Project EIR, 4/2005. Employment is headcount employment.

Source: Hausrath Economics Group; Oakland Cumulative Growth Scenario and Land Use Database, as updated for Downtown Cumulative Update 6/2006 and *MacArthur Transit Village EIR* 7/2007.

• Nearly half, 46 percent, of area employment is in medical services on Pill Hill, including employment at the Summit campus of Alta Bates Summit Medical Center and in medical uses nearby. The data show about 3,500 jobs in medical services in this area.

<sup>/</sup>b/ Includes employment in construction, finance/insurance/real estate, government, transportation/communications/utilities, wholesale trade, and manufacturing.

- Employment in auto-related businesses in the Project Area and Nearby Areas also represents a large share of area employment. Although specific data for auto-related activities are not available, it is estimated that about 2,300 to 2,500 jobs in the area are in auto-related businesses, representing about one-third of the jobs in the area overall.
- ◆ The rest of the employment in the area, about 1,600 to 1,800 jobs, are in a variety of business activities including retail and service businesses, restaurants/bars, institutional/non-profit uses, fitness/exercise uses, clubs, building materials/construction, and professional services.

Since 2005, it is estimated that health-related employment and restaurant/bar-lounge/arts employment have increased somewhat in the Project Area and Nearby Areas, and that auto-related employment has declined.

#### **Surrounding Areas**

There is substantially more employment in the Surrounding Areas, totaling nearly 40,000 jobs in 2005. This total is likely to be a little higher in 2009, due to growth in Downtown.

The Kaiser Permanente Medical Center area just north of I-580 supports over 4,000 jobs in medical services. When combined with the medical activities nearby on Pill Hill, there are over 7,500 jobs in medical services in the study area overall.

The nearby parts of Downtown below Grand Avenue to 14<sup>th</sup> Street include 30,000 jobs, the majority of which are in the office sector. There also is Downtown employment in restaurants, entertainment, retail, and other uses.

#### **Total for Study Area**

Overall, employment in the total Study Area (i.e. Project Area, Nearby Areas, and Surrounding Areas) includes about 47,000 jobs, representing about 23 percent of citywide employment in Oakland. (See Table 3-1.)

#### 3.2.2.2 Households and Population

#### **Project Area and Nearby Areas**

There were over 3,620 households and 6,850 people residing in the Project Area and Nearby Areas in 2005, as summarized in Table 3-2. Just over half reside in areas to the east of Broadway, and somewhat less than half live to the west of Broadway, and most of those to the west of Telegraph Avenue. Between 2006 and 2009, 418 housing units were built in the area, although the new units are not yet fully occupied. When occupied, there will be a total of approximately 4,020 households in the area and a population of approximately 7,530 people (see Table 3-3).

#### **Surrounding Areas**

The Surrounding Areas to the north and east are predominantly residential in character, particularly the Adams Point neighborhood to the east and parts of North Oakland above I-580 to the north. There also is housing in Downtown, particularly in the Uptown District and areas around Lake Merritt (to the south of

TABLE 3-2 HOUSEHOLDS AND POPULATION IN THE STUDY AREA, 2005

	Households	Population	Household Population	Persons per HH	Employed Residents	Employed As % Total Pop.
Project Area and Nearby Areas						
East of Broadway	2,050	3,590	3,590	1.75	2,050	57%
Broadway to Telegraph	550	1,330	1,010	1.8	480	36%
West of Telegraph	1,020	1,930	1,920	1.9	<u>750</u>	39%
Subtotal	3,620	6,850	6,520	1.8	3,280	48%
Surrounding Areas						
In North Oakland	3,430	6,190	6,090	1.8	3,750	61%
Adams Point	6,910	11,310	11,120	1.6	7,140	63%
In Downtown	4,880	7,900	7,410	1.5	3,560	45%
Subtotal	15,220	25,400	24,620	1.6	14,450	57%
Total – Study Areas	18,840	32,250	31,140	1.65	17,730	55%
Total as % of Citywide	12%	8%				
Citywide Total	154,730	412,430	405,100	2.6	180,650	44%

Source: Hausrath Economics Group; Oakland Cumulative Growth Scenario and Land Use Database, as updated for Downtown Cumulative Update 6/2006 and *MacArthur Transit Village EIR* 7/2007.

The Kaiser Center office district). Overall, there were 15,200 households residing in Surrounding Areas in 2005, with a population of 25,400 people (see Table 3-2). There also has been new housing built since 2005 in Surrounding Areas, and when it is fully occupied, there will be nearly 16,000 households and 26,700 residents in Surrounding Areas (see Table 3-3). Most of the new housing is in the new Uptown neighborhood of Downtown.

#### **Totals for Study Area**

Overall, households in the Study Area (i.e. Project Area, Nearby Areas, and Surrounding Areas) totaled 18,840 in 2005, and represented about 12 percent of total households citywide. They included 32,250 residents, about eight percent of the city's population. These totals are shown in Table 3-2.

TABLE 3-3
HOUSEHOLDS AND POPULATION IN THE STUDY AREA, 2009+

	Projec	t Area										
	and Near	by Areas	Surroundi	ng Areas	Total							
	HHs	Pop	HHs	Pop	HHs	Pop						
2005	3,620	6,850	15,220	25,400	18,840	32,250						
In Housing Built 2006-April 2009	400	680	760	1,290	1,160	1,970						
Totals When New Housing Occupied	4,020	7,530	15,980	26,690	20,000	34,220						
Source: Hausrath Economics Group; City	of Oakland.			Source: Hausrath Economics Group; City of Oakland.								

#### Housing, Household, and Population Characteristics

Characteristics of the households and population in the Study Area highlight the market characteristics of those attracted to live in this part of Oakland. Key points are summarized below and exemplified by the data in Table 3-2 and the Census data summarized in Table 3-4.

- Most housing in the Study Area is in higher-density, multi-family buildings. The large majority of units are renter-occupied (88 percent in 2000 and most new housing since then although some new units can eventually be sold as condominiums).
- Households are smaller than average citywide (1.6 persons per household overall compared to the citywide average of 2.6 persons per household). This reflects the types of housing in the area and the demographic characteristics of residents.
- Households in the area have fewer children and proportionally more working adults. There also are proportionally more seniors residing in the Study Area.
- ♦ Housing in the eastern and northern parts of the Study Area (Adams Point, North Oakland, and Nearby Areas east of Broadway) have relatively high shares of residents who are employed (57 to 63 percent in 2005). These neighborhoods have been attractive to younger, working adults and to empty nesters. These areas offer proximity to Downtown places of work and are well served by public transit. Housing rents and prices also are higher in these areas, as are the incomes of residents.
- ♦ Housing in the western and southern parts of the Study Area (Nearby Areas west of Broadway and Telegraph in particular, and also parts of Downtown) have included relatively lower shares of residents who are employed (36 to 45 percent in 2005). Incomes are lower for residents in these areas as well (falling below citywide averages in 2000). Recent, new housing in these areas is attracting higher-income households with more employed residents.

#### TABLE 3-4 AREA RESIDENT DEMOGRAPHIC DATA AND AREA HOUSING DATA, 2000

	Project Area and Nearby Areas		Surrounding Areas															
	East of Broa	adway	West of Bro	adway	Subtot	al	North Oak	land	Adams P	oint	Downto	wn	Subtot	al	Study Ar	eas	Oaklan	ıd
Households	2,051		1.345		3,396		3,411		6.909		4.647		14,874		18.363		150,790	
Household Population	3,546		2,485		6,031		5,978		11,000		6,948		23,816		29,957		392,309	
Group Population	10		325		335		96		139		379		614		949		7,175	
Total Population	3,556		2,810		6,366		6,074		11,139		7,327		24,430		30,906		399,484	
Persons/Household	1.73		1.85		1.78		1.75		1.59		1.50		1.60		1.63		2.60	
Age:																		
Under 18	458	12.9%	463	16.5%	921	14.5%	786	12.9%	1,056	9.5%	742	10.1%	2,579	10.6%	3,505	11.3%	99,759	25.0%
18 - 34	1,269	35.7%	913	32.5%	2,182	34.3%	2,464	40.6%	4,290	38.5%	2,272	31.0%	8,982	36.8%	11,208	36.3%	111,106	27.8%
35 - 49	808	22.7%	591	21.0%	1,399	22.0%	1,516	25.0%	3,034	27.2%	1,735	23.7%	6,250	25.6%	7,684	24.9%	91,822	23.0%
50 - 64	357	10.0%	365	13.0%	722	11.3%	807	13.3%	1,615	14.5%	1,100	15.0%	3,498	14.3%	4,244	13.7%	55,009	13.8%
65 and over	664	18.7%	478	17.0%	1,142	17.9%	501	8.2%	1,144	10.3%	1,478	20.2%	3,121	12.8%	4,265	13.8%	41,788	10.5%
Race:																		
White	1,162	32.7%	678	24.1%	1,840	28.9%	2,686	44.2%	4,515	40.5%	1,857	25.3%	9,013	36.9%	10,898	35.3%	93,953	23.5%
Black	1,240	34.9%	1,376	49.0%	2,616	41.1%	1,671	27.5%	3,907	35.1%	2,706	36.9%	8,237	33.7%	10,900	35.3%	140,139	35.1%
Asian	621	17.5%	314	11.2%	935	14.7%	799	13.2%	1,187	10.7%	1,600	21.8%	3,581	14.7%	2,736	8.9%	60,393	15.1%
Hispanic	309	8.7%	249	8.9%	558	8.8%	546	9.0%	854	7.7%	778	10.6%	2,168	8.9%	4,521	14.6%	87,467	21.9%
Two or More Races/Other	224	6.3%	193	6.9%	417	6.6%	372	6.1%	676	6.1%	386	5.3%	1,431	5.9%	1,851	6.0%	17,532	4.4%
Owner-occupied Units	152	7.4%	52	3.9%	204	6.0%	626	18.4%	1,104	16.0%	266	5.7%	1,995	13.4%	2,200	12.0%	62,489	41.4%
Renter-occupied Units	1,899	92.6%	1,293	96.1%	3,192	94.0%	2,785	81.6%	5,805	84.0%	4,381	94.3%	12,879	86.6%	16,163	88.0%	88,301	58.6%
Total Housing Units	2,137		1,454		3,591		3,539		7,231		4,939		15,709		19,300		157,508	
Single Family (includes detached and attached)	218	10.2%	90	6.2%	308	8.6%	671	19.0%	442	6.1%	147	3.0%	1,260	8.0%	1,568	8.1%	78,070	49.6%
2-4 Units	254	11.9%	313	21.5%	567	15.8%	889	25.1%	555	7.7%	178	3.6%	1,622	10.3%	2,189	11.3%	28,973	18.4%
5+ Units	1,665	77.9%	1,051	72.2%	2,716	75.6%	1,971	55.7%	6,234	86.2%	4,614	93.4%	12,819	81.6%	15,535	80.5%	50,009	31.8%
Mobile Homes/RV's/Boats/Vans/Etc.	0	0.0%	0	0.0%	0	0.0%	8	0.2%	0	0.0%	0	0.0%	8	0.1%	8	0.0%	456	0.3%
Mean HH Income	\$44,639		\$27,228		\$37,743		\$49,912		\$48,443		\$32,082		\$43,971		\$42,597		\$57,336	
Income/Citywide Income (\$57,336)	0.78		0.47		0.66		0.87		0.84		0.56		0.77		0.74		1.00	
Mean HH Income per Capita	\$25,819		\$14,737		\$21,253		\$28,479		\$30,427		\$21,457		\$27,462		\$26,111		\$22,038	
Per Capita Income/Citywide Per Capita Income	1.17		0.67		0.96		1.29		1.38		0.97		1.25		1.18		1.00	

NOTE: Housing unit type data (e.g., 2-4 units, 5+ units, etc.) is not available for Census blocks. Therefore, housing unit types were estimated using percentage distributions for the block groups most closely approximating the analysis areas.

Source: 2000 U.S. Census; Hausrath Economics Group

## 3.3 TRENDS AND RECENT MARKET CHANGES

The Project Area itself is primarily an older commercial district, dominated by auto dealerships and services. Trends in the automobile industry and the recent economic downturn are reducing auto-related business activities here. Dealerships have closed or left the area, others have cut back operations, and others have improved facilities and/or changed locations within the area. There are now vacant showrooms and other storefronts along parts of Broadway

There had been no new development in the Project Area for many years, until recent new housing development occurred on Broadway at the southern end near Downtown. The new development included new eating and drinking places in the ground-floor space. On the side streets off of Broadway, there are large areas of surface parking remaining among older auto repair garages and older residential uses. Some of those sites have been under consideration for new housing development.

Market trends have been stronger in nearby and surrounding areas. There is investment underway in the hospital medical centers, new housing development has occurred, a destination dining and club district is beginning to take shape, there are new art galleries in the area, and a major new Whole Foods supermarket was recently developed.

Market conditions and market interests in the area are evidenced by recent changes and new developments and tenancies. These are described below, and provide market context for developing the Specific Plan.

## 3.3.1 Auto Dealerships and Broadway Auto Row

#### 3.3.1.1 Local/National Factors and Trends

Local and national factors and trends are affecting the viability of Broadway Auto Row. These are of three types, as described below.

#### Changes in U.S. Auto Industry Underway for Some Time Now

National trends in the automotive industry have been resulting in a reduction in the number of auto dealerships in the U.S., and particularly in the number of smaller, independent dealerships that are often located in older, urban centers like Broadway Auto Row. The following trends have been occurring:

- The number of dealerships has been declining.
- The remaining dealership base has been increasingly dominated by larger, well-financed dealers, often with multiple facilities.
- Internet marketing and sales have affected product distribution and reduced in-store sales at dealerships.
- Leasing and used car sales have gained in importance at the expense of new car sales, and car services and parts sales have become more important to dealer revenues.

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Recognizing these trends, proactive steps were undertaken in the late 1990s/early 2000s to enhance Broadway Auto Row and support local dealerships, including the installation of streetscape improvements along Upper Broadway, joint advertising efforts with support from the public sector, and a façade improvement program (which continues). Plans also were made to develop a new auto mall on the former Oakland Army Base to provide larger, modern facilities with freeway accessibility and visibility. (These plans were not implemented, and no longer appear likely to be, as discussed later in this section.)

#### Changes Locally Affecting Land Values and Developer Interest in Auto Row Sites

Since the late 1990s/early 2000s, there has been increased interest in higher-density housing development in Downtown Oakland, due to market factors and City initiatives under the 10K Housing program. This interest extends from Downtown into the Project Area and further northward into North Oakland. Not only have these factors resulted in a substantial increase in Downtown housing, land values in Downtown and along Upper Broadway also have increased substantially as has developer interest in Auto Row properties for future housing development. City land use policies allow higher-density residential development along Broadway Auto Row.

Some Auto Row properties at the southern end of the Project Area were purchased for higher-density housing developments, some of which have been constructed while others are approved and could be constructed when the market recovers. In addition to affecting land values, the plans for new housing have directly displaced some auto uses on Broadway.

#### **Recent Economic Downturn Significantly Impacting Auto Sales**

The recent economic downturn and credit crisis, as well as the high gas prices at the beginning of the downturn, have had significant negative impact on auto sales, nationwide as well as in Oakland. Taxable sales data for the Project Area indicate that auto and auto-related sales for Broadway Auto Row in 2008 of \$217 million are down 38 percent from sales of \$352 million in 2001.

Poor economic performance in the auto industry and the lack of financing have also contributed to the demise of plans for a new auto mall at the former Oakland Army Base as was being planned to provide new, modern facilities for the relocation and expansion of current Auto Row dealerships.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Based on taxable retail sales data from the California State Board of Equalization as available to the City of Oakland from the HdL Companies. These revenues include taxable sales for new and used cars, auto parts and auto repair, and auto leasing and rentals.

<sup>&</sup>lt;sup>2</sup> An example of the severity of the economic problems for auto dealerships was provided by the closing of a new Toyota dealership recently built along I-880 near the Oakland Coliseum. The new dealership was forced to close after just weeks at its new location (and before its grand opening) because of the loss of financing for its inventory. Newspaper reports identify that many dealers have closed across the country due to the poor economy and the lack of financing.

3. LOCAL MARKET CONTEXT

The recent bankruptcy filings by Chrysler Corporation and General Motors, and announcements about dealer closures, have introduced more uncertainties for the future of the American auto industry and for dealerships on Broadway Auto Row.

#### 3.3.1.2 Implications of Recent Trends

The severity of the current economic downturn, combined with longer-term automobile industry trends, have significantly affected auto-related business activities in the Project Area. Auto sales and related business activities are down significantly in the Project Area, dealerships have closed or left the area, and others have cut back operations as have related auto repair and parts businesses. There are now noticeable vacancies of showrooms and other storefronts along parts of Broadway. There is uncertainty as to the length and depth of the current recession, and as to the further effects of bankruptcy filings by American automakers. Recognizing the uncertainties going forward, there could be two types of implications for Broadway Auto Row:

- Recent events and trends could result in the closing of additional dealerships and other autorelated businesses. Others that remain could reduce their operations and facilities. These types of changes would result in additional properties along Broadway being available for new uses.
- Stronger dealerships in Oakland are likely to remain viable and could continue to value Broadway locations for their businesses. Recent economic events and trends could encourage viable dealerships to remain at their current Auto Row locations longer than they might otherwise, given the difficulties of relocating and financing new facilities. If so, this trend could add difficulties for developing major destination retailing in parts of the Project Area as envisioned by the Upper Broadway Retail Strategy (further described later in this chapter). Beyond the retail objectives for the Specific Plan, there also could be public policy reasons to encourage dealerships to remain on Auto Row because of other benefits to the City that would be lost if relocations elsewhere in the City were not feasible (benefits from retaining sales tax revenues and consumer choices and services for residents).<sup>3</sup>

## 3.3.2 New Housing

Recent market interest in new development in the Study Area has been focused primarily on the development of new housing. As mentioned above, there has been increased market interest in higherdensity housing development in Downtown that has extended northward into the Project Area. The presence of large sites in lower-density auto uses in the area is attractive to housing developers. Further, City land use policy allows and encourages higher-density housing in the area.

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<sup>&</sup>lt;sup>3</sup> Taxable sales from auto dealers and auto supplies represent a significant share of total taxable sales in Oakland, about 12 percent in recent years, down from about 17 percent in 2000/2001. A large share of those sales occur in businesses on Broadway Auto Row.

#### **Substantial New Housing Being Built**

Since 2000, 640 new units have been built in the Project Area and Nearby Areas, in 11 different projects (see Table 3-5). The new construction has occurred at the southern end of the Project Area and Nearby Areas, nearest Downtown (in the vicinity of Broadway, Grand Avenue, and 23rd Street) and along Telegraph Avenue in the southwestern parts of the Nearby Areas. There are also 1,021 additional units in seven approved projects in the area. If the approved projects are built, they would combine with already completed projects to add 1,645 units, and increase the housing supply in the Project Area and Nearby Areas by a significant 44 percent. (The locations of new housing projects are shown on the map of development projects in the Land Use Chapter 2.)

TABLE 3-5
NEW HOUSING DEVELOPMENT IN THE
PROJECT AREA AND NEARBY AREAS

	Housing Units					
	Project Area	Nearby Areas	Total			
Completed 2000-April 2009 /a/	48	592	640			
Approved Projects, as of April 2009	<u>672</u>	349	1,021			
Total New Units	720	941	1,661			
To Be Removed	(16)	-	(16)			
Net Additional Units	+704	+941	+1,645			
Existing Housing Units, 2000			3,701			
Percent Increase from New Development			+44%			
/a/ Includes 100 Grand project being completed in April 20	009.					
Source: City of Oakland; Hausrath Economics Group.						

#### **Increasing Land Values Driven by the Housing Market**

The demand for new housing and the success of Downtown housing developments increased developer interest in sites in the Project Area and Nearby Areas, and increased the value of land there. Higher-density housing supports higher land values than lower-density auto-related and other commercial uses. The substantial increase in land values in the Upper Broadway area since the late 1990s and early 2000s has been driven by the housing market.

#### **Major Downturn in the Housing Market**

Since 2007, the major downturn in the national housing market and now the economy overall have slowed the absorption of new units, reduced sales prices, and resulted in new for-sale housing being rented or leased, at least for the foreseeable future. The effects have been similar throughout Downtown and the Study Area as well as other parts of Oakland.

While the long-term potentials for housing development in the Project Area and Nearby Areas are strong, the timing for recovery of the housing market is uncertain and new projects are unlikely to move forward for several years. Factors involved include the following:

- Many recently built units remain available as absorption has dropped at the same time that a large number of new units have come on the market in Oakland. The large numbers of new housing units built recently in Downtown and surrounding areas may have exceeded demand in the near term, even without the market downturn.
- High vacancies in new projects, declines in sales prices and rents, and problems securing financing, make it infeasible to develop new housing projects at the present time and for the foreseeable future.
- Already approved projects in the Project Area, Nearby Areas, and in Downtown will remain on hold for a while,<sup>4</sup> and some sites may even become available for other uses.
   Upward pressures on land values in the study areas will drop as well, for the near future.
- When the housing market recovers, many of the large number of already approved but unbuilt projects in the pipeline will likely be built before other new developments occur.
- In the short term, land values will drop, but not to the lower levels which can be paid by retail-only projects. The City's desire to encourage higher-density downtown housing will keep land values higher, requiring consideration of upper-floor residential and office uses over retailing, as well as public subsidies, in order to make major retail projects feasible.

Current housing market conditions could affect the timing and nearer-term feasibility of mixed-use developments with major retail as envisioned for the Project Area in the Upper Broadway Strategy. Development of housing will be delayed until the market recovers. The higher costs of vertical mixed use could discourage mixed use developments for a while into the future. These issues will be further considered in the next task addressing market demand and feasibility issues.

## 3.3.3 Hospital Medical Centers

The major hospital medical centers have long-term commitments in the area and both have seismic upgrade and master plan projects underway for the future.

♦ *Alta Bates Summit Medical Center* is in the planning stages of a seismic upgrade and master plan program for their Summit Campus on Pill Hill which will add approximately 400,000 sq.ft. to the campus. The proposal is summarized in Table 3-6 and includes the following:

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<sup>&</sup>lt;sup>4</sup> Entitled projects in the pipeline in Oakland were recently granted a blanket extension through 2011 in the hope that the housing market will have improved by then.

- 3. LOCAL MARKET CONTEXT
- New patient care pavilion to include replacement acute care hospital facilities and a relocated/remodeled emergency department;
- New parking structure;
- New medical office building;
- New space for Samuel Merritt College; and
- Fitness center, street-level retail space, and green space.

The improvements will satisfy state seismic standards, modernize and improve existing facilities, and accommodate growth in patient care.

TABLE 3-6 ALTA BATES SUMMIT MEDICAL CENTER PROPOSED CAMPUS MASTER PLAN						
	Existing	Build-Out				
	2009	2030	Change			
Site Acres	20.40	21.20	+0.80			
Building Area (SF)	1,437,659	1,821,757	+384,098			
Hospital Beds	537	501	(36)			
Medical Offices	43	147	+104			
Parking Spaces	2,189	2,995	+806			
Total Employment (FTE)	2,812	3,241	+429			
Source: Reissued Notice of Preparation Campus Seismic Upgrade and			al Center, Summit			

- ♦ Kaiser Permanente Oakland Medical Center (Kaiser OMC) is already underway with its medical center replacement project. The project, summarized in Table 3-7, will add approximately 600,000 sq.ft. to its facilities, including the phased redevelopment of the existing Kaiser OMC to provide a new, state-of-the-art medical center which includes the following:
  - New medical services building with retail space and parking garage;
  - New hospital, outpatient services offices, a central utility plant, and parking garage;
     and
  - New central administration medical services building, plant, and parking facility.

Patient Visits per Year

Visitors per Year

+217.643

+237,190

The project will meet state seismic mandates, provide new, modern patient facilities, and accommodate growth in patient care.

TABLE 3-7 KAISER PERMANENTE OAKLAND MEDICAL CENTER REPLACEMENT PROJECT MASTER PLAN						
	Existing	Build-Out				
	2004/05	2020	Change			
Site Acres	16.3	20.6	+4.3			
Building Area (SF)	1,165,746	1,780,455	+614,709			
Hospital Beds	346	346	-			
Medical Offices	370	410	+ 40			
Parking Spaces	2,656	3,584	+928			
Total Employment (headcount)	4,072	5,860	+1,788			
Total Employment (FTE)	3,365	4,553	+1,188			

Source: Kaiser Foundation Hospitals, 2005; *Kaiser Permanente Oakland Medical Center Replacement Project Draft EIR*, March 2006.

1,181,565

778,691

1.399.208

1,015,881

The medical centers will bring growing numbers of employees, patients, and visitors into the area over time. They serve citywide markets and draw from a larger, regional area for specialized medical services. Data for the Kaiser Medical Center identify approximately 1.2 million patient visits per year currently, growing to 1.4 million by 2020, and approximately 800,000 additional visitors per year, increasing to about 1.0 million visitors by 2020 (visitors are additional people accompanying or visiting patients). The Kaiser Medical Center also employs over 4,000 workers currently, and employment is anticipated to increase to nearly 6,000 workers by 2020 (see Table 3-7).

The Summit Campus of Alta Bates Summit Medical Center supports high levels of activity and employment in the Upper Broadway area. Besides the medical center facilities themselves, there are additional medical offices and support facilities on Pill Hill and nearby, such as the 12-story medical office building on Webster Street with a six-level parking structure that extends down to Broadway, and medical offices in an eight-story former financial building on Grand Avenue at Broadway. Completion of the new campus master plan will increase medical offices in the area, particularly on the medical center campus (see Table 3-6). Employment, patient visits, and visitors will also show increases over time.

#### 3. LOCAL MARKET CONTEXT

#### 3.3.4 Commercial Uses

Except for the trends affecting the auto industry, not much has changed for the other, existing types of commercial uses in the Project Area. Many are in the area because they value its central location and because of relatively low rents and the availability of commercial space.

Over the past few years, market changes in Nearby and Surrounding Areas have begun to extend into the Project Area. Market trends have shown growing support for new eating places, bars, and clubs in the Project Area and Nearby Areas and for a major new upscale grocery store just outside the Project Area. . .

#### Eating Places/Bars, Lounges, and Clubs

New residential development Downtown and in the Project Area and Nearby Areas has brought new residents and added market support for new eating places, bars, and clubs. The recent re-opening of the Fox Theater and the success of early entrants into the marketplace (such as Flora restaurant in the Floral Depot building across from the Fox Theater) have helped attract a number of new establishments to the Uptown and Upper Broadway areas. Further, proximity to the Downtown office district is also an attraction, generating lunchtime business as well as after work patronage.

There is blossoming nightlife in the Uptown area and the beginning of a destination dining and club district. This energy is extending northward into the Upper Broadway area. There are a number of new establishments in locations around Broadway and Grand/West Grand Avenue, and others located around Telegraph Avenue and 20<sup>th</sup> Street. New establishments include some that have recently opened in the area and others that are planned. Several are outposts for chefs and restaurateurs with popular restaurants in San Francisco, Berkeley, and elsewhere in Oakland. The area and the new establishments have a very urban, big-city feel. Some are offering an East Bay alternative to a trip across the Bay to San Francisco. They attract patrons from throughout Oakland and the Inner East Bay.

Table 3-8 lists restaurants and clubs already located or planned in the Uptown/Upper Broadway district, between Broadway and Telegraph from around 19<sup>th</sup> Street on the south to 23<sup>rd</sup> Street on the north. The list also includes plans for a new outlet for a popular bakery already located in Oakland's Temescal district.

#### Art Galleries and Art Murmur Events

The Uptown/Upper Broadway area also is home to numerous art galleries and the monthly Art Murmur event. This event occurs on the first Friday night of every month, when galleries are open late and street vendors and street performers set up in the area. The event draws large numbers of people, and has enhanced the area's visibility and image. The epicenter for Art Murmur is Telegraph Avenue and 23<sup>rd</sup> Street, just outside the Project Area, and the galleries are located from 19<sup>th</sup> Street to 40<sup>th</sup> Street along and between Telegraph Avenue and Broadway.

TABLE 3-8
RESTAURANTS, BARS, AND CLUBS IN
THE UPTOWN/UPPER BROADWAY AREA

Establishment	Open	Planned	Address
Luka's Taproom & Lounge	X		2221 Broadway
Ozumo	X		2295 Broadway
Pican	X		2251 Broadway
Bakesale Betty		X	2218 Broadway
Era Art Bar & Lounge	X		19-23 Grand Avenue
Farley's		X	33 Grand Avenue
Brown Sugar Kitchen		X	43-45 Grand Avenue
Vo's Restaurant	X		59 Grand Avenue
Mua Restaurant & Bar	X		2442a Webster Street
Mimosa Champagne Lounge		X	2355 Broadway
The Vibe Lounge	X		2272 Telegraph Avenue
Ave Restaurant & Bar	X		2022 Telegraph Avenue
The Uptown (club)	X		1928 Telegraph Avenue
Flora Restaurant	X		1900 Telegraph Avenue
Den at the Fox	X		Telegraph and 19th
Up to 3 new restaurants		X	19 <sup>th</sup> and Telegraph

#### New Whole Foods Store

A new 56,000-sq.-ft. Whole Foods grocery store was recently developed just to the east of the Project Area, on Bay Place and Harrison Street, at 27<sup>th</sup> Street. The store is the newest and one of the largest grocery stores in Oakland. It was developed as a renovation of the historic Cox Cadillac auto showroom.

The new Whole Foods store helps set the stage for additional retail development in the area. Its success can help attract other retailers to the area, and provides evidence that there is market support for retailing in the area. Its attractive design and architecture in a visible location enhances the attractiveness of the surrounding areas and sets a tone and example for future development.

#### 3.3.5 Downtown Office District

The Downtown office district just to the south of the Project Area represents the largest concentration of office employment in the region, outside of downtown San Francisco. Downtown workers provide patrons for eating places, clubs, and retail activities nearby. They also provide markets for new housing Downtown and in the Upper Broadway area. Office activities in Downtown Oakland include both private sector and government offices.

Office employment Downtown is projected to grow in the future. Total employment Downtown<sup>5</sup> of approximately 71,700 in 2005 is projected to increase to 96,600 by 2025, an increase of about 25,000 jobs. Office activities account for the large majority of Downtown employment.

#### 3.3.6 Institutional Uses

The institutional uses in the area are remaining active. A major new facility was recently built in the area, and an existing facility is underway with an expansion and renovation project.

The new Catholic Cathedral of Christ the Light was recently built on Lake Merritt at Grand Avenue and Harrison Street, just to the south of the Project Area. It serves parishioners from Nearby Areas and throughout Oakland as well as parishioners from throughout the Alameda-Contra Costa County Diocese. The new cathedral provides further evidence of substantial new investment in the area. Its magnificent design has added a new landmark in Oakland. Since opening in 2008, many visitors have come to Downtown Oakland to see the new cathedral.

The Jewish Temple Sinai just outside the Project Area at 28<sup>th</sup> and Webster Streets, is underway with an expansion and renovation project to expand and modernize their facility. Using two properties adjacent to the current site, they are creating a new campus to include educational facilities (pre-school, other classrooms), a new chapel, teen and adult lounges, a library, art room, offices, parking, and outdoor spaces.

## 3.4 OBJECTIVES FOR UPPER BROADWAY

In 2006, the Oakland City Council decided to make retail recruitment and development a high priority for the City. A consultant team led by Conley Consulting Group was hired to evaluate retail enhancement opportunities and create an action plan to implement retail revitalization activities across the City. In 2008, the Citywide Retail Enhancement Strategy was completed. In 2007, the Upper Broadway Strategy was released as the first component of the citywide strategy. It is the Upper Broadway Strategy that provides the direction for preparing this Specific Plan.<sup>6</sup>

The following summarizes the retail objectives for Upper Broadway as set forth in the Upper Broadway Strategy and adopted by the City Council. It also identifies requirements to successfully meet the objectives of the Upper Broadway Strategy. This section sets the stage for evaluating existing conditions and identifying opportunities, constraints, and issues in the last section of this chapter. The market analysis report (in a later task) will summarize key market data for the Upper Broadway Strategy, as provided in the earlier Conley report.

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<sup>&</sup>lt;sup>5</sup> Downtown includes the area bounded by Grand Avenue on the north, Lake Merritt and the Channel on the east, the Estuary on the south, and I-980 on the west. The forecasts are from the Oakland Cumulative Growth Scenario and Land Use Database, as updated for Downtown Cumulative Update 6/2006.

<sup>&</sup>lt;sup>6</sup> Upper Broadway Strategy, A Component of the Oakland Retail Enhancement Strategy, prepared for the City of Oakland by Conley Consulting Group, JRDV Architects, Strategic Economics, and Colliers International, September 2007.

## 3.4.1 Goal of Re-Establishing Destination Retailing in Oakland

The City Council has given high priority to re-establishing destination retailing in Oakland. The objective is to reverse the high rate of retail leakage by creating a critical mass of retail selection in Oakland that will attract residents and others to shop within the city.

## 3.4.2 Upper Broadway Retail Opportunity

Upper Broadway was identified in the Conley analysis as the City's single best opportunity to capture destination retailing.

- The area offers the opportunity to create a major retail environment at/near the center of Oakland, along Broadway, the city's Main Street, and in proximity to Downtown.
- There is significant land area potentially available for new development if and when auto dealers relocate or leave the area.
- The area offers opportunities to take advantage of both local and regional access by car, transit, and bicycle.

The Upper Broadway Strategy report identified three development alternatives that were all designed to define a strong pedestrian-oriented urban vision supporting new retail in the Project Area. The three alternatives were designed around different retail programs and intents. The alternatives were presented to the City, reviewed in detail, and a decision was made as to the preferred development alternative for this Specific Plan effort.

The City's desired strategy for Upper Broadway retail development is the concept of *Urban Mixed Use With Major Retail*. This strategy is Alternative 1 in the 2007 Conley report. The intent is to create destination, comparison goods retail in a lifestyle format. The development concept is to be based on a strong, pedestrian-oriented urban vision that provides the shopping environment of successful retail streets. The intent is for anchored, continuous comparison goods retail in a lifestyle format along major streets. Restaurant and entertainment uses can also be included. Mixed-use building types are envisioned with housing over retail to create density and the land values needed for a feasible project.

## 3.4.3 Requirements for Success

There are several requirements to successfully meet the City's objectives for re-establishing destination, comparison goods retailing in Oakland as envisioned in the Upper Broadway Strategy. They include the following:

#### ♦ A critical mass of retail.

The scale of new retail needs to be large enough to attract shoppers and compete with existing retail in other areas. A minimum of 450,000 sq. ft. was identified in the Conley report, with potential for up to a million sq. ft. of retailing. The market analysis under the next task identifies a minimum of 1.0 million sq. ft. to be able to establish and sustain a successful comparison goods *retail district* over time.

#### ◆ An appropriate tenant mix and coordinated merchandising plan.

The tenant mix must be appropriate to the preferences of the customer base. The Conley analysis identifies middle to upper-end consumers as the target market, as they are currently poorly served in Oakland. Retail in multiple buildings needs to be designed with a unified merchandising theme and coordinated so as to serve a recognizable market niche or cluster of related niches.

#### A layout and configuration that supports successful retailing.

The shopping environment of successful retail streets should include contiguous, active storefronts and an attractive, pedestrian-scale environment. Larger spaces for anchors and/or mini-anchors should be sited in key locations to draw shoppers and to allow for smaller stores to be located between anchors and nearby.

# ◆ Attractive design for new development that creates a "place" and provides a desirable downtown shopping environment.

The design for new development needs to be higher quality and befitting to a downtown, center city location. Mixed-use buildings should recognize the desirability of sunlight on the street for shoppers. Where possible, historic and other attractive existing buildings should be retained and incorporated into the new development. The design should focus on creating a "place" that is attractive to the desired customer base.

#### Adequate vehicular access and parking, supplemented by transit access.

Vehicular access and parking are important to shoppers and retail tenants. The Conley analysis identifies that the major customer-attracting retail stores are likely to require parking at about four spaces per thousand square feet of retail space. In an urban context, parking should be accessible but not a dominant feature of the development.

#### Shoppers and merchants who are free of concern about crime.

For shoppers, this means freedom from fear of crime against persons or possessions. For merchants, this means freedom from fear of theft of merchandise and from fear for the safety of employees and shoppers. Concern about crime relates to perception of crime as well as to actual crime.

#### Ongoing management performed at high standards.

This includes ongoing marketing and promotion, tenanting and re-leasing, security, and maintenance and upkeep. In an urban context, management needs to be centralized over multiple properties/buildings and include common areas and public rights-of-way.

#### Strong community and political commitment.

The public sector needs to support the concept and advocate for it, leading property owners and reducing development risk. Political commitments should span election cycles. Funding/financial assistance may be needed for district-wide improvements and as a catalyst to attract/support private sector investment.

## 3.5 OPPORTUNITIES, CONSTRAINTS, AND ISSUES

The Project Area as described earlier from a local market perspective, is now evaluated from the perspective of meeting market and feasibility objectives for establishing destination retailing in the area and satisfying the requirements for success that are identified above. The evaluation focuses on suitability/desirability of the area as a whole and includes some discussion of different parts of the area. Work under the future market analysis task includes a more fine-grained approach to evaluating opportunity sites and groups of sites in the Project Area as to their suitability for retail development. That more detailed evaluation will be summarized in the market analysis report to provide further direction for the planning effort.

As described below, the Project Area offers opportunities and advantages for establishing successful destination retailing. There also are issues and constraints to be addressed.

## 3.5.1 Opportunities

The following discussion identifies advantages of the Project Area for establishing successful destination retailing there. The work done thus far confirms the advantages of the area identified in the earlier Conley work.

#### ♦ Central Location for Destination Uses

The Upper Broadway area is a desirable location within Oakland and the Inner East Bay. It is centrally located within Oakland and is broadly included as part of greater Downtown Oakland, the heart of the city. The area also is centered around Broadway, Oakland's Main Street.

Both historically and currently, the area has accommodated land uses and business activities that are *destinations* and serve both citywide and regional markets. These include Broadway Auto Row and the wide range of auto sales and service uses, the major hospital medical centers on Pill Hill and at the Kaiser Permanente facilities, and the major religious institutions in the area and nearby areas including both a Catholic cathedral and a Jewish temple.

#### ◆ Large Sites With Relatively Few Improvements

There is significant land area potentially available for new development in the Project Area, particularly if more auto dealers and automotive uses leave the area and/or go out of business. The auto dealer sites represent relatively large properties, often with relatively few capital improvements, thus facilitating potential redevelopment. The largest sites are dispersed along Broadway and in the triangular area at the southern end of the area, bounded by Broadway, 27<sup>th</sup> Street, Harrison Street, and 23<sup>rd</sup> Street. Although some of the larger sites in the Project Area appear suitable for redevelopment, it is likely that additional assemblage of these larger parcels will be necessary in order to provide the critical mass needed for successful new destination retailing. (A map of the largest property ownerships is shown in the Land Use Chapter 2.)

#### ♦ Good Local and Regional Access Via Auto and Transit

The area is accessible via freeway, major city street arterials, AC Transit bus service, and BART. It also is within walking and bicycling distance for a large number of residents and employees. The I-580

freeway runs perpendicular to Broadway at the northern end of the area and 27<sup>th</sup> Street connects to I-980 just west of the area. Major city arterials to/from the area include Broadway, Grand/West Grand Avenue, 27<sup>th</sup> Street, Harrison Street, Telegraph Avenue, and Piedmont Avenue. AC Transit's busiest bus routes traverse the area, connecting to both Oakland and Berkeley, and the new Bus Rapid Transit (BRT) system is proposed for Telegraph Avenue. BART stations are located to the south and north of the area, and

#### **♦** Proximity to Customer Markets

There are several advantages to identify. First, the Upper Broadway location offers proximity to the central and northern parts of Oakland where many of the potential customer households reside. Secondly, the area is surrounded by higher-density residential neighborhoods and high-density employment centers, both of which provide customers within easy access of future retailing. Further, the Nearby and Surrounding Areas are growing and forecast to experience substantial growth in the future.

#### ♦ Image of the Area: Positive, In Transition, and Up-And-Coming

could be made more accessible with shuttle connections or improved bus service.

The Project Area has the image of a relatively desirable area on the fringes of more desirable areas. While the area is active and accommodates a mix of uses, it seems underutilized and somewhat undefined and in transition. It is a very "urban" area where one can sense the potential for substantially greater activity and density of use.

The image of the area is changing, particularly at the southern end where new housing has been built, new eating places and bars/lounges have been locating, art galleries and events have been added, and where the new Whole Foods grocery store was built. Future use of the larger sites in the area will have a substantial impact on the image and recognition of the area in the future. Thus, the area provides a significant opportunity for destination retail.

#### 3.5.2 Issues and Constraints

There also are a number of issues and constraints to be addressed in order to establish successful mixed use development with a focus on destination retailing. These will be addressed in ongoing efforts leading to development of the Specific Plan.

#### **♦** Multiple Ownerships of Property

While there are large parcels in the Project Area and multiple parcels under single ownership in a number of cases, there is not enough property in total under a single ownership to create the scale and critical mass needed for establishing destination retailing. Multiple ownerships create difficulties and complexities as the objectives and time horizons of owners often differ. Some consolidation of property ownership will be needed, through land assembly of major parcels and/or through creation of a joint entity/strategy for development. Ongoing management also will require a centralized approach.

In upcoming efforts, further consideration will be given to the objectives of property owners and to options for consolidating multiple ownerships in key opportunity areas, particularly to create the larger site area needed for initial development.

## Uncertainty About Future for Auto Dealerships and the Availability of Properties for Development

Since the Upper Broadway Strategy was prepared (Conley report), conditions relevant to the future for Auto Row dealerships have changed somewhat.

- Relocation Options Uncertain.

At the time of the earlier analysis, planning was underway for a new auto mall at the former Oakland Army Base in the near future. Several Auto Row dealerships had made commitments or expressed interest in relocating to the Army Base. However, that plan is no longer feasible, and there are no current relocation plans underway.

Full Effects of Recession on Auto Dealerships Unclear.

The recent economic downturn and credit crisis, as well as high gas prices at the beginning of the downturn, have had significant negative impact on auto sales and the financial health of dealerships. There is uncertainty as to the length and depth of the current recession and its effects on the auto industry and on the dealerships on Broadway Auto Row.

Thus far, recent economic events and trends appear as if they could have two types of implications:

- They could hasten the demise of weaker dealerships, making properties along in the Project Area available for new uses sooner than might otherwise occur.
- They could also encourage more viable dealerships to remain at their current Auto Row locations longer than they might otherwise, given the difficulties of relocating and financing new facilities.

To further consider these uncertainties, upcoming efforts will attempt to: (a) clarify objectives of large dealerships and property owners; and (b) further consider Auto Row properties that are leased and the nature of leases. Information available thus far indicates that about half of the dealerships own most of the property they occupy and about half lease their facilities/sites. Leases do not appear to be long term, or to extend out beyond four to five years.

While it is beyond the scope of the Specific Plan process, there are potentially significant citywide issues associated with the loss of auto dealerships in Oakland because of the sales tax revenue they provide to the City's General Fund and the consumer choices and services they provide for residents. Such issues may need to be considered on a parallel track to those addressing the potential availability of Auto Row properties for destination retail development under the Specific Plan.

#### ◆ Additional Complexities With Mixed-Use Development Including Potential Effects of Recent Housing Market Downturn and the Timing for Recovery

Mixed-use building types are envisioned for the new development, with housing over major retail to create density and the land values needed for feasible projects. While there are benefits from mixed-use development, there also are additional complexities.

The recent housing market downturn and the timing for recovery have implications for new development as envisioned for the Project Area. While the long-term potentials for higher-density housing in the area are strong, near-term market conditions do not support new housing development. There is uncertainty about the timing of market recovery, and about the timing of demand for additional new housing projects beyond those already in the City's pipeline of approved projects.

In upcoming tasks, the earlier Conley analysis will be reviewed and updated, focusing on the complexities of mixed-use development, including the demand for upper floor uses and possible implications for the feasibility and timing of mixed-use development.

#### ♦ Attention to Urban Design and Place Making Needed

There is no comparison shopping to build on in the Project Area. Substantial new development is envisioned. In planning for that development, it is important that attention be given to urban design, architecture, and the requirements of successful retailing. The intent is to create high-quality development befitting of a downtown location and to create a desirable shopping environment that will be attractive to the desired customer base. Later tasks in developing the Specific Plan will focus on design and place making so as to meet market objectives.

#### Concerns About Safety and Crime

While the Upper Broadway area is not a high crime area in Oakland, the city's overall image as a city with crime and violence is still a factor to contend with, particularly for attracting retailers from outside the area. Recent events surrounding the BART police shooting of an unarmed suspect and the violent reaction that occurred in the Downtown business district again raised the image of crime and violence in Oakland. As identified in the Conley report, crime and safety are very important issues and ones that should be addressed in planning for the area. Potential developers and tenants need to be assured that the public sector will be actively engaged in policing the area and responding to calls, and will support private, on-site security efforts as part of ongoing management of the area.

#### Need for Public Sector Participation

The earlier Conley analysis identified the need for public sector financial participation in developing successful major destination retailing, most likely focused on parking improvements. The experiences of creating successful retailing in downtowns of other cities also indicate the importance of the public sector in providing investments to attract developers and serve as catalysts for private investments. While the Project Area is located in two city redevelopment areas, there are limits on the funding potentially available in the future. Part of the efforts under this specific planning process will be to identify the amounts and timing of public investment required, the possible sources of available funding, and the best approaches for using public investment as an effective catalyst to support private development.

## DRAFT

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# **Chapter 4: Community Character**

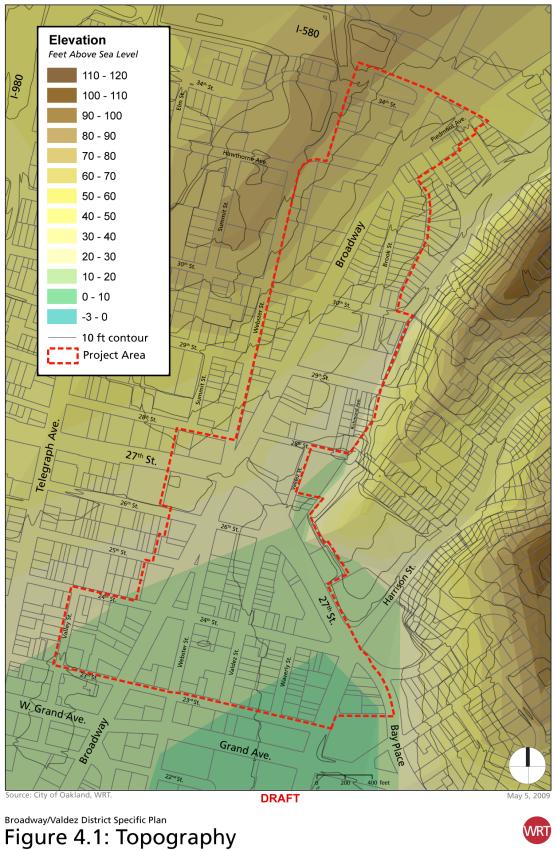
# 4.1 Development Patterns

At the macro scale, several factors work together to shape the character and function of Project Area. These include the size and shape of the area, the configuration of blocks within the area, the number and spacing of streets, the size of parcels, the size of buildings and lot coverage, and the location and orientation of buildings. Variations in these factors are responsible for much of the differences in character that exist from one end of the corridor to the other.

# 4.1.1 Project Area Form

At the largest scale, Project Area character is influenced by two factors: its shape and topography. First, the area is roughly four times as long as it is wide. The area's long, narrow configuration has and will continue to affect development in a number of ways. The linear character of area combined with the central location and size of Broadway as an arterial street within it, suggests that the area functions more as a circulation corridor—i.e., a place to pass through—than a place to stop and linger. The combination of the corridor's length and the relatively shallow parcel depth on either side of Broadway means that retail development tends to be strung out in a long line with little activity on the side streets. With a length of approximately ¾ of a mile, the Project Area is not particularly suited for pedestrians. It is unlikely that shoppers, who are notorious for wanting to park close to their destination, would walk from one end of the Project Area to the other. Thus, the physical configuration of the area combined with Broadway's arterial function tends to promote the development of automobile- rather than pedestrian-oriented commercial development.

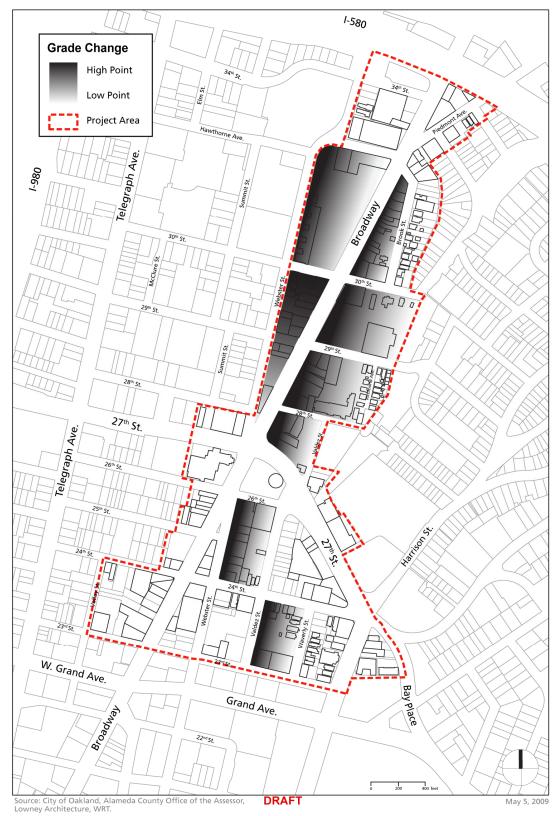
Topographically, the Project Area is situated in a shallow valley that slopes down from north to south and is framed by ridges—Pill Hill to the west and the 'HarriOaks' neighborhood to the east (see Figure 4.1 Topography). The effects of this are subtle, but significant. The gentle slope down to the south subtly reinforces the connection and orientation of the area to the downtown and to key features like Lake Merritt. The subtle definition created by the ridges on either side of Broadway suggests boundaries to the area that contribute to the area's identity as a distinct area—not just another corridor in the street grid. From a more practical standpoint, the elevation differences that occur across the area (e.g., from Webster to Broadway, from Broadway to Brook) also create opportunities to sensitively and less expensively integrate multi-level development, particularly structured parking, without having to build as high or to excavate as deep (see Figure 4.2 Topography—Grade Changes). In addition, the development that occupies those ridges has a natural, but at present, unrealized orientation to the area with views into the area and the potential for physical access down into the Project Area. The existing residential and employment populations of these adjoining areas also represent a built-in customer base within convenient walking distance of future development.



4-2



WRT



Broadway/Valdez District Specific Plan
Figure 4.2: Topography - Grade Changes



#### 4.1.2 Streets and Blocks

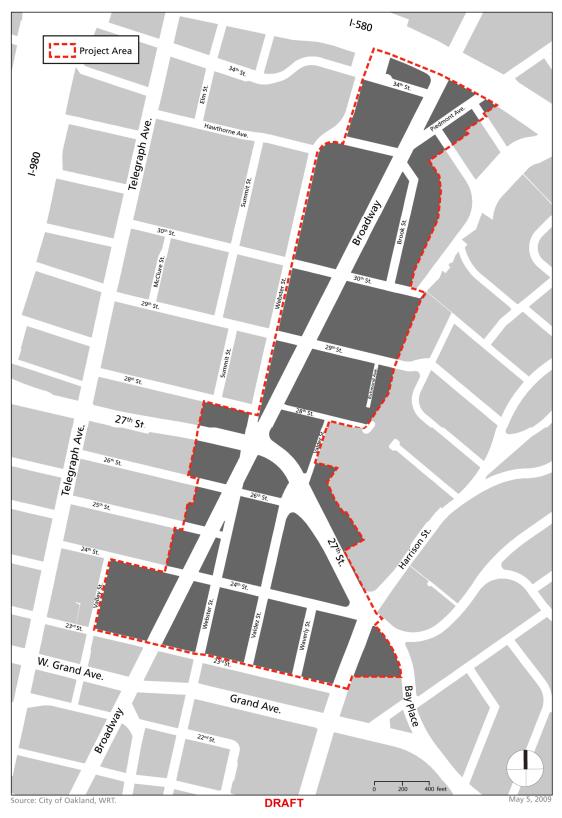
Streets, and the networks they create, are critical components of any area's urban form. They influence circulation, but also give form to development by defining the size and shape of the area's blocks. The street pattern in the Project Area and block structure created by it are significant factors that have influenced past development and will continue to have implications for future development. As illustrated in Figure 4.3 Block Structure, the street network in the Project Area is dominated by the wide Broadway and 27<sup>th</sup> Street corridors.

Broadway, which extends the length of the area, is the area's spine. Its northeast/southwest trending diagonal alignment bisects the underlying grid of streets creating an irregular block pattern that is characterized by a series of triangular and trapezoidal shape blocks. The effect is twofold. It has created a series of irregularly shaped blocks, the smallest of which are very constrained for development due to their shallow depths and inefficient shapes. It also has resulted in a series of distinctively designed 'flatiron' buildings such as the historic Arnstein-Field & Lee Star Showroom (Photo 4.1) at the intersection of Broadway and Webster Street, and a series of unique sidewalk configurations such as at 27<sup>th</sup> and Broadway where extra wide sidewalks are used for a combination of public space and automobile showcases (Photo 4.2).

27<sup>th</sup> Street's influence is less dramatic, but also important. 27<sup>th</sup> Street bisects the lower third of Broadway creating a distinct north-south boundary within the Project Area. By creating a discernable break in the Broadway corridor, 27<sup>th</sup> Street positively contributes to the definition of two recognizable subareas within the Project Area. This is important given the area's length and the desire to establish a more distinctive sense of place. In addition, as the primary east/west corridor, 27<sup>th</sup> Street also is a component of two key Project Area intersections where multiple streets come together: Broadway/Webster/27<sup>th</sup> Street and Harrison/Vernon/Bay Place/24<sup>th</sup> Street/27<sup>th</sup> Street. Both of these intersections serve as important regional and local gateways into the Project Area. As such, these intersections represent potential opportunities as future development and activity nodes, as suggested by the success of the recently opened Whole Foods store at 27<sup>th</sup> and Harrison streets.

As shown in Figure 4.3, the local street network within the Project Area is distinctly different north and south of 27<sup>th</sup> Street. South of 27<sup>th</sup> Street, the area is served by a relatively consistently spaced and interconnected network of parallel east/west and north/south streets. The result is a series of generally rectangular blocks. North of 27<sup>th</sup> Street, the east/west streets are irregularly spaced, and Webster Street, which is aligned along the western Project boundary, is the only north/south local street that provides a more or less continuous connection. However, even Webster Street is closed between 28<sup>th</sup> and 27<sup>th</sup> streets. The absence of regularly spaced, through streets in this area results in blocks that are generally quite large and highly irregular in shape.

The size of blocks and the connectivity of the streets that form them significantly influence the "walkability" (i.e., conduciveness to pedestrian use) of an area and the volume and speed of vehicular traffic on the streets. Generally, blocks with smaller perimeters are easier for pedestrians to navigate and thus support walking. Street networks with numerous streets and high connectivity generally allow for a greater distribution of traffic and route choice and slower traffic speeds compared to areas with few streets and low connectivity.



Broadway/Valdez District Specific Plan
Figure 4.3: Block Structure



The combination of large irregularly shaped blocks and low street connectivity tends to adversely affect the pedestrian orientation, particularly in the area north of  $27^{th}$  Street, by making walking inconvenient and reducing the number of through connections, both north-south and east-west. The relatively low number of east-west streets north of  $27^{th}$  Street also tends to emphasize the linear north/south character of Broadway due to the reduced number of intersections. The absence of any through north-south streets parallel to Broadway in the area north of  $27^{th}$  Street, funnels all of the traffic, vehicular, pedestrian, and bicycle, onto Broadway, which increases traffic volumes and potential for congestion and reduces the attractiveness of Broadway for pedestrians and bicyclists.





Photo 4.1

#### 4.1.3 Parcel Size

Parcel sizes, like block sizes, influence the type of development and character of aProject Area. For example, in spite of the auto-oriented nature of the current uses, the finer-grained pattern of small lots (predominantly less than ¼ acre in size) along the east side of Broadway between 30<sup>th</sup> and Brook Streets (Figure 4.4 Parcel Size) generally provides a comfortable, pedestrian scaled street environment, with narrower building frontages and more frequent building entrances. By comparison the opposite side of the same stretch of Broadway consists of larger parcels (generally larger than 0.5 acre) that are dedicated primarily to automobile sales lots, which results in an unappealing pedestrian environment that lacks scale, definition, or visual interest.

Overall, parcel sizes in the Project Area tend to be small. Over 75% of the parcels are less than 0.25 acres. Only 4% are larger than an acre, and only one is larger than 2 acres. The parcelization pattern is generally quite diverse, with some areas having primarily small parcels and others a mix of large and small parcels. The result is a very irregular and eccentric pattern of development that conforms to the patterns established by legal parcels (and ownership patterns) without any obvious regard for the resulting development character. For example, two of the largest parcels contain development as diverse as the low density Grocery Outlet (Photo 4.3) and the mid-rise Broadway Webster Medical Plaza (Photo 4.4).

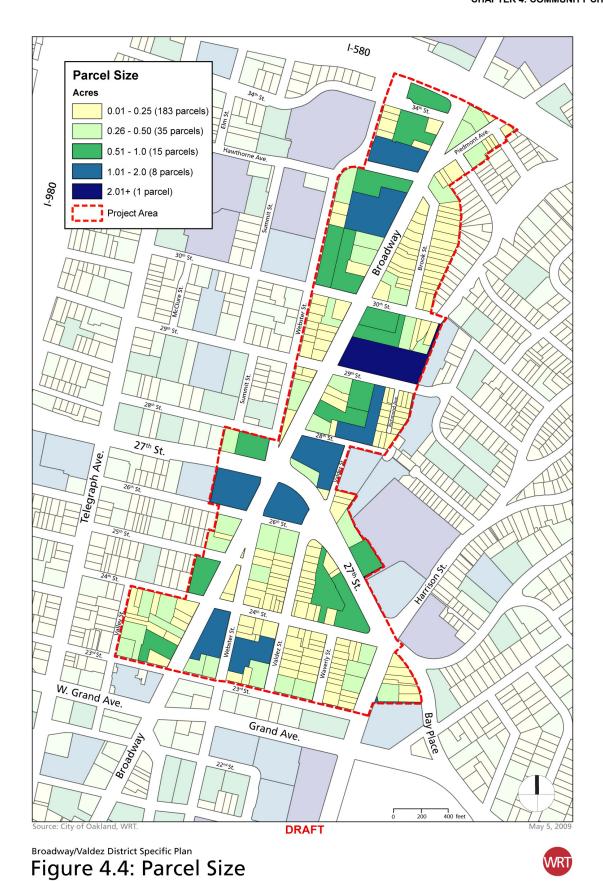
While smaller parcel sizes tend to create a finer-grained, more interesting and comfortable pedestrian environment, they also have the disadvantage of making redevelopment more complicated and potentially less viable. It is much more difficult to transition from existing low density uses to higher density, mixed

use development if the parcel sizes are small. It also means that many more parcels need to be redeveloped to significantly shift the character of an area. This has particular implications for areas like the east side of Broadway between Brook and 30th streets, and for streets like Waverly and 24th where the parcels are generally smaller. Conversely, development in areas with larger parcels will need to be designed reflect the rhythm and pattern created by development on surrounding smaller parcels in order to provide an attractive pedestrian environment that feels integral to the surrounding urban fabric.





Photo 4.3 Photo 4.4



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## 4.1.4 Building Footprints and Lot Coverage

As illustrated in Figure 4.5 Figure/Ground Study, the size of building footprints (i.e., the area covered by a building) vary significantly throughout the Project Area, but generally include larger building footprints typical of commercial development. In particular, development related to auto showrooms and garages requires larger floorplates. As shown in the figure/ground study in Figure 4.5, the building footprints are similar in scale to buildings to the west of the Project Area in the 25<sup>th</sup> Street Garage District and on Pill Hill, but smaller than those to the south in the adjoining Uptown and Kaiser Center Office districts.

As with parcel size, building size (as reflected in the building footprint) also has implications for the character of the pedestrian environment. Smaller building footprints tend to create a finer-grained, more interesting and more comfortably-scaled pedestrian environment. While large buildings can be designed to support an attractive and appropriately scaled pedestrian environment, they generally tend to undermine the environment, particularly when the buildings have limited or no ground floor tenants or have relatively few entrances and limited façade transparency (i.e., street front windows). Examples of the latter condition can be seen on the west side of Webster Street between 23<sup>rd</sup> and 25<sup>th</sup> streets (Photo 4.5), and the north side of 23<sup>rd</sup> Street between Valdez and Waverly streets (Photo 4.6), where the long blank walls of parking structures and automotive garages and the absence of ground floor uses lack the visual interest and pedestrian activity to support a vibrant pedestrian environment.

In addition to building size, lot coverage (i.e., the proportion of the lot covered by a building) is another factor affecting the character of the area and the quality of the pedestrian environment The development pattern in the Project Area is much less compact than found in Downtown. The lower lot coverage reflects the concentration of automotive uses in the area that devote large parcel areas to sales lots and vehicle storage (Photo 4.7), and the greater dependence that Project Area development has on surface parking. The dedication of large areas to surface parking areas results in an urban development pattern that is dispersed and fragmented and lacks consistent physical form (Photo 4.8).



BROADWAY/VALDEZ DISTRICT SPECIFIC PLAN

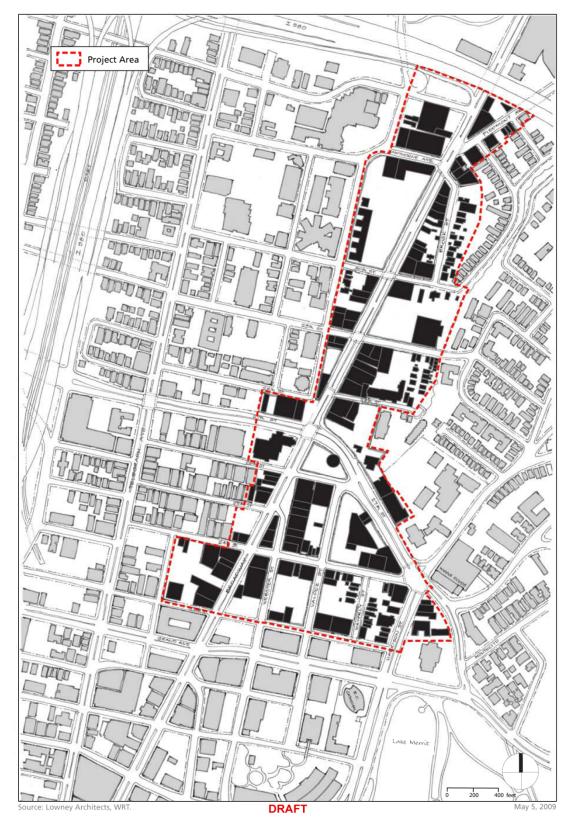


Photo 4.5 Photo 4.6





Photo 4.7 Photo 4.8



Broadway/Valdez District Specific Plan
Figure 4.5: Figure/Ground Study



## 4.1.5 Street Frontage Definition

One of the key factors in creating successful retail districts is to create an attractive and vibrant pedestrian environment. Typically this means creating an active and well-defined public realm and streetscape that is specifically designed to comfortably accommodate the pedestrian. Building placement and orientation play a critical role in both defining and activating the public realm. An excellent example of this principle can be seen in the stretch of Broadway around  $20^{th}$  Street where historic buildings like the Paramount Theater, I.Magnin's, and Sears combine with more contemporary buildings to provide a well-defined and comfortable public realm.

Unlike Broadway in the heart of the downtown, the Project Area generally does not have a well-defined public realm. Few blocks within the Project Area have sections where buildings form a consistent street wall that frames the street with active storefronts and without major gaps (see Figure 4.6 Street Frontage Definition). The few places where there is a consistent street wall, such as along Broadway between 25<sup>th</sup> and 26<sup>th</sup> streets (Photo 4.9), the presence of automotive-related showrooms and repair garages undermine the pedestrian environment with physical distractions such as curb cuts, driveways and roll-up garage doors and uses that provide limited interest to most pedestrians.

Parking lots are the primary reason for weak street front definition. When surface parking lots and automobile sales lots are located adjacent to the public sidewalk, it not only destroys the sense of a well-defined streetscape, but also diminishes the pedestrian environment by placing automobiles on both sides of the sidewalk and by creating vehicular crossings of the sidewalk at parking lot driveways. There are many different examples in the Project Area where the pedestrian environment is compromised by surface parking lots. The used car lot along the west side of Broadway between Hawthorne and 30<sup>th</sup> streets (Photo 4.10) and the Grocery Outlet parking lot between 29<sup>th</sup> and 30<sup>th</sup> streets are prime examples, where parking lots occupy the majority of the street frontage. Similarly, the combination of parking lots and automobile display areas at three corners of the Broadway and 27<sup>th</sup> Street intersection creates an ill-defined gateway to the area and an unappealing pedestrian environment at a very large intersection (Photo 4.11).

In addition to creating a consistent street wall that defines the public streetscape, the orientation of the building to the street is critical. In order to support pedestrian activity, buildings need to have entrances that front directly onto the street (i.e., no parking in between), rather than to parking lots, and have street-facing storefront windows (rather than just blank walls) that serve as display cases that add interest to the pedestrian environment and encourage window-shopping. Generally, where there are buildings in the Project Area, they tend to have a positive orientation to the street. There are only a few places, such as the Grocery Outlet and Honda dealership at Broadway and 34<sup>th</sup> Street where buildings have been pulled back from the street and parking has been introduced in between. The area around 24th Street and Webster Street in particular shows potential for continuous storefront displays based on the current building configurations. Additionally, many of the garages along Broadway with large car-sized openings (Photo 4.12) provide open views into the interior spaces, which is a highly desirable feature for potential retail use. Figure 4.6 shows those locations where Project Area buildings have a positive relationship to the street and would help support the creation of a more pedestrian oriented retail district.

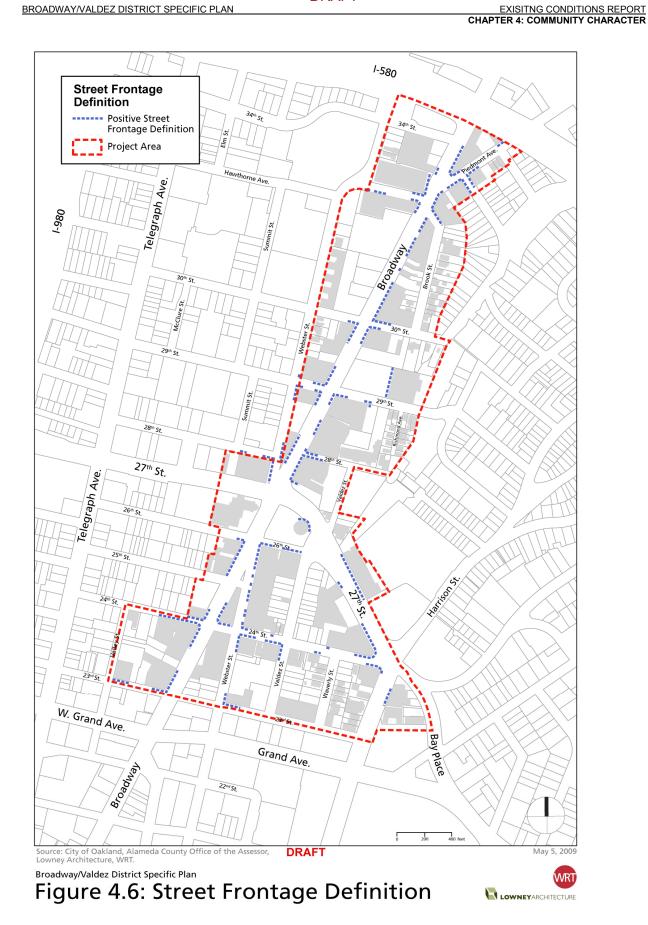






Photo 4.9 Photo 4.10





Photo 4.11

Photo 4.12

# 4.2 Building Character

#### 4.2.1 Architectural Character

The architectural character of buildings in the Project Area is quite diverse. No single architectural style predominates. Instead the building stock is a record of the time at which each building was constructed, reflecting both the land use and design trends of a particular moment in Oakland's history. Figure 4.7 Year Built, shows the distribution of buildings by their date of construction, ranging from late 19<sup>th</sup> Century to early 21<sup>st</sup> Century. Over half (60%) of the Project Area building stock was constructed prior to 1920, and the vast majority (87%) was constructed prior to 1950 (For more detailed discussion of historic resources in the Project Area, refer to Chapter 5 of the Existing Conditions Report).

As can be seen in the figure, the area includes a handful of buildings constructed in the late 19<sup>th</sup> Century (1870-1899). Generally dispersed throughout the area, these buildings are wood-frame structures that are predominantly Victorian in style and originally residential in use. The most prominent and centrally located of these is the Queen Ann style commercial building on Broadway at 29<sup>th</sup> Street (Photo 4.13).

The largest number of buildings (55%) in the Project Area date from early 20<sup>th</sup> Century, specifically the period from 1900 to 1920, when the downtown began to extend up Broadway and the area was first being established as a center for automotive sales and service. For the most part, buildings from this era fall into two distinct groups: residential or automotive-related commercial. The residential buildings are a mix of single family and small multi-family (fewer than 10 units) structures that are designed predominantly in the Craftsman, Colonial Revival, or Mission Revival styles (Photo 4.14). Most of the residential buildings from this period are located on the east side of the Project Area, along Brook, Richmond, and Waverly streets, and continue to be used primarily as residences. The commercial structures represent a variety of construction types, but the majority are masonry buildings designed as showrooms or automotive service garages that have large open floorplates and tall ceilings. The two flatiron showrooms at Broadway and 28<sup>th</sup> Street (formerly KIA) (Photo 4.15) and Broadway and Piedmont Avenue (Honda) (Photo 4.16) are good examples, as are the service garages along the east side of Broadway at 3074 Broadway (Automotive Collision Repair) and 2820 Broadway (formerly Bay Bridge Nissan) (Photo 4.16).

Buildings constructed between 1920 and 1950 represent the next largest group of structures (27%) in the area. The majority of these buildings also were developed for automotive sales and service uses, so share the large, open floorplates and high ceilings of earlier automotive structures, but the majority are built with concrete or concrete block rather than masonry. Stylistically, the predominant architectural styles employed are Art Deco and Moderne. Examples of buildings constructed during this period include the GMC showroom at Broadway and Hawthorne Avenue (Photo 4.17), the Volkswagen Showroom at Broadway (Photo 4.18) and 28<sup>th</sup>, the Mercedes-Benz pre-owned showroom at Broadway and 30<sup>th</sup> Street, and the Bay Bridge Jeep showroom at Broadway and 27<sup>th</sup> Street.

Less than 15% of the current building stock in the Project Area has been built in the last 60 years. Many of the buildings constructed during this period are larger and denser than other buildings in the area. For example, the Valdez Plaza Residences, Broadway Webster Medical Plaza, YMCA, and 180 Grand Parking Garage are the only mid-rise buildings in the area, and the latter three all include structured parking as a primary use. There is no consistent stylistic direction expressed in the buildings of this period, and with a few exceptions, such as the recent housing constructed at Broadway and 23<sup>rd</sup> Street, the buildings constructed since 1950 tend to have a generic, non-descript quality that contributes little to establishing a distinct or memorable identity for the area.

Figure 4.8, Construction Type & Façade Materials shows the distribution of buildings in the Project Area by the materiality of each building's primary façade. Although the materials on the other facades may differ, the assumption is that the primary façade is the most important contributor to the area's architectural character. In total, seven (7) categories of materials were recorded, including: brick, concrete masonry, formed concrete, stucco, wood, stone and metal. As previously discussed, the residential structures tend to be wood and stucco. The automotive garages tend to be made of brick or concrete masonry, with truss roofs made of metal or wood. Larger, more modern buildings are mostly concrete with steel frames, and the area's parking structures have been constructed with pre-cast concrete systems. With the exception of the short stretches of Waverly Street and Richmond Avenue, there were no zones in the Project Area that display a continuous use of materials along an entire block (see Figure 4.8).



Photo 4.13



Photo 4.14



Photo 4.15



Photo 4.16



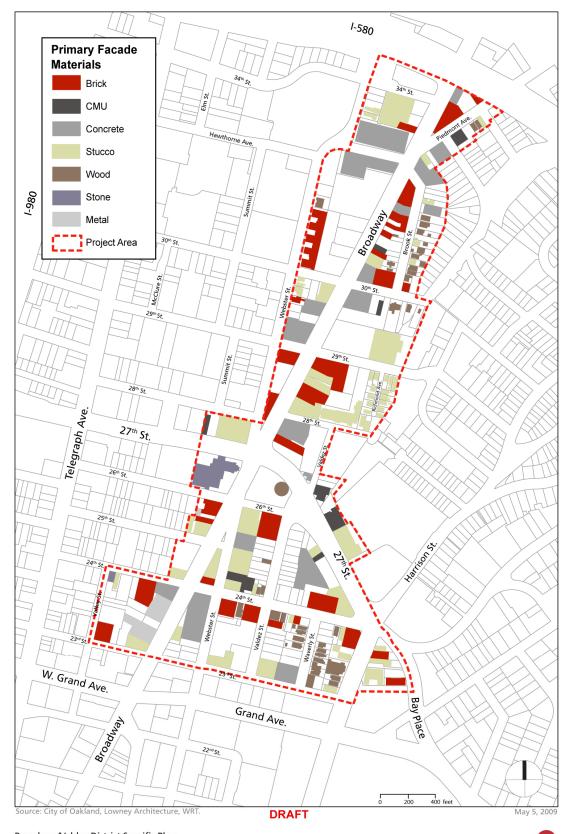
Photo 4.17



Photo 4.18



Broadway/Valdez District Specifc Plan
Figure 4.7: Year Built



Broadway/Valdez District Specific Plan Figure 4.8: Construction Type & Facade Materials



## 4.2.2 Building Heights

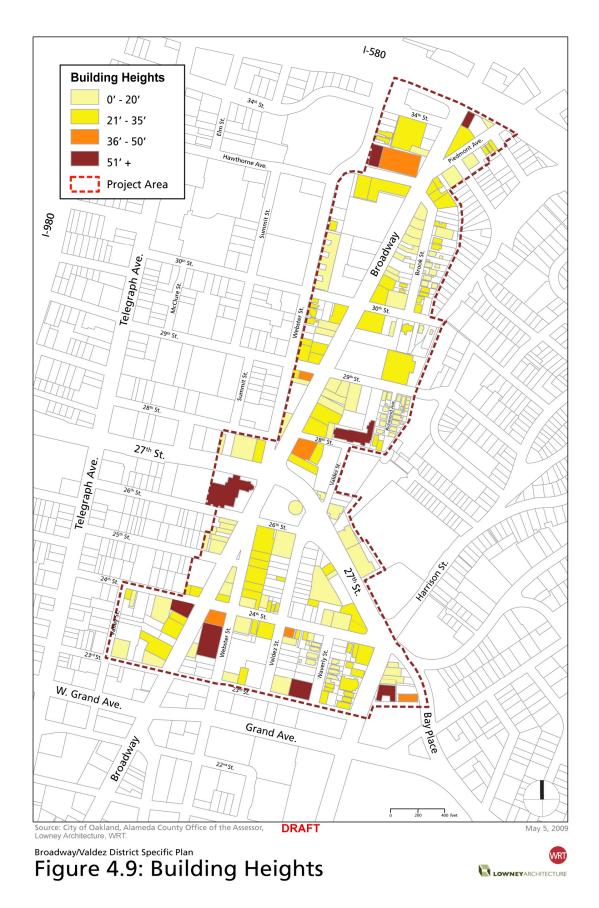
Over 90% of the buildings in the Project Area are one (65%) or two (27%) stories in height, and range from approximately 15 to 25 feet in height. As shown in Figure 4.9 Building Heights, small clusters of two-story structures (approximately 25 to 35 feet) are located in the vicinity of Brook and Waverly Streets, and along the northern portion of Webster Street. A dozen or so other multi-story buildings, ranging from 3 to 12 stories are scattered throughout the Project Area. The tallest buildings in the Project Area are the 12-story tower portion of the Broadway Webster Medical Plaza (approximately 150 feet tall) at 3300 Webster Street and the 12-story Valdez Plaza apartment building (approximately 125 feet tall) at 260 28<sup>th</sup> Street.

Heights of other elements in the area that may be relevant to building heights include the I-580 freeway overpass at the north end of the area which is approximately 20-25 feet tall. Pill Hill, which is a major topographic feature northwest of the Project Area, has a top elevation of approximately 80-85 feet, and the existing Summit Alta Bates buildings rise another 70-80 feet above the top of the ridge. Finally, the spire of the First Presbyterian Church at 27<sup>th</sup> Street and Broadway rises approximately 105 feet in the air, making it a significant visual landmark in the Project Area.

Another distinctive characteristic of area buildings is that many of the automotive showrooms and service garages are a very tall single story. Several of these buildings are closer in height to a two-story structure (i.e., 20-25 feet). While this is not particularly distinctive from the exterior, the open floor plans, truss roofs, and clerestory windows that are characteristic of these buildings result in soaring interior spaces that are distinctly different from typical commercial retail space, particularly when the interiors have maintained the natural finish of the original masonry walls and wood trusses (Photo 4.19).



Photo 4.19



#### 4.2.3 The Architectural Resource

The Project Area includes a range of building types and architectural styles, all of which reflect the area's rich history. This diversity of building stock provides a variety of scales and textures that contribute to the area's visual interest and character. The richness of the area's architecture represents a significant asset around which to plan and build—an asset that can serve as inspiration and context for future designs, and help to ground future development as part of a pre-existing neighborhood. Of course, distinctive architecture can also raise issues for redevelopment, particularly if its location constrains redevelopment of surrounding parcels. While at this early stage in the planning process it is not known what buildings may be affected by future redevelopment, some observations can be made about the existing Project Area buildings.

#### **Historic Buildings**

As previously discussed, the Project Area includes many older buildings, some of which have cultural and historic significance to the City, others of which are individually less significant but generally contribute to the area's character and identity. The historic value of the area's buildings is discussed in more detail in Chapter 5 Historic Resources, but the general conclusion of the recent historic resource inventory is that there are thirteen (13) buildings in the Project Area that are considered Historic Resources for purposes of California Environmental Quality Act (CEQA) assessment (Figure 4.10 and Photos 4.20-4.23, refer to Chapter 5 for specific buildings). If possible, these buildings should be preserved, and any alterations or renovations should be executed in accordance with the California Historic Building Code. It will be important for the Specific Plan to recognize the significance of the area's historic resources and find a way to integrate with these buildings and be responsive to the area's history while still accommodating desired change and redevelopment.





Photo 4.20 Photo 4.21





Photo 4.22 Photo 4.23

#### Residential Buildings

The Project Area includes a number of single-family and small multi-family residential buildings that are generally located along the east side of the area on Brook Street, Richmond Avenue and Waverly Street. These buildings with their Victorian, Craftsman, and Colonial and Mission Revival styles are generally different in scale, character and use from the majority of the other development in the Project Area. As a result they raise questions about their potential for re-use and the relationship (e.g., scale, massing, orientation, etc.) of future development to these residential areas.

Each of the three residential areas serves as a transition between the Project Area's commercial uses and the adjoining residential neighborhoods, but the conditions in each are slightly different. On Brook Street, the majority of the residential structures are on the east side of the street (with two exceptions), facing the rear of the garages and other automotive uses that front onto Broadway (Photo 4.24). Because of the narrow configuration of the block between Brook Street and Broadway, the developable area is not deep enough to accommodate back to back parcels with uses fronting on Brook Street as well as Broadway. Thus, the current dichotomy with different types of uses on either side of Brook Street and front facades facing rear façades is likely to continue to be an issue for future development. The architectural character of several of the residential buildings, particularly the Queen Anne Victorian and the California Craftsman style buildings, provide distinct character and charm to this street (Photo 4.25).

Unlike Brook Street, Waverly Street is flanked on both sides by single-family and small multi-family residential (e.g., duplex and 4-plex) buildings. However, the scale of current development is not as consistent as along Brook Street, nor is the pattern of uses. The design character is also not as distinctive (Photo 4.26). The south end of the street is anchored by large, 10-story parking structure, whose scale dwarfs the surrounding residential uses and whose concrete construction is inconsistent with the wood-frame character of the street. Surface parking lots occupy the area adjacent to the parking structure and along both sides of the north end of the street. Most of the residential is located along the east side of the street, with only three residential buildings on the west side.

Richmond Avenue, a dead-end street accessible only from 29th Street to the north, has the most consistent residential character of the three areas. Both sides of the street are lined by small one-story California Craftsman bungalows that typically have stucco exteriors, exposed rafters and roof beams that give them their craftsman aesthetic, and composite roof shingles (Photo 4.27). The area is generally buffered from Project Area commercial development by the Valdez Plaza property which extends from 28th Street to 29th Street.





Photo 4.24 Photo 4.25





Photo 4.26 Photo 4.27

#### **Parking Structures**

Three of the largest buildings in the Project Area are parking structures. Two of these are part of a larger development: the Broadway Webster Medical Plaza and the YMCA. The third is the 180 Grand standalone public parking structure at 23rd & Waverly. These structures, which currently serve a mix of employee, visitor, and public users, represent significant capital investments in addition to being major buildings. As such, further analysis will be conducted to determine if these structures are being used to their full potential. Since many of the spaces in these structures serve employees during the week, there may be an opportunity for the structures to be used to support retail shoppers and restaurant goers on the weekends and evenings.

#### Automotive Showrooms & Garages

As a result of the area's Auto Row history, automotive showrooms and garages represent two of the most prevalent building types in the Project Area. Due to their number and the changes in the auto industry, these buildings are likely to be the ones most available for re-use and/or redevelopment. When evaluating their potential for re-use for retail each building type has its own set of characteristics that must be considered—some positive, some negative. The following summarizes some of the key features of each building type that need to be taken into consideration:

- Automotive Showroom (Commercial) (Photo 4.28)
  - o Architectural features beneficial for future retail use
    - Large storefronts provide natural light
    - High ceilings
    - Interior highly visible by pedestrians/vehicles
    - Existing loading docks in back
    - Presence of mezzanine (for back of house/office uses)
  - o Architectural features w/ negative implications for future retail use
    - Large storefronts may increase solar gain
    - High ceilings large volume of conditioned air
- Automotive Garage (Light Industrial) (Photo 4.29)
  - Architectural features beneficial for future retail use
    - Ornamental masonry/tile facades pedestrian scale
    - Skylights reduce need for artificial lighting
    - Truss roofs architecturally stimulating; permits exposed ceiling/ductwork
    - Large openings for garage doors may be
    - Existing loading docks
  - o Architectural features w/ negative implications for future retail use
    - Masonry construction may require seismic retrofit
    - Large openings may increase solar gain
    - High ceilings large volume of conditioned air
    - Lack of separate "back of house" spaces
    - Potential need for hazardous material remediation

Several automotive buildings in the Project Area that have undergone renovations in the past decade and can serve as precedents for how to successfully adapt new programs to old buildings, while preserving the architectural character of the original structure.

**2946-64 Broadway**. The Firestone Tire & Rubber Service Station (now occupied by Mercedes-Benz) is an example of historic preservation combined with a modern design sensibility. By preserving the original detailing (cast concrete patterns along the parapet with crests marked "F" for Firestone) and openness of the high, trussed ceiling, the building reflects the area's Auto Row heritage while creating an attractive contemporary retail space. Although still being used for automobile-oriented use, this project is a good example of how a light industrial garage can be re-used for retail. It is easy to imagine that this building could just as easily be used for other types of retail (Photo 4.30).

<u>2355 Broadway</u>. The Western Auto Building, originally designed as a full complex of automobile showrooms and service garages, was recently renovated as a mixed-use building with ground-floor commercial spaces and residential lofts on the upper floors. The renovation is successful in preserving the original architectural character, including features such as the rounded "flatiron" corner and the continuous metal cornice. The project also takes advantage of the large storefront window along the street to accommodate a new restaurant, and the tall floor-to-ceiling heights on the upper floors to create alternative loft-type residences (Photo 4.31).

2801-25 Broadway / 2800-24 Webster. Although now vacant, this building was renovated to serve as a showroom and garage for the KIA dealership. The renovation emphasizes the ornate Spanish Colonial detailing. Due to its "flatiron" plan, the building has large window frontage on both Broadway and Webster, which would be an ideal configuration for a comparison goods retailer. This project is a good example of using ornamental architectural features as a frame for retail storefronts (Photo 4.32).





Photo 4.29 Photo 4.28





Photo 4.30 Photo 4.31



Photo 4.32

#### **Prominent Buildings and Architectural Precedents**

BROADWAY/VALDEZ DISTRICT SPECIFIC PLAN

In addition to buildings within the Project Area, there are a number of prominent buildings in the immediate vicinity that represent significant features within the local setting that contribute to the character and identity of the area or represent significant new development that may serve as precedents for future development (see Figure 4.10 Prominent Buildings & Architectual Precedents). In the former category there a number of older buildings that by their prominence and design positively influence the character of the area. These include the Paramount Theater (Photo 4.33) and the Art Deco-style Breuner building (Photo 4.34) at 2201 Broadway just south of the Project Area; the Moorish-style First Congregational Church (Photo 4.35) at Harrison and 27th streets; the Whole Foods Market (Photo 4.36) in the former Cox Cadillac showroom at Harrison and 27th streets; the Veteran's Memorial Building (Photo 4.37) at Grand Avenue and Harrison Street; and the Spanish Colonial-style First Christian Church (Photo 4.38) at Fairmount Avenue and 29th Street. A new building that has become an instant landmark (in the generic sense of the word—not a historic landmark) in the area is the dramatically designed Christ the Light Cathedral (Photos 4.39 and 40) located at Harrison Street and W. Grand Avenue overlooking Lake Merritt. Finally, two new buildings that may suggest a direction for future Project Area development include the seven-story Broadway Grand (Photo 4.41 and 4.42) mixed use building at Broadway and W. Grand Avenue, and The Grand, a new 22-story apartment building at 100 W. Grand Avenue (Photos 4.43 and 4.44).



Photo 4.33



Photo 4.34





Photo 4.35







Photo 4.37 Photo 4.38





Photo 4.39 Photo 4.40



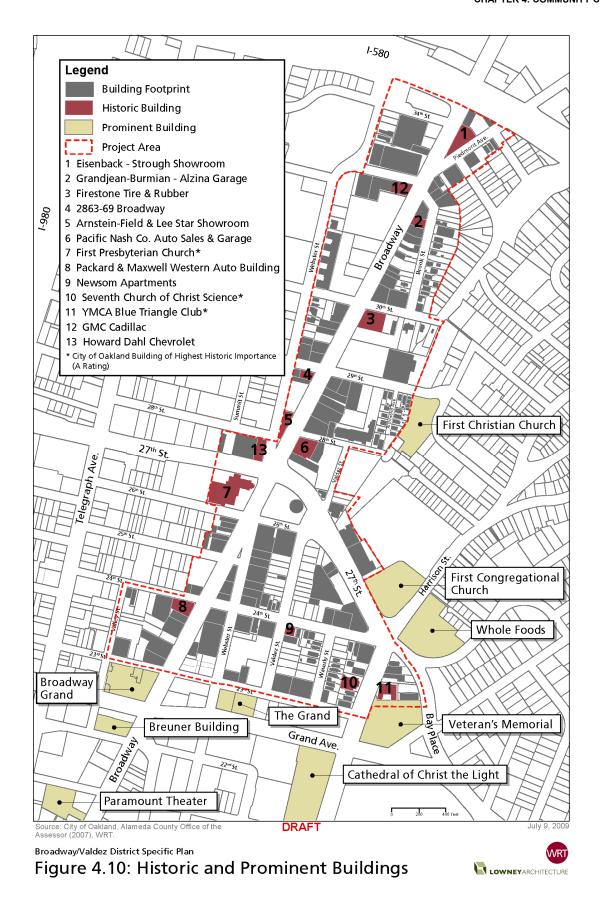


Photo 4.41 Photo 4.42





Photo 4.43 Photo 4.44



# 4.3 Streetscape Character

The physical design and function of the Project Area circulation system, including pedestrian, bicycle, and vehicular, is described in Chapter 7: Transportation. Recognizing the importance of establishing an attractive and comfortable pedestrian environment to the success of any retail district, the following discussion focuses on the aesthetic character of area's streetscapes, particularly the pedestrian realm.

The character of the existing Project Area streetscape is in large part a reflection of Broadway's historic role as Auto Row and as the primarily arterial roadway that links Downtown Oakland to the regional freeways (particularly I-580) and to North Oakland and Piedmont. The corridor's arterial function has strongly influenced the design character of the streetscape as well as the corridor's building character and land use mix, making them more automobile oriented and less pedestrian friendly. Balancing the flow of vehicular traffic along Broadway, as well as other Project Area streets, while establishing an attractive, pedestrian-oriented environment, is a key objective and challenge of this planning effort.

### 4.3.1 Gateways

A key concern when trying to establish a distinctive identity for an area is making evident when one is entering the area and creating a positive first impression. Thus, it is important to understand where key "gateways" are and what their character is. The Project Area has a number of access routes and potential gateways, each with its own character, constraints, and potential opportunities:

- <u>Broadway / I-580 Eastbound Off-ramp</u> is a key regional access from the freeway. Given the distance of the freeway exit from the ramp connection to Broadway, visitors do not actually see the area until they pass Webster Street. The view from the off-ramp includes the Honda dealerships auto sales lot on the right and the Saw Mill Building as the terminus at the tee intersection with Broadway. This is an inauspicious entry at best, that requires drivers to exit the freeway without any visual cues (due to the distance from the area) and then drops them off at a dead end that does not provide views into the area.
- <u>I-580 Underpass</u> is actually two entry points, one from Broadway and one from Piedmont Avenue, but the entry experience is largely the same. Both corridors provide an important gateway into the Project Area from North Oakland destinations, including the Kaiser Medical Center and the Piedmont Avenue shopping district. The elevated freeway structure greatly obscures views into the Project Area from these corridors and the respective underpasses create dark and uninviting portals that must be passed through in order to enter the Project Area (Photo 4.45).
- 27<sup>th</sup> Street/Harrison Street/Vernon Street/24<sup>th</sup> Street/BayPlace is an important regional and local gateway to the Project Area. Harrison Street is the connection for west bound travelers on I-580 into the area. Bay Place, Vernon Street, and Harrison Street represent key local routes from surrounding neighborhoods. Each of these routes is generally lined with attractive, predominantly residential development that provides a positive entry experience. The intersection where these five street come together represents a potentially dramatic gateway into the Project Area, but at present lacks development that defines and distinguishes it. The First Congregational Church and Whole Foods Market are distinctive elements that define two of the corners, but the scale and character of

- development on the other three corners, which is single-story and auto-oriented, does not convey the import of this key gateway (Photo 4.46).
- <u>Eastbound 27th Street / Broadway</u> is an important regional and local gateway that provides entry to regional visitors from I-980 and neighborhoods to the west. The First Presbyterian Church provides a dramatic landmark on the southwest corner of this intersection but the other three corners are not well defined. The sales lots for auto dealerships on two of the four corners means that there are no buildings to define or give scale to this very large intersection.

Broadway and Harrison Street both represent major routes into the Project Area from the south, but no single point along them suggests itself as an appropriate gateway location. Where these two corridors cross Grand Avenue is an important boundary, but recent development in the Uptown Districts suggests that rather than designating a distinct point as the gateway, the developing fabric of the downtown needs to seamlessly extended north into the Project Area.





Photo 4.45 Photo 4.46

#### 4.3.2 Pedestrian Realm

Generally, the physical design of the corridor conveys the impression that that the corridor is designed primarily to accommodate the automobile, and only secondarily to meet the needs of the pedestrian. A key factor in this is the width and volume of traffic carried by the two primary streets: Broadway and 27<sup>th</sup> Street. Both factors contribute to the automobile-dominant character that currently prevails in the area. In addition, while streetscape improvements have been made to Broadway, the streets in the rest of the area lack a consistent or comprehensive approach to enhancing the pedestrian realm. Overall, the pedestrian environment lacks the quality and character that characterizes many of the streets in the Downtown.

#### Sidewalks

All streets in the Project Area have sidewalks along both sides of the street, with exception of Richmond Avenue. Generally the existing sidewalks are 10 feet wide, but in different areas range from as narrow as 6 feet (e.g., Valdez Street) to as wide as 15 feet (Broadway south of 25th Street). While adequate to accommodate the relatively low volume of current pedestrian traffic, the sidewalk widths generally do not seem adequate to support the robust and vibrant pedestrian environment envisioned for a future destination retail district. This is particularly true where sidewalks are only 8-10 feet wide and utility

poles, street trees, and bus stops occupy significant portions of the sidewalk and reduce the area available for pedestrian movement (Photo 4.47). In areas where Broadway intersects with Piedmont Avenue and Webster Street (i.e., between 27<sup>th</sup> and 28<sup>th</sup> streets and between 25<sup>th</sup> and 26<sup>th</sup> streets) sidewalk areas have been widened to create small plaza-like areas. These areas, which were improved to enhance the corridor's identity and function as Auto Row, include features such as decorative paving, planters and raised podiums that are used by adjacent auto dealers to display their merchandise (Photo 4.48).

In addition to sidewalk width, another factor that can adversely affect the quality of the pedestrian environment is the number of driveways that cross the sidewalk. Each driveway and curb cut represents a point of potential conflict between vehicles and pedestrians, which affects the sense of pedestrian safety. They also reduce the area available for streetscape amenities such as trees and furniture, and constrain their placement. The area's historic focus on automotive sales and service means that many buildings have at least one curb cut and driveway. This is particularly true along Broadway where auto dealerships and service garages have a major presence. Not only are curb cuts found at existing automotive businesses, but in several locations curb cuts still exist where there is no longer a driveway access to the adjoining parcel (Photo 4.49).



Photo 4.47



Photo 4.48



Photo 4.49

#### Signage

Signage within the corridor generally falls into three categories: traffic signs, private commercial signs, and billboards. Traffic signs, including stop signs, parking signs, bus stop signs, turn lane/merge signs, and street signs tend to be modest in size and generous in spacing so they do not attract inordinate attention.

Commercial signage generally maintains a pleasant and relatively low-profile character throughout the Project Area, with a few exceptions. Wall signs and window signs (i.e., painted on or attached flat to the wall/window surface) are the most common sign type used (Photo 4.50). Small blade signs (i.e., project perpendicular to the façade) are also used, but are less common than the wall and window signs. While most of the wall and blade signs are relative small, there are a number of properties where the combination of multiple signs, window painting, and banners on a single façade is visually chaotic (Photo 4.51). Although dispersed, there are a number of free-standing post-mounted signs along Broadway and 27<sup>th</sup> Street, occurring primarily where buildings are set back from the street with parking areas in between and typically being associated with automotive uses (Photo 4.52). There are also a number of billboards in the area, (Photo 4.53) located atop buildings on Broadway and Harrison Street. Both the post signs and the billboards are scaled and located for visibility from moving automobiles. Thus, they convey the message that the area is catering primarily to automobile-oriented users and undermine the perception of the area as a pedestrian-oriented district.

There is little in the way of "wayfinding" or directional signage that provides directions to specific destinations (e.g., Civic Center, Lake Merritt, Uptown District, etc.), but Broadway does include banners that promote Broadway's Auto Row (Photo 4.54). These banners are hung from standards that are located in the median, and extend from 34 Street down to 23<sup>rd</sup> Street.







Photo 4.51



Photo 4.52



Photo 4.53



Photo 4.54

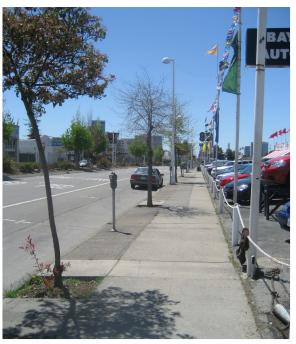


Photo 4.55

#### Street Trees and Landscaping

The general impression of the Project Area is that there are relatively few streets trees. However, on closer inspection there are in fact numerous street trees, but the combination of tree age, placement, and variable maintenance limits their visual impact and contribution to the streetscape character. The Broadway corridor has the most consistent and comprehensive street tree planting of the Project Area streets. Implemented as part of the Auto Row streetscape enhancement program in the late 90's, the planting includes street tree planting along both sides of the corridor and street tree and shrub planting in the center median. The plantings do not seem to be thriving. Apparently, the pavement was not removed when the median plantings were installed, so there is no room for the root systems to expand. As a result, the street trees in the sidewalks are struggling and seem unlikely to mature to attractive and attractive trees (Photo 4.55). Trees and shrubs in the center median appear to be doing better, but the mounded planting beds have large areas of bare soil and exposed surface roots suggest that these trees are stressed and may not continue to thrive (Photo 4.56). Median plantings on Broadway south of 25th Street are more attractive and in much better condition, but it is unclear if this is just because the streetscape was more recently installed in conjunction with the construction of adjoining development (Photo 4.57).

The largest and most mature street trees are located on 27th Street where a consistent planting in the center median extends from San Pablo Avenue (west of the Project Area) to Grand Avenue (Photo 4.58). While these trees provide an attractive canopy over the center part of the roadway, there are no trees in the sidewalks to complement the median trees and shade the pedestrian areas. In addition, the spacing of the median trees is greater and less consistent than in the medians west of Broadway.

Street tree planting in the rest of the Project Area is much more irregular, consisting primarily of trees that have been planted by individual landowners over the years in front of their businesses or homes. As a result, there is a great diversity in size, species, and distribution (Photo 4.59).

Overall, the lack of mature street trees in the Project Area, combined with the uneven distribution of tree planting and the high percentage of surface parking lots and automobile sales lots gives the pedestrian environment a hard, stark quality that is generally not supportive of pedestrian activity (Photo 4.60).





Photo 4.57





Photo 4.58





Photo 4.60 Photo 4.61

#### CHAPTER 4: COMMUNITY CHARACTER

### Street Lighting and Furniture

There is very little street furniture provided within the Project Area to accommodate or enhance pedestrian use. Existing street furniture is associated with the area's bus stops, and typically consists of a bench and a trash receptacle, and in a few instances, a newspaper box (Photo 4.61). The design of these features is utilitarian. Bus stops do not include shelter and no bike racks were recorded.

Street lighting in the Project Area takes two primary forms. The Broadway corridor has coordinated, decorative lighting fixtures along its entire length within the Project Area. The majority of the lighting was installed as part of the Auto Row streetscape enhancement program in the late '90s, and extends the length of the Project Area from I-580 to  $23^{rd}$  Street. The white light standards and fixtures have a simple, unornamented contemporary style that includes two dome-shaped fixtures on each standard: one mounted lower over the sidewalk for pedestrian lighting and one mounted higher and over the roadway for street lighting (Photo 4.62). The design reference is unclear and seems somewhat dated. The overall effect of the lighting treatment generally makes little impression. By comparison, the historic, Victorian-style light standards and fixtures used in the Uptown and for a block into the Project Area (east side of Broadway between  $23^{rd}$  and  $24^{th}$  streets) are very distinctive (Photo 4.63). On the one block of Broadway where the historic and contemporary lighting treatments are on opposite sides of the street from each other, the contemporary lighting suffers by comparison.

The other streets in the Project Area are all illuminated with standard cobra head street lights (Photo 4.64). These light standards are much taller and more widely spaced than the pedestrian-scale street lights on Broadway, and of more utilitarian design. The highly mounted fixtures throw a broad splay of light that is intended to light the roadway as much as the pedestrian zone. While providing necessary illumination, the amount and quality of the light provided is out of character for a pedestrian-oriented neighborhood. In addition, in many cases the cobra head street lights do not have their own standards, but instead are attached to wood utility poles that are carrying overhead utility lines (Photo 4.65).



Photo 4.62



Photo 4.64



Photo 4.63



Photo 4.65

#### CHAPTER 4: COMMUNITY CHARACTER

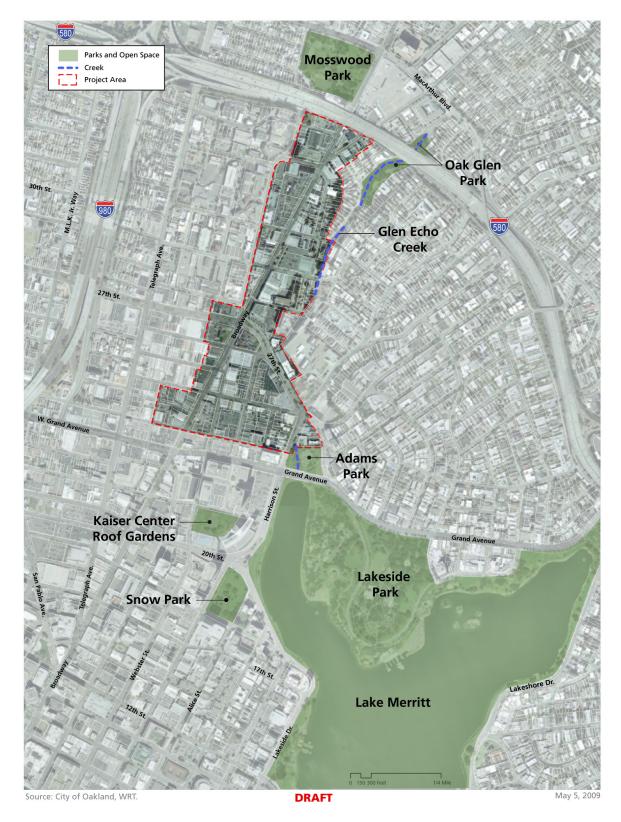
# 4.4 Public Space

The Project Area is surrounded by some of the City's largest and most unique open space resources. At the same time, the area itself contains no park space and no significant public gathering space within its boundaries (see Figure 4.11, Parks and Open Space).

Lake Merritt (Photo 4.66) and Lakeside Park, Mosswood Park (Photo 4.67), the Kaiser Center Roof Garden (Photo 4.68), and Glen Echo Creek and Oak Glen Park (Photo 4.69 and 4.70) represent four of the most diverse and unique recreational, environmental, and historical resources in the city and each is a short walk from the Project Area (refer to Chapter 2 for further description). However, due to building patterns and street alignments, none of these open space resources is visually prominent from within the Project Area. As a result, there is little in the existing development pattern that acknowledges these resources or takes advantage of the benefits of this rich open space amenity.

The Project Area currently lacks the signature parks or plazas that might serve as recognized gathering places or contribute to the identity of the area. Given the length of the Project Area, such spaces are particularly important, not only to provide a respite for pedestrians, but also to create activity nodes that give the area a finer-grained structure and distinctive identity. The only semi-public spaces in the area are the widened sidewalk zones located at Broadway between 27<sup>th</sup> and 28<sup>th</sup> streets and between 24<sup>th</sup> and 25<sup>th</sup> streets which serve primarily as showcases for cars from adjoining showrooms, and only secondarily as public open space (Photo 4.71). Although public art was originally incorporated into the space between 27<sup>th</sup> and 28<sup>th</sup> streets to enhance the pedestrian character, the actual use of these spaces by adjoining auto dealers leaves little to suggest that they are intended for public use. As a result, few pedestrians are typically found to be using these areas.

Given their small size and location at the confluence of four streets, the function of Clock Park and Post Office Plaza is primarily figurative as an entry to the Downtown. The orientation of these two public spaces is primarily to the CBD (i.e., North Pacific Avenue), and thus they do not contribute significantly to the character of the River/Front/Lower Pacific corridor or serve as a significant public gathering space for the corridor. Similarly, while the Gateway Plaza is an attractively designed space, its location in an area with relatively low pedestrian activity (i.e., adjacent to a busy four-lane street and an automobile-oriented commercial center) works against its intended function as a successful public space.



Broadway/Valdez District Specific Plan
Figure 4.11: Parks and Open Space









Photo 4.66

Photo 4.67





Photo 4.68

Photo 4.69





Photo 4.70 Photo 4.71

# **Chapter 5: Historic Resources**

# 5.1 Introduction

Environmental Science Associates (ESA) conducted a historic resources inventory investigation as background to the preparation of the Broadway / Valdez District Specific Plan. The purpose of the historic resources inventory was to:

- identify historic properties, including buildings, structures, and districts, located within the Project Area;
- provide a historic context describing the historical development of the Upper Broadway area;
- review/revise existing evaluations of historic properties according to the City of Oakland's Historic Preservation Element standards;
- recommend procedures for avoidance or mitigation of adverse effects to potentially significant cultural resources.

The historic architectural analysis was completed by Brad Brewster and Kathy Anderson with ESA, both of whom meet the Secretary of Interior's Professional Qualification Standards for architectural history. This chapter represents a condensed version of ESA's report "Broadway/Valdez District Specific Plan Historic Resources Inventory Report (July 2009)." The entire report including appendices is available under separate cover.

# 5.2 Regulatory Requirements

### 5.2.1 State

The State of California implements the National Historic Preservation Act (NHPA) of 1966 through its statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the state's jurisdictions.

### California Register of Historical Resources

The California Register of Historical Resources (California Register) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code [PRC] Section 5024.1[a]). The criteria for eligibility to the California Register are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historical-period property must be significant at the local, state, and/or federal level under one or more of the following criteria:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- 2) Is associated with the lives of persons important in our past;
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

For a resource to be eligible for the California Register, it must also retain enough of its character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. A historic resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

The California Register consists of resources that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined to be eligible for the National Register
- California Historical Landmarks from No. 770 onward
- California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion on the California Register
- Other resources that may be nominated to the California Register include:
  - Historical resources with a significance rating of Category 3 through 5 (i.e., properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register)
  - Individual historical resources
  - Historical resources contributing to historic districts
  - Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone

### **5.2.2 Local**

#### City of Oakland Historical Resources

In March 1994, the Oakland City Council adopted a Historic Preservation Element of the General Plan (amended July 21, 1998). The Historic Preservation Element sets out a graduated system of ratings and designations resulting from the Oakland Cultural Heritage Survey (OCHS) and Oakland Zoning Regulations.

The Oakland Cultural Heritage Survey uses a five-tier rating system for individual properties, ranging from "A" (highest importance) and "B" (major importance) to "E" (of no particular interest). This letter rating is based on such criteria as visual quality, history, context, and integrity. The rating system is described below:

- **A Highest Importance.** Properties of exceptional historical or architectural value which are clearly eligible individually for the National Register of Historical Places. Properties generally appropriate for an "A" rating include those which are outstanding examples of an important style, type, or convention, or which are intimately associated with a person, organization, event, or historical pattern of extreme importance at the local level or of major importance at the state or national level.
- **B Major importance.** Properties of major historical architectural value, but less important than those rated "A." Although most "Bs" are individually eligible for the National Register, they may be somewhat marginal candidates. Properties generally appropriate for a "B" rating include those which are especially fine examples of an important style, type, or convention or which are intimately associated with a person, organization, event, or historical pattern of major importance at the local level or of moderate importance at the state or national level.
- C **Secondary Importance.** Properties having sufficient historical or visual/architectural value to warrant limited recognition but which do not appear individually eligible for the National Register. Properties generally appropriate for a "C" rating include those which are superior or visually important examples of a particular style, type, or convention and most buildings which were constructed prior to 1906.
- D Minor Importance. Properties which are not individually distinctive but which are typical or representative examples of an important style, type, convention or historical pattern. The great majority of Oakland's pre-1946 properties fall into the "D" category.
- E Of No Particular Interest. Properties which are not representative of any important style, type, convention, or historic pattern and are visually undistinguished.

Contingency Ratings. (lower-case letter, as in "Dc" or "Fb"): potential rating under some condition, such as "if restored" or "when older" or "with more information."

District Status (numbers): "1": In an Area of Primary Importance (API) or National Register quality district. "2": In an Area of Secondary Importance (ASI) or district of local interest. "3": Not in a historic district.

For properties in districts, (+) indicates contributors, (-) indicated non-contributors, and (\*) indicates potential contributors.

All areas of the City have been evaluated by the OCHS through "windshield" surveys in 1985–1986 and 1996–1997. This Preliminary Citywide Historical and Architectural Inventory, known as the *Reconnaissance Survey*, employs the same A-B-C-D-E rating system as the OCHS, but is intended to be confirmed or modified over time by the OCHS. Nearly every building in the Project Area has an existing

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OCHS rating of A through E. In 1994, OCHS also completed a survey of all unreinforced masonry buildings in Oakland (1994 URM Survey), many of which were included in the Project Area. Each of these surveyed buildings in the 1994 URM survey received a DPR 523 Form, which was submitted to the state SHPO.

In the City of Oakland, an historical resource under the California Environmental Quality Act (CEQA) is a resource that meets any of the following criteria:

- 1) A resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources:
- 2) A resource included in Oakland's Local Register of historical resources (defined below), unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- 3) A resource identified as significant (e.g., rated 1–5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- 4) Any object, building, structure, site, area, place, record, or manuscript which the Oakland City Council determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered "historically significant" if it meets the criteria for listing on the California Register of Historical Resources CEQA Guidelines section 15064.5; or
- 5) A resource that is determined by the City Council to be historically or culturally significant even though it does not meet the other four criteria listed here.

For purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland's Local Register of Historical Resources:

- 1) All Designated Historic Properties (Landmarks, Heritage Properties, Study List Properties, Preservation Districts, and S-7 and S-20 Preservation Combining Zone Properties); and
- 2) Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance (API).

#### Local Plans and Policies

City of Oakland goals and policies that pertain to historic resources are provided primarily in the General Plan HPE. The following HPE goals and policies are applicable to the Project Area:

• <u>HPE Historic Preservation Goal 2</u>: To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value. Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural

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features related to human presence, and activities taking place on or within such properties or physical features.

- <u>HPE Policy 3.1</u>: Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions: The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions.
- <u>HPE Policy 3.5</u>: *Historic Preservation and Discretionary Permit Approvals*. For additions or alterations to Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design matches or is compatible with, but not necessarily identical, to the property's existing or historical design; or (2) the proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the character of the neighborhood; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

- <u>HPE Policy 3.7</u>: *Property Relocation Rather than Demolition*. As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site.
- HPE Policy 3.8: Local Register of Historical Resources. See discussion above.

The above policies from the Historic Preservation Element generally encourage, but do not mandate, the preservation of Oakland's historical resources, within the context of and consistent with other General Plan goals, objectives, and policies. So, for example, the admonition in HPE Historic Preservation Goal 2 against "the unnecessary destruction" of historic buildings and HPE Policy 3.1's direction to employ "all reasonable efforts to avoid or minimize adverse effects" on historical resources are reviewed against the proposed project's provision of essential health care services to the community.

A determination of consistency with the above policies by the Planning Commission and City Council must be predicated upon a finding that, as specified in HPE Policy 3.5, "(1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood."

# 5.2.3 Historic Setting

The Project Area is within the Rancho San Antonio land grant that was granted to Luis Maria Peralta on August 3, 1820 for his service to the Spanish government. The 43,000-acre rancho included the present-day cities of Oakland, Berkeley, Alameda, and parts of San Leandro and Piedmont. Peralta's land grant was confirmed after Mexico's independence from Spain in 1822, and the title was honored when California entered the Union by treaty in 1848. Despite the title, by the middle of the 19th century, squatters had moved in to use portions of Peralta's undeveloped land. The Gold Rush and California statehood brought miners, businessmen, lumbermen and other speculators to the area in search of opportunities. Early settlers of that period include Edson Adams, Andrew Moon, and Horace Carpentier, who squatted on 480 acres of Vicente Peralta's (one of Luis Peralta's sons) land. Adams, Moon, and Carpentier subsequently hired Jules Kellsersberger, an Austrian-educated Swiss military engineer, to plot a new city – Oakland, which was incorporated in 1852.

The city originally encompassed the area roughly bordered by the Oakland Estuary on the south, Market Street on the west, 14th Street on the north, and the Lake Merritt Channel on the east. Broadway served as the main street. The majority of the early city dwellers, numbering under one hundred, lived near the foot of Broadway in proximity to the estuary. In 1869, transcontinental rail service began along 7th Street, which was followed by the 1st Street freight line and Long Wharf in 1891. With the arrival of the railroad, Oakland was transformed into a commercial center with a rapidly growing population. The city's population tripled from 10,500 in 1870 to 34,555 in 1880, and the first street cars were installed in 1891. City development moved north along the street car lines of Broadway and Telegraph Avenue towards the Oakland Hills and ultimately towards East Oakland. Between 1889 and 1928, Saint Mary's College was located at what is now 3093 Broadway. This site is now California Historical Landmark No. 676.

The 1906 earthquake and fire in San Francisco prompted a population increase in Oakland, and by 1910 the City's population of 150,000 was more than double the 1900 level of 67,000. Residential and commercial development in Oakland increased during this time to accommodate displaced San Francisco residents. Older neighborhoods became more densely populated as new apartment buildings and related growth became part of Oakland's residential fabric. The population growth also increased the demand for retail goods, and shopping districts expanded throughout the next decade to meet this demand. The post-earthquake development boom defined much of downtown Oakland as it is known today, resulting in most of the City's notable early 20th century architecture.

Initially owned solely by the wealthy, automobiles became the standard mode of transportation for many Americans of all classes by the 1920s. By 1920 there were 210,000 registered vehicles in Alameda County. The number of automobile showrooms and service facilities that appeared on Broadway in the early 20th century was related to Oakland's role at the forefront of the West Coast's fledgling automobile industry. GM founder, William C. Durant, joined forces with French racecar driver Louis Chevrolet, and formed the Chevrolet Motor Car Company and in 1916 opened the first Chevrolet plant in East Oakland (Architectural Resources Group, 2006).

Both Broadway and Telegraph Avenue were in existence by 1857 as country roads leading to town. By 1870, Broadway extended beyond 14th Street—the original town—when this outlying area was mainly occupied by agricultural uses. The blocks now forming portions of the Project Area were subdivided as

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Webster Homestead and Lincoln Homestead, and were nearly fully built out with medium sized, single family houses by 1903. At the turn of the century, Sanborn maps show Broadway as having been predominantly occupied by residential buildings, as well as associated schools and hospitals. Garages and other associated automobile buildings begin appearing along Broadway by 1911, and the auto service area, with sales centers located along Broadway, had developed a strong presence by the 1920s.

Directories in the early 1910s show Oakland's center for automobile service and sales shifting from 12th, Jackson, and Madison Streets, to upper Broadway beyond 20th Street. This pattern continued through and beyond the 1920s, with service and parts becoming concentrated on the side streets in an area roughly bounded by Telegraph Avenue, Webster, and 23rd Streets. Dealerships and service garages simply kept pace with the nationwide car explosion.

It was fairly natural that upper Broadway would develop as an auto row. Its location near to, but immediately outside of, downtown Oakland where commercial real estate was slightly less expensive, dealers were able to assemble fairly large lots for the display of automobiles along a major commercial thoroughfare leading directly into town. Eventually becoming more commercial than residential in focus, the properties along Broadway eventually developed into the second most important automobile retail center in the Bay Area, after Van Ness Avenue in San Francisco.

Broadway and Telegraph Avenue were major roadways connecting Oakland to Berkeley, and streetcars transported residents and commuters from one community to another until the system was dismantled in 1948. As a major roadway leading out of Oakland, Broadway was the route to the outlying prosperous Piedmont and Rockridge residential areas, whose development owed a great deal to the automobile. By 1912, there were reportedly 4500 automobiles registered in Oakland. The majority of the buildings located within the Upper Broadway Auto Row District were constructed between 1900 and 1940s, and revolved around the growing auto industry. The main building types from this period include Beaux Arts and Moderne automobile showrooms, early 20th century utilitarian service garages, and 1920s decorative brick commercial buildings.

# 5.2.4 Common Building Types

Within the Project Area, a number of different building types exist, including retail commercial, light industrial, multi-family and single-family residential, office, and mixed-use. The most *common* building types in the Project Area, however, are commercial buildings used for auto showrooms and garages, and single-family and duplex/apartment residential buildings. A selection of the most common building types in the Project Area is described below.

### Commercial

### **Auto Showroom**

Commercial buildings within the Project Area are predominantly either auto showrooms or garages. Auto showrooms tend to be large, single story structures with frontages located close to the street. Showrooms tend to have large windows to provide viewing opportunities to patrons passing by.



Figure 5.1 -- 3093 Broadway Streamline Moderne Auto Showroom

# Garage

Garages within the Project Area tend to be single story, rectangular buildings with flat roofs located near to the street with large vehicle doorways.

Broadway/Valdez District Specific Plan Source: ESA 2009



Figure 5.2 -- 2344-50 Webster Street Decorative Brick Garage

### Residential

### Single Family

Single-family residential property types within the Project Area generally consist of either one- to twostory large family homes or smaller cottages. Architectural styles within these categories tend to reflect Craftsman style features, including exposed beams and rafters, and partial width porches supported by square columns, although other styles are also found, such as Queen Anne, Colonial Revival, and Mission Revival.

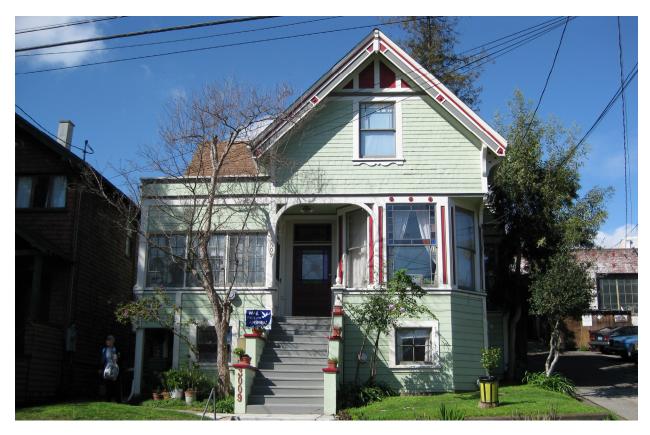


Figure 5.3 - 3009 Brook Street Queen Anne Single Family Residence





Figure 5.4 -- 2824 Richmond Avenue Craftsman Style Single Family Residence

### **Duplex**

Duplex residential property types within the Project Area generally consist of multi-story large family homes subdivided into smaller units. Architectural styles within these categories tend to reflect either Craftsman or Colonial Revival style features. Colonial Revival features include paired windows, symmetrical facades, and accentuated entryways.



Figure 5.5 - 2315-21 Harrison Street Colonial Derivative Style Duplex

# **Apartment**

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Apartment property types within the Project Area generally consist of multi-story buildings with ten to twenty units. Architectural styles within these categories tend to cover a wide range of types, including Mission Revival, Colonial Revival, and Craftsman.



Figure 5.6 - 2337 Harrison Street Mission Revival Style Apartment

# 5.3 Methods

### 5.3.1 Archival Search

Archival research was conducted at the Oakland Cultural Heritage Survey archives in March 2009. Existing Department of Park and Recreation (DPR) forms from the 1994 Unreinforced Masonry (URM) Survey were reviewed, as were records from the reconnaissance-level windshield survey conducted by the OCHS in 1986. Also included in the review were the California Inventory of Historical Resources (California Department of Parks and Recreation 1976), California Historical Landmarks (1990), California Points of Historical Interest (1992), and the Historic Properties Directory Listing (2004) for Alameda County. The Historical Resources, and listings of the National Register and the California Register of Historical Resources, and listings of the California Historical Landmarks and California Points of Historical Interest.

## 5.3.2 Field Survey

ESA staff historians Kathy Anderson and Brad Brewster conducted a reconnaissance-level pedestrian survey of the Project Area in February and March, 2009, to identify existing and potential historic architectural resources. Of the approximately 225 buildings in the Project Area, the survey focused solely on those buildings at least 45 years old (pre-1964), which is considered the minimum age threshold for potential listing as an historic resource. As such, the survey focused on a total of 150 pre-1964 buildings. Buildings located in the Project Area were photographed and evaluated for their historic significance at a reconnaissance level, and are discussed below.

### 5.3.3 Results

#### Archival Search Results

Results of the archival search indicate that a majority of the buildings within the Project Area had been surveyed either in the 1986 windshield survey or in the 1994 URM survey. Between these two surveys, 150 buildings within the Project Area were recorded and evaluated for their historic significance at a reconnaissance level. A complete listing of these resources, including descriptions, original ratings, and updated current OCHS ratings, are located in Appendices A and B of the complete Historic Resource Inventory (under separate cover).

#### 'A' or 'B' Rated Buildings in the Project Area

Among the 150 buildings surveyed within the Project Area, archival results identified nine buildings previously identified as either an "A" or "B"-rated building, and are therefore considered local historic resources under the City of Oakland Historic Preservation Element and for CEQA purposes. "A"-rated buildings are eligible for consideration as landmarks by the City of Oakland. Table 5-1 below identifies these resources. Figure 5.7 shows the location of these nine "A" and "B"-rated resources, as well as the locations of Areas of Secondary Importance (ASIs) within the Project Area. Figure 5.8 shows the approximate ages of the buildings located within the Project Area. Figure 5.9 shows a map of all district contributors. Figures 5.10 – 5.18 contain photographs and brief descriptions of these resources.

TABLE 5-1
EXISTING "A" AND "B" RATED BUILDINGS WITHIN THE PROJECT AREA

Address	Historic Name	Date Constructed	Rating (A-E)	District Code	CEQA Historic Resource (y/n)
2355 Broadway	Packard & Maxwell – Don Lee – Western Auto Bldg	1913-14	B+a1+	25D	у
2601-19 Broadway	First Presbyterian Church	1913-14	A3	n/a	у
2863-69 Broadway	n/a	1892	B*2+	AU2	у
2946-64 Broadway	Firestone Tire & Rubber service station	1930	B-2+	AU2	у
3074 Broadway	Grandjean - Burman(C.) -GM Co-Alzina garage	1917	B-2+	AU2	у
3304-60 Broadway	Eisenback (Leo)-Strough (Val) showroom	1917	B*2+	AU2	у
2333 Harrison Street	Seventh Church of Christ Scientist	1915-18	A3	n/a	у
2332 Harrison Street	YMCA Blue Triangle Club	1925-1926	A3	n/a	у
2346 Valdez Street	Newsom Apartments	1909-10	B+2+	WV2	у

SOURCE: OCHS, 2009

Located outside of, but immediately adjacent to, the Project Area is Temple Sinai, an A-Rated City Landmark building, at 356 28<sup>th</sup> Street. No other landmarks or buildings with existing "A" or "B" ratings are known to exist on the immediate periphery of the Project Area

#### Areas of Secondary Importance in the Project Area

There are five areas within the Project Area that have been identified by the City of Oakland as Areas of Secondary Importance (ASIs). While an Area of Primary Importance (API) is considered a National Register quality district, an ASI is considered a district of local interest, and not considered a historic resource under CEQA, according to the City of Oakland Historic Preservation Element (discussed above). Although contributors to an ASI are not considered 'historic resources' by CEQA per se, they may have local importance that are worthy of recognition in specific planning efforts.

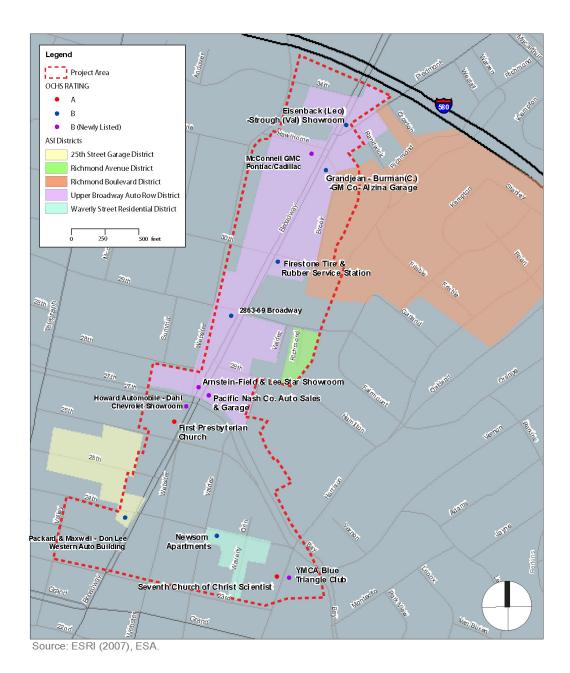
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### The Broadway Auto Row ASI (AU2)

The Broadway Auto Row District is identified as an ASI for the City of Oakland. The Broadway Auto Row District includes buildings historically constructed for automobile related uses: auto and auto accessory factories, showrooms, repair and parking garages, and service stations. Upper Broadway was referred to as "Auto Row" by the mid-1910s.

Automobile-related buildings constructed on Broadway in the early twentieth century abut the sidewalk and provide a "window wall of storefronts" to display the vehicles. Storefront windows were large, often reaching from floor to ceiling, to afford open views of showrooms from the street and sidewalk.

The Upper Broadway Auto Row District is a distinctive early 20th century commercial district of approximately 49 buildings on 53 assessor's parcels, all of which are in the Project Area. Approximately 34 properties contribute to the district's significance. Most buildings date from the 1910s through 1940s, and main property types are Beaux Arts and Moderne automobile showrooms, early 20th century utilitarian service garages, and 1920s decorative brick commercial buildings. Within this district, four buildings are rated either A or B. The district is considered to be of secondary local importance (ASI).



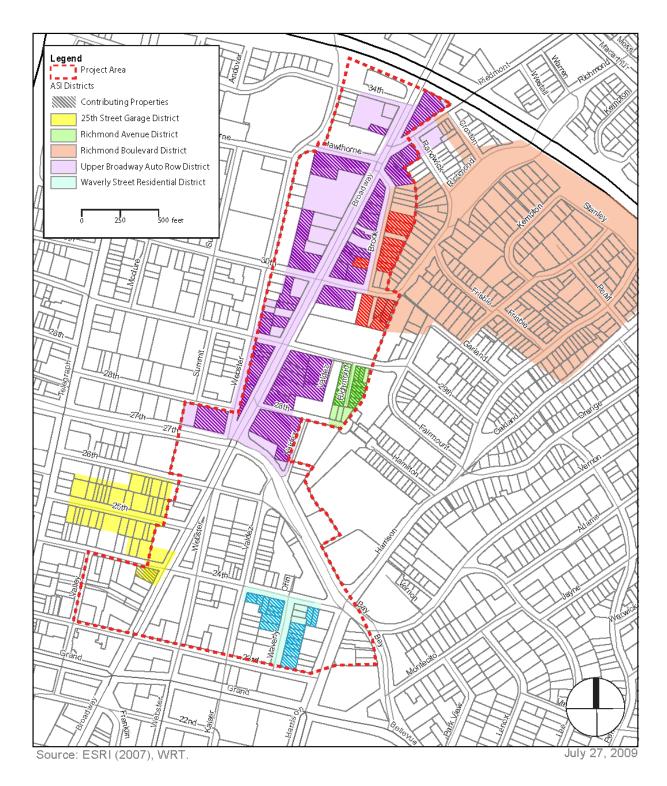
Broadway/Valdez District Specific Plan

Figure 5.7: ASI'S and A- or **B-Rated Buildings** 



BROADWAY/VALDEZ DISTRICT SPECIFIC PLAN





Broadway/Valdez District Specific Plan

BROADWAY/VALDEZ DISTRICT SPECIFIC PLAN

Figure 5.9: ASI Districts and Contributing Properties



#### The 25th Street Garage District (25D)

The 25th Street Garage District, a small portion of which is within the Project Area, is also identified as an ASI for the City of Oakland. The 25th Street Garage District occupies most of both sides of the block of 25th Street between Broadway and Telegraph Avenue, and parts of the east end of the same block on 24th and 26th Streets. The buildings in the district are predominantly one story service or industrial, and face onto the side (numbered) streets, not the Telegraph or Broadway commercial frontages. The buildings in the district are predominantly one-story brick and truss-roofed garages built between 1920 and 1929. The 25th Street Garage District is significant as a concentrated, intact, and homogenous group of buildings of a distinctive type, dating from a specific period of Oakland's economic development.

In 1913, the Oakland City Council established an ordinance regulating the construction of buildings used as public automobile garages, stating that public garages were to be "of brick, stone, or concrete construction" with concrete floors, well ventilated at floor level, and lit only be electricity. After 1929, construction in the present district stopped until the late 1940s. The result of this short development period is an enclave of single-frontage, single-purpose buildings unusually uniform in type, style, and construction.

### The Waverly Street Residential District (WV2)

The Waverly Street Residential District ASI is a turn-of-the-century residential district of approximately 19 buildings on 21 assessor's parcels, predominantly consisting of Colonial Revival and Craftsman-style single family residences, a portion of which is located in the northeast section of the Project Area. Buildings date from the 1880s to the 1920s, with the majority of the buildings constructed between 1900 and 1910.

### **Richmond Avenue District (RA2)**

The Richmond Avenue District ASI is a residential district of approximately 13 homes on 13 assessor's parcels, on one block. Buildings are similar in size, age and design. All buildings are Craftsman cottages from the 1910s, either one or one and a half stories in height, and include examples of early residential garages.

### **Richmond Boulevard District (RCH)**

The Richmond Boulevard District ASI is an architecturally distinguished turn of the century residential district of approximately 116 buildings on 137 parcels on 7 blocks along Glen Echo Creek and Oak Glen Park. A portion of this district is found in the Project Area. Most buildings date from the 1900s -1920s and are two stories in height. There are 19 buildings within the Project Area which are included in the Richmond Boulevard District including portions of Brook Street, Piedmont Avenue, and 30<sup>th</sup> Street. The buildings include predominantly Craftsman and Colonial Revival style single family homes.

### California Historical Landmarks and National Register Listed Buildings

The only California Historic Landmark in the Project Area is the Saint Mary's College Site (CHL 676), which existed from 1889 to 1928 on what is now 3093 Broadway. This site, however, is not list in the California Register of Historic Resources, because only those CHL's numbered 770 and higher are

automatically listed in this register (see page 5-2 for a complete description). As this site is not listed in the California Register, it would not be considered an historic resource for CEQA purposes.

No buildings listed in the National Register are located in the Project Area. The closest site listed on the National Register is the Locke House, located at 3911 Harrison Street, located approximately 0.5 miles east of the Project Area.

## 5.3.4 Survey Results

### Survey Methodology

The pedestrian survey completed by ESA in March 2009 identified the buildings previously identified in the 1986 and 1994 surveys, and provided a reconnaissance-level assessment of whether these original OCHS ratings were still correct. Considerations such as physical alterations, restorations, as well as new information which may have come to light since these buildings were originally surveyed were used to inform the rating assessment.

Buildings were evaluated based on the Oakland Cultural Heritage Survey (OCHS) five-tier rating system, described in detail above and briefly summarized again below. City designated building ratings range from "A" (highest importance) and "B" (major importance) to "E" (of no particular interest). This letter rating is based on such criteria as visual quality, history, context, and integrity.

- **A Highest Importance.** Properties of exceptional historical or architectural value which are clearly eligible individually for the National Register of Historical Places.
- **B Major importance.** Properties of major historical architectural value, but less important than those rated "A."
- C **Secondary Importance.** Properties having sufficient historical or visual/architectural value to warrant limited recognition but which do not appear individually eligible for the National Register.
- **D Minor Importance.** Properties which are not individually distinctive but which are typical or representative examples of an important style, type, convention or historical pattern.
- **E Of No Particular Interest.** Properties which are not representative of any important style, type, convention, or historic pattern and are visually undistinguished.

*Contingency Ratings.* (lower-case letter, as in "Dc" or "Fb"): potential rating under some condition, such as "if restored" or "when older" or "with more information."

### District Status (numbers):

- "1": In an Area of Primary Importance (API) or National Register quality district.
- "2": In an Area of Secondary Importance (ASI) or district of local interest.
- "3": Not in a historic district.

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For properties in districts, (+) indicates contributors, (-) indicated non-contributors, and (\*) indicates potential contributors.

### Survey Findings

The pedestrian survey identified 23 buildings whose integrity had been altered since they were originally surveyed, buildings which have achieved the 45 year age threshold since their original evaluation, or had no local rating. Among these, four of the buildings surveyed would possess new proposed ratings of "B" because they have been restored since they were original evaluated or they are considered an outstanding example of their type and period. These are 2740 Broadway, 2801-25 Broadway / 2800-24 Webster, 3093 Broadway and 2735 Webster. Table 5-2 describes the original rating of these buildings and ESA's suggested new rating. Figure 5.7 identifies the location of the four buildings with new ratings of "B" in addition to the existing "A" and "B" rated buildings. There are a total of 13 buildings in the plan area which are considered historic resources for CEQA purposes (nine existing and four newly identified).

This chapter represents a condensed version of ESA's report "Broadway Valdez District Specific Plan Historic Resources Inventory Report (April 2009)." The entire report including appendices is available under separate cover. Appendix A provides a table of all surveyed buildings in the Project Area, identifying them by street address, existing NRHP ratings and OCHS ratings, proposed new OCHS ratings (if any), year built information, district information, and historic name (if any). Appendix B provides updated continuation forms for many of the buildings that had been previously surveyed as part of the 1994 URM survey and had DPR forms prepared. The updated continuation forms are attached to the end of each existing DPR form. Properties which have a rating of "5" on DPR form 523, specifically, indicating they appear eligible for local listing, will be addressed separately. For buildings where no previous DPR forms were prepared, ESA attached a photo of the property and brief descriptive data. In some cases, and where available, OCHS evaluation sheets were also attached to Appendix B.

### Existing "A" and "B" - Rated Buildings in the Project Area



Source: ESA 2009

Figure 5.10 -- 2601-19 Broadway First Presbyterian Church

The First Presbyterian Church at 2601-19 Broadway is a Gothic Revival-Tudor Revival church building, measuring three stories high and constructed of reinforced concrete with concrete blocks. The building was constructed in 1913-14 by architect William C. Hays, as well as consultation from architects Cram, Goodhue & Ferguson and engineers Maurice Couchot and William Leland. The First Presbyterian Church of Oakland supported the first congregation of any denomination to be organized in Oakland, beginning in the spring of 1853. The building is significant for its site and landscaping, as well as its distinguished architecture, combining 20<sup>th</sup> century structure and materials (steel frame, reinforced concrete, concrete block cladding) with the design and proportions of the English Perpendicular Style. The design was displayed in the 1915 San Francisco Architectural Club Exhibit, as well as the first exhibition of the Alameda County Society of Architects in 1916. The First Presbyterian Church is an "A" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.



Source: ESA 2009

Figure 5.11 -- 2333 Harrison Street Seventh Church of Christ Scientist

The Seventh Church of Christ Scientist at 2333 Harrison is a low-lying, single story wood frame Arts and Crafts bungalow church with a clerestory, flared gable roofs with exposed beams. The building was constructed in 1915 and designed by architect William Arthur Newman. Newman was the architect for the Oakland Post Office in 1931, as well as several other buildings in Oakland. The building is significant for its architectural and for its association with locally significant architect, William Newman. The Seventh Church of Christ, Scientist is an "A" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.

BROADWAY/VALDEZ DISTRICT SPECIFIC PLAN





Source: ESA 2009

Figure 5.12 - 2332 Harrison Street YMCA Blue Triangle Club

The YMCA Blue Triangle Club at 2332 Harrison Street is a Beaux Arts derivative Mediterranean hotel building, measuring four stories high on a U-shaped plan. The reinforced concrete framed building has curtain walls of terra cotta tile and brickwork detailing on a concrete foundation. The building was constructed in 1925-26 by architects McCall & Davis, and builders Villadsen Brothers Inc. The original occupant was the YWCA Blue Triangle Club, and the building reflects lakeside development in Oakland, as well as social history, and women's history in Oakland. The YWCA Blue Triangle Club building is an "A" rated building within the Project Area. Based on the visual inspection by ESA in March 2009, and consultation with the City of Oakland, determined that the building possesses a rating of Ba3, due to replacement of the original windows.



Source: ESA 2009

Figure 5.13 -- 2346 Valdez Newsom Apartments

The Newsom Apartments at 2346 Valdez Street is a three-story and basement shingled frame apartment building. Considered part of the Waverly Residential District, the building was constructed in 1909-1910 by architect/builder/owner Sidney B Newsom. Newsom was the son of Samuel Newsom and the nephew of Joseph Cather Newsom, renowned and prolific "low-art architects" of California. The building is considered significant for its association with Sidney Newsom and well as its craftsman design. The roof is basically flat, with steeply pitched crossed gables dominating both street facades, and two large half-timbered gables over symmetrical rectangular bay windows on Valdez and a single similar feature on the 24<sup>th</sup> Street façade. The main façade on Valdez Street is organized symmetrically. Between the bays the entry is flanked by pairs of windows at the first door, and two pairs of windows near the center of the third floor. The craftsman theme is expressed by projecting rafters jigsawn with decorative endings. These rafters project under eaves, windows and bay windows. The current use is as an apartment building. The Newsom Apartment building is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.



Source: ESA 2009

Figure 5.14 -- 2355 Broadway
Packard & Maxwell - Don Lee - Western Auto Building

The Packard & Maxwell – Don Lee - Western Auto Building at 2355 Broadway is a four-story reinforced concrete building originally designed for auto sales on the ground floor and offices on the upper floors. The building plan has 100' by 135' frontages and a rounded, flatiron corner. The ground floor consists of mostly glazed storefront bays and a low tiled base. The upper floors are formed concrete, and the flatiron corner is curved and slightly recessed from the facades. Windows are three over three in hinged casements separated by plain wall surfaces. A metal cornice molding separates the top floor from the roof parapet, and the second floor from the base. Current use is a mix of ground floor commercial and upper floor residential and commercial live/work lofts.

The building was constructed in 1913-14 by architect and building, Willis Polk & Company. Willis Polk was prominent in the 1890s as one of the pioneers of the so-called Bay Region style, and after the turn of the century was associated with civic improvement project in San Francisco. The building at 2355 was a full complex of auto shops intended for Cuyler Lee's Packard and Maxwell dealership and garage. The building was, and remains, larger and more urbane than any of the other auto row buildings in the Project Area. The building at 2355 Broadway acts as an anchor and foil to the one-story utilitarian buildings which make up the 25th Street Garage District to the west. 2355 Broadway is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating, although it has been recently rehabilitated and the upper floors converted into residential lofts.



Source: ESA 2009

Figure 5.15 -- 2863-2869 Broadway

2863-69 Broadway is a two-story Queen Anne commercial building on a corner lot. The building sits on a slightly trapezoidal plan and has a pent roof on both street sides. There is a slender round corner tower with a witch's cap roof, and multiple angled bays on the second story. The wood frame structure has a composition shingle roof, and the ground floor has plate glass storefronts and pressed brick pilasters. The building was designed by Charles Mau in 1892 and is one of the oldest buildings in the Upper Broadway Auto Row District. The ground floor has plate glass storefronts and pressed brick plasters, which are presumed to date to the 1920s. Current use is commercial, and 2863-69 Broadway is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.



Source: ESA 2009

Figure 5.16 -- 3304-60 Broadway Eisenback-Strough Showroom

The Eisenback -Strough showroom at 3304-60 Broadway is an early 20<sup>th</sup> century Beaux Arts derivative and Arts and Crafts automobile showroom in the Upper Broadway Auto Row District. It is a high one story building in a flatiron shape with exterior walls covered in dark red brick with a concrete foundation. The building has a straight parapet, pilaster and bay composition with pilaster caps, large windows and transom. The building was constructed in 1917 by architects Falch & Knoll. The building reflects motor transportation and the auto industry as an early and elaborate showroom. The Eisenback-Strough showroom is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.



Source: ESA 2009

Figure 5.17 -- 2946-64 Broadway Firestone Tire & Rubber Service Station

The Firestone Tire & Rubber service station at 2946-64 Broadway is a one story Art Deco service garage in the Upper Broadway Auto Row District. The building has a trapezoidal plan on a corner lot, and has a truss roof, decorated parapet and rounded corner with recessed entry. The exterior walls are cast concrete and terra cotta, and the decorative parapet has a cast concrete leaf pattern with crests marked "F" (Firestone) spaced evenly throughout. The building was constructed in 1930 by builder Harold Page and designed by architect Charles W. McCall. The original owner and occupant from the 1930s was Firestone Tire and Rubber. The building reflects motor transportation and the auto industry, as well as national business and industries in Oakland. The building is currently used as an auto showroom. The Firestone Tire and Rubber service station is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.



Source: ESA 2009

Figure 5.18 -- 3074 Broadway Grandjean-Burman - GM Co-Alzina Garage

The Grandjean-Burman - GM Co-Alzina garage at 3074 Broadway is a 1920s decorative brick automobile showroom constructed of pressed brick and common brick with a concrete foundation. The building is one and two stories on an irregular plan on a double ended lot. The brick building has a stepped and peak parapet as well as elaborate, three-dimensional brickwork framing the windows. The building was constructed in 1917 by architect/building A.S. Holmes, and is an early example of the decorative brick style that became popular in the 1920s. Current use is commercial and the Grandjean-Burman – GM Co. – Alzina garage is a "B" rated building within the Project Area. Based on the pedestrian survey completed by ESA in March 2009, this building would retain its existing rating.

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The pedestrian survey completed by ESA in March 2009 identified 23 buildings in the Project Area whose integrity had been altered since they were originally surveyed, buildings which have achieved the 45 year age threshold since their original evaluation, or had no local rating. Table 5-2, below, describes the existing local rating of these buildings (if any) and ESA's suggested new local rating, with the exception of 2332 Harrison Street, which is described above. These buildings are also shown on Figures 5-19 through 5-42.

**TABLE 5-2 BUILDINGS WITH ALTERED RATINGS WITHIN THE PROJECT AREA** 

Street Address		OCHS Rating	New Rating	Year Built	Historic Name	CEQA Historic Resource (y/n)	
2404	BROADWAY	F3	E3	1943		n	
2740	BROADWAY	Cb+2+	B2+	1929	Pacific Nash Co. auto sales and garage	у	
2801-25	BROADWAY	Cb+2+	B2+	1916	Arnstein-Field & Lee Star showroom	у	
2943	BROADWAY	*2-	E2-	1952	Hollidge Hydramatic Service	n	
3026	BROADWAY	F2-	E2-	1963		n	
3093	BROADWAY	C2+	B2+	1947	McConnell GMC Pontiac Cadillac	y	
3007	BROOK ST	D2+	C2+	1900		n	
3028	BROOK ST	F2-	E2-	1950s		n	
3050	BROOK ST	F3	E3	1931		n	
2332*	HARRISON ST	A3	Ва3	1925-	YMCA Blue Triangle Club	у	
2336	HARRISON ST		D3	1950		n	
2340	HARRISON ST	*3	D3	1952		n	
2344	HARRISON ST	*3	D3	1948		n	
2410	WEBSTER ST	*3	D3	1956	C. P. Hunt Co. Annex	n	
2500-06	WEBSTER ST	Dc3	*D	1929-	J. A. Kitchen Auto Repair Garage	n	
2735	WEBSTER ST	Ec2*	B+2+	1924	Howard Automobile-Dahl Chevrolet showroom	у	
2950	WEBSTER ST	Fc3	*d3	1900s		n	
326-48	23RD ST	Ed3	D3	1922	Chestnut (Mary) store	n	
266-72	24TH ST	C3	*3	1925-	United Automotive Service	n	
366	24TH ST	X	D3	1938		n	
290-92	27TH ST	D3	C3	1945- 46	Schwarz(H.)-Chanslor & Lyon Co. building	n	
293	27TH ST	F3	E3	1950		n	
295	27TH ST	X	*3	1963		n	

SOURCE: OCHS 2009; ESA 2009

<sup>\* =</sup> not previously surveyed





Figure 5.19 -- 2400-04 Broadway / 2401-03 Webster Street

2400-04 Broadway: 2400-04 Broadway is a two story commercial structure built in 1943 with a plain parapet and flat roof. The exterior walls are stucco, and the first floor consists of store front windows separated by brick pillars. As part of the 1986 OCHS Survey, this property was assigned a rating of F3 by the OCHS. From visual inspection by ESA in March 2009, the property appears to possess a E3 rating. The building at 2400-04 Broadway / 2401-03 Webster is not considered an historical resource for CEQA purposes.



Figure 5.20 -- 2740 Broadway Pacific Nash Co. Auto Sales and Garage

2740 Broadway: The Pacific Nash Co. auto sales and garage at 2740 Broadway is a two story Art Deco building built in 1929 on a corner lot. The reinforced concrete building has brick exterior walls and a straight parapet with decorated pilaster caps. The building has large four by four metal sash windows, and vertical pilasters run the length of the building along the northern and eastern facades. As part of the 1994 URM Survey, this property was assigned a rating of Cb+2+ by the OCHS, and a National Register Status Code of "7" on DPR form 523 B, which indicates that it was not evaluated for National Register (NR) or California Register (CR). From visual inspection by ESA in March 2009, the property appears restored from when it was originally evaluated in 1994, with the transom covering removed to reveal the windows underneath. It is the professional opinion of ESA that the building currently possesses a B2+ rating. The building at 2740 Broadway is therefore considered an historical resource for CEQA purposes.



Figure 5.21 -- 2801-25 Broadway / 2800-24 Webster
Arnstein-Field & Lee Star Showroom

2801-25 Broadway / 2800-24 Webster: The Arnstein-Field & Lee Star Showroom at 2801-25 Broadway / 2800-24 Webster is a single story Beaux Arts derivative Spanish Colonial commercial building built in 1916. The long, flatiron building extends approximately 200 feet, and has four peaked parapets on each side over arched doors or windows with fan lights. Exterior walls are stucco with large plate glass storefront windows. As part of the 1994 URM Survey, this property was assigned a rating of Cb+2+ by the OCHS, and a National Register Status Code of "7" on DPR form 523 B, which indicates that it was not evaluated for National Register (NR) or California Register (CR). From visual inspection by ESA in March 2009, the property appears restored from when it was originally evaluated in 1994, with the removal of modern ornamentation. It is the professional opinion of ESA that the building currently possesses a B2+ rating. The building at 2801-25 Broadway / 2800-24 Webster is therefore considered an historical resource for CEQA purposes.



**Figure 5.22 -- 2943 Broadway**Hollidge Hydramatic Service

**2943 Broadway:** The Hollidge Hydramatic Service station at 2943 Broadway is a single story commercial building with a flat roof, large vehicle door, and hollow clay tile exterior walls built in 1952. As part of the 1986 OCHS Survey, this property was assigned a rating of \*2- by the OCHS, due to the building not having reached the 50 year standard for evaluation at the time. From visual inspection by ESA in March 2009, the property appears to be a E2- rated building due to its lack of distinctive characteristics and its modern appearance. The building at 2943 Broadway is not considered an historical resource for CEQA purposes.





Figure 5.23 -- 3026 Broadway

**3026 Broadway :** 3026 Broadway is a single story commercial building built in the 1950s with a flat roof and brick and stucco exterior walls. An awning extends over the first floor, covering metal sash plate glass windows. As part of the 1986 OCHS Survey, this property was assigned a rating of F2- by the OCHS, due to the building not having reached the 50 year standard for evaluation at the time. From visual inspection by ESA in March 2009, the property appears unchanged from when it was originally evaluated in 1986. It is the professional opinion of ESA that the building currently possesses a E2- rating. The building at 2863-69 Broadway is not considered an historical resource for CEQA purposes.



Figure 5.24 -- 3093 Broadway

**3093 Broadway:** 3093 Broadway is a single story Streamline Moderne commercial building on a corner lot designed by architect Alben Froberg. The showroom section has a straight parapet, full height windows, and a rounded corner topped with a large commercial sign reading "GMC Pontiac Cadillac Buick." Exterior walls are reinforced concrete with stucco and glass. The garage located behind the showroom is reinforced concrete, plain with small windows. As part of the 1994 URM Survey, this property was assigned a rating of C2+ by the OCHS, and a National Register Status Code of "7" on DPR form 523 B, which indicates that it was not evaluated for National Register (NR) or California Register (CR). From visual inspection by ESA in March 2009, and consultation with the City of Oakland, the building possesses a rating of B2+ as an outstanding example of its type and period. The building at 3093 Broadway is considered an historical resource for CEQA purposes.



Source: ESA 2009

Figure 5.25 -- 3007 Brook Street

**3007 Brook Street:** 3007 Brook Street is a two story Craftsman derivative residential building with redwood siding. The building has a gable roof, exposed beams and rafters, an asymmetrical façade, and a partially enclosed porch supported by square columns. As part of a 1996 OCHS Field Survey, this property was assigned a rating of D2+ by the OCHS. From visual inspection by ESA in March 2009, and consultation with the City of Oakland, determined that the building possesses a rating of C2+. The building at 3007 Brook Street is not considered an historical resource for CEQA purposes.



Figure 5.26 -- 3028 Brook Street

3028 Brook Street: 3028 Brook Street is a single story shed style commercial building built in the 1950s. Exterior walls are hollow clay tile. As part of a 1996 OCHS Survey, this property was assigned a rating of F2- by the OCHS. From visual inspection by ESA in March 2009, the property appears to possess a E2- rating. The building at 3028 Brook Street is not considered an historical resource for CEQA purposes.



Figure 5.27 -- 3050 Brook Street

**3050 Brook Street**: 3050 Brook Street is a single story, reinforced concrete commercial building with a vehicle door, flat roof, and domed ventilation system built in 1931 according to tax information, but has been clearly altered since then. As part of a 1996 OCHS Survey, this property was assigned a rating of F3 by the OCHS. From visual inspection by ESA in March 2009, the property appears to possess a E3 rating. The building at 3050 Brook Street is not considered an historical resource for CEQA purposes.



Figure 5.28 -- 2336 Harrison Street

2336 Harrison Street: 2336 Harrison Street is a single story commercial building built in the 1940s with a straight parapet, flat roof, a recessed entry, and brick exterior walls. From visual inspection by ESA in March 2009, the property appears to possess a D3 rating. The building at 2336 Harrison Street is not considered an historical resource for CEQA purposes.



Figure 5.29 -- 2340 Harrison Street

2340 Harrison Street: 2340 Harrison Street is a tall single story commercial building built in the 1950s with a straight parapet, flat roof, vehicle door, and stucco exterior walls. From visual inspection by ESA in March 2009, the property appears to possess a D3 rating. The building at 2340 Harrison Street is not considered an historical resource for CEQA purposes.



Figure 5.30 -- 2344 Harrison Street

2344 Harrison Street: 2344 Harrison Street is a single story commercial building built in the 1950s with a straight parapet, flat roof, recessed entry, brick exterior walls and large plate glass windows. From visual inspection by ESA in March 2009, the property appears to possess a D3 rating. The building at 2344 Harrison Street is not considered an historical resource for CEQA purposes.



Figure 5.31 -- 3356 Piedmont Avenue

**3356 Piedmont Avenue:** 3356 Piedmont Avenue is a single story commercial building built in 1946 on a corner lot. The building has a straight parapet, round corner, storefront windows, and brick and concrete exterior walls. As part of the 1994 URM Survey, this property was assigned a rating of \*d3 by the OCHS, due to the building not having reached the 50 year standard for evaluation at the time. From visual inspection by ESA in March 2009, the property appears unchanged from when it was originally evaluated in 1994. Although it has some minimal Art Deco styling due to the rounded corner and horizontal bands, it is the professional opinion of ESA that the building currently posses a D3 rating. The building at 3356 Piedmont is not considered an historical resource for CEQA purposes.



Figure 5.32 - 2410 Webster Street

**C. P. Hunt Co. Annex. 2410 Webster Street:** 2410 Webster Street is a tall single story Modern style commercial building built in 1956 with transom windows, metal siding, and tile base façade. Exterior walls are hollow clay tile. As part of the 1994 URM Survey, this property was assigned a rating of \*3 by the OCHS, due to the building not having reached the 50 year standard for evaluation at the time. From visual inspection by ESA in March 2009, the property appears to possess a D3 rating. The building at 2410 Webster Street is not considered an historical resource for CEQA purposes.



Figure 5.33 - 2500-06 Webster Street

**2500-06 Webster Street:** 2500-06 Webster Street is a single story commercial building. The reinforced concrete building has a straight parapet, tile base on the façade, and plate glass windows. As part of the 1985 OCHS North Central Intensive Survey, this property was assigned a rating of Dc3 by the OCHS. From visual inspection by ESA in March 2009, the front facade appears altered with newer shop windows, pedestrian and vehicular doors, signage, and painting from when it was originally evaluated in 1994. Based on visual inspection by ESA in March 2009, and consultation with the City of Oakland, the building possesses a rating of \*D. The building at 2500-06 Webster Street is not considered an historical resource for CEQA purposes.



Figure 5.34 -- 2735 Webster Street

**2735 Webster Street:** The Howard Automobile-Dahl Chevrolet Showroom at 2735 Webster Street, built in 1924, is a two story Beaux Arts commercial building with reinforced concrete walls, a straight parapet, pilaster and bay composition, pilaster caps, and industrial sash windows on the second floor. As part of the 1994 URM Survey, this property was assigned a rating of Ec2\* by the OCHS. From visual inspection by ESA in March 2009, the property has been restored from when it was originally evaluated in 1994, including the removal of the corrugated metal siding, in addition to the identification of an intact original interior, and therefore would posses a new rating of B+2+. The building at 2735 Webster Street is considered an historical resource for CEQA purposes.



Figure 5.35 -- 2946 Webster Street

2946-50 Webster Street: 2946-50 Webster Street is a pair of two story residential buildings now joined in a U shaped plan with hipped roof, recessed entry surrounded by tile pillars, and stucco exterior walls. As part of the 1986 OCHS Survey, this property was assigned a rating of D2+ by the OCHS. From visual inspection by ESA in March 2009, and consultation with the City of Oakland, determined that the building possesses a rating of \*d3, as it appears to have been heavily modified. The building at 2946-50 Webster Street is not considered an historical resource for CEQA purposes.



Figure 5.36 -- 366 24th Street

326-48 23rd Street: 326-48 23rd Street is a single story decorative brick commercial building with a straight parapet, multiple storefronts, and plate glass windows. As part of the 1994 URM Survey, this property was assigned a rating of Ed3 by the OCHS. From visual inspection by ESA in March 2009, and consultation with the City of Oakland, determined that the building possesses a rating of D3. The building at 326-48 23rd Street is not considered an historical resource for CEQA purposes.



Figure 5.37 -- 266-72 24th Street

**266-72 24th Street:** 266-72 24th Street is a tall single story commercial building with concrete exterior walls and plate glass windows. As part of the 1985 OCHS North Central Intensive Survey, this property was assigned a rating of C3 by the OCHS. From visual inspection by ESA in March 2009, the property appears altered from when it was originally evaluated in 1985, including new windows and major exterior alterations. Visual inspection by ESA in March 2009, and consultation with the City of Oakland, determined that the building possesses a rating of \*3, as it has been heavily modified since its original evaluation 266-72 24th Street is not considered an historical resource for CEQA purposes.



Figure 5.38 -- 366 24th Street

366 24th Street: 366 24th Street is a single story commercial building built in 1938 with a flat roof, vehicle entrance, and hollow clay tile exterior walls. As part of the 1986 OCHS Survey, this property was assigned a rating of X, or no rating, by the OCHS. From visual inspection by ESA in March 2009, the property appears possess a D3 rating. The building at 366 24th Street is not considered an historical resource for CEQA purposes.



Figure 5.39 - 290-92 27th Street

290-92 27<sup>th</sup> Street: 290 27th Street is a two story commercial building built in 1945-46, with hollow clay tile and reinforced concrete exterior walls. As part of the 1986 OCHS Survey, this property was assigned a rating of F3 by the OCHS. From visual inspection by ESA in March 2009, and consultation with the City of Oakland, the building possesses a rating of C3. The building at 290 27th Street is not considered an historical resource for CEQA purposes.



Figure 5.40 -- 293 27th Street

293 27th Street: 293 27th Street is a single story, reinforced concrete commercial building built in 1950 with a flat roof, vehicle door, and stucco exterior walls. As part of the 1986 OCHS Survey, this property was assigned a rating of F3 by the OCHS, due to not having reached the 50 year threshold at the time of its original evaluation. From visual inspection by ESA in March 2009, the property appears to possess a E3 rating. The building at 367 24th Street is not considered an historical resource for CEQA purposes.





Figure 5.41 -- 295 27th Street

295 27th Street: 295 27th Street is a two story commercial building with wood frame and reinforced concrete block exterior walls. As part of the 1986 OCHS Survey, this property was assigned a rating of X by the OCHS. From visual inspection by ESA in March 2009, the property appears unchanged from when it was originally evaluated in 1986, but would now possess a \*3 rating. The building at 367 24th Street is not considered an historical resource for CEQA purposes.

#### CHAPTER 5: HISTORIC RESOURCES

# 5.4 Summary of Findings

This chapter documents the historic resources inventory study completed for the Broadway / Valdez District Specific Plan project in Oakland, California. The study consisted of archival review at the Oakland Cultural Heritage Survey archives, historical research at local repositories, and a reconnaissance-level pedestrian field survey in March 2009.

Of the 150 buildings and structures identified as older than 45 years, and surveyed within the Project Area, 13 structures, were identified as CEQA historic resources (i.e., 9 currently designated and 4 recommended based on survey) based on criteria listed on Page 5-4. These are shown in the summary table, below.

#### SUMMARY TABLE OF HISTORIC RESOURCES WITHIN PROJECT AREA

Street Add	dress	NRHP Rating	OCHS Rating	New Rating	Year Built	Historic Name	CEQA Historic Resource (y/n)
2355	BROADWAY	3D	B+a1+(LM)		1913- 14	Packard & Maxwell- Don Lee- Western Auto Bldg	у
2601-19	BROADWAY	3S	A3 (LM)		1913- 14	First Presbyterian Church	у
2740	BROADWAY	5B	Cb+2+	B2+	1929	Pacific Nash Co. auto sales and garage	у
2801-25	BROADWAY	N/A	Cb+2+	B2+	1916	Arnstein-Field & Lee Star showroom	у
2863-69	BROADWAY	N/A	B*2+		1892		у
2946-64	BROADWAY	5B	B-2+		1930	Firestone Tire & Rubber service station	у
3074	BROADWAY	5B	B-2+		1917	Grandjean - Burman(C.)-GM Co-Alzina garage	у
3093	BROADWAY	N/A	C2+	B2+	1947	McConnell GMC Pontiac Cadillac	у
3304-60	BROADWAY	4S7	B*2+		1917	Eisenback (Leo)-Strough (Val) showroom	у
2332	HARRISON ST	3S	A3	Ba3	1925- 26	YWCA Blue Triangle Club	у
2333	HARRISON ST	N/A	A3 (LM)		1915- 18	Seventh Church of Christ Scientist	у
2346	VALDEZ ST	3B	B+2+(LM)		1909- 10	Newsom Apartments	у
2735	WEBSTER ST	5B	Ec2*	B+2+	1924	Howard Automobile-Dahl Chevrolet showroom	у

### 5.5 Recommendations

While there are numerous buildings in the Project Area that represent a range of architectural styles and are greater than 45 years of age, 13 of these are considered historic resources for the purposes of CEQA. Implementation of the Specific Plan could result in the demolition or substantial alteration of the physical characteristics that convey the historical significance of these resources, which would be considered a significant environmental impact.

As such, the Broadway / Valdez District Specific Plan should avoid demolition or substantial alteration of CEQA historic resources, and incorporate them into the urban design fabric in an appropriate manner, where feasible and not inconsistent with General Plan policies. Compatible new uses should be found for these resources that would minimize material impacts to their character defining features. New construction immediately adjacent to the identified resources should also be compatible in terms of materials, scale, and massing. Any future rehabilitation efforts of identified historic resources should comply with the *Secretary of Interior's Standards for Rehabilitation*. Properties identified only as historic sites but which no longer have historic buildings on them can be redeveloped without application of the *Standards*, although some plaque or marker should be located at the site. Properties listed as contributors to an ASI are not considered historic resources for CEQA purposes, per se, but may have local importance that are worthy of recognition in specific planning efforts.

### References

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# **Chapter 6: Environmental Factors**

The following sections discuss existing environmental conditions in the Project Area that may have implications for future redevelopment. Environmental topics discussed in this chapter include biological resources, geology, soils, and seismicity, hydrology and water quality, hazardous materials, archaeological resources, air quality, and noise. Following the discussion of the existing conditions for each environmental factor is a brief summary of potential opportunities and constraints associated with implementing the Broadway/Valdez District Specific Plan. References for each environmental topic are located at the end of this chapter.

# 6.1 Biological Resources

The Project Area is located in a developed area where 150 years of urban development has replaced any former native biotic habitats and natural vegetation. The Project Area is currently occupied by roads, buildings, and parking lots mostly associated with automobile retail and service businesses. Existing vegetation generally consists of landscaping and intermittent street tree plantings. Given the existence of substantial commercial development, including heavy vehicle traffic along Broadway that has occurred for more than 90 years in the area, the site is unlikely to be a part of an established native resident or migratory wildlife corridor, and is not located within a designated habitat area.

The Oakland Tree Preservation Ordinance requires that a tree protection/removal permit be obtained prior to removal of any "protected" trees. A "protected" tree includes "on any property, *Quercus agrifolia* (California or Coast Live Oak) measuring four inches diameter at breast height or larger, and any other tree measuring nine inches diameter at breast height or larger except Eucalyptus and *Pinus radiata* (Monterey Pine)." The Project Area includes relatively few trees and most are street trees, which are typically exotic landscape species not native oak trees, and are therefore not likely to be subject to the ordinance.

Glen Echo Creek, a channelized stream with mature riparian trees and vegetated banks, runs north to south along the eastern boundary of the Project Area between 28<sup>th</sup> and 30<sup>th</sup> Streets. North of the intersection of Richmond Boulevard and Randwick Avenue, the creek is the central feature of Oak Glen Park, which includes a significant stand of native oaks. North of 29<sup>th</sup> Street, Glen Echo Creek is daylighted, while south of 29<sup>th</sup> Street, the creek flows into a subterranean culvert until it reaches Adams Park, where the stream daylights for a short distance before flowing under Grand Avenue and into Lake Merritt.

In the Project Area (i.e., near 30<sup>th</sup> Street and Richmond Boulevard), the creek's canopy vegetation is mostly dominated by Eucalyptus trees with a few mature remnant coast live oak trees along the banks. Recent restoration activities have been implemented along the western bank at 30<sup>th</sup> Street and Richmond Boulevard. A number of animal species adapted to human habitation were found using this area such as: raccoon, striped skunk, Virginia opossum, gray squirrel, American starling, mourning dove, and American robin. There are no recorded sightings of special status animal species in this area, and it is not

likely that special status animal species would tolerate the elevated human presence in this area, although tree nesting birds including raptors could nest in the taller Eucalyptus trees.

Ownership along the creek south of Oak Glen Park is unclear, with some of the western bank appearing to be within the public right-of-way and other parts appearing to be private property with private foot bridges crossing the channel and roadside parking posted for private use.

The Creek does not support a native fishery, and impediments to fish passage and wildlife movement make the creek an unlikely location for aquatic resources. It does, however, offer some modest opportunities for urban wildlife habitat enhancement (see discussion below).

### 6.1.1 Potential Opportunities & Constraints

Given the limited biological resources within the Project Area, it is unlikely that they represent any significant constraints to the area's redevelopment. Glen Echo Creek, while having only a small segment of channel within or adjacent to the Project Area, is the one existing resource in the immediate Project vicinity that may offer opportunities and/or sensitivities that should be considered by the Project. The following biological resource related opportunities and/or constraints should be considered during project planning:

- Regulatory requirements and City of Oakland standard conditions of approval generally include measures to mitigate potential biological constraints to development in the Project Area.
   Implementation of regulatory requirements into project design requirements can reduce potential impacts to less than significant levels.
- Underground streams or waterways may be present within the project area, the alteration of which could potentially be under the jurisdiction of the US Army Corps of Engineers under section 404 of the Clean Water Act (CWA), and the Regional Water Quality Control Board under section 401 of the CWA. The underground portion of the creek follows Alameda County Flood Control and Water Conservation District's "Zone 12 Line B", but the water is still under state and federal jurisdiction. Permits conditions required to work in jurisdictional waters are heavily weighted to protection of biological resources. Implementation of the Specific Plan may or may not affect Glen Echo Creek, but its presence means that the permit requirements may limit or modify what can be done to or adjacent to it. See below for a discussion of opportunities to improve Glen Echo Creek.
- The Glen Echo Creek corridor is located along the eastern boundary of the Project Area, between 28<sup>th</sup> and 30<sup>th</sup> Streets, and is daylighted between 29<sup>th</sup> and 30<sup>th</sup> Streets. However, depending on the location of proposed new construction in the Project Area, construction activities may have the potential to disturb wildlife in this corridor through elevated noise levels, and changes in air and water quality. Additionally, damage to mature trees hanging over 30<sup>th</sup> Street at Richmond Boulevard could occur if large equipment is driven along that stretch of road. Riparian corridors are protected by the California Department of Fish and Game (CDFG) code 1600-1616, which require a Streambed Alteration Agreement for modification of creek banks and associated vegetation when CDFG determines that the proposed project would substantially adversely affect fish or wildlife resources.

- The daylighted sections of the Creek, including those sections along the eastern edge of the Project Area, have been the subject of much community interest. These sections represent an opportunity for restoration and maintenance of the Creek. Such activities would first involve the protection of existing stands of native oaks and redwoods. Second and more intensively, it would involve removal of invasive species and replacement with multiple species of native tree and understory vegetation, which ultimately can replace starlings and house sparrows with a more diverse and appealing avian community. The City of Oakland, the Flood Control District, the Piedmont Avenue Neighborhood Improvement League Avenue, and others, organize various restoration and clean up projects. The ultimate biological benefits may be modest given the small fragments of daylighted creek which are available, but they would have a positive influence on human attitudes toward nature and are a "quality of life" enhancement in the Project Area. Funding for, and collaboration with, these and other volunteer stewards would be a project opportunity.
- As stated above, portions of the creek that are currently covered run beneath existing rights-of-way in and near the project area, including beneath Harrison Avenue, and 27th Street. These portions of the creek may present the opportunity for additional daylighting. Their restoration and cleanup could have similar positive quality-of-life influences as do the currently daylighted areas, and they could create a natural connection to Lake Merritt, southeast of the Project Area, and Oak Glen Park, east of the Project Area. Such daylighting would be dependent on determinations of street capacity, available funding sources, and review and approval of regulatory agencies discussed above.
- Although the Project Area does not provide forage habitat for raptors, and generally has inhospitable nesting habitat, there is a low potential that migratory birds could use the area to stop over, and that raptors may nest in some of the mature street trees. Although unlikely, migratory birds and nesting raptors can occur in very urbanized environments such as the Project Area, and they can constrain project scheduling. Habitat improvements along Glen Echo Creek, however, could lessen the chances that a raptor might choose to nest in a street tree.
- Many species of bats are found in the Bay Area and roost in crevices in buildings and trees. A few species, such as: Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), and the pallid bat (*Antrozous pallidus*), two federal and state species of special concern, could potentially be present in the Project Area.

# 6.2 Geology, Soils, and Seismicity

### **6.2.1 Soils**

Surface soils generally exhibit various characteristics dependent on location, slope, geologic formations, climate, and drainage. The Project Area is located in a fully developed area of Oakland where native soils are unlikely to still be present. Generally, previous development within the Project Area has been reworked and in some cases replaced native soils to the point where they are no longer present in their original characteristics.

## 6.2.2 Seismicity and Seismic Hazards

The Project Area lies within an area that contains many active and potentially active faults and is considered to be an area of high seismic activity. The USGS Working Group on California Earthquake Probabilities evaluated the probability of one or more earthquakes of Richter magnitude 6.7 or higher occurring in the San Francisco Bay Area within the next 30 years (USGS, 2008). The result of the evaluation indicated a 63 percent likelihood that such an earthquake event will occur in the Bay Area before 2037 (USGS, 2008).

According to the Association of Bay Area Governments (ABAG) Shaking Intensity Maps and Information, the Project Area is located in an area subject to "strong" ground shaking from earthquakes along the San Andreas fault (similar to the 1906 Earthquake), and "very strong" ground shaking from the Hayward fault (ABAG, 2009).

The Hayward fault is the closest fault to the Project Area, and poses a significant threat of damage in the Project Area. Located approximately 3 miles east of the Project Area, the Hayward fault caused considerable damage in the area in 1868. The USGS Working Group on California Earthquake Probabilities includes the Hayward–Rodgers Creek Fault Systems in the list of those faults that have the highest probability of generating earthquakes of magnitude 6.7 or greater in the Bay Area (USGS, 2008).

Other principal faults capable of producing significant ground shaking in the Project Area include the San Andreas Fault located approximately 15 miles west of the Project Area. While these regional faults are considered active, and there are many other potentially active and inactive faults located throughout the Bay Area. Considerable seismic events can occur on faults with a long period of inactivity, although it is generally considered less likely. The following provides a list of potential seismic and/or geologic hazards present in the Project Area, including ground shaking, fault rupture, liquefaction, landslides, and expansive soils.

# 6.2.3 Ground Shaking

Strong ground shaking from a major earthquake could affect the Project Area during the next 30 years. An earthquake on any one of the active faults mentioned above could potentially produce a range of ground shaking intensities at the Project Area. Ground shaking may affect areas hundreds of miles distant from the earthquake's epicenter. Historic earthquakes have caused strong ground shaking and damage in the San Francisco Bay Area, the most recent being the Loma Prieta earthquake (moment magnitude 6.9) in October 1989. The epicenter was approximately 55 miles southeast of the Project Area, and the

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An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). A "potentially active" fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. "Sufficiently active" is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

Richter magnitude is a measure of the size of an earthquake as recorded by a seismograph. Richter magnitudes vary logarithmically, with each whole number step representing a ten-fold increase in the amplitude of the recorded seismic waves. Earthquake magnitudes are also measured by their Moment Magnitude (Mw) which is related to the physical characteristics of a fault including the rigidity of the rock, the size of fault rupture, and movement or displacement across a fault.

earthquake caused strong ground shaking for about 20 seconds and resulted in varying degrees of structural damage including collapse of a section of the elevated 880 freeway in West Oakland, not far from the Project Area.

### 6.2.4 Surface Fault Rupture

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude, sense, and nature of fault rupture can vary for different faults or even along different strands of the same fault. Ground rupture is considered more likely along active faults, which are referenced above.

The Project Area is not within a fault rupture hazard zone, as designated through the Alquist-Priolo Earthquake Fault Zoning Act, and no mapped active faults are known to pass through the immediate project region. Therefore, the risk of ground rupture within the Project Area is very low.

# 6.2.5 Liquefaction

Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soils susceptible to liquefaction include saturated loose to medium dense sands and gravels, low-plasticity silts, and some low-plasticity clay deposits. Liquefaction and associated failures could damage foundations, disrupt utility service, and can cause damage to roadways.

The California Geological Survey has prepared Seismic Hazard maps for liquefaction potential in many areas located around the bay. According to the map that covers the Project Area (Oakland West topographic quadrant); the majority of the Project Area is outside of the liquefaction area. However, a narrow band east of Broadway around 29<sup>th</sup> Street that follows the trace of Glen Echo Creek is shown as having a high potential for liquefaction (CGS, 2003).

#### 6.2.6 Landslides

Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material. Landslides may occur on slopes of 15 percent or less; however, the probability is greater on steeper slopes. The Project Area generally consists of relatively gently sloping developed topography that has a low likelihood of landslides or debris flows.

# 6.2.7 Expansive Soils

Expansive soils possess a "shrink-swell" behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage to buildings can occur over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Expansive soils are relatively common throughout the Bay Area including the Project Area. Proper application of the construction techniques found in the California Building Code typically avoids potential problems associated with expansive soils.

## 6.2.8 Potential Opportunities & Constraints

- While the potential for significant damage as a result of a major earthquake is a fact in the Bay Area, the Project Area is not any more threatened by such an occurrence than the rest of the region.
   Industry standard practices and current building code requirements include measures to mitigate all of the above mentioned hazards, if present.
- Future development of the Project Area provides an opportunity to apply more stringent seismic codes in the design of new buildings that will enable them to better withstand seismic hazards.

# 6.3 Hydrology and Water Quality

### 6.3.1 Drainage Patterns

The Project Area is located within the San Francisco Bay Hydrologic Region which is a large estuarine system that receives fresh water from numerous drainages that interface with the Pacific Ocean at the Golden Gate. The drainage courses in the region generally flow from east to west, originating in the undeveloped foothills as natural streams, passing through developed urban areas via improved channels, and discharging into sloughs that eventually flow into San Francisco Bay.

The Project Area lies in the Glen Echo Creek watershed and all portions of the Project Area drain toward the creek or to Lake Merritt. Glen Echo Creek has alternating daylighted and culverted sections along its 1.25-mile length from its origin above the Mountain View Cemetery at the northern terminus of Piedmont Avenue, southwest to its outlet in Lake Merritt. The daylighted sections of Glen Echo Creek in the Project Area vicinity begin north of I-580 and extend south parallel to Richmond Boulevard to 30<sup>th</sup> Street where it follows the eastern boundary of the Project Area to 29<sup>th</sup> Street. Between 29<sup>th</sup> Street and Adams Park the creek is carried in a below grade culvert that runs along the base of the hill and then under the 27<sup>th</sup> and Harrison Street rights-of-way. The creek daylights again with a short section in Adams Park before flowing under Grand Avenue and into Lake Merritt.

#### 6.3.2 Surface Water

The major surface water bodies in the Project Area are Glen Echo Creek, Lake Merritt, the Oakland Estuary, and San Francisco Bay. As stated above, the Project Area drains into Glen Echo Creek which flows into Lake Merritt. Lake Merritt drains into San Francisco Bay via Lake Merritt Channel and the Oakland Estuary.

# 6.3.3 Water Quality

The Glen Echo Creek watershed is an urbanized area containing both residential and commercial development. Surface water within the watershed reaches Glen Echo Creek and its tributaries and then flows through a combination of open creek (daylighted) and culverted underground sections. Available data regarding the water quality of the Glen Echo watershed system was contained within a sediment study of Glen Echo Creek conducted by the Alameda County Clean Water Program (ACCWP) in 2002. The water quality report prepared for this study presented results of water quality sampling conducted in 2000 and 2001 in Glen Echo Creek to generate baseline information on particulate-associated contaminants (ACCWP, 2002). The 2002 ACCWP water quality study identified concentrations of polychlorinated biphenyls (PCBs) and mercury from two sampling sites within a daylighted section of the

mainstem Glen Echo Creek (north and east of Piedmont Avenue)(ACCWP, 2002). The detected PCB and mercury levels are relatively low but are above the background levels typically expected for such an urban stream system. The study concluded that the PCB and mercury concentrations are attributable to a source within the sampled daylighted section of Glen Echo Creek more than 2,000 feet north and east of the Project Area.

### 6.3.4 Stormwater Runoff and Drainage Facilities

Stormwater runoff in Oakland is collected from the southwesterly flows from the Oakland-Berkeley Hills to the developed flatlands where it then flows primarily through underground storm drains and culverts to the San Francisco Bay via the Oakland Estuary (directly or by way of Lake Merritt) or through the city of Emeryville. The Alameda County Flood Control and Water Conservation District (ACFCWCD) constructs, operates, and maintains major trunk lines and flood-control facilities in Oakland, and the Oakland Public Works Agency (PWA) is responsible for construction and maintenance of the local storm drainage system within Oakland's public areas and roads. Stormwater runoff is conveyed in the Project Area through onsite pavement gutters, surface drains, parking lots, and roof drains that discharge to local surface waters. Please also see Chapter 8 – Infrastructure and Utilities, for additional information regarding stormwater runoff.

### 6.3.5 Flooding

Flooding is inundation of normally dry land as a result of rise in the level of surface waters or rapid accumulation of stormwater runoff. The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping program, designates areas where urban flooding could occur during 100-year and 500-year flood events (i.e., storms with a likelihood of occurring every 100 or 500 years). The Project Area is largely located in an area designated with minimal flooding potential, however there is a 100-year flood zone associated with Glen Echo Creek that does overlap the boundary on the eastern side between 29<sup>th</sup> and 30<sup>th</sup> Avenues (FEMA, 1982). Figure 6.1 identifies the 100-year flood zone in the Project Area.

Flooding could also occur due to dam failure. The California Department of Water Resources, Division of Safety of Dams (DSOD) oversees the construction of dams that are over 25 feet high and impound over 15 acre-feet of water, or those that are over 6 feet high and impound over 50 acre-feet of water. Due to DSOD regulatory oversight, monitoring, and design review, the potential for the catastrophic failure of a properly designed and constructed dam is minimal, whether caused by a seismic event, flood event, unstable slope conditions, or damage from corrosive or expansive soils. The eastern portion of the Project Area that generally abuts Glen Echo Creek lies in the Piedmont and Estates Dam inundation areas (ABAG, 1995). These dams are located further east of the Project Area but a catastrophic failure could potentially cause a release that would inundate a large area including portions of the Project Area. Figure 6.2 identifies the dam inundation zone in the Project Area.

# 6.3.6 Groundwater

The Project Area lies in the East Bay Plain (Department of Water Resources [DWR] Groundwater Basin<sup>3</sup> No. 2-9.01), a northwest-trending alluvial plain (DWR, 2004). The East Bay Plain extends from Richmond to Hayward. The alluvial materials that extend westward from the East Bay hills to the edge of San Francisco Bay constitute the deep water-bearing strata for this groundwater basin, which is identified as a potential water source for municipal, industrial, and agricultural use (RWQCB, 2007). Since the early 1950s, historic groundwater levels in the deep aquifer in the basin have varied between -10 and -140 feet mean sea level (DWR, 2004). Groundwater in the Project Area occurs at relatively shallow depths but there are no water supply wells in the Project Area.

# 6.3.7 Potential Opportunities & Constraints

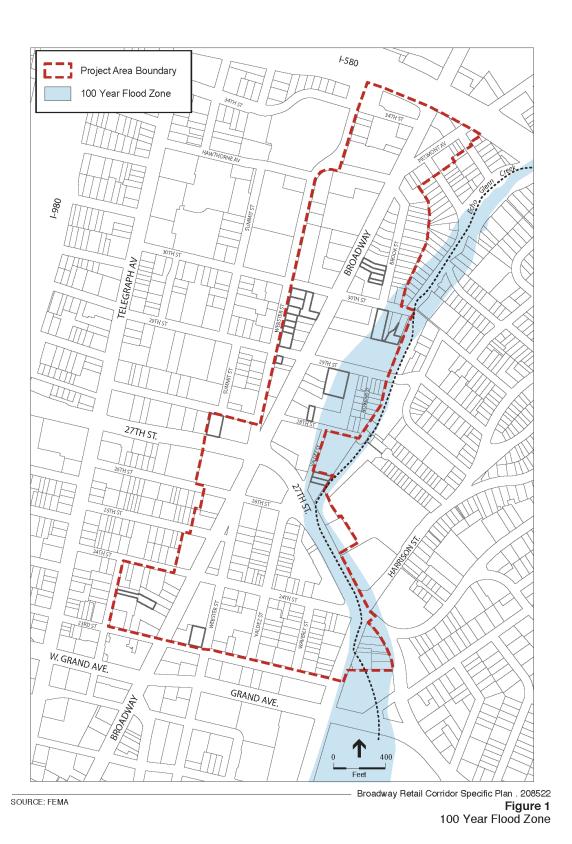
The Project Area is located in an urban area that has been largely developed with residential and commercial land uses. Glen Echo Creek and Lake Merritt are the closest water bodies to the Project Area though much of the drainage in the Project Area occurs through existing drainage improvements. Future development or redevelopment within the Project Area would be subject to the following potential hydrology, water quality, and flooding constraints:

 Regulatory requirements and City of Oakland standard conditions of approval generally include measures to mitigate potential hydrologic constraints to development in the Project Area.
 Implementation of regulatory requirements into project design requirements can reduce potential impacts to less than significant levels.

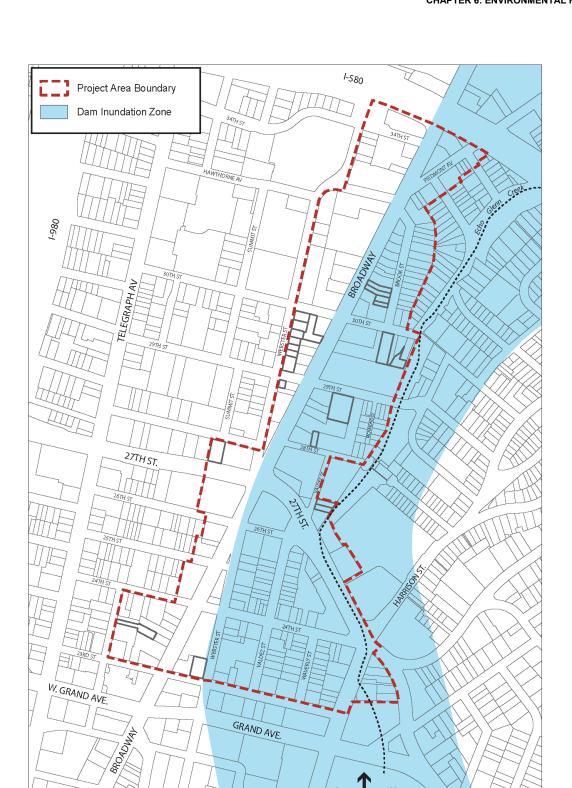
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A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers (Regional Water Quality Control Board, 1995).



SOURCE: ABAG



Broadway Retail Corridor Specific Plan . 208522

Figure 2
Dam Inundation Zone

Glen Echo Creek is listed as impaired water bodies for diazinon, sediment, pathogens, and trash. Development of the Project Area would be subject to the requirements of the Alameda Countywide Clean Water Program and City of Oakland standard conditions of approval in addition to potential Regional Water Quality Control Board requirements for construction (depending on the proposed area of disturbance). These requirements include measures to protect water quality during construction as well as post construction requirements to limit runoff volume and pollutants from discharging offsite into receiving waters.

- Glen Echo Creek is mapped by FEMA as having a 100-year flood hazard area which intersects the Project Area on the eastern side. City of Oakland and Alameda Flood Control District requirements apply to construction within the 100-year flood zone. Development can be constructed in these areas provided that design measures are incorporated to prevent significant damage in the event of a flood. In addition, portions of the Project Area are located within the dam inundation areas for the Piedmont and Estates dams. Generally, the performance standards set by DSOD of these dams minimizes the potential for catastrophic releases.
- Future redevelopment of the area will provide opportunities to reduce the volume of stormwater
  runoff and improve water quality of runoff. By introducing increased landscape areas such as parks
  and open spaces, and drainage facilities such as bio-filtration swales, retention basins, permeable
  paving, and other development practices future development has the potential to make significant
  improvements in stormwater quality and management.

## 6.4 Hazards and Hazardous Materials

Areas where historic or ongoing activities have resulted in the known or suspected release of hazardous materials to soil and groundwater, as identified by the California Department of Toxic Substances (DTSC) and San Francisco Bay Regional Water Quality Control Board (RWQCB), are included in databases maintained by these agencies. These sites are designated as either Leaking Underground Fuel Tank (LUFT) sites; Spills, Leaks, Investigations, and Cleanups (SLIC) sites; or Hazardous Waste and Substances Sites from the DTSC. In addition, there are parcels within the City of Oakland with residual contamination that are subject to institutional controls or use restrictions based on requirements of the RWQCB, DTSC, and the Alameda County Department of Environmental Health (ACDEH).

The Project Area has a mix of past and present commercial and light industrial uses. Associated hazardous material use, storage, transport, and hazardous waste generation with these past and present uses can pose hazards to the public health through releases of hazardous materials to the subsurface soil and groundwater. The presence of contamination in the soils and groundwater can also potentially restrict future development of property and require specialized construction practices.

Historically, automobile dealerships and auto repair garages, uses which typically include maintenance activities that handle hazardous materials and waste, have been prevalent in the area. According to the databases reviewed for this analysis, there are numerous LUFT sites located within and around the Project Area. Many of these sites have been closed because they no longer represent any potential threat to

human health based on existing land uses. In some cases, a proposal to change a land use, for example from commercial to residential, may require the case to be re-opened and evaluated by the overseeing regulatory agency.

Among the open cases found within the Project Area, several are automobile dealerships (Chrysler, Volkswagen, and Oldsmobile) located along Broadway, as well as a few other commercial uses (Chevron, Roy Anderson Paints, and a property at 30<sup>th</sup> and Broadway) (DTSC, 2009). All of the open cases found within the Project Area are LUFT sites, and all but one involves a fuel spill. The Roy Anderson Paints site was listed due to a release of waste oil, hydraulic oil, and lubrication.

## 6.4.1 Hazardous Building Materials

Other potential hazards in the Project Area include building materials, such as asbestos, lead, and Polychlorinated biphenyls (PCBs) which exist in many of the older commercial, light industrial and residential uses.

Asbestos is the commercial term for a group of naturally occurring, fibrous silicate minerals that were used as building fireproofing and insulation until it was banned by the USEPA in the 1970s. Inhalation of asbestos fibers by humans can lead to asbestosis and other lung respiratory complications and diseases. Buildings in the Project Area that were built prior to the 1980's, which include most of the Project Area's buildings, can potentially lead to asbestos contamination if released into the air during demolition or construction activities.

Prior to 1960, lead-based paint (LBP) was commonly used. The substance was gradually banned from use in residential construction by local governments through the 1960s and 1970s, and it was banned federally in 1978. LBP is likely present in buildings in the Project Area constructed before 1978, which include most of the Project Area's buildings. If present, LBP chips can pose a hazard to workers and adjacent sensitive land uses during the demolition process, and is classified as a hazardous waste if the lead content exceeds 1,000 parts per million (ppm). LBP chips in excess of 1,000 ppm must be separated from building materials during the demolition process, and would need to be disposed of in accordance with environmental law.

Dust generating activities that include removal of walls, sanding, and material disposal could also produce airborne quantities of lead-laden material. These materials could expose workers and persons in close proximity, including occupants of offsite locations. The presence of lead, above natural background levels, in shallow soils is a possible occurrence in areas that were constructed over artificial fill and in former industrial areas. Lead concentrations in fill can originate from building and industrial rubble containing or affected by sources of lead such as piping, coatings, paint, and other construction materials. Another potential source of lead comes from petroleum fuels. Historically, tetraethyl lead (TEL) was used as an anti-knocking agent in gasoline. Although the USEPA has banned the use of TEL in gasoline, residual elevated concentrations are still present in the shallow soils along roadsides and in industrial areas.

Polychlorinated biphenyls (PCBs) constitute a group of compounds, developed in the 1930s, that were historically used in many types of electrical equipment, including transformers and capacitors, primarily

as electrical insulators. PCBs are also commonly found in fluorescent lighting. Production and use of PCBs was discontinued in 1977 following discovery that exposure to PCBs may cause serious adverse health effects. Since most of the Project Area's buildings were constructed prior to 1977, PCBs may exist in electrical equipment and could be released into the atmosphere during the demolition and/or rehabilitation processes.

## 6.4.2 Potential Opportunities & Constraints

- The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government. Regulatory requirements and City of Oakland standard conditions of approval include measures to mitigate the potential effects of hazardous materials exposure and release in the Project Area.
- The Project Area is located in a commercial district which has the potential for encountering soil and groundwater contamination from previous uses. There is also the potential for encountering older underground storage tanks that were abandoned prior to more recent regulations. Since the Project Area contains known sites with identified contamination, the Project Area could also include other areas that have had unidentified releases. Disturbance of subsurface soils during redevelopment activities in the Project Area could expose the workers and the public to hazardous materials including unidentified underground storage tanks. Depending on the extent and degree of contamination, the future uses of contaminated areas can be limited unless regulatory approved remediation is sufficient to allow such uses. In some cases remediation costs can exceed the economic viability of proposed development projects or be such that regulatory land use restrictions are placed (e.g. no residential use).
- Hazardous building materials such as asbestos, lead-based paint, and PCBs may be present in many of
  the older buildings in the Project Area, of which there are many. While workers and the public could
  become exposed to these hazardous substances during demolition or renovation activities, such
  effects would be minimized by following standard practices for the appropriate removal of such
  materials.
- Generally, redevelopment in the Project Area can improve the environmental quality of subsurface soils and groundwater through construction-related remediation efforts. In addition, renovation or demolition activities can reduce the presence of hazardous building materials in the Project Area.

## 6.5 Archaeological Resources

## 6.5.1 Prehistoric Archaeological Resources

Although the Project Area is now mostly urbanized, prehistorically it was a biologically rich alluvial plain and estuarine environment between the East Bay Hills and San Francisco Bay. The natural marshland biotic communities along the edges of bays and channels were the principal source for subsistence and other activities during the prehistory of the San Francisco Bay region. Dense prehistoric midden sites found throughout the East Bay have been dated to be approximately 2000 B.C., but other evidence from around the Bay suggests that human occupation in the region is of greater antiquity, or around 5000 B.C. (Davis & Treganza, 1959 as cited in Moratto, 1984).

Prior to Euroamerican contact, the Ohlone (also known by their linguistic group, Costanoan<sup>4</sup>) occupied the area that is currently Alameda County. Politically, the Costanoan were organized into groups called tribelets. A large area of the East Bay, including the Project Area, is located within the territory of a people that spoke Chochenyo, one of several Costanoan languages. The Ohlone economy was based on fishing, gathering, and hunting, with the land and waters providing a diversity of resources including acorns, various seeds, salmon, deer, rabbits, insects, and quail. Technologically, the Costanoan crafted tule balsa, basketry, lithics (stone tools) such as mortars and metates (a mortar-like flat bowl used for grinding grain), and household utensils. The Costanoan, like many other Native American groups in the Bay Area, likely lived in conical tule thatch houses. In 1770 the Costanoan-speaking people lived in approximately 50 separate and politically autonomous nations or tribelets. At this time, the number of Chochenyo speakers reached 2,000, substantially more than the typical size of a tribelet, which ranged from 40 to 200 members. Beginning around 1800, the Costanoan people were significantly diminished through missionization, Mexican slave raids, disease, and immigrant settlement in their territory (Levy, 1978).

In the Oakland area known prehistoric sites tend to be located about ½-mile or less from a present or former water source on relatively stable landforms. Glen Echo Creek is located just east of the Project Area and the historic tidal estuary of Lake Merritt is located ¼-mile to the south. Additionally, the Project Area is mapped as Pleistocene Marine Terrace Deposits with alluvium in the south and west sections and Holocene alluvium on the east side of Broadway toward Glen Echo Creek. Pleistocene landforms do not have the potential to contain buried archaeological resources, however Holocene alluvium has a high potential to contain sediments that would have once been available for human use and occupation prior to being covered with sediment (Meyer and Rosenthal, 2007).

## 6.5.2 Historic-period Archaeological Resources

The Project Area was once located within the larger Rancho San Antonio land grant, which was granted to Luis Maria Peralta on August 3, 1820 for his service to the Spanish government. The 43,000-acre rancho included the present-day cities of Oakland, Berkeley, Alameda, and parts of San Leandro and Piedmont. The Gold Rush and California statehood brought miners, businessmen, lumbermen and other speculators to the area in search of opportunities. Early settlers of that period include Edson Adams, Andrew Moon, and Horace Carpentier, who squatted on 480 acres of Vicente Peralta's (one of Luis Peralta's sons) land. Adams, Moon, and Carpentier subsequently hired Jules Kellsersberger, an Austrianeducated Swiss military engineer, to plot a new city—Oakland—which was incorporated in 1852.

The city originally encompassed the area roughly bordered by the Oakland Estuary on the south, Market Street on the west, 14th Street on the north, and the Lake Merritt Channel on the east. Broadway served as the main street. The majority of the early city dwellers, numbering under one hundred, lived near the foot of Broadway in proximity to the estuary. From there, city development moved north along the street car lines of Broadway and Telegraph Avenue towards the Oakland Hills and ultimately towards East Oakland. The 1900 Oakland bird's eye view and early Sanborn fire insurance maps show the Project Area

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<sup>4 &</sup>quot;Costanoan" is derived from the Spanish word Costanos meaning "coast people." No native name of the Costanoan people as a whole existed in prehistoric times as the Costanoan were neither a single ethnic group nor a political entity.

along upper Broadway with scattered residential development, tree-lined streets, open space, and forested blocks. Development of the Project Area as a focus for automobile sales and service began in the late 1910s and early 1920s.

The records search conducted at the Northwest Information Center of the California Historical Resources Information System by ESA on February 13, 2009 (File No. 08-0943) indicated that there are no recorded prehistoric or historic-period archaeological sites within a ½-mile radius of the Project Area. The nearest prehistoric archaeological site is approximately 1-½ miles to the south, nearer to the historic shoreline of the Bay tidal marshland. Refer to Chapter 5, Historic Resources, for more detailed discussion of historic resources within the Project Area.

## 6.5.3 Potential Opportunities & Constraints

- Although no known prehistoric resources have been recorded in the Project Area, there is a moderate potential that prehistoric archaeological resources are present within the Holocene alluvium, which is generally located in a north-south strip between Broadway and the Glen Echo Creek corridor (i.e., the entire eastern side of Broadway to the easternmost Project Area boundary) (Helley & Graymer, 1997). The potential for containing previously unidentified prehistoric archaeological resources is based on the following factors: (1) the presence of relatively stable Holocene-age terrestrial landform; (2) proximity to the Glen Echo Creek, the Oakland estuary, and other water sources, and (3) the presence of landforms similar to those at previously recorded prehistoric sites located nearby. Redevelopment in the area, including construction-related subsurface disturbance, could inadvertently damage or destroy previously unidentified prehistoric period archaeological resources. In the event of accidental discovery of such resources, standard measures such as halting construction until the find can be evaluated by a qualified archaeologist would be implemented.
- Although no historic-period archaeological resources have been recorded in the Project Area, there is a moderate potential for such resources to be present. According to National Park Service guidelines, archaeological sites in urban areas "are likely to be more or less invisible, buried under modern created land surfaces." Here, "the reconnaissance consists of field checking predictions made on the basis of archival research" (National Park Service, 1985:36). Archaeology undertaken for various projects in an urban environment (Meyer, 2002; Praetzellis, 2001, 2004) has demonstrated that historic-period archaeological features often survive within two feet of the modern ground surface. These features include pits, privies, wells, and sheet refuse associated with buildings shown on early Sanborn and other maps. Urban archaeological experience has also shown that pits and privies are most often located near the back of house lots, while wells tend to be closer to the rear of the building and can sometimes be located within the footprint of the house itself, typically at a rear or side addition. The significance of these features has been illuminated in numerous urban historical archaeology projects in Oakland (Koenig, Mc Ilroy, Meyer, 2001; Praetzellis, 1994), San Francisco (ArcheoTec Inc., 2000; Praetzellis and Praetzellis, 1993), San Jose (Basin, 1999), and Sacramento (Praetzellis and Praetzellis, 1988) over the past few decades.
- Broadway has been a primary thoroughfare in Oakland since 1852. The earliest settlement was nearer
  to the estuary, but early maps show scattered structures in the Project Area. Urban development in the
  Project Area that began in the late nineteenth and early twentieth centuries may have destroyed

subsurface historic-period archaeological remains; however paved surfaces such as parking lots potentially cap and protect archaeological deposits. Implementation of the specific plan, including construction-related subsurface disturbance, could inadvertently damage or destroy previously unidentified historic period archaeological resources. In the event of accidental discovery of such resources, standard measures such as halting construction until the find can be evaluated by a qualified archaeologist would be implemented.

## 6.6 Air Quality and Climate Change

The Bay Area Air Quality Management District (BAAQMD) operates a regional monitoring network that measures the ambient concentrations of seven "criteria air pollutants" for which federal and state ambient standards have been established. The seven criteria air pollutants are: ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), suspended particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>) and lead (Pb). Documented health effects from air pollution include acute respiratory infections, chronic bronchitis, pulmonary emphysema, and bronchial asthma.

Existing and probable future levels of air quality in the Project Area can generally be inferred from ambient air quality measurements conducted by the BAAQMD at nearby monitoring stations. The monitoring station closest to the Project Area is the Davie Street station, which is located approximately seven miles southeast of downtown Oakland (BAAQMD, 2008). The station monitors ozone (1-hour and 8-hour), PM<sub>10</sub>, and PM<sub>2.5</sub>, carbon monoxide, nitrogen dioxide and sulfur dioxide. Since the major pollutants of concern in the San Francisco Bay Area are ozone, carbon monoxide, and particulate matter, Table 6-1 shows a five-year summary of monitoring data (2004 – 2008) for these pollutants from the Oakland and San Leandro Stations. Air quality measurements gathered in the Oakland stations are representative of conditions in the Plan Area. Table 6-1 also compares measured pollutant concentrations with state and national ambient air quality standards.

### **Toxic Air Contaminants**

The ambient background of toxic air contaminants (TACs) is the combined result of many diverse human activities, including gasoline stations, automobiles, dry cleaners, industrial operations, hospital sterilizers, and painting operations. In general, mobile sources contribute more significantly to health risks than do stationary sources.

Regionally, ambient concentrations of toxic air contaminants are similar through the urbanized areas of the Bay Area. Of the pollutants for which monitoring data are available, benzene and 1,3- butadiene (which are emitted primarily from motor vehicles) account for over one half of the average calculated cancer risk (BAAQMD, 2004). Based on 2003 ambient monitoring data, the calculated inhalation cancer risk is 162 in one million, which is 46 percent less than what was observed in 1995 (BAAQMD, 2004).

In March 2005, the California Air Resources Board (CARB) published its document *Air Quality Land Use Handbook: A Community Health Perspective*. <sup>5</sup> This handbook is intended to give guidance to local

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<sup>&</sup>lt;sup>5</sup> California Air Resource Board, Air Quality Land Use Handbook: A Community Health Perspective, April 2005.

governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities. Specifically, the document focuses on risks from emissions of diesel particulate matter (DPM), a known carcinogen, to establish recommended siting distances. The general guidelines of this handbook regarding sensitive receptors and freeways are:

• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day or rural roads with 50,000 vehicles per day.

As stated within this CARB document, these guidelines are a recommendation only and "needs to be balanced with other State and local policies." These guidelines are also based upon data that does not take into account wind dispersion. The northern project boundary borders on Interstate 580 which experienced daily traffic volumes exceeding 200,000 in 2007<sup>6</sup>. Conformance of a proposed project with these above requirements is addressed in Item 94 of the City's Oakland's Standard Conditions of Approval which require, as part of CEQA review, specific measures incorporated into projects (e.g. filter systems) designed to reduce health impacrs.

A review of the most recent Air Toxics Inventory report published by BAAQMD indicates that there are no permitted stationary TAC emitters in the Specific Plan area<sup>7</sup>. The nearest TAC emitters to the Specific Plan area are two dry cleaning facilities located over one mile away (Pride Cleaners at 3401 Grand Avenue and Perkins cleaners at 447 Perkins Avenue) which emit percholoethylene.

<sup>&</sup>lt;sup>6</sup> Caltrans, Traffic Operations Program, Traffic and Vehicle Data Systems, <a href="http://traffic-counts.dot.ca.gov/2007all.htm">http://traffic-counts.dot.ca.gov/2007all.htm</a>, accessed June 16, 2009

<sup>&</sup>lt;sup>7</sup> BAAQMD, Tocic Air Contaminant Control Pogram Annual Report, August 2007

TABLE 6-1
AIR QUALITY DATA SUMMARY (2004–2008) FOR THE PROJECT AREA

		Monitoring Data by Year				
Pollutant	Standard <sup>a</sup>	2004	2005	2006	2007	2008
Ozone <sup>b</sup>						
Highest 1 Hour Average (ppm)	0.09	0.080	0.068	0.88 <sup>g</sup>	0.040 <sup>h</sup>	0.086 <sup>h</sup>
Days over State Standard		0	0	0	0	0
Days over National Standard	NA	0	0	0	0	0
Highest 8 Hour Average (ppm)	0.07	0.057	0.045	0.066 <sup>g</sup>	0.036 <sup>h</sup>	0.064 <sup>h</sup>
Days over State Standard	0.075	0	0	0	0	0
Days over National Standard		0	0	0	0	0
Carbon Monoxide <sup>b</sup>						
Highest 1 Hour Average (ppm)	20	3.5	3.4	2.9 <sup>c</sup>	1.4 <sup>h</sup>	1.6 <sup>h</sup>
Days over State Standard		0	0	0	0	0
Highest 8 Hour Average (ppm)	9.0	2.6	2.4	1.8 <sup>c</sup>	ND	ND
Days over State Standard		0	0	0	0	0
Nitrogen Dioxide <sup>c</sup>						
Highest 1 Hour Average (ppm)	0.25 <sup>d</sup>	0.060	0.069	0.063	0.059 <sup>h</sup>	0.070 <sup>h</sup>
Days over State Standard			0	0	0	0
Annual Average (ppm)	0.0530	0.015	0.015	0.015	ND	0.015 <sup>h</sup>
Particulate Matter (PM10) <sup>c</sup>						
Highest 24 Hour Average (μg/m³)	50 <sup>e</sup>	48.9	54.1	56.6	60.6	38.7
Days over State Standard		0	1	1	1	0
Annual Average (μg/m³)	20	18.6	17.8	20	19.6	ND
Particulate Matter (PM2.5) <sup>C</sup>						
Highest 24 Hour Average (μg/m³)	65/35 <sup>f</sup>	39.9	33.4	43.9	22.8 <sup>h</sup>	30.1 <sup>h</sup>
Days over federal Standard		0/1	0	0/2	0	0
Annual Average (μg/m³)	12	9.4	9.0	10.3	ND	ND

<sup>&</sup>lt;sup>a</sup> Generally, state standards are not to be exceeded and national standards are not to be exceeded more than once per year.

ppm = parts per million; µg/m3 = micrograms per cubic meter; ND: data not available or insufficient to determine annual average. NOTE: Values in **bold** are in excess of applicable standard.

SOURCE: California Air Resources Board, Summaries of Air Quality Data, 2002-2006 (http://www.arb.ca.gov/aqd/aqdcd/aqdcd.htm).

<sup>&</sup>lt;sup>b</sup> Oakland - Alice Street monitoring station closed at the end of 2005.

<sup>&</sup>lt;sup>C</sup> Fremont – Chapel Way.

 $<sup>^{\</sup>rm d}~$  State NO2 standard reduced to 0.18 ppm as of 2/23/07.

<sup>&</sup>lt;sup>e</sup> Federal mean PM-10 standard revoked as of 12/17/06.

 $<sup>^{\</sup>rm f}$   $\,$  Federal PM 2.5 standard reduced to 35 micrograms per cubic meter as of 12/17/06.

<sup>&</sup>lt;sup>g</sup> San Leandro – County Hospital.

h Oakland Davie Street Station started operation in November of 2007.

## 6.6.1 Climate Change and Greenhouse Gases

Gases that trap heat in the atmosphere are called greenhouse gases. The major concern is that increases in greenhouse gases are causing Global Climate Change. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity generation and motor vehicle operations have elevated the concentration of greenhouse gases in the atmosphere. This accumulation of greenhouse gases (GHG) has contributed to an increase in the temperature of the earth's atmosphere and contributed to Global Climate Change. The principal greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H<sub>2</sub>O). Carbon dioxide is the reference gas for climate change because it is the predominant GHG emitted. To account for the varying warming potential of different greenhouse gases, greenhouse gas emissions are often quantified and reported as CO<sub>2</sub> equivalents (CO<sub>2</sub>E). Large emission sources are reported in million metric tons of eCO<sub>2</sub> (MMTCO<sub>2</sub>E).

There are currently no state regulations in California that set ambient air quality emissions standards for GHGs. However, California has passed laws directing the California Air Resources Board (CARB) to develop actions to reduce GHG emissions, and several state legislative actions with a bearing on climate change and GHG emissions have come into force in the past decade. These include Assembly Bill 32, Assembly Bill 1493, Senate Bill 375, and Executive Order S-3-05.

On December 11, 2008 CARB adopted its Climate Change Scoping Plan (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations (ARB 2008b). The Scoping Plan contains the main strategies California will implement to reduce CO2e emissions by approximately 30%, from the state's projected 2020 emissions level of 596 MMT of CO2e under a business-as-usual scenario.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO2e),
- the Low-Carbon Fuel Standard (15.0 MMT CO2e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO2e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO2e).

While CARB has identified a GHG reduction target of 15 percent for local governments themselves, it has not yet determined what amount of GHG emissions reductions it recommends from local government land use decisions. However, the Scoping Plan does state that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. CARB further acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission

sectors. The Scoping Plan states that the ultimate assignment to local government operations is to be determined (CARB 2008b). The measures approved by the Board will be developed over the next two years and be in place by 2012.

Senate Bill SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. The act mandates an integrated regional land-use-and-transportation-planning approach to reducing greenhouse-gas (GHG) emissions from automobiles and light trucks, principally by reducing vehicle miles traveled (VMT). SB 375 requires that the California Air Resources Board (CARB) set GHG-reduction targets for cars and light trucks in each California region for the years 2020 and 2035. SB 375 provides incentives for creating attractive, walkable and sustainable communities and revitalizing existing communities. SB 375 also changes the state Housing Element law by linking regional planning efforts for transportation and housing. Under the bill, all transportation and housing planning processes are put on the same eight-year schedule and must be updated once every eight years.

SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. If MPOs do not meet the GHG reduction targets, transportation projects will not be eligible for funding programmed after January 1, 2012. MTC has the responsibility to prepare and submit a sustainable communities strategy to CARB pursuant to SB 375. MTC's 2013 Regional Transportation Plan will be its first plan subject to SB 375. Depending on the types and densities of land uses envisioned in the plan area, such uses may help the City of Oakland meet its VMT and GHG reduction goals relative to SB 375.

## 6.6.2 Sensitive Receptors in the Project Area

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Land uses such as schools, children's day care centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality, because the population groups associated with these uses have increased susceptibility to respiratory distress and other air quality-related health problems. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions, and because the presence of pollution detracts from the recreational experience.

Existing sensitive receptors within the Project Area include residences immediately south of I-580 along Richmond Boulevard and Fairmount Avenue to the east of Broadway.

The highest volume roadway in the vicinity of the Project Area is Interstate I-580, which has a daily volume of 206,000 vehicles per day (vpd) per Caltrans estimates (Caltrans, 2006). The next largest roadway in the Project Area is Broadway which, based on traffic data in the McArthur Bart Transit

Village EIR, is predicted to experience traffic volumes of 2,533 vehicles during the peak traffic hour in 2030 or approximately 25,330 vpd (City of Oakland, 2008).

## **6.6.3 Potential Opportunities & Constraints** *Air Quality*

- Redevelopment activities in the Project Area would be required to meet strict federal, state, and local air quality standards. Regulation of air pollution is achieved through both national and state ambient air quality standards and emissions limits for individual sources of air pollutants. As required by the federal Clean Air Act, the U.S. EPA has established National Ambient Air Quality Standards (national standards) to protect public health and welfare. California has adopted more stringent ambient air quality standards for most of the criteria air pollutants (referred to as State Ambient Air Quality Standards or state standards). In addition, California has established state ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.
- The commercial and residential development envisioned for the Project Area would not represent a constraint in terms of new emissions of stationary source air pollutants, particularly in an area historically occupied by auto dealership and maintenance facilities. Dealership facilities typically include maintenance shops that store and use hazardous material that emit volatile organic gases which area a precursor to ozone formation. Residential development does not typically include stationary source emissions other than natural gas combustion for space and water heating. With the possible exception of dry cleaning facilities, service commercial land uses envisioned under the Ppecific Plan would not be expected to represent a major stationary emission source of criteria pollutants or TACs.
- The proposed Specific Plan could result in a net increase in vehicle trip generation and, hence, vehicle miles travelled (VMT), compared of the existing uses. Increased VMT would result in a regional increase in ozone precursors and particulate matter in a region that is designated as non-attainment for the state and federal standards for these pollutants. The relative contribution of the Specific Plan would depend upon the findings of the transportation impact study and a consideration of transportation demand management strategies implemented by the Plan.
- The primary existing source of air pollution in the Specific Plan area is Interstate 580, located on the northern boundary of the Project Area. Based on guidance of CARB, any new sensitive receptors, including residences, generally should not be located within 500 feet of I-580 due to concerns with regard to toxic air contaminant exposure. This constraint may limit residential land uses between Hawthorne Avenue and I-580. It should be noted that trailer trucks are prohibited from using I-580, with exception of unusual circumstances such as when sig alerts occur on I-880. Therefore the diesel particulate emissions along this Interstate would be expected to be less than those of the freeways used in the CARB study on which its recommendations are based. Conformance of the Specific Plan with these conditions will be addressed through the City's Oakland's Standard Conditions of approval.

## GHG Emissions and Climate Change

- Redevelopment of the Project Area represents an opportunity to contribute to regional reductions in GHG emissions. By developing retail destinations and retail employment closer to Oakland residents and employment, the Project has the potential to reduce the vehicle miles they now travel to shop and work. Additionally, the siting and design of new residential and commercial developments could be completed in such a way that reduces greenhouse gases associated with vehicle travel, as well as energy, water, and waste. Project opportunities to reduce GHGs include higher density infill development, construction of more resource efficient buildings, and the construction of affordable and transit-oriented housing in a mixed use area, especially given the presence of multiple AC transit stops in the Specific Plan Area as well as its proximity to BART. This effort should work in tandem with MTC's efforts in developing a Sustainable Communities Strategy pursuant to SB 375.
- Redevelopment of the Project Area also represents an opportunity to replace existing commercial structures with energy efficient and sustainably designed structures. Such "green building" applications in the Project Area may consist of the following measures identified in the CARB Scoping Plan adopted in December 2008:
  - Energy efficiency, which may include LEED certified Green Building Design;
  - Solar Water Heating;
  - ENERGY STAR Appliances;
  - Full Compliance with Title 24 Lighting Requirements.
- Climate warming and GHG emissions represent significant considerations for all new development, but particularly for a project promoting destination retail—a use that frequently is more automobile-oriented and can, as a regional attraction, generate substantial vehicle travel. Given the scale of retail and residential uses envisioned, it is likely that at the local level the Project Area will have a larger carbon footprint than the existing low density pattern dominated by auto dealerships. While the effect of GHG emission reduction strategies can best be evaluated at a regional or state scale, it will still be incumbent on the Project to do whatever feasible to minimize its local carbon generation. The Project will need to consider a whole range of strategies for reducing energy consumption and GHG emissions in spite of its potential regional benefits.

## Noise

The Project Area is located in downtown Oakland, and the major noise source is vehicular traffic on the surrounding street network, including arterials such as Broadway, 27th Street, and the elevated section of Interstate 580 at the north end of the Project Area. Other sources of noise include aircraft over flights and intermittent emergency vehicle sirens. The effects of noise on people can be placed into three categories, 1) subjective effects of annoyance, nuisance, dissatisfaction; 2) interference with activities such as speech, sleep, learning; and 3) physiological effects such as hearing loss or sudden startling.

Roadway noise modeling conducted for the City's General Plan Update in 2005 show noise levels from vehicle traffic on Broadway at 27<sup>th</sup> Street were 67 A-weighted decibels (dBA) at 75 feet with the 60 dBA

contour extending up to 220 feet away from the centerline of Broadway. Noise levels from vehicle traffic on I-580 at Harrison Street were 79 dBA at 150 feet with the 60 dBA contour extending up to 2,580 feet away from the centerline of I-580.

Noise monitoring conducted by ESA in October of 2008 near the Project Area (21<sup>st</sup> and Harrison Streets) identified a roadside noise level of 67 dBA. This recently measured noise level is commensurate with the modeled noise level for Broadway in the General Plan.

## Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than are commercial and industrial land uses.

Existing sensitive receptors nearest the Project Area include residences along Richmond Boulevard and Fairmount Avenue to the east of Broadway immediately south of I-580.

## 6.6.4 Potential Opportunities and Constraints

- Redevelopment activities in the Project Area would be regulated by Title 24 of the California Code of
  Regulations (for new multifamily residential developments), local General Plan policies, and local
  noise ordinance standards. Federal, state, and local agencies regulate different aspects of
  environmental noise. Title 24 standards, specifically, are enforced through the building permit
  application process in the City of Oakland, as in most jurisdictions.
- State regulations include requirements for the construction of new multi family residential uses
  intended to limit the extent of noise transmitted into habitable spaces. For limiting noise from exterior
  sources, the noise insulation standards set forth an interior standard of 45 dBA in any habitable room.
  Any proposed multi-family residential uses in the Project Area would be required to meet this interior
  standard.
- The City of Oakland also regulates noise through enforcement of its noise ordinance, which is found in Section 17.120 of the Oakland Planning Code. In addition to meeting the interior 45 dBA standard for residential uses, the code also prohibits the emission of any construction noise between the hours of nine p.m. and seven a.m.
- The Noise Element of the City of Oakland General contains guidelines for commercial land uses which state that a noise environment of 70 dBA or less is "normally acceptable" while for residential land uses, the "normally acceptable" noise exposure category is 60 dBA or less. Based on modeling of existing traffic noise along Broadway from the General Plan and noise monitoring data near the Plan Area (67 dBA), the existing noise environment is compatible with the existing and proposed business commercial land uses, but would be categorized as "conditionally acceptable" with respect to proposed residential land uses.

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Policies contained in the Noise Element may prohibit or require mitigation for any noise-sensitive land uses (i.e., residences) proposed within 2,580 feet of the I-580 centerline and 220 feet of the centerline of Broadway. It is unclear if the effects of elevation were considered in the modeling of traffic noise contained in the Oakland General Plan which may reduce this estimate distance of potential impact and further noise monitoring may result in a smaller potential noise impact area.

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CHAPTER 7: TRANSPORTATION

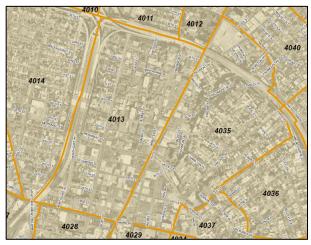
# Chapter 7: Transportation: Circulation, Access and Parking

This chapter presents the existing transportation conditions of the Broadway/Valdez District in Oakland, California. A discussion of the overall characteristics of the project area, based on the latest available Census data, is followed by discussion relevant policies, existing facilities and usage for each travel mode (pedestrians, bicycles, transit, motor vehicles, and parking) and planned and proposed improvements in the project area and surrounding communities.

## 7.1 PROJECT AREA TRAVEL CHARACTERISTICS

Demographic information about the project vicinity was collected from Census 2000 data. The project area is located in Census Tracts 4013 and 4035, as shown in the adjacent figure. In the year 2000, the total residential population of these census tracts was about 9,300 people, and the number of employed residents over the age of 16 was about 4,700 people. There were about 5,000 households in this area, over 90 percent of which were multifamily homes (multi-family homes are defined as residential parcels with more than one housing unit). About 92 percent of housing units in this area are occupied by renters. There were also about 8,200 jobs in the area.

Travel characteristics of project area residents are discussed below.



Project Area Census Tracts

#### 7.1.1 Mode Choice

Table 7-1 presents the primary travel mode used to commute to work. About half of the project area residents commute to work by driving alone, which is lower than the City of Oakland, Alameda County, or California. About 30 percent of the project area residents use public transit (including AC Transit, BART, and Amtrak), which is lower than the City of Oakland, Alameda County, or California. A higher percentage of the area residents walk and bicycle to work, relative to the surrounding community.

#### 7.1.2 Commute Travel Time

Table 7-2 presents the distribution of commute travel times for residents of the project area, as well as the entire City of Oakland. A detailed distribution of commute travel time for workers in the City of Oakland was not available. The average commute travel time for project area residents is about 28 minutes, slightly less than the average commute travel time for all Oakland residents (31 minutes).

TABL	_	7 4
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	Mode Share					
Mode	Project	City of 0	Dakland	Alameda County Residents	California	
	Area <sup>1</sup> Residents	Residents	Workers			
Drive Alone	50.6%	55.7%	64.1%	66.8%	71.8%	
Carpool	8.2%	16.7%	13.6%	13.7%	14.5%	
Bus	11.9%	9.0%	5.9%	4.5%		
BART	17.2%	7.7%	6.7%	5.4%	5.1% <sup>2</sup>	
Amtrak	0.8%	0.4%	0.5%	0.5%		
Walk	5.8%	3.7%	3.2%	3.2%	2.9%	
Bike	1.3%	1.2%	0.8%	1.2%	0.8%	
Other	1.1%	1.4%	1.2%	1.0%	1.1%	
Worked at Home	3.0%	4.1%	3.8%	3.6%	3.8%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	

<sup>1.</sup> Census Tracts 4013 and 4035.

Source: Census 2000, as summarized by Fehr & Peers, 2009.

TABLE 7-2
TRAVEL TIME TO WORK FOR ALL MODES

Time	Project Area <sup>1</sup> Residents	Oakland Residents	
< 5 minutes	1.4%	1.1%	
5 - 9 minutes	6.5%	5.6%	
10 - 14 minutes	10.6%	11.4%	
15 - 19 minutes	12.8%	15.5%	
20 - 24 minutes	12.3%	14.3%	
25 - 29 minutes	6.6%	4.9%	
30 - 34 minutes	15.5%	15.7%	
35 - 39 minutes	4.5%	3.1%	
40 - 44 minutes	4.9%	4.4%	
45 - 59 minutes	10.9%	10.9%	
60 - 89 minutes	11.1%	9.2%	
>= 90 minutes	2.7%	3.9%	
Total	100.0%	100.0%	
Average Travel Time	28 minutes	31 minutes	

<sup>1.</sup> Census Tracts 4013 and 4035

Source: Census 2000, as summarized by Fehr & Peers, 2009.

<sup>2.</sup> Consists of all public transit modes

### 7.1.3 Available Vehicles

Table 7-3 presents the number of vehicles available to residents of the project area as well as the entire City of Oakland. Residents of the project area are less likely to own a car than other Oakland residents. About 47 percent of project area residents do not have access to a vehicle, compared to 20 percent of all Oakland residents.

TABLE 7-3 HOUSEHOLD VEHICLE AVAILABLILITY						
	Owners		Renters		Total	
Vehicles Available	Project Area <sup>1</sup> Residents	Oakland Residents	Project Area <sup>1</sup> Residents	Oakland Residents	Project Area <sup>1</sup> Residents	Oakland Residents
0	5.9%	7.2%	35.4%	28.4%	46.8%	19.6%
1	48.1%	32.6%	49.7%	48.6%	40.7%	41.9%
2	29.1%	39.8%	12.8%	18.4%	9.5%	27.3%
3	13.3%	14.6%	1.8%	3.1%	2.3%	7.9%
4	0.0%	4.0%	0.2%	0.9%	0.0%	2.2%
>=5	3.6%	1.8%	0.2%	0.6%	0.5%	1.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>1.</sup> Census Tracts 4013 and 4035

Source: Census 2000, as summarized by Fehr & Peers, 2009.

## 7.2 APPLICABLE PLANS AND POLICIES

The City of Oakland, through various policy documents, states a strong preference for encouraging the use of alternative transportation modes. Applicable policy documents are discussed below.

## 7.2.1 The Oakland General Plan Land Use and Transportation Element (LUTE)

The Oakland General Plan, adopted in March 2008, includes numerous elements, and those containing policies relevant to transportation resources are primarily contained in the Land Use and Transportation Element (LUTE). The following polices are included in LUTE:

- <u>LUTE Policy Framework: Encouraging Alternative Means of Transportation:</u> A key challenge for Oakland is to encourage commuters to carpool or use alternative modes of transportation, including bicycling or walking. The Policy Framework proposes that congestion be lessened by promoting alternative means of transportation, such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements. The City will continue to work closely with local and regional transit providers to increase accessibility to transit and improve intermodal transportation connections and facilities. Additionally, policies support the introduction of light rail and trolley buses along appropriate arterials in heavily traveled corridors, and expanded use of ferries in the bay and estuary.
- <u>Policy T3.5, Including Bikeways and Pedestrian Walks:</u> The City should include bikeways and pedestrian walks in the planning of new, reconstructed, or realized streets, wherever possible.
- Policy T4.1, Incorporating Design Features for Alternative Travel: The City will require new
  development, rebuilding, or retrofit to incorporate design features in their projects that encourage
  use of alternative modes of transportation such as transit, bicycling, and walking.

- <u>Policy T6.2, Improving Streetscapes:</u> The City should make efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian oriented, including lighting, directional signs, trees, benches, and other support facilities.
- Policy D3.2, Incorporating Parking Facilities: New parking facilities for cars and bicycles should be incorporated into the design of any project in a manner that encourages and promotes safe pedestrian activity.

## 7.2.2 City of Oakland Pedestrian Master Plan

In November 2002, the *Pedestrian Master Plan* (PMP) was adopted by the Oakland City Council and incorporated into the adopted General Plan. The PMP identifies policies and implementation measures that promote a walkable City. The PMP includes the following relevant policies and actions:

- <u>Policy 1.2</u>: Use traffic signals and their associated features to improve pedestrian safety at dangerous intersections.
- Policy 2.1: Create and maintain a pedestrian route network that provides direct connections between activity centers.
  - Action 2.1.1: Improve existing connections across/under freeways to activity centers using lighting, acoustics, and other design features.
  - Action 2.1.4: Avoid the use of pedestrian overpasses and underpasses for pedestrian crossings on surface streets.
- <u>Policy 2.3</u>: Implement pedestrian improvements along major AC Transit lines and at BART stations to strengthen connections to transit.
  - Action 2.3.1: Develop and implement street designs (like bus bulbouts) that improve pedestrian/bus connections.
  - Action 2.3.3: Prioritize the implementation of street furniture (including bus shelters) at the most heavily used transit stops.
  - Action 2.3.4: Improve pedestrian wayfinding by providing local area maps and directional signage at major AC Transit stops and BART stations.
- Policy 3.2: Promote land uses and site designs that make walking convenient and enjoyable.
  - Action 3.2.4: Require contractors to provide safe, convenient, and accessible pedestrian rights-of-way along construction sites that require sidewalk closure.
  - Action 3.2.8: Discourage motor vehicle parking facilities that create blank walls, unscreened edges along sidewalks, and/or gaps between sidewalks and building entrances.

#### 7.2.3 City of Oakland Bicycle Master Plan

The Oakland City Council adopted the *2007 Oakland Bicycle Master Plan* (BMP) *Update* on December 4, 2007. The adopted BMP, update includes the following policy-supporting actions that are applicable to the project area:

- Policy 1: Create, enhance and maintain the recommended bicycle network.
- <u>Policy 4</u>: Include provisions for safe and direct bicycle access to special development areas and key corridors.

- <u>Policy 5</u>: Promote secure and conveniently located bicycle parking at destinations throughout Oakland.
- <u>Policy 8</u>: Insure that the needs of bicyclists are considered in the design of new development and redevelopment projects.

The 2007 BMP also contains requirements that new development provide both short-term (i.e., bicycle racks) and long-term parking (i.e., lockers or indoor storage) for bicycles. These requirements for bicycle parking were adopted by a City Council Ordinance in 2008.

## 7.2.4 Oakland "Transit First" Policy

The "Transit First" resolution, passed by the City Council on October 29, 1996, recognizes the importance of striking a balance between economic development opportunities and the mobility needs of those who travel by means other than the private automobile. The policy favors modes that have the potential to provide the greatest mobility for people, rather than vehicles.

## 7.2.5 AC Transit Short Range Transit Plan

AC Transit, has established goals related to transit service. These goals are documented in the *Short Range Transit Plan - FY 2003 to FY 2012* (AC Transit, 2004). Some of the major goals of AC Transit include:

- Goal 1: Provide High Quality, Useful Transit Service for Customers in the East Bay.
- Goal 4: Plan and Advocate for the Funding and Implementation of Future Projects.
  - Work with City and Local agencies to make transit usage as safe, secure, reliable, and quick as possible and to promote transit usage in the planning process.
  - Promote "Transit First" development practices and increased funding for transit through transit mitigation funding for new developments.

#### 7.2.6 BART Goals and Policies

BART has established goals related to transit service that are documented in the 2008 BART Strategic Plan, adopted by the BART Board of Directors in October 2008. Some of the relevant strategies of BART include:

- The Future of BART: Implementing Strategy F5: Transit-Oriented Development
  - Work with community partners to maximize support for TODs, to enhance the livability and vitality at our stations, and to support regional goals.
- The Customers of BART: Implementing Strategy C4a\_Station Access Program

Develop a package of programs and projects to improve access to our stations by modes other than single occupant vehicles.

## 7.3 PEDESTRIAN ACCESS AND CIRCULATION

Most trips begin and/or end with a pedestrian trip. Thus, the walking environment is one of the most basic elements of the public space. Pedestrian access and circulation in the study area are discussed in this section.

#### 7.3.1 **Existing Pedestrian Facilities**

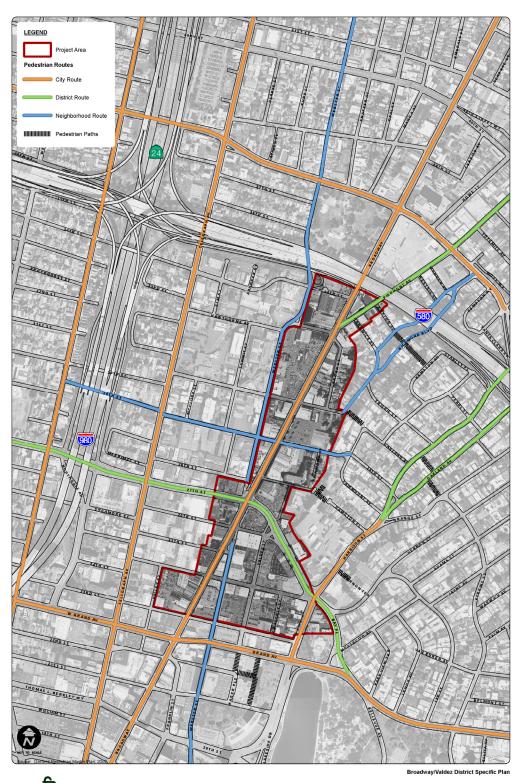
The City of Oakland's Pedestrian Master Plan (PMP) adopted in November 2002, designates different pedestrian facility types. These facility types and corresponding facilities in and around the project area are described below and shown on Figure 7.1:

- City Routes designate streets that are destinations in themselves places to live, work, shop, socialize, and travel. They provide the most direct connections between walking and transit and connect multiple districts in the City. City Routes in and around the project area include Broadway, Harrison Street, Grand Avenue, Telegraph Avenue, and MacArthur Boulevard.
- District Routes have a more local function as the location of schools, community centers, and smaller scale shopping. They are often located within a single district and help to define the character of that district. District Routes in and around the project area include 27<sup>th</sup> Street, Piedmont Avenue, and the Harrison Street/Oakland Avenue couplet.
- Neighborhood Routes are local streets that connect to schools, parks, recreational centers, and libraries. They are places for people to meet and they provide the basis for neighborhood life. They are used for walking to school, walking for exercise, and safe walking at night. Neighborhood Routes in and around the project area include Webster Street, 29th Street, and Richmond Boulevard.
- Walkways are off-street routes that provide shortcuts for pedestrians. They are most common in older neighborhoods with hilly terrain and long street blocks. There are two walkways on the east side of the Broadway/Valdez District that provide pedestrian-only access; stairs connect 28th Street to Hamilton Place and 30<sup>th</sup> Street to Fairmount Avenue.



Pedestrian Path at 28th Street

The street network in the Broadway/Valdez District and surrounding areas is generally a grid with a flat terrain providing a high level of pedestrian connectivity, especially to the west and south. Immediately to the east of the project area, the terrain becomes more hilly and the street network is not a grid. However, the blocks continue to be short and public walkways provide additional connectivity to the project area. Immediately to the north, I-580 limits the number of connections to and from the north. Webster Street, underneath I-580, is the only street in the project area that provides a sidewalk only on one side of the street.



FEHR & PEERS
TRANSPORTATION CONSULTANTS
April 2009

FIGURE 7.1

DESIGNATED PEDESTRIAN FACILITIES
FIGURE 7.1

The pedestrian facilities in the surrounding neighborhood are typical of an urban environment. Pedestrian circulation within and surrounding the Broadway/Valdez District is provided via sidewalks and marked crosswalks. Sidewalks vary in width, physical conditions and amenities provided, making some more

attractive to walking than others. All surrounding streets provide sidewalks on both sides of the street and crosswalks with pedestrian marked ramps intersections with major roadways. Pedestrian signal heads, audible warnings, and pedestrian push buttons are provided at most signalized intersections. Signals at Harrison Street/27<sup>th</sup> Street and Broadway/27<sup>th</sup> Street intersections provide pedestrian countdown signal heads. Medians on provided on Broadway, 27th Street, and Harrison Street that can assist pedestrians in crossing the street. However, the Harrison Street/27<sup>th</sup> Street intersection is the only intersection that provides median refuge islands that protect pedestrians from oncoming traffic. A pedestrian-activated signal is provided on 29<sup>th</sup> Street adjacent to the Grocery Outlet. However, this signal does not provide a marked crosswalk across 29<sup>th</sup> Street.

BROADWAY / VALDEZ DISTRICT SPECIFIC PLAN



Marked crosswalks are also provided on at least one approach of unsignalized intersection along Broadway, 27<sup>th</sup> Street, and Harrison Street in the project area. In addition, high visibility uncontrolled crosswalks (i.e., zebra crossing) are provided across Broadway at 23<sup>rd</sup> Street and mid-block between Hawthorne Street and 30<sup>th</sup> Street. However, intersections of two local streets, such as Brook Street/30<sup>th</sup> Street and Waverly Street/24<sup>th</sup> Street intersections intermittently provide marked crosswalks.

Sidewalks in the study area are in generally moderate to good condition. They provide walking paths of various widths clear of obstructions. In addition, intermittent plantings and on-street parking on most roadways buffer the pedestrians on sidewalks from vehicular traffic. While sidewalk widths in the study area meet or exceed



High-Visibility Mid-Block Pedestrian Crossing on Broadway

Americans with Disabilities (ADA) minimum width requirements, ADA standards for ramps and side-slopes are not met at all intersections.

Sidewalks along Broadway are in generally good condition. They are generally ten feet wide, although sidewalks are up to 15 feet wide in some areas south of 27<sup>th</sup> Street. Sidewalks on other roadways in the plan area are generally about 10 feet wide. Although, in some areas, they can be as narrow as six feet (such as segments of Valdez Street and 24th Street) or as wide as 15 feet (such as segments of Brook Street and 23<sup>rd</sup> Street). Sidewalks on these other roadways are generally in poorer conditions than Broadway sidewalks with uneven or cracked surfaces. Sidewalks adjacent to new developments are in good condition with new sidewalk surfaces, new landscaping, and ADA compliant pedestrian ramps at intersections. Many newer buildings also have longer set-backs resulting in wider sidewalks.

The overall walkability of the area also suffers from a relatively low level of landscaping and a lack of pedestrian-level lighting. Intermittent landscaping, consisting of mostly trees, is provided along sidewalks on most roadway segments in the study area. Broadway, 27<sup>th</sup> Street, and Harrison Street provide center medians with some landscaping and street lighting. The median along Broadway narrows at intersections to provide vehicle left-turn lanes. In general, with the exception of Harrison Street/27<sup>th</sup> Street intersection,

medians do not have the adequate width to provide refuge islands that protect pedestrians from oncoming traffic. Street lighting is primarily provided to light the vehicular right-of-way.

## 7.3.2 Existing Pedestrian Usage

AM and PM peak period (7:00 to 9:00 AM. and 4:00 to 6:00 PM.) pedestrian counts were collected at major intersections in the project area in 2009 and are shown on Figure 7.2. In addition, Figure 7.3 compares the pedestrian volumes at intersections within the project area with intersections along surrounding roadways based on data collected in 2008 and 2009. The heaviest pedestrian intersections crossings were observed near activity centers such as the Telegraph Avenue/MacArthur Boulevard intersection near the MacArthur BART Station, the Webster Street/MacArthur Boulevard intersection near Mosswood Park, the Harrison Street/27th Street intersection adjacent to Whole Foods Market and Westlake Middle School, and the Broadway/Grand Avenue intersection adjacent to the Uptown project and near downtown Oakland.

#### 7.4 BICYCLE ACCESS AND CIRCULATION

Bicycle access and circulation in the study area and vicinity are discussed in this section.

## 7.4.1 Existing Bicycle Facilities

Bicycle facilities can be classified into several types, including:

- <u>Class I Paths</u> These facilities are located off-street and can serve both bicyclists and pedestrians. Class I paths are typically eight to 12 feet wide excluding shoulders and are generally paved.
- <u>Class II Bicycle Lanes</u> These facilities provide a dedicated area for bicyclists within the paved street width through the use of striping and appropriate signage. These facilities are typically five to six feet wide.
- <u>Class III Bicycle Routes</u> These facilities are found along streets that do not provide sufficient
  width for dedicated bicycle lanes and are also provided on low-volume streets that have no
  bicycle lanes. The street is designated as a bicycle route through the use of signage informing
  drivers to share the roadway with bicyclists.

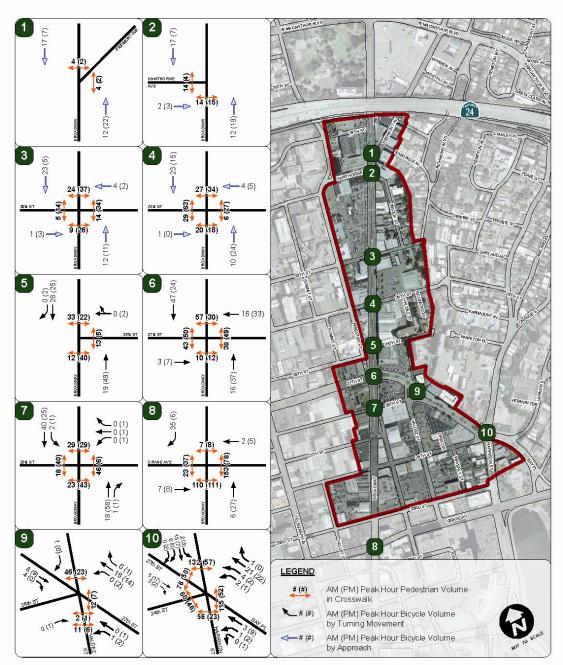
The 2007 Oakland BMP Update also identifies the following variations on the standard bicycle route: 1

- <u>Class IIIA Arterial Bicycle Routes</u> Bicycle routes may be used on some arterial streets where bicycle lanes are not feasible and parallel streets do not provide adequate connectivity. These streets should promote shared use with lower posted speed limits (preferably 25 miles per hour), shared lane bicycle stencils, wide curb lanes, and signage.
- <u>Class IIIB Bicycle Boulevards</u> these are bicycle routes on residential streets that prioritize
  through trips for bicyclists. The route should appeal to cyclists of varied skill levels by providing
  direct connections on streets with low traffic volumes. The route should reduce delay to bicyclists
  by assigning right-of-way to travel on the route. Traffic calming should be introduced as needed
  to discourage drivers from using the boulevard as a through route. Intersections with major
  streets should be controlled by traffic signals with bicycle actuation.

There are a number of existing bicycle facilities located within and near the project area, as shown in Figure 7.4. These include:

-

<sup>&</sup>lt;sup>1</sup> 2007 Oakland Bicycle Master Plan Update, page 67.



Broadway / Valdez District Specific Plan



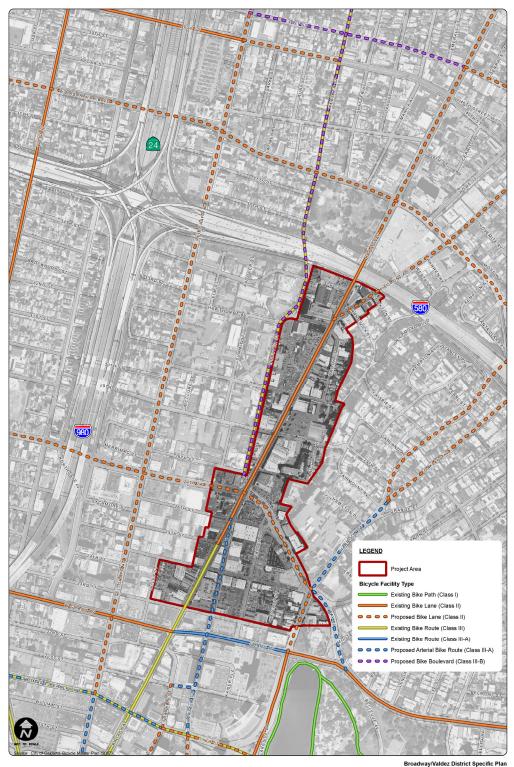
EXISTING PEAK HOUR INTERSECTION PEDESTRIAN AND BICYCLE VOLUMES

FIGURE 7.2



EXISTING PM PEAK HOUR INTERSECTION PEDESTRIAN VOLUMES
FIGURE 7.3

Broadway/Valdez District Specific Plan





EXISTING AND PROPOSED BICYCLE FACILITIES
FIGURE 7.4

- Broadway (north-south) Class II bicycle lanes between 525th Street and just north of the I-580 underpass and Class III bicycle routes south of 26<sup>th</sup> Street.
- Webster Street (north-south) Class III bicycle route between 29th Street and the City of Berkeley border, via Shafter Avenue and Colby Street. The small segment of 29<sup>th</sup> Street is designated a bike route.
- West Street (north-south) Class II bicycle lanes between West Grand Avenue and 52<sup>nd</sup> Street; and Class III bicycle route between West MacArthur Boulevard and Adeline Street
- Grand Avenue (east-west) Class II bicycle lanes between Market Street and Telegraph Avenue and between Webster Street and El Embarcadero; and Class III bicycle route between Telegraph Avenue and Webster Street.
- 20<sup>th</sup> Street (east-west) Class III bicycle route between San Pablo Avenue and Lakeside Drive



Class III Bicycle Route on Webster Street

The nearest Class I path to the project area is located around Lake Merritt.

The Broadway and Webster Street facilities provide direct access to and within the project site. The segment of Webster Street between 28<sup>th</sup> Street and Broadway was closed and replaced with a pedestrian plaza in 1988, removing the connection between the Broadway and Webster Street bicycle facilities. The designated path of travel between Webster and Broadway is via 29<sup>th</sup> Street, though many cyclists continue to ride through the plaza between Webster Street and Broadway and diagonally cross the Broadway/27<sup>th</sup> Street intersection to connect with Webster Street south of Broadway.



Pedestrian Plaza at Webster Street and Broadway

## Planned Bicycle Facilities

In the project vicinity, the City of Oakland's 2007 BMP Update includes the following planned facilities as shown on Figure 7.4:

- Extension of the Class II bicycle lanes on Broadway north to Caldecott Lane
- Class IIIB Bicycle Boulevard on Webster Street/Shafter Avenue between 29<sup>th</sup> Street and the Rockridge BART station
- Class II bicycle lanes on Telegraph Avenue between Downtown Oakland and the existing bicycle lanes at Aileen Street bicycle 27<sup>th</sup> /Bay PlaceGrand Avenue
- Class II bicycle lanes 27<sup>th</sup>/Bay Place (Grand Avenue to MLKMartin Luther King Jr Way (See page 7-47 for more detail)

- Class II bicycle lanes on West MacArthur Boulevard (between Broadway and BART frontage Road): (See page 7-47 for more detail)
- Facilities on Oakland Avenue and Harrison Street (between 27<sup>th</sup> Street and I -580) consisting of Class II bicycle lanes on the one-way couplet, and class IIIA arterial bike routes on the two-way segments of Harrison Street (See page 7-50 for more detail)

In addition, the Alameda County Congestion Management Agency (ACCMA)'s 2006 Countywide Bicycle Plan highlights proposed regional bicycle network that facilitate intercity bicycle travel. Consistent with the City's 2007 BMP Update, the ACCMA's 2006 Countywide Bicycle Plan identifies Telegraph Avenue and Grand Avenue as part of the regional bicycle network, and includes the extension of Class II lanes on Telegraph Avenue between Aileen Street and 14<sup>th</sup> Street.

## 7.4.2 Existing Bicycle Usage

Although not many bicycle facilities are provided in the project area, general conditions on many of the non-major roadways within and surrounding the project area are favorable for bicycling. The topography is relatively flat and many of the local streets, such as 30th Street, have low traffic volumes. However, pavement conditions can be rough on arterial streets such as Broadway and Telegraph Avenue.

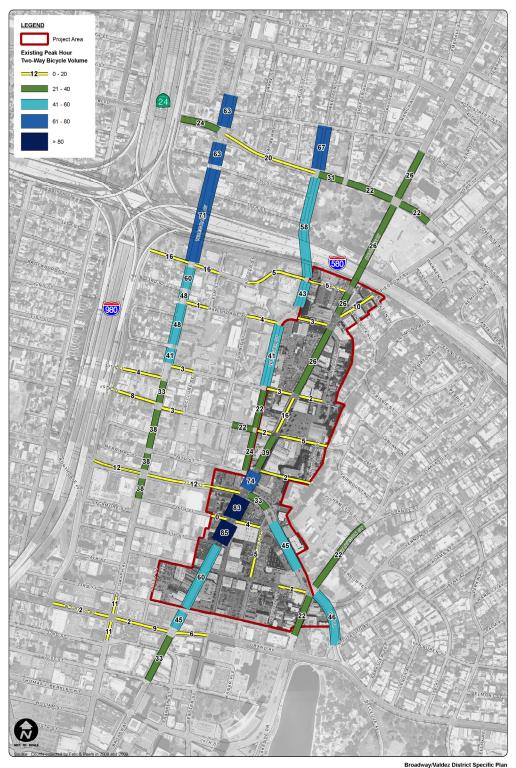
AM and PM peak period (7:00 to 9:00 AM and 4:00 to 6:00 PM) bicycle counts were collected at major intersections in the project area in November 2008 and March 2009 and presented on Figure 7.2. In addition, Figure 7.5 illustrates the relative number of bicycles along roadways within and surrounding the project area. These volumes are based on PM peak hour counts collected in 2008 and 2009. Although Broadway is the only north-south street with Class II bicycle lanes in the area, it generally has fewer bicyclists than segments of Telegraph Avenue or Webster Street. Telegraph Avenue, near the MacArthur BART Station, has high bicycle volumes due to the BART Station, as bicycle volumes on Telegraph Avenue decrease further away from the BART Station. More bicyclists use Webster Street than Broadway most likely because Webster Street carries less vehicular traffic and presents fewer conflicts for bicyclists. In comparison to Broadway, Webster Street is unappealing to some bicyclists due to indirectness of route depending on final destination, an underpass at I-580 with inadequate lighting, and steep slopes (about 14 percent) near 34<sup>th</sup> Street. However, the highest amount of bicycle traffic in the study area is experienced on Broadway around Grand Avenue. This is most likely due to connections with Webster Street both north and south of Grand Avenue.

Considering that bicycles are prohibited from using the 12<sup>th</sup> Street and 19<sup>th</sup> Street BART Stations during the peak congestion periods, some cyclists who live in downtown Oakland ride through the project area to access BART at the MacArthur station. The MacArthur station is also the East Bay terminal for the Caltrans Bay Bridge Bike Shuttle, which provides direct service to the San Francisco Transbay Terminal for cyclists during commuter hours.

Bicycle parking provided at the 19th Street BART Station consists of eight electronic bicycle lockers and bicycle racks provided on 20th Street adjacent to the station entrance. About 6.5 lockers (corresponding to 81 percent) were occupied in the spring of 2008.<sup>2</sup> Bicycle parking provided at the MacArthur BART Station consists of 40 lockers and 108 bicycle racks provided in the BART Plaza. In October 2006, the bicycle racks were 88 percent occupied and the lockers were 13 percent occupied.<sup>3</sup>

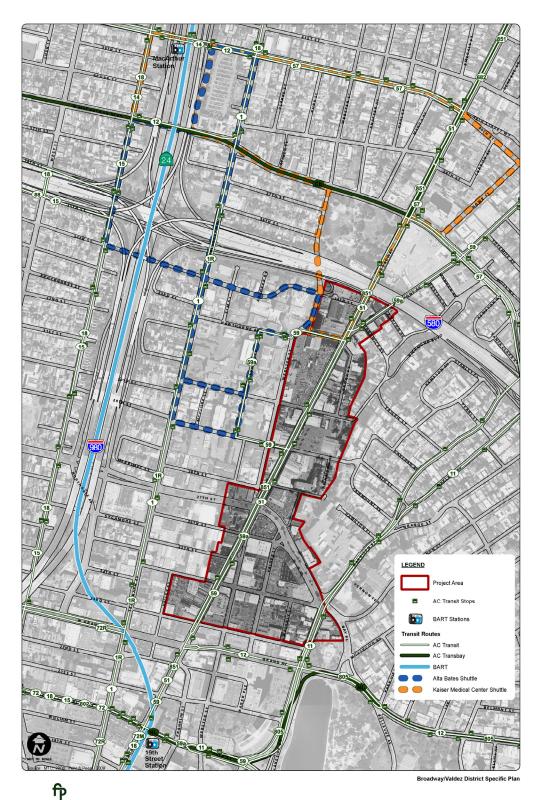
<sup>&</sup>lt;sup>2</sup> City of Oakland Final eLocker Usage Report April-June 2008.

<sup>&</sup>lt;sup>3</sup> Final MacArthur BART Station Access Feasibility Study, May 2008.





EXISTING PM PEAK HOUR TWO-WAY BICYCLE VOLUMES
FIGURE 7.5



#### 7.5 TRANSIT ACCESS AND CIRCULATION

Transit service providers near the Broadway/Valdez District include Alameda-Contra Costa Transit District (AC Transit), which provides local and TransBay bus service connecting to the TransBay Terminal in San Francisco; BART commuter rail service, and shuttles. These services are described below. Figure 7.6 shows the various transit services in the project area.

#### 7.5.1 AC Transit

AC Transit is the primary bus service provider in 13 cities and adjacent unincorporated areas in western Alameda and Contra Costa Counties, with TransBay service serving destinations in San Francisco, San Mateo, and Santa Clara Counties.

#### <u>Fares</u>

As of April 2009, local adult fares are \$1.75 per ride. Local fares for disabled, seniors (over 65) and youth (under 17) are \$0.85. A transfer to other local AC Transit routes is an additional \$0.25. A \$0.25 discount is provided with a transfer issued from machines within the paid area of BART stations.

TransBay adult fares are \$3.50 and provide a free transfer to or from connecting AC Transit routes. Tenand 30-day passes are also available for both local and TransBay services. Fares are paid on the bus, and passengers must have exact change. AC Transit also honors TransLink, a universal fare card, which is planned to be introduced to the entire Bay Area Region in the future, but is currently only compatible with the San Francisco Muni and Golden Gate Transit and Ferry.

#### **Existing Facilities**

The characteristics of AC Transit routes serving the project area are summarized in Table 7-4. Two AC Transit bus routes, Routes 51 and 59/59A, directly serve the Broadway/Valdez District along Broadway. Routes 1 and 1R provide frequent service along nearby Telegraph Avenue, two to three blocks west of Broadway. Additionally, Route 12 provides frequent service on Grand Avenue, one block south of the project area. Routes 800 and 851, which are all-nighter routes, also operate along Telegraph Avenue and Broadway respectively.

Currently, no TransBay buses directly serve the Broadway/Valdez District. The nearest TransBay routes are Route CB which stops at the Broadway/MacArthur Boulevard intersection and Route NL which stops at the Uptown Transit Center adjacent to the 19th Street BART Station.

All bus stops in the area are identified with a signpost that includes the bus route. Some stops also include information on bus route and schedule. Most stops also provide a bench and some provide a trash receptacle. However, none of the bus stops in the project area provide a shelter.

## Uptown Transit Center

Located along 20<sup>th</sup> Street between Telegraph Avenue and Broadway and adjacent to the 19<sup>th</sup> Street BART Station, the Uptown Transit Center was recently completed to enhance connectivity between BART and various AC Transit routes. Currently, ten AC Transit bus routes, including Routes 1 and 1R described above, serve the Uptown Transit Center. The proposed Bus Rapid Transit (BRT) system will also be served at the Uptown Transit Center. The Uptown Transit Center provides amenities such as bus



**Uptown Transit Center** 

shelters, benches, wide sidewalks, dwelling areas for buses and NextBus message signs.

AC Transit reports about 2,600 boardings and alightings at the Uptown Transit Center on a typical weekday. An additional 800 boardings and alightings were reported for the nearby bus stops along Broadway.

#### NextBus

NextBus technology uses geographic positioning system (GPS) to provide real-time information on bus arrivals. Bus riders can use the internet (<a href="www.nextbus.com">www.nextbus.com</a>) to access the real-time information, and it is also available via changeable message signs at the Uptown Transit Center and other locations. NextBus is currently available on many AC Transit routes, including Routes 1/1R, 12 and 51.

TABLE 7-4
AC TRANSIT ROUTES IN THE VICINITY OF THE PROJECT AREA

1	,	Nearest	Weekday		Weekend		
Line	Route	Stops	Hours	Headway	Hours	Headway	Bus Type
Local Route	<b>∌</b> S						
1 (Telegraph)	Downtown Berkeley to the Bay Fair BART station	Telegraph Ave. at 34 <sup>th</sup> St., 32 <sup>nd</sup> St., 30 <sup>th</sup> St., 29 <sup>th</sup> St., 27 <sup>th</sup> St., and 24 <sup>th</sup> St.	5:30 AM to 12:00 AM	15-20 minutes	5:00 AM to 1:00 AM	15-20 minutes	60-foot articulated
1R (Telegraph/ International Boulevard Rapid)	Downtown Berkeley to the Bay Fair BART station (limited stops)		6:00 AM to 8:30 PM	12 minutes	7:30 AM to 7:00 PM	15 minutes	buses with a 47- person seating capacity
11	Piedmont to Dimond Business District	Harrison St. at Bay Place	6:20 AM to 7:40 PM	20 minutes (peak hours); 30 minutes (10 AM – 4:30 PM)	7:20 AM to 7:20 PM	60 minutes	N/A
12 (Grand Avenue)	MacArthur BART station to downtown Oakland	W Grand Ave. at Harrison St., Webster St., and Broadway	6:00 AM to 7:30 PM	20-30 minutes	7:00 AM to 7:00 PM	30 minutes	40-foot buses with a 40-person seating capacity
51	Berkeley Amtrak station to the city of Alameda	Broadway at 24 <sup>th</sup> St., 28 <sup>th</sup> St., 29 <sup>th</sup> St., 30 <sup>th</sup> St., and Piedmont Ave.	5:00 AM to 12:30 AM	8-10 minutes (6AM - 6PM); 15-20 minutes (early morning and late night)	5:00 AM to 12:30 AM	15-20 minutes	40-foot buses with a 32-person seating capacity
57	Emeryville Marketplace to Eastmont Transit Center	West MacArthur Blvd. at Broadway	5:30 AM to 12:30 AM	12-13 minutes (7AM to 8PM); 15-30 minutes (early morning and late night)	6:00 AM to 12:30 AM	15-30 minutes	40-foot buses with a 35- or 40- person seating capacity
59/59A	Rockridge BART to Lake Merritt BART	Broadway at Piedmont Ave., 28 <sup>th</sup> St., 24 <sup>th</sup> St.	6:30 AM to 7:30 PM	60 minutes	8:30 AM to 6:30 PM	60 minutes	30-foot buses with a 25-person seating capacity
Night Route	;s						
800 (All-Nighter)	Downtown San Francisco to the Richmond BART station	Telegraph Ave. at 34 <sup>th</sup> St., 32 <sup>nd</sup> St., 30 <sup>th</sup> St., 29 <sup>th</sup> St., 27 <sup>th</sup> St., and 24 <sup>th</sup> St.	`Saturdays)	60 minutes	12:20 AM to 7:20 AM (Sundays)	60 minutes	40-foot buses with a 40-person seating capacity
851 (All-Nighter)	Downtown Berkeley to the city of Alameda	Broadway at 24 <sup>th</sup> St., 28 <sup>th</sup> St., 29 <sup>th</sup> St., 30 <sup>th</sup> St., and Piedmont Ave	12:20 AM to 5:20 AM (weekdays & Saturdays)	60 minutes	12:20 AM to 7:20 AM (Sundays)	60 minutes	40-foot buses with a 40-person seating capacity

Source: AC Transit, April 2009.

### **Existing Ridership**

Table 7-5 shows the capacity and loads (passengers) of the AC Transit routes serving the project area and vicinity. Average and maximum load factors are also shown. Load factor is defined as the ratio of occupied seats to the number of seats on the bus. A load factor of 100 percent or more indicates that the bus operates at or above its seated capacity.

TABLE 7-5
AC TRANSIT BOARDINGS AND ALIGHTINGS (WEEKDAY)

Bus Route and Stop Location	Direction	Average Capacity (Seats)	Average Load (Passengers) <sup>1</sup>	Average Load Factor <sup>2</sup>	Maximum Load (Passengers) <sup>3</sup>	Maximum Load Factor <sup>4</sup>	Boardings (On's) <sup>5</sup>	Alightings (Off's) <sup>6</sup>
Route 1 on Telegraph	SB	47	17.1	36%	35	74%	23	16
Avenue at West Grand Avenue	NB	47	19.4	41%	41	87%	4	7
Route 1 on Telegraph	SB	47	17.0	36%	34	72%	86	64
Avenue at 24 <sup>h</sup> Street	NB	77	18.8	40%	42	89%	66	106
Route 1 on Telegraph	SB	47	16.5	35%	35	74%	37	40
Avenue at 27 <sup>h</sup> Street	NB	47	18.8	40%	42	89%	33	35
Route 1 on Telegraph Avenue at 29h Street/	NB	47	18.2	39%	40	85%	22	61
30th Street	SB	47	16.6	35%	36	77%	92	36
Route 1 on Telegraph Avenue at 31st Street/	NB	47	18.0	38%	41	87%	42	50
32nd Street	SB	47	15.7	33%	35	74%	9	20
Route 1 on Telegraph	SB	47	15.9	34%	36	77%	44	30
Avenue at 34 <sup>h</sup> Street	NB	47	18.0	38%	41	87%	33	39
Route 1 on Telegraph	toute 1 on Telegraph SB	15.6	33%	36	77%	20	6	
Avenue at 36 <sup>th</sup> Street	NB	47	17.6	37%	41	87%	5	24
Route 1R on	SB		18.5	39%	34	72%	160	78
Telegraph Avenue at 24 <sup>th</sup> Street	NB	47	21.1	45%	48	102%	100	161
Route 1R on	SB		17.2	37%	34	72%	151	77
Telegraph Avenue at 30th Street/31st Street	NB	47	20.2	43%	48	102%	92	161
Route 12 on West Grand Avenue at	EB	40	8.5	39%	21	72%	3	22
Broadway	WB	40	N/A	N/A	N/A	N/A	N/A	N/A
Route 12 on West Grand Avenue at	EB	40	12.2	31%	27	68%	1	8
Webster Street	WB	40	10.0	25%	26	65%	15	7
Route 12 on West	EB	40	12.4	31%	27	68%	17	27
Grand Avenue at Harrison Street	WB	40	10.0	25%	26	65%	13	12
Route 51 on	SB	20	20.2	63%	45	141%	67	27
Broadway at West Grand Avenue	NB	32	20.6	64%	60	188%	93	90
Route 51 on	SB	00	22.6	71%	47	147%	61	53
Broadway at 24 <sup>th</sup> Street	NB	32	20.7	65%	60	188%	40	33
Route 51 on	SB	32	22.5	70%	48	150%	177	52

#### **TABLE 7-5** AC TRANSIT BOARDINGS AND ALIGHTINGS (WEEKDAY)

Bus Route and Stop Location	Direction	Average Capacity (Seats)	Average Load (Passengers) <sup>1</sup>	Average Load Factor <sup>2</sup>	Maximum Load (Passengers) <sup>3</sup>	Maximum Load Factor <sup>4</sup>	Boardings (On's) <sup>5</sup>	Alightings (Off's) <sup>8</sup>
Broadway at 28 <sup>th</sup> Street	NB		19.3	60%	60	188%	57	208
Route 51 on	SB	00	21.3	67%	47	147%	152	58
Broadway at 29 <sup>th</sup> Street	NB	32	19.0	59%	61	191%	86	124
Route 51 on	SB	00	20.4	64%	46	144%	50	35
Broadway at 30 <sup>th</sup> Street	NB	32	18.9	59%	61	191%	21	33
Route 51 on	SB	00	20.2	63%	45	141%	67	27
Broadway at Piedmont Avenue	NB	32	18.5	58%	61	191%	21	63
Route 51 on Broadway at	SB	32	19.7	62%	45	141%	260	106
West MacArthur Boulevard	NB	32	17.1	53%	61	191%	154	288
Route 57 on West	EB	40	15.8	40%	36	90%	152	50
MacArthur Boulevard at Broadway	WB	40	14.2	36%	37	93%	45	151
Route 59/59A on	SB		5.1	20%	8	32%	2	4
Broadway at West Grand Avenue	NB	25	5.5	22%	10	40%	6	2
Route 59/59A on	SB		5.2	21%	8	32%	2	2
Broadway at 24 <sup>th</sup> Street	NB	25	5.6	22%	10	40%	2	1
Route 59/59A on	SB		5.3	21%	8	32%	13	4
Broadway at 28 <sup>th</sup> Street	NB	25	N/A	N/A	N/A	N/A	N/A	N/A
Route 59/59A on 29 <sup>th</sup>	SB		4.7	19%	8	32%	2	3
Street at Webster Street	NB	25	5.5	22%	10	40%	7	10
Route 59/59A on	SB		4.8	19%	8	32%	1	2
Summit Street at 29 <sup>th</sup> Street	NB	25	5.6	22%	10	40%	2	1
Route 59/59A on	SB		4.9	20%	8	32%	2	3
Summit Street at 30 <sup>th</sup> Street	NB	25	5.5	22%	10	40%	2	4
Route 59/59A on	SB	_	5.0	20%	9	36%	1	1
Summit Street at Hawthorne Avenue	NB	25	5.5	22%	10	40%	1	0
Route 59/59A on	SB		5.0	20%	9	36%	2	2
Hawthorne Avenue at Webster Street	NB	25	5.5	22%	12	48%	4	3
Route 59/59A on	SB		5.0	20%	8	32%	1	2
Piedmont Avenue at Broadway	NB	25	5.6	22%	12	48%	3	1

- Number of passengers on the bus averaged on a typical weekday.
   Average load divided by average seated capacity.
   Maximum number of passengers on the bus observed on a typical weekday.
   Maximum load divided by average seated capacity.

- 5. Total number of passengers boarding the bus at this location on a typical weekday.

  6. Total number of passengers alighting the bus at this location on a typical weekday.

**Bold** indicates load factor above 100 percent. Source: Data collected in December 2008 through March 2009 and provided by Howard Der, AC Transit in April 2009.

Route 51, which is AC Transit's busiest route and directly serves the project area along Broadway, is currently over capacity during peak service periods, with maximum loads of up to 191 percent, and average daily load factors of 58 to 71 percent within the project area.

Route 59/59A, which serves the project area but detours along Summit Street for several blocks, has excess capacity, with maximum loads of 48 percent or less, and average daily load factors of 22 percent or less within the project area. Route 1 along Telegraph Avenue also has excess capacity, with maximum load factors of 87 percent or less. However, the express route on Telegraph, Route 1R, experiences higher daily loads, and reaches its seated capacity in the northbound direction near the Summit Campus. Route 12 on Grand Avenue, south of the project area, operates with excess capacity, with maximum load factors of 72 percent or less.

Figure 7.7 shows the number of daily boardings and alightings at bus stops in the vicinity of the project area. Please note that the totals on Figure 7.7 only include data for AC Transit Routes 1/1R, 12, 51, and 59. In general, bus stops along Broadway experience the highest number of boardings and alightings. The bus stops with the highest number of boardings and alighting are the stops on Broadway just south of MacArthur Boulevard and on Telegraph Avenue at 24<sup>th</sup> Street, where more than 600 daily boardings and alightings were reported. The high usage of the stop on Broadway is most likely due to the transfers to routes 57 and TransBay Route Cb and the proximity of the Kaiser Medical Center. The stop on Telegraph Avenue is one of the limited stops for Route 1R.

### 7.5.2 Bay Area Rapid Transit (BART)

BART is the regional rapid transit provider and connects the study area to other parts of Alameda County, Contra Costa County, San Francisco, and northern San Mateo County. The BART system operates trains along five routes: (1) Richmond-Fremont; (2) Richmond-Daly City; (3) Millbrae-Dublin/Pleasanton; (4) Daly City-Pittsburg/Bay Point; and (5) Fremont-Daly City. A total of 43 stations are served by BART.

The nearest BART stations to the project area are 19<sup>th</sup> Street station, about one-third of a mile from the southern end of the project area, and MacArthur station, about two-thirds of a mile from the northern end of the project area. Based on data provided by BART, the systemwide median distance for riders walking to a BART Station is about one-half mile for home-origin trips and about one-third mile for non-home origin trips. Thus, a portion of the Broadway/Valdez District is within walking distance of either BART Station

#### <u>Fares</u>

BART fares are based on passenger origin and destination stations, and range from \$1.50 (trips within downtown San Francisco) to \$8.00 (trips from Pittsburg/Bay Point station to/from San Francisco International Airport). In general, prices are based on trip distance. Fares from 19<sup>th</sup> Street and MacArthur station generally vary by 5 to 20 cents depending on the destination and the direction of travel. Table 7-6 shows the current pricing to popular destinations as of April, 2009.

TABLE 7-6 ONE-WAY BART FARES TO/FROM POPULAR STATIONS									
To/From	24 <sup>th</sup> St. Mission	Coliseum	Downtown Berkeley	Dublin/ Pleasanton	Fremont	Montgomery St.	SFO Airport	Walnut Creek	
19 <sup>th</sup> Street	\$3.15	\$1.50	\$1.50	\$3.75	\$3.80	\$2.90	\$5.65	\$3.00	
MacArthur	\$3.35	\$1.90	\$1.50	\$3.85	\$3.85	\$3.10	\$5.70	\$2.90	
Source: BAF	Source: BART, 2009.								



AC TRANSIT DAILY PASSENGER BOARDING AND ALIGHTING FIGURE 7.7

Broadway/Valdez District Specific Plan

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Unlimited ride passes (such as monthly or yearly passes) are not currently sold by BART; however, high value tickets are offered at a 6 percent discount. Discounts are also provided for seniors, persons with disabilities, and middle and secondary school students.

#### **Existing Facilities**

The two BART stations serving the Broadway/Valdez District, MacArthur and 19<sup>th</sup> Street are described below.

19th Street Station - The 19th Street station is located underground beneath Broadway in downtown Oakland. The station is accessed through four portals along Broadway between 18th and 20th Streets. No designated vehicle parking or pick-up/drop off is provided at 19th Street station. However, pick-ups and drop offs occur along Broadway and the side streets, especially during the peak commute periods. The lack of adequate facilities for this activity pick-ups and drop offs creates congestion and conflicts between modes, including vehicle queues that back into the westbound AC Transit bus stop on 20th Street at Franklin. Street. Bicycles are not allowed in the 12th and 19th Street BART stations during the AM and PM peak periods. <sup>4</sup> Bicycle parking on-site



Electronic Bike Lockers at the 19th Street Station

consists of eight electronic bicycle lockers and bicycle racks provided on 20th Street adjacent to the station portal. Fifty-four transit vehicles make a connection with the station during both peak hours primarily at the Uptown Transit Center. The station is comprised of three levels, with the ticket machines, station agent booth, and fare gates on the first level, the northbound platforms on the second level, and the southbound platform located on the third level.

MacArthur Station - The MacArthur station is elevated and located in the State Route (SR) 24 median. The ticket machines, station agent booth, and fare gates are located on the south side of 40th Street and open into a public plaza that is covered by SR 24 off-ramps and provides bicycle storage facilities and transit waiting areas. A total of 108 racks and 40 lockers are provided for bicycle parking and 43 buses arrive during the peak hour. There is a frontage road adjacent to the plaza that parallels SR 24 and serves as an area for pick-up/drop-offs and stops for Emery-Go-Round and medical center (Kaiser, Alta Bates Summit, and Children's Hospital Oakand) shuttle services. Adjacent to the frontage road is a 618-space depressed



MacArthur BART Station Faregate Plaza

surface parking lot that is accessible from 40th Street, West MacArthur Boulevard, and Telegraph

<sup>&</sup>lt;sup>4</sup> BART Fares and Schedules Brochure.

Avenue via Apgar Street. MacArthur station has two platforms and serves as a timed transfer station for trains on the Richmond-Fremont and Daly City-Pittsburg/Bay Point lines.

During weekday peak commute periods, riders at both the MacArthur and 19<sup>th</sup> Street BART stations can directly access trains to all other BART stations except Castro Valley, Dublin/Pleasanton, and San Francisco Peninsula stations south of Daly City. Access to these stations requires a transfer at the Bay Fair (Castro Valley and Dublin/ Pleasanton) or Balboa Park (San Francisco Peninsula) stations. Approximately 460 trains per day pass through these stations providing service to many parts of the Bay Area, including downtown Oakland (3 minutes), downtown San Francisco (16 minutes) and the San Francisco International Airport (54 minutes).

Train service at both stations is provided from approximately 4:30 AM to 12:45 AM on weekdays, with each line serving the stations operating at typical headways of 15 minutes throughout the day. During the weekday AM peak commute period (6:00 AM to 9:00 AM), headways to San Francisco range from two to six minutes. On weekends, service is provided from approximately 6:15 AM (8:00 AM on Sundays) to 12:45 AM with typical headways of 15 to 20 minutes. Headways for all trains serving the MacArthur and 19<sup>th</sup> street BART stations are shown in Table 7-7.

TABLE 7-7 MACARTHUR AND 19 <sup>TH</sup> STREET BART TRAIN SCHEDULE									
Line Headway (Minutes)									
LI	ne		Weekd	ay	Week	end			
Origin	Destination	AM Commute Period (WB)	PM Commute Period (EB)	Non-Peak	Saturday (Daily)	Sunday (Daily)			
Richmond	Millbrae	15	15	15 (no service after 7 PM)	No Service	No Service			
Millbrae	Richmond	15	15	15 (no service after 7 PM)	No Service	No Service			
Richmond	Daly City	15	15	15	20 (no service after 7 PM)	No Service			
Daly City	Richmond	15	15	15	20 (no service after 7 PM)	No Service			
Richmond	Fremont	15	15	15	20 (15 after 6:30 PM)	15			
Fremont	Richmond	15	15	15	20 (15 after 6:30 PM)	15			
Pittsburg/Bay Point	Daly City	5 - 10	5 - 15	15	20 (15 after 6:30 PM)	15			
Daly City	Pittsburg/Bay Point	5 - 15	5 - 10	15	20 (15 after 6:30 PM)	15			
ource: BART published schedule as of April 2009.									

#### **Existing Ridership**

Table 7-8 and Table 7-9 summarize the total number of boardings and alightings for both stations based on passenger surveys conducted in the spring of 2008.<sup>5</sup> In addition, Table 7-10 summarizes the travel modes used to access both stations.

The number of boardings at the 19<sup>th</sup> Street station was approximately 625 during the AM peak hour (7:30 AM – 8:30 AM), 2,077 during the PM peak hour (5:00 PM – 6:00 PM), and 9,800 daily. The vast majority of patrons arrived at the station by walking or biking. This is likely due to the fact that no parking at the station is provided, the location of the station at edge of the central business district, and the close station spacing in downtown Oakland. Over an entire day, the walk/bike mode of access comprised 89 percent of the total boardings, followed by drive (mostly drop-off) at six percent and transit at five percent. The high number of AM alightings and PM boardings indicates that 19<sup>th</sup> Street is an AM destination station for commuters, typical of stations within the urban classification.

TABLE 7-8	
BART BOARDING MODE OF ACCESS	

_		19 <sup>th</sup> Street		MacArthur		Systemwide <sup>1</sup>	
Time	of Day	Ridership	Percentage	Ridership	Percentage	Ridership	Percentage
AM Peak	Walk/Bike	435	69%	402	38%	12,557	30%
(7:30 AM –	Transit <sup>2</sup>	67	11%	175	17%	6,112	15%
8:30 AM)	Drive <sup>3</sup>	123	20%	469	45%	23,084	55%
PM Peak	Walk/Bike	1,986	96%	145	18%	34,955	79%
(5:00 PM –	Transit <sup>2</sup>	20	1%	518	65%	6,222	14%
6:00 PM)	Drive <sup>3</sup>	71	3%	133	17%	3,205	7%
	Walk/Bike	8,786	90%	2,663	34%	200,500	56%
Total Daily	Transit <sup>2</sup>	427	4%	2,581	33%	58,289	16%
	Drive <sup>3</sup>	587	6%	2,562	33%	100,630	28%

<sup>&</sup>lt;sup>1</sup> Overall system-wide totals do not include San Francisco International Airport.

Source: BART and Fehr & Peers, 2009.

<sup>&</sup>lt;sup>2</sup> Transit access includes buses and shuttles.

<sup>&</sup>lt;sup>3</sup> Drive access includes by single occupancy vehicle, carpool, motorcycle and drop-off.

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<sup>&</sup>lt;sup>5</sup> The results of this survey are summarized *2008 BART Station Profile Summary* published by BART in 2009.

# TABLE 7-9 BART EGRESS MODE OF ACCESS

_		19 <sup>th</sup> Street		MacArthur		Systemwide <sup>1</sup>	
Time	of Day	Ridership	Percentage	Ridership	Percentage	Ridership	Percentage
AM Peak	Walk/Bike	2,033	96%	114	16%	35,198	82%
(7:30AM –	Transit <sup>2</sup>	57	3%	581	81%	6,565	15%
8:29AM)	Drive <sup>3</sup>	26	1%	25	3%	1,090	3%
PM Peak	Walk/Bike	455	74%	356	36%	16,989	64%
(5:00PM -	Transit <sup>2</sup>	65	10%	321	33%	6,222	24%
6:00PM)	Drive <sup>3</sup>	98	16%	304	31%	3,205	12%
	Walk/Bike	8,788	92%	2,643	34%	209,472	59%
Total Daily	Transit <sup>2</sup>	379	4%	3,368	44%	64,014	18%
	Drive <sup>3</sup>	382	4%	1,716	22%	81,477	23%

<sup>&</sup>lt;sup>1</sup> Overall system-wide totals do not include San Francisco International Airport.

Source: BART and Fehr & Peers, 2009.

<b>TABLE 7-10</b>
BART ACCESS MODE SHARE BY STATION

Access Mode	19 <sup>th</sup> Street	MacArthur
Walk	88%	27%
Bus/Transit	4%	33%
Drive Alone	1%	19%
Carpool	1%	3%
Dropped Off	4%	11%
Bicycle	2%	7%
Total	100%	100%

Nearly 2,000 fewer daily boardings occurred at MacArthur Station than 19<sup>th</sup> Street Station, with a much higher percentage of these accessing the station by transit and driving (mostly parking). Located outside of the central business district, a higher percentage of boardings occur in the AM peak than the PM peak as MacArthur shares the dual role as origin and destination in the morning peak due to the mix of uses within the neighborhood and the quality and frequency of feeder transit service. The quality of feeder transit service, such as the Emery-go-Round, various hospital shuttles, and multiple AC transit routes operating at headways of fifteen minutes or less, also contributes to one of the highest percentages of passenger access by transit of any station in the BART system (44 percent).

<sup>&</sup>lt;sup>2</sup> Transit access includes buses and shuttles.

<sup>&</sup>lt;sup>3</sup> Drive access includes by single occupancy vehicle, carpool, motorcycle and drop-off.

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Based on the same station survey, approximately 75 percent of BART riders within the Broadway/Valdez District study area enter/exit the system at 19<sup>th</sup> Street Station, with the majority of the remaining study area riders entering/exiting at MacArthur Station. This is likely due to the proximity of 19<sup>th</sup> Street Station to the study area.

Table 7-11 summarizes the origin location of BART riders using both stations. The vast majority of trips of BART riders using the 19<sup>th</sup> Street station originate within a half mile, the typical distance associated with transit walkshed. This is consistent with the high number of walk boardings observed at the station. Conversely, most riders at MacArthur station originate outside of one half mile, which is also consistent with the higher percentages of riders entering and exiting the station by driving and transit. As shown in Table 7-11, the median distance for riders walking to the 19<sup>th</sup> Street Station is about three-fourth of a mile, while it is about one-half mile for riders walking to the MacArthur station.

Table 7-12 summarizes the trip purposes for the two stations. The majority of riders at both the 19<sup>th</sup> Street and MacArthur stations use the station for trips to and from work or for work-related business. Approximately 85 percent of riders at 19<sup>th</sup> Street and 72 percent of riders at MacArthur use the station for work trips.

TABLE 7-11 BART TRIP ORIGIN LOCATIONS BY STATION								
Distance	19 <sup>th</sup> Street	MacArthur						
<= 0.25 Mile	49%	11%						
0.26 – 0.50 Mile	25%	11%						
0.51 – 1.00 Mile	19%	36%						
1.01 – 1.50 Miles	4%	15%						
1.51 – 2.00 Miles	1%	17%						
> 2.00 Miles	2%	10%						
Median Distance for Home-Origin Trips (miles)								
Overall	0.84	0.89						
Walk Access	0.76	0.48						
Drive Access	N/A	1.34						
Transit Access	N/A	N/A						
Median Distance for Non-Home- Origin Trips (miles)								
Overall	0.29	1.25						
Walk Access	0.29	N/A						
Drive Access	N/A	2.08						
Transit Access	N/A	1.52						

N/A = data not shown due to small sample size.

Source: 2008 BART Station Profile Study and Fehr and Peers, 2009.

TABLE 7-12 BART TRIP PURPOSE BY STATION						
	19 <sup>th</sup> Street	MacArthur				
Commute to/from Work	85%	72%				
Commute to/from School	3%	9%				
Personal Business/Recreation/Shopping 12% 20%						
Source: 2008 BART Station Profile Study and Fehr a	nd Peers. 2009.					

Table 7-13 summarizes load factors by line and direction for the BART lines serving the 19<sup>th</sup> Street and MacArthur Stations. Individual BART car loads, in terms of passengers per car, for the lines passing through the MacArthur Station were collected in September 2007. Using a total capacity per car of 92 (67 seated and 25 standing), five of the six directional lines were at capacity as some point during the day. The most loaded line, the Pittsburg/Bay Point to Daly City line, exceeded the maximum load capacity at MacArthur station by 22 passengers per car at 8:00 AM. This line in the PM return trip was the second most heavily loaded line directionally (14 passengers per car over capacity at 4:00 PM). Peak hour loads are also similar at the 19<sup>th</sup> Street Station, slightly lower in the AM and higher in the PM, due to commute patterns.

<b>TABLE 7-13</b>
PEAK HOUR LOADS BY LINE AT MACARTHUR BART STATION

Line	Total Capacity (Passengers/Car) <sup>1</sup>	Maximum Load Peak Hour	Maximum Load (Passengers/Car)	Load Factor
Pittsburg/Bay Point-Daly City	92	8:00 AM	114	1.24
Daly City-Pittsburg/Bay Point	92	4:00 PM	106	1.15
Colma/Daly City-Richmond	92	5:00 PM	99	1.08
Fremont-Richmond	92	5:00 PM	92	1.00
Richmond-Daly City/Colma	92	8:00 AM	101	1.10
Richmond-Fremont	92	5:00 PM	58	0.63

<sup>&</sup>lt;sup>1</sup> **Bold** indicates maximum load above capacity.

Total capacity includes 67 seated and 25 standing passengers.

Source: September 2007 data provided by BART in January 2008.

#### 7.5.3 Shuttle Services

Two shuttle services operate in the vicinity of the Broadway/Valdez District: the Alta Bates Summit Medical Center shuttle and the Kaiser Medical Center shuttle. Both of these shuttle services operate on a fixed route, and provide service to and from the MacArthur BART Station. Although not directly serving the study area, Emery Go Round also operates six free shuttle routes between the MacArthur BART Station and various destinations in Emeryville. There may be opportunities to extend Emery Go Round service into the project area.

### Summit Medical Center Shuttle

Alta Bates Summit Medical Center operates free shuttles for employees and visitors, with two routes providing service between the MacArthur BART station and the Summit Medical Center Campus, located between Telegraph Avenue and Webster Street, 34<sup>th</sup> Street and 24<sup>th</sup> Street:

- Route 5 provides service between the Summit Campus, MacArthur BART station and the Alta Bates campus in Berkeley, with 15-minute headways from 6:30 AM to 7:30 AM, and 20-minute headways between 7:30 AM and 12:30 AM.
- Route 6 provides service between the Summit Campus and MacArthur BART station, with 15minute headways between 5:30 AM and 9:00 PM.

The closest shuttle stops to the project area are on Hawthorne Avenue at Webster Avenue, and on 29<sup>th</sup> Street at Webster Avenue. Only Route 6 serves the 29<sup>th</sup> Street at Webster stop. Each shuttle has a capacity of 15 seated passengers. The Summit Medical Center shuttles currently transport about 400 passengers each day.

#### Kaiser Medical Center Shuttle

Kaiser Medical Center operates a free shuttle system between the MacArthur BART Station and its medical center, primarily serving the Kaiser Hospital on Howe Street and the Mosswood Building at 3505 Broadway, close to the north end of the project area. Shuttles operate from 5:30 AM to midnight on weekdays only and have an estimated travel time of 10 minutes. The shuttles operate with ten to fifteen minutes headways during the peak commute periods (5:45 AM to 9:00 AM and 3:00 PM to 6:30 PM), and every 15 to 20 minutes during other times. The shuttle vehicle is a minibus with a 22-person capacity. The shuttle system, which primarily serves Kaiser employees, patients, and visitors, can also be used by the general public. Kaiser shuttles currently transport about 1,200 passengers on typical weekday. Kaiser will increase the shuttle service and modify shuttle routes to serve new buildings planned as part of their expansion project in the next few years.

#### 7.6 VEHICULAR ACCESS AND CIRCULATION

Vehicular access and circulation in the study area and vicinity are discussed in this section.

#### 7.6.1 Existing Roadway System

Regional access to the project area is provided via Interstate 580 (I-580), Interstate 980 (I-980) and State Route 24 (SR 24), while local access is provided by Broadway, 27<sup>th</sup> Street/Bay Place and Piedmont Avenue. These roadways are described below.

*Interstate 580 (I-580)* is an eight-lane freeway between I-80, near the Bay Bridge, and the Tri Valley area and I-5 further east. I-580 borders the north side of the project area and has an average annual daily traffic volume (AADT) of approximately 202,000 vehicles per day<sup>6</sup> in the study area.

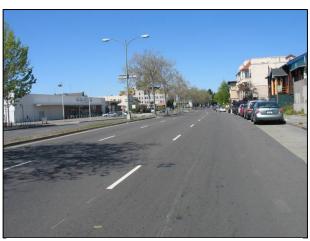
*Interstate 980 (I-980)* is an eight-lane north-south freeway west of the project area that connects SR 24 and I-580 to I-880. I-980 has an AADT of 97,000 vehicles near the project area.<sup>7</sup>

**State Route 24 (SR 24)** is an eight-lane east-west freeway that connects to I-980 at a junction with I-580. SR 24 has an AADT of approximately 137,000 vehicles near the project area.<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Caltrans, 2007 (http://dot.ca.gov/hq/traffops/saferesr/trafdata/2007all.htm

<sup>&</sup>lt;sup>7</sup> ibid





Broadway North of 27th Street Looking North

27th Street west of Broadway Looking West

**Broadway** is a major north-south arterial between Water Street at Jack London Square and SR 24. Broadway varies in width from four to six lanes, with four travel lanes through the project area. On-street parallel parking and a center median are provided on both sides along most of its length. Bike lanes are provided on Broadway between 23<sup>rd</sup> Street and just north of MacArthur Boulevard.

**27**<sup>th</sup> **Street** is a major east-west arterial between Market Street and Harrison Street. It provides three vehicle lanes in each direction, a raised median, and on-street parallel parking on both sides of the roadway within the project area. East of Harrison Street, 27<sup>th</sup> Street continues as Bay Place. Class II bicycle lanes are planned for 27<sup>th</sup> Street east of Broadway by eliminating one travel lane in each direction.

**Piedmont Avenue** is a two-lane, minor north-south arterial bounded by Broadway Avenue and 51st Street. Piedmont Avenue provides one lane in each direction with parking on both sides of the street.

**MacArthur Boulevard** is a major east-west arterial just north of the project area that extends from Hollis Street in West Oakland/Emeryville generally paralleling I-580 to San Leandro in the south and beyond. It varies in width from four to six lanes, with a six-lane cross section and a center median in the vicinity of the project area. On-street parallel parking is also provided west of Broadway. Class II bicycle lanes are planned for MacArthur Boulevard between Telegraph Avenue and Broadway by eliminating one travel lane in each direction.

**Grand Avenue** is a four-lane major arterial just south of the project area extending from West Oakland to Downtown Oakland and City of Piedmont. On-Street parallel parking, bicycle lanes, and a center median are provided along certain segments of Grand Avenue.

**Telegraph Avenue** is a north-south major arterial east of the project area extending from Broadway in Downtown Oakland to Berkeley. Near the project area, Telegraph Avenue is four lanes wide with left-turn bays at major intersections and on-street parallel parking on both sides.

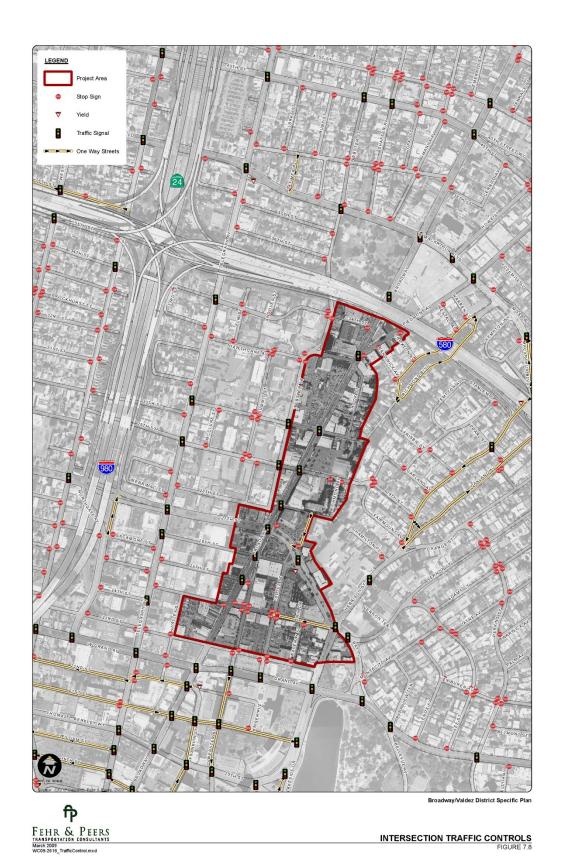
*Harrison Street* is a major arterial extending from Downtown Oakland to east of I-580. In the vicinity of I-580, Harrison Street forms a one-way couplet with Oakland Avenue. North of 27<sup>th</sup> Street, Harrison Street provides two travel lanes and on-street parallel parking in each direction. South of 27<sup>th</sup> Street, Harrison Street provides three travel lanes and on-street parallel parking in each direction and a center median.

<sup>&</sup>lt;sup>8</sup> ibid

Other local streets in the project area include Webster Street, Hawthorne Avenue, Brook Street, Valdez Street, Waverly Street and 24<sup>th</sup> through 34<sup>th</sup> Streets. In general, these streets provide one travel lane in each direction and parallel on-street parking on both sides of the street.

#### Intersection Controls

Figure 7.8 shows the traffic controls at intersections in the project area and the surrounding area. Within the Broadway/Valdez District, all intersections along 27<sup>th</sup> Street and the majority of intersections along Broadway are controlled by signals. Only the intersections on Broadway at 23<sup>rd</sup> and 24<sup>th</sup> Street are controlled by stop-signs on the side-streets. In addition, two intersections along Webster Street, at 29<sup>th</sup> and 30<sup>th</sup> Streets, are also signalized. Most of the remaining local street intersections in the project area are all-way stop-controlled.



Several freeways (I-80, I-580, I-980, and SR 24) connect the Broadway/Valdez District to the region. Figure 7.9 and Figure 7.10 show regional access to and from the project area using the various freeways in the area, respectively. The project area is adjacent to I-580 and less than ½ mile from I-980. As shown in Figure 7.9 and Figure 7.10, depending on direction of regional approach and destination within the District, various ramps and multiple routes are available to motorists. The various available access options distribute traffic throughout the roadway network and prevent traffic from concentrating in few locations and causing congestion. However, regional access to and from the freeway system can be confusing for drivers unfamiliar with the area. This is mostly due to the number of freeways in the area, numerous on-ramps and off-ramps in the area, poor signage, and the fact that most freeway interchanges in the area do not provide on-ramps and off-ramps in both directions of the freeway.

#### Traffic Calming

Limited traffic calming has been implemented on the local streets within the project area. The only traffic calming devices installed in the project area are speed humps on Brook Street and 29th Street, east of Broadway.

#### 7.6.2 **Existing Traffic Conditions**

Traffic operations at ten intersections along the arterials within or adjacent to the Broadway/Valdez District were analyzed. The methodology and analysis results are presented below.



Speed Hump on Brook Street

#### Level of Service Analysis Methodologies

Traffic conditions in urban areas are generally affected more by the operations at the intersections than by the capacities of the local streets because traffic control devices (signals and stop signs) at intersections control the capacity of the street segments. The level of service grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from level of service (LOS) A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long queues and delays). This level of service grading system applies to both signalized and unsignalized intersections. LOS A to C are generally considered satisfactory service levels, while the influence of congestion becomes more noticeable (though still considered acceptable) at LOS D. LOS E and LOS F are generally considered to be unacceptable, though some jurisdictions, including the City of Oakland, consider LOS E to be acceptable in certain areas like a downtown central business district in recognition of the positive effect of traffic congestion in promoting the use of transit or other methods of travel. In City of Oakland, Downtown is defined in the Land Use and Transportation Element of the General Plan as the area generally bounded by West Grand Avenue to the North, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south, and I-980/Brush Street to the west. Thus, Downtown is immediately to the south of the Broadway/Valdez District and intersections along Grand Avenue and further south are considered to be in Downtown.

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City of Oakland, General Plan Land Use and Transportation Element, Policy T3.3 (Allowing Congestion Downtown).





At the signalized study intersections, traffic conditions were evaluated using the *Highway Capacity Manual* (HCM) operations methodology (TRB, 2000). The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and signal phasing/ timing) to estimate the average control delay experienced by motorists traveling through an intersection. Table 7-14 summarizes the relationship between control delay and level of service for signalized intersections. Synchro 6.0 software program was used to apply the 2000 HCM methodology for signalized intersections.

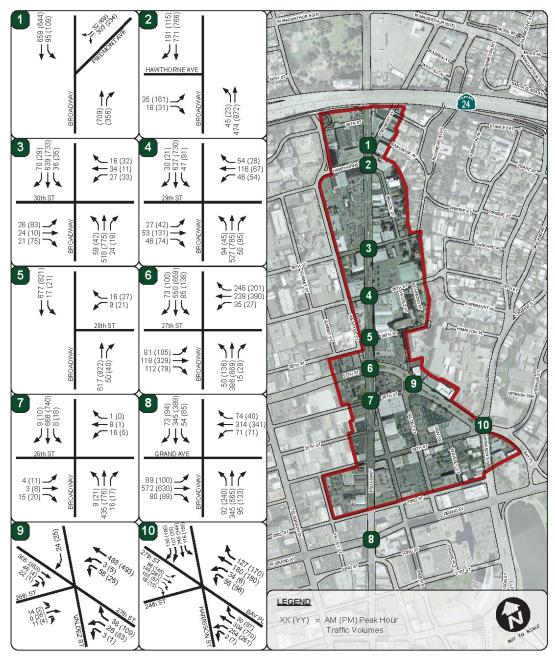
	TABLE 7-14 SIGNALIZED INTERSECTION LOS CRITERIA							
LOS	Average Control Delay (seconds per Vehicle)	Description						
А	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle length.						
В	10.1 to 20.0	Operations with low delay occurring with good progression and/or short cycle lengths.						
С	20.1 to 35.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.						
D	35.1 to 55.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.						
E 55.1 to 80.0 Operations with high delay values indicating poor progression, long lengths, and high V/C ratios. Individual cycle failures are frequent of This is considered to be the limit of acceptable delay.								
F	> 80.0	Operations with delays unacceptable to most drivers occurring due to over- saturation, poor progression, or very long cycle lengths.						
Source: Highwa	y Capacity Manual 20	00.						

#### Level of Service Analysis Results

Consistent with other recent studies completed in the City of Oakland, Weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period intersection turning movement counts, as well as pedestrian and bicycle counts, were conducted at the study intersections in March 2009, while area schools were in regular session. At each study intersection, the hour with the highest traffic volume within each peak period was selected for analysis.

Existing AM and PM peak hour vehicular volumes are shown on Figure 7.11, pedestrian and bicycle volumes are shown on Figure 7.2, and the existing intersection lane configurations and controls are shown on Figure 7-12.. Existing traffic signal timing data was obtained from the City of Oakland and compared against the actual conditions at study intersections to verify accuracy. Intersection operations at the ten study intersections were analyzed based on these input data.

The AM and PM peak hour levels of service and corresponding average delays under existing conditions at the study intersections are summarized in Table 7-15. As shown in the table, all study intersections, except one, operate at LOS C or better during both AM and PM peak hours. The only intersection operating at LOS E is Harrison Street/27<sup>th</sup> Street, Bay Place and 24<sup>th</sup> Street intersection which operates at LOS E during both AM and PM peak hours.

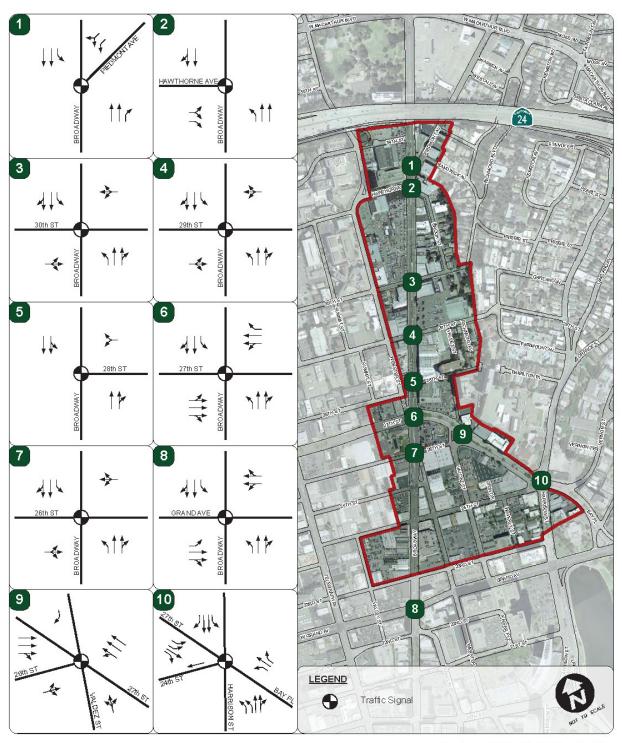


Broadway / Valdez District Specific Plan



**EXISTING PEAK HOUR INTERSECTION TRAFFIC VOLUMES** 

FIGURE 7.11



Broadway / Valdez District Specific Plan



EXISTING INTERSECTION LANE CONFIGURATIONS
AND TRAFFIC CONTROL

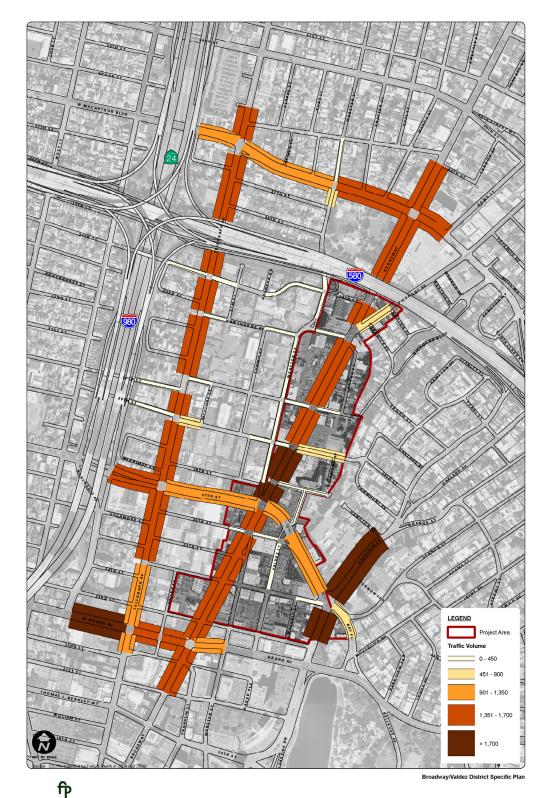
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# TABLE 7-15 EXISTING INTERSECTION LEVELS OF SERVICE

	Intersection	Traffic Control <sup>1</sup>	Peak Hour	Delay (seconds)	LOS <sup>2</sup>
1.	Broadway Avenue/Piedmont Avenue	Signal	AM PM	24.8 30.3	C C
2.	Broadway Avenue/Hawthorne Avenue	Signal	AM PM	8.4 11.8	A B
3.	Broadway Avenue/30 <sup>th</sup> Street	Signal	AM PM	5.8 10.3	B B
4.	Broadway Avenue/29 <sup>th</sup> Street	Signal	AM PM	15.5 14.5	B B
5.	Broadway Avenue/28 <sup>th</sup> Street	Signal	AM PM	1.6 1.9	A A
6.	Broadway Avenue/27 <sup>th</sup> Street	Signal	AM PM	22.3 13.2	C B
7.	Broadway Avenue/26 <sup>th</sup> Street	Signal	AM PM	2.9 2.1	A A
8.	Broadway Avenue/Grand Avenue	Signal	AM PM	14.6 16.7	B B
9a.	Valdez Street/27 <sup>th</sup> Street	Signal	AM PM	13.4 19.0	B B
9b.	Valdez Street/27 <sup>th</sup> Street and 26 <sup>th</sup> Street	Signal	AM PM	16.8 30.8	B C
10.	Harrison Street/27 <sup>th</sup> Street, Bay Place, and 24 <sup>th</sup> Street	Signal	AM PM	63.2 65.5	E E

Source: Fehr & Peers, 2009.

Figure 7.13 shows the relative vehicle volumes along roadways within and surrounding the project area. These volumes are based on PM peak hour counts collected in 2008 and 2009. In general, traffic volumes on roadways are consistent with the roadway classifications and number of lanes. Major arterials such as Broadway, Telegraph Avenue, Grand Avenue, and Harrison Street have the highest traffic volumes. Harrison Street has more traffic than the other arterials most likely because it provides direct access between the Broadway/Valdez District and Downtown Oakland and the I-580 freeway.



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April 2007
FIGURE 7.13
FIGURE 7.13

#### 7.7 COLLISION ANALYSIS

Collision data for major roadways in the project area for the five year period from 2003 through 2007 was provided by City of Oakland staff. A total of 194 collisions, including 14 (about 7 percent) involving bicycles and 10 (about 5 percent) involving pedestrians were reported at intersections and mid-block along Broadway and 27<sup>th</sup> Street. About 34 percent of all collisions resulted in injury, including 71 percent of collisions involving bicycles and 40 percent of collisions involving pedestrians. Data for vehicle/vehicle, vehicle/bicycle, and vehicle/pedestrian collisions are summarized in Table 7-16 for intersections, and in Table 7-16 for mid-block locations.

Within the study area, the highest number of collisions was reported at the Harrison Street/27<sup>th</sup> Street intersection. A total of 33 collisions were reported over the five year period, with seven resulting in injuries. The Harrison Street/27<sup>th</sup> Street intersection has five approaches and one of the highest traffic volumes in the study area, which contribute to the high number of collisions reported at the intersection. The highest number of injuries from vehicle/vehicle collisions was reported at the Broadway/Grand Avenue intersections where 13 collisions resulting in injuries were reported. The most common vehicle/vehicle collision type at intersections was broadside.

TABLE 7-16
COLLISIONS SUMMARY-INTERSECTIONS (2003 TO 2007)

	Vehicle/Vehicle <sup>1</sup>		Vehicle	/Bicycle	Vehicle/P	edestrian	То	tal
Location	Total	With Injury	Total	With Injury	Total	With Injury	Total	With Injury
Broadway/Grand Avenue	24	13	1	1	0	0	25	14
Broadway/23 <sup>rd</sup> Street	5	1	0	0	0	0	5	1
Broadway/24 <sup>th</sup> Street	22	8	1	0	0	0	23	8
Broadway/25 <sup>th</sup> Street	3	1	0	0	0	0	3	1
Broadway/26 <sup>th</sup> Street	6	1	1	1	0	0	7	2
Broadway/27 <sup>th</sup> Street	19	2	3	3	2	0	24	5
Broadway/28 <sup>th</sup> Street	8	6	0	0	3	2 (1)	11	8 (1)
Broadway/29 <sup>th</sup> Street	15	6	3	3	2	1	20	10
Broadway/30 <sup>th</sup> Street	7	2	4	1	0	0	11	3
Broadway/Hawthorne Avenue	4	0	0	0	0	0	4	0
Broadway/Piedmont Avenue	7	0	0	0	0	0	7	0
Broadway/34 <sup>th</sup> Street	1	0	1	1	0	0	2	1
27 <sup>th</sup> Street/Valdez Street	2	0	0	0	1	1	3	1
27 <sup>th</sup> Street/Harrison Street	33	7	0	0	1	1	34	8
27 <sup>th</sup> Street/Vernon Street	2	0	0	0	0	0	2	0
Total	158	47	14	10	9	3	181	54

<sup>1.</sup> Vehicle/Vehicle collisions also include single vehicle collisions hitting fixed objects or parked vehicles.

Source: City of Oakland, summarized by Fehr & Peers, 2009

<sup>(1)</sup> Indicates collision resulting in fatality and number of fatalities.

## TABLE 7-17 COLLISIONS SUMMARY – MIDBLOCK (2003 TO 2007)

	Vehicle/Vehicle <sup>1</sup>		Vehicle	/Bicycle	Vehicle/P	edestrian	То	tal
Location	Total	With Injury	Total	With Injury	Total	With Injury	Total	With Injury
Broadway (Grand to 23 <sup>rd</sup> )	0	0	0	0	0	0	0	0
Broadway (23 <sup>rd</sup> to 24 <sup>th</sup> )	1	1	0	0	0	0	1	1
Broadway (24 <sup>th</sup> to 25 <sup>th</sup> )	2	2	0	0	0	0	2	2
Broadway (25 <sup>th</sup> to 26 <sup>th</sup> )	0	0	0	0	0	0	0	0
Broadway (26 <sup>th</sup> to 27 <sup>th</sup> )	0	0	0	0	0	0	0	0
Broadway (27 <sup>th</sup> to 28 <sup>th</sup> )	0	0	0	0	0	0	0	0
Broadway (28 <sup>th</sup> to 29 <sup>th</sup> )	4	3	0	0	1	1	5	4
Broadway (29 <sup>th</sup> to 30 <sup>th</sup> )	3	3	0	0	0	0	3	3
Broadway (30th to Piedmont)	0	0	0	0	0	0	0	0
Broadway (Piedmont to 34 <sup>th</sup> )	1	1	0	0	0	0	1	1
27 <sup>th</sup> Street (Valdez to Harrison)	1	1	0	0	0	0	1	1
27 <sup>th</sup> Street (Harrison to Vernon)	0	0	0	0	0	0	0	0
Total	12	11	0	0	1	1	13	12

<sup>1.</sup> Vehicle/Vehicle collisions also include single vehicle collisions hitting fixed objects or parked vehicles.

Source: City of Oakland, summarized by Fehr & Peers, 2009

Vehicle collisions with bicycles and pedestrians accounted for about 12 percent of reported collisions at intersections in the study area. No bicycle collisions were reported along 27<sup>th</sup> Street. The Broadway/30<sup>th</sup> Street intersection had the highest number of bicycle collisions with one resulting in injury, while Broadway/27<sup>th</sup> Street and Broadway/29<sup>th</sup> Street followed with three collisions each, with all three collisions at each intersection resulted in injury.

Pedestrian collisions accounted for the fewest number of collisions of the three types of intersection collisions. The highest number of pedestrian collisions was reported at the signalized Broadway/28<sup>th</sup> Street intersection, with one collisions resulting in a fatality. The fatality occurred when a pedestrian crossed Broadway and was hit by a northbound vehicle.

Similar to other urban areas, a relatively small percentage of the collisions (about seven percent) within the study area were reported mid-block between intersections. These collisions were largely between vehicles, with rear-end and side-swipe being the most common. No mid-block collisions involving bicycles and only one mid-block collision involving a pedestrian was reported. The highest number of vehicle collisions was reported on Broadway between 28th and 29th Streets. As previously shown on Figure 7.13, this segment of Broadway also has the highest level of vehicular traffic along Broadway within the project area.

#### 7.8 EXISTING PARKING CONDITIONS

Fehr & Peers collected data to assess current parking supply and demand on-street and at off-street parking facilities (parking garages and lots) within and in the vicinity of the Broadway/Valdez District. The survey was conducted during the mid-day period on Thursday, March 26, 2009 and included parking facilities available to the general public that would most likely be used by the proposed project. The location of parking facilities, the on-street parking designations, and parking supply are shown on Figure 7.14. Existing weekday mid-day on-street and off-street parking occupancies are shown on Figure 7.15. Both on-street and off-street parking are discussed in further detail below.

#### 7.8.1 On-Street Parking

Nearly all the streets within the study area provide some form of on-street parking. About 1,700 on-street parking spaces are located within proximity of the Broadway/Valdez District with an average occupancy of about 84 percent at mid-day. On-street parking in the study area can be classified into the following four categories:

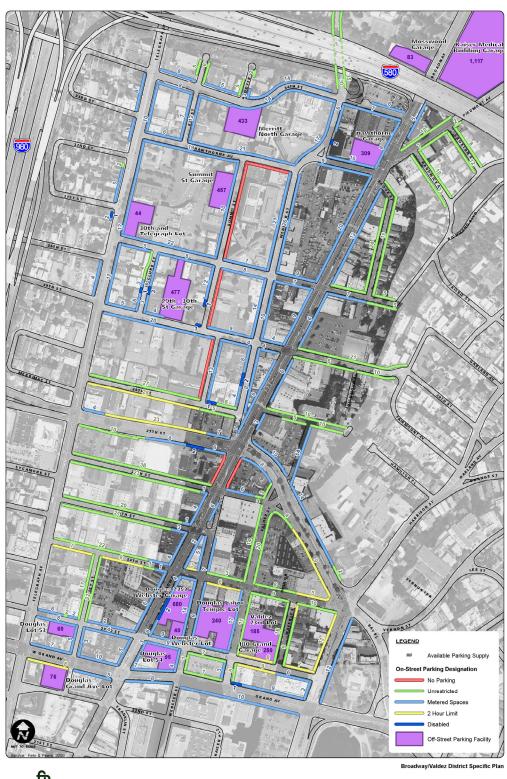
- Metered Spaces are located along the major arterials, such as Broadway and 27<sup>th</sup> Street and surrounding the Alta Bates Summit Medical Center. Nearly all metered spaces have a two-hour time limit, with less than two percent limited to one hour. The individual parking meters at many of the metered parking spaces have been replaced by parking pay stations that typically serve larger areas. The 923 metered spaces located within the study area account for the largest percentage of overall on-street parking supply by category; In general, metered on-street parking spaces have an overall occupancy of about 78 percent. Parking meters cost \$1.50 per hour.
- Unrestricted Parking is parking which is free year-round and has no time limits. Unrestricted parking is located along the majority of the side streets to the east and west of Broadway, with the exception of the area surrounding the Alta Bates Summit Medical Center. About 620 unrestricted on-street parking spaces were counted in the study area, and mid-day counts show a parking occupancy of 94 percent, the highest for all on-street parking categories.

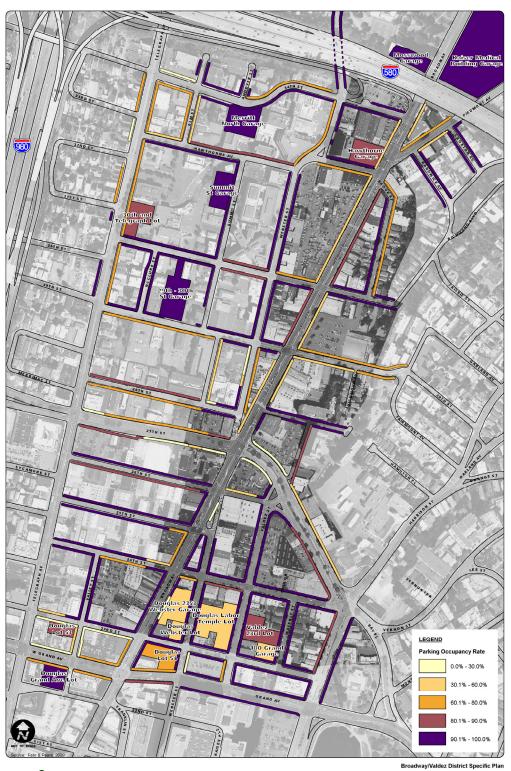


Parking Pay Station on Webster Street

- *Time-Restricted* free parking spaces are scattered throughout the southern parts of the study area, especially along 27<sup>th</sup> and 28<sup>th</sup> Streets west of Broadway. All time-restrictive parking spaces within the study area have a posted limit of two hours. About 140 time-restricted spaces are located within the study area with an average occupancy of about 82 percent at mid-day.
- Disabled Spaces are identified with a painted blue curb and handicap sign. A total of 17 disabled parking spaces are provided along major thoroughfares and around the major medical facilities.

Table 7-18 presents a summary of on-street parking supply and demand within the study area.





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<b>TABLE 7-18</b>
ON-STREET PARKING FACILITIES - SUPPLY AND DEMAND

Туре	Supply	Demand	Occupancy <sup>1</sup>	
Unrestricted	617	579	94%	
Metered	923	723	78%	
Time Limit	138	113	82%	
Disabled	17	12	71%	
Total	1,695	1,427	84%	

<sup>&</sup>lt;sup>1</sup> Number of parked vehicles divided by the number of parking spaces

Source: Fehr and Peers. 2009.

#### 7.8.2 Off-Street Parking

More than 3,600 off-street parking spaces open to the general public are provided in the study area in a combination of public garages and surface lots. Off-street parking facilities are generally clustered around two areas in the district: 23<sup>rd</sup> Street and Webster Streets in the south, and the Alta Bates Summit Medical Center in the north. The area between these two clusters is primarily characterized by automobile dealerships and service centers with small amounts of private parking. A summary parking supply and demand at the facilities within the area is summarized in Table 7-19.

About 1,600 spaces are located around the south cluster, with the majority of these garages and lots operated by the Douglas Company. The parking facilities in this area can be categorized between time sensitive and flat rate usage fees. Weekday hourly rates are typically \$3 per hour, while flat rates range from \$3 on the weekends to \$9 on weekdays. The mid-day survey showed an average parking occupancy of 60 percent for the parking facilities in this area. Two of the highest occupancies were observed at two garages on the west side of Broadway: Douglas Lot 53 (83 percent) and Douglas Grand Avenue Lot (92 percent).

About 1,700 parking spaces are provided in the northern part of the study area. The majority of these facilities are owned or operated by Alta Bates Summit Medical Center. However, most of these facilities are also available for general public use. Typical rates for garages and lots in the area are \$4.50 per hour or \$18 per day. Parking facility occupancies at the northern end of the project area are much higher than the southern end, with an average occupancy of 93 percent. The highest occupancies were observed at the Summit Street (97 percent), and Merritt North (95 percent) garages. Residential and mixed-use developments have been approved on the Douglas Lot 53, Douglas Webster Lot, and Douglas Labor Temple Lots. Completion of these projects would reduce the parking supply in the area by about 340 parking spaces.

Overall, about 2,600 of the 3,500 off-street spaces currently provided within proximity of the Broadway/Valdez District were occupied, corresponding to an average occupancy of 77 percent.



Hawthorne Avenue Garage

CHAPTER 7: TRANSPORTATION

TABLE 7-19
OFF-STREET PARKING FACILITIES – SUPPLY AND DEMAND

Name	Туре	Supply	Demand	Occupancy <sup>1</sup>	Hourly Rate <sup>2</sup>	Daily Rate
North Area			•	1		
Merritt North (Alta Bates Summit Medical Center) <sup>3</sup>	Garage	433	410	95%	\$4.50	\$18.00
Hawthorne (Alta Bates Summit Medical Center) <sup>3</sup>	Garage	309	250	81%	\$4.50	\$18.00
Summit St. near Hawthorne (Alta Bates Summit Medical Center) <sup>3</sup>	Garage	457	444	97%	\$4.50	\$18.00
29 <sup>th</sup> -30 <sup>th</sup> Street	Garage	477	450	94%	\$4.50	\$18.00
30 <sup>th</sup> and Telegraph	Surface Lot	44	37	84%	\$4.50	\$18.00
Subtotal		1,720	1,591	93%		
South Area						
Douglas - Lot 53	Surface Lot	60	50	83%	\$5.50 <sup>4</sup>	
Douglas - Grand Ave	Surface Lot	76	70	92%	\$3.00	\$9.00
Douglas - Lot 54	Surface Lot	95	62	65%	\$3.00	\$12.00
Douglas - Webster	Surface Lot	40	20	50%	N/A\$3.00	\$8.00
Douglas - Labor Temple	Surface Lot	240	95	40%	\$9.00 <sup>4</sup>	\$9.00
Douglas - 2353 Webster	Garage	680	331	49%	\$2.00	\$9.00
Valdez – 23 <sup>rd</sup> St.	Surface Lot	185	160	86%	\$8.00 <sup>4</sup>	\$8.00
180 Grand	Garage	250	194	78%	\$4.50	\$12.00
Subtotal		1,626	982	60%		
Total		3,346	2,573	77%		

<sup>&</sup>lt;sup>1</sup> Number of parked vehicles divided by the number of parking spaces

N/A indicates facilities where information is not available

Source: Fehr and Peers, 2009.

#### 7.9 PLANNED AND PROPOSED IMPROVEMENTS

The City of Oakland, AC Transit, and others are planning or proposing various improvements that would affect transportation and circulation access in the Broadway/Valdez District. Some of these changes are triggered by recent approved and proposed developments in the area such as the Kaiser Medical Center Reconstruction project (documented in an EIR published in March 2006), the MacArthur BART Transit Village (EIR published in January 2008) and the Alta Bates Medical Center project (EIR under preparation). In addition, the following studies recommending changes to the circulation network has also been completed:

- 27th Street Bikeway Feasibility and Design Study
- MacArthur BART Bicycle Access Feasibility Study

<sup>&</sup>lt;sup>2</sup> Hourly rates shown are for weekdays

<sup>&</sup>lt;sup>3</sup> The medical center parking facilities are also open for use by the general public.

<sup>&</sup>lt;sup>4</sup> Denotes parking facilities with a flat rate

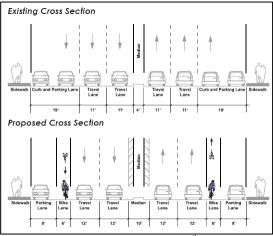
- AC Transit Route 51 Service and Reliability Study
- Telegraph Avenue Bus Rapid Transit (BRT) Project
- Harrison Street/Oakland Avenue Corridor Community Based Transportation Plan

Planned and proposed improvements recommended in the above studies, in addition to specific improvement projects and how they would affect transportation and circulation access for each travel mode in the project areas are discussed below.

#### 7.9.1 Bicycle Improvements

In the project vicinity, the following improvements to the bicycle circulation system are planned for the near future:

- The existing Class II bike lanes on Broadway would be extended further north from their current terminus just north of I-580 to 40<sup>th</sup> Street as part of the Kaiser Medical Center Reconstruction project. The new bicycle lanes would be accommodated by narrowing the roadway from three through lanes to two through lanes in each direction. Along the segments where adequate width to accommodate bicycle lanes are not available, sharrows will be used to designate shared roadway. The project is expected to be completed by 2016.
- New Class II bicycle lanes will be installed on 27<sup>th</sup> Street/Bay Place between Broadway and Grand Avenue. The new bicycle lanes would be accommodated by narrowing 27<sup>th</sup> Street from three lanes to two lanes in each direction. Pork chop islands along 27<sup>th</sup> Street would also be modified to provide uniform width for bicycle and vehicle lanes along the corridor. A feasibility study completed for the City determined that the proposed project would not adversely affect vehicle traffic flow. The proposed bicycle lanes are scheduled to be installed as part of resurfacing of 27<sup>th</sup> Street in 2010. The bike lanes along 27<sup>th</sup> Street will eventually extend further west and connect to San Pablo Avenue.



Proposed Configuration for 27<sup>th</sup> Street Source: City of Oakland

#### MacArthur BART Bicycle Access Feasibility Study

The City recently completed the MacArthur BART Bicycle Access Feasibility Study<sup>11</sup> to determine best alignment and facility type to improve east/west bicycle connections to and from the MacArthur BART Station without adversely affecting bus/shuttle operations and vehicular circulation. Based on the analysis completed for the study, the following bicycle improvements were recommended:

 West MacArthur Boulevard – Class IIIA Arterial Bicycle Route between the BART Station and Telegraph Avenue and Class II Bicycle Lanes between Telegraph Avenue and Broadway.

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<sup>&</sup>lt;sup>10</sup> 27th Street Bikeway Feasibility and Design Final Report, Kimley-Horn March 23, 2007.

MacArthur BART Station Safe Routes to Transit Bicycle Facility Feasibility Study, AECOM, June 2008.

- 40th Street Class IIIA Arterial Bicycle Route between San Pablo Avenue and Yerba Buena Avenue, Class II Bicycle Lanes between Yerba Buena Avenue and Martin Luther King, Jr. Way, and Class II Bicycle Lanes between Telegraph Avenue and Webster Street.
- 41st Street Class IIIB Bicycle Boulevard between Webster Street and Montgomery Street and Class II Bicycle Lanes between Montgomery Street and Piedmont Avenue.

#### 7.9.2 AC Transit Improvements

AC Transit is currently planning the following improvements:

#### Route 51 Service and Reliability Study

Currently, Route 51 has more riders than any other AC Transit routes. In response to performance concerns and customer complaints, AC Transit created a task force to analyze operational issues of Route 51. Their findings and the resulting recommendations by the AC Transit Planning Department are presented in the *Route 51 Service and Reliability Study*, completed in December 2008. This document presents several potential strategies for modifying Route 51. The potential modification options, and the effects of each on the Broadway/Valdez District, are summarized below.

- A. *Infrastructure and Operational Improvements* General infrastructure and operational improvements were recommended for the entire route. In the project area, recommended improvements include:
  - Creation of a queue jump lane on northbound Broadway at Grand Avenue by adding "Right Turn Only, Buses Excepted" signage to the existing right turn lane
  - Lengthening of the stops on Broadway at 28<sup>th</sup> Street
  - Removal of the southbound stop on Broadway at 29<sup>th</sup> Street
  - Removal of the northbound stop on Broadway at 30<sup>th</sup> Street
- B. Split Route Three options have been proposed to split Route 51 into two routes, each serving a portion of the existing Route 51 service area.
  - Option 1 would not affect the route in the project area, but would require passengers traveling to or from points north of Rockridge BART Station to transfer to another bus at the Rockridge BART Station.
  - Option 2 would not affect the route in the project area, but would require passengers traveling to or from points south of 12<sup>th</sup> Street BART Station to transfer to another bus at the 12<sup>th</sup> Street BART Station.
  - Option 3 would provide duplicate service in the project area with one route serving the area between 12<sup>th</sup> Street BART Station and points north and another one serving the area between MacArthur BART Station and points south.
- C. Limited Service Overlaid with Local Service A limited route, serving selected stops, would be created in addition to the existing local Route 51. In the project area, all existing stops would be served by the local route, while the stops on Broadway at Grand Avenue and 29<sup>th</sup> Street would be served by both the local and limited routes.
- D. *A/B Stops* Two variants of the route, 51A and 51B, would each serve selected stops. In the project area, the stops on Broadway at Grand Avenue, 28<sup>th</sup> Street, Hawthorne Avenue and Piedmont Avenue would be served by Route 51A, stops on Broadway at 24<sup>th</sup> and 30<sup>th</sup> Streets would be served by the Route 51B, and the stops on Broadway at 29<sup>th</sup> Street would be served by both routes.

#### Telegraph Avenue Bus Rapid Transit (BRT)

AC Transit plans to ultimately convert the 1R line to a Bus Rapid Transit (BRT) line. The proposed BRT project would improve bus operations by allowing buses to travel in dedicated lanes between Berkeley, Oakland, and San Leandro. In the project vicinity, BRT would exclusively use one lane in each direction on Telegraph Avenue, leaving one through mixed-flow vehicle travel lane in each direction. BRT would also provide transit signal priority to reduce bus travel times, raised platforms, fare payment on the platform, and boarding and alighting at multiple doors to reduce bus dwell times at stops.

AC Transit published a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the implementation of the BRT project in May 2007. There are currently no finalized design plans, an assurance of full funding, or approvals from AC Transit, the City of Oakland and other public agencies. The City of Oakland, in addition to the Cities of Berkeley and San Leandro, are currently working with AC Transit to develop a locally preferred alternative to identify preferred roadway modifications and potential mitigation measures needed to accommodate the proposed BRT project.

#### 7.9.3 BART Improvements



The MacArthur Transit Village was recently approved by City of Oakland and BART. The proposed project would replace 300 parking spaces at the existing BART Station parking lot with about 675 multi-family residential units and 44,000 square-feet of commercial space. In addition, the existing 300 parking spaces would be consolidated in a garage accessed from MacArthur Boulevard. The existing BART Plaza would also be renovated to include additional bike lockers. artwork. pedestrian pathways, lighting, and seating area improvements. The project

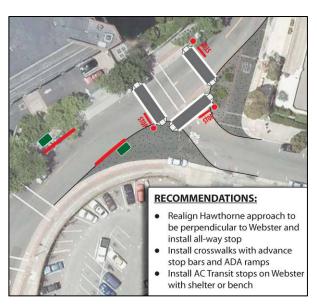
also includes strategies and improvements to the pedestrian, bicycle, and transit modes and parking to maintain the current BART ridership at the station.

#### 7.9.4 Roadway Improvements

Other planned and proposed roadway improvements affecting circulation and access for all travel modes are described below.

#### Alta Bates Summit

The Alta Bates Summit Medical Center is currently proposing changes at the Summit Campus. The project consists of a new inpatient tower at the Summit Campus, between Summit Street and Webster Street north of Hawthorne Avenue, and a new parking structure on Hawthorne Avenue west of Summit Street. The parking structure would provide 800 net new parking spaces on the Summit Campus. The proposed project would include road and pedestrian improvements in the vicinity. The section of Hawthorne Avenue between Summit Street and Webster Street would be realigned and



Proposed Realignment of Westbound Hawthorne
Avenue at Webster Street

CHAPTER 7: TRANSPORTATION

re-graded, on-street parking on this segment would be removed, and on-street loading turnouts installed for patient drop-off and pick up. The existing AC Transit Route 59 stops on Hawthorne Avenue would be relocated to Webster Street and the existing Alta Bates Summit Medical Center shuttle stops on Hawthorne Avenue (currently shared with the AC Transit Route 59 stops) would be relocated to the proposed loading turnouts. The westbound Hawthorne Avenue approach to the Webster Street/Hawthorne Avenue intersection would be realigned to make the approaches perpendicular, and eliminate the channelized right-turn lane from Hawthorne Avenue onto Webster Street. Pedestrian facilities, including sidewalks, curb ramps, and marked crossings would generally be improved along Hawthorne Street between Broadway and Telegraph Avenue.

Potential future project phases on the Summit Campus may include the closure of Summit Street between Hawthorne Avenue and 30<sup>th</sup> Street. In this scenario, existing AC Transit Route 59 would have to be modified, and would potentially operate along Webster Street instead of Summit Street. Several onstreet parking spaces on Webster would also be removed to accommodate these improvements.

#### Kaiser Medical Center

As part of their reconstruction project, the Oakland Kaiser Medical Center is planning major changes just north of the Broadway/Valdez District. The proposed Kaiser Medical Center project is demolishing the existing M/B Center, which provided medical offices, retail, and parking. Kaiser will replace M/B Center with a new million-square-foot hospital and a parking garage providing about 1,200 parking spaces. The parking garage would be located just north of I-580 with access to and from Broadway.

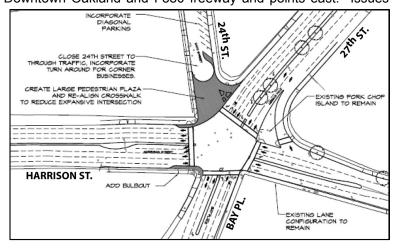
As part of the proposed project, the Broadway/MacArthur Boulevard intersection will be reconfigured to convert a shared through/right-turn lane to an exclusive right-turn lane in the northbound and southbound approaches. The proposed project will also install new signals along Broadway at the entrances to the new medical center. In addition, the project will also widen sidewalks and install bike lanes on Piedmont Avenue along the project frontage.

#### Harrison Street/Oakland Avenue Corridor Community Based Transportation Plan

The City of Oakland is currently working with neighborhood groups to address safety and access issues for pedestrians, cyclists and motorists on the Harrison Street/Oakland Avenue couplet between Grand Avenue and Monte Vista Avenue. The Harrison Street/Oakland Avenue corridor provides access between the Broadway/Valdez District, Downtown Oakland and I-580 freeway and points east. Issues

affecting circulation, access and safety were identified through analysis and stakeholder meetings. Three draft alternatives have been developed for the corridor to improve circulation, access, and safety by all travel modes. These alternatives and how they would affect the project area are described below.<sup>12</sup>

Alternative I: Pedestrian Improvements — this alternative focuses on providing pedestrian and bicycle amenities within the existing right-of-way. This alternative would convert 24<sup>th</sup>

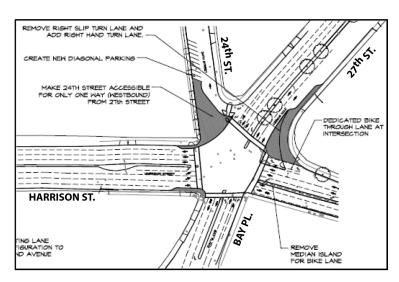


Alternative 1 Improvements at Harrison Street/27<sup>th</sup> Street Intersection Source: DC&E, April 2009

<sup>&</sup>lt;sup>12</sup> Harrison Street/Oakland Avenue CBTP Draft Alternative Concept by DCE dated March 31, 2009.

Street into a cul-de-sac and eliminate the 24<sup>th</sup> Street approach at the Harrison Street/27<sup>th</sup> Street intersection and create a pedestrian plaza that would realign crosswalks at the intersection and improve pedestrian safety and circulation. This alternative would also add bulb-outs at the southern crosswalk on Harrison Street. Other modifications in this alternative include: elimination of the channelized right turn lane and installation of a pedestrian refuge on the Harrison median island at the Harrison Street/Orange Street intersection; installation of a Class II bike lane on Oakland Avenue north of Harrison Street; closure of the Stanley Place approach to Harrison Street; installation of a pedestrian pathway adjacent to I-580 between Harrison Street and Oakland Avenues; and conversion of both Harrison Street and Oakland Avenue to two-way operation north of MacArthur Boulevard. Based on the *Harrison Street/Oakland Avenue CBTP Draft Alternative Concept* report, this alternative would cause the Harrison Street/27<sup>th</sup> Street/24<sup>th</sup> Street/Bay Place intersection to improve from LOS E to LOS D during both AM and PM peak hours. Additionally, operations at the Harrison Street/Fairmount Avenue/Orange Street intersection would improve from LOS F to LOS C and LOS B during the AM and PM peak hours, respectively.

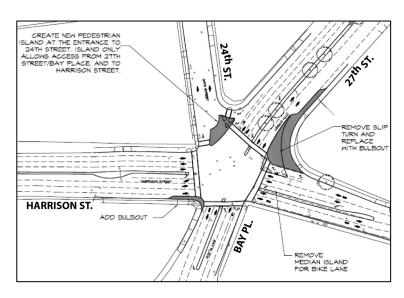
Alternative II: Road Diet -"Road diet" is defined as a reduction in the number and/or width of vehicle travel lanes on a roadway in order to provide more space for bike lanes, sidewalks, and/or landscaping. This alternative focuses on narrowing both Harrison Street and Oakland Avenues from three to two travel lanes in each direction. The remaining right-of-way would provide space for widened sidewalks and Class II bike lanes on both Harrison Street and Oakland Avenue north of Orange 24<sup>th</sup> The Street Street. approach to the 27th Street/ Harrison Street intersection



Alternative 2 Improvements at Harrison Street/27<sup>th</sup> Street Intersection Source: DC&E, April 2009

would be partially closed to allow only right-turning traffic from southbound 27<sup>th</sup> Street to enter. The existing slip right-turn lane from southbound Harrison Street to 27<sup>th</sup> Street and the pork chop island would be eliminated. Other modifications in this alternative include: closure of 29<sup>th</sup> Street between Harrison Street and Oakland Avenue; realignment of the Orange Street approach at Oakland Avenue; closure of the Stanley Place approach to Harrison Street; and installation of a pedestrian pathway adjacent to I-580 between Harrison Street and Oakland Avenues. Based on the *Harrison Street/Oakland Avenue CBTP Draft Alternative Concept* report, this alternative would cause the Harrison Street/Stanley Place/I-580 Eastbound Off-Ramp intersection to degrade from LOS D to LOS F during the AM peak hour, but the Harrison Street/27<sup>th</sup> Street/ 24<sup>th</sup> Street/Bay Place intersection would improve from LOS E to LOS D during both peak hours. This alternative would also improve bicycle circulation (as evaluated using the Multimodal Level of Service (MMLOS) methodology to be included in the upcoming 2010 Highway Capacity Manual) along southbound Harrison Street.

Alternative III: One Way to Two-Way Conversion – This alternative focuses converting both Harrison Street and Oakland Avenue from one-way to two-way operations along their entire lengths. 24<sup>th</sup> Street would also be converted to two-way operations and the 24th Street approach to the Harrison Street/27<sup>th</sup> Street intersection would be partially closed to only allow right-turns to and from 24<sup>th</sup> Street. Similar to Alternative II, The existing slip right-turn lane southbound Harrison Street to 27<sup>th</sup> Street and the pork chop island would be eliminated. Other modifications in this alternative include:



Alternative 3 Improvements at Harrison Street/27<sup>th</sup> Street Intersection Source: DC&E, April 2009

signalization of the intersections of Harrison Street with 29<sup>th</sup> Street, Fairmount Avenue, Oakland Avenue and Orange Avenue; closure of the westbound I-580 on-ramp from Oakland Avenue and installation of a new on-ramp from Harrison Street; installation of a northbound Class II bike lane on Oakland Avenue north of Harrison Street; closure of the Stanley Place approach to Harrison Street; and installation of a pedestrian pathway adjacent to I-580 between Harrison Street and Oakland Avenues. According to the *Harrison Street/Oakland Avenue CBTP Draft Alternative Concept* report, this alternative would likely improve operations at the Harrison Street/27<sup>th</sup> Street/24<sup>th</sup> Street/Bay Place intersection, but degrade operations at intersections in the vicinity of I-580.

# **Chapter 8: Infrastructure and Utilities**

#### 8.1 Introduction

The following sections are a summary of information researched and compiled from the City of Oakland, East Bay Municipal Utility District (EBMUD), Pacific Gas and Electric (PG&E), and communication providers such as AT&T and Comcast. The existing size, condition, and capacity of the utility infrastructure were reviewed based on available data with the understanding that the Project Area will be redeveloped for mixed-use. As utility information was compiled and analyzed, communication was maintained with utility providers in order to document any known existing capacity or condition issues.

Each utility section concludes with a summary of the opportunities and constraints relating to existing infrastructure serving the Project Area. As redevelopment alternatives for the Project Area are developed in Phase II, each of these items will need to be taken into consideration. Where appropriate, constraints are shown on utility exhibits relevant to each utility.

#### 8.2 Sanitary Sewer

The existing treatment plant capacity, sub-basin capacity and sanitary sewer collection system was reviewed with the City of Oakland Public Works Agency and EBMUD. To determine a baseline for analysis of sewer capacity, a sewer generation estimate has been prepared based on existing land use within the Project Area. This estimate will serve as a baseline estimate to evaluate the impacts associated with review of redevelopment alternatives as part of Phase II. Refer to Figure 8.1 "Existing Sanitary Sewer System" for location of existing sanitary sewer infrastructure within and surrounding the Project Area.

#### 8.2.1 Wastewater Treatment

Sanitary sewer treatment is provided by EBMUD's Main Wastewater Treatment Plant (MWWTP) located at the eastern end of the San Francisco-Oakland Bay Bridge. EBMUD's plant serves approximately 642,000 people in an 88-square-mile area along the east shore of San Francisco Bay<sup>1</sup>, providing waste wastewater treatment for parts of Alameda and Contra Costa Counties, also known as Special District No. 1. The MWWTP provides both primary and secondary treatment. The plant's primary treatment removes floating material, oils, greases, sand, silt, and organic solids heavy enough to settle in water. The secondary treatment biologically removes suspended and dissolved organic and chemical impurities before discharging into the San Francisco Bay. The plant's maximum treatment capacity is 320 million gallons per day (mgd) for primary treatment and 168 mgd for secondary treatment. In 2008, the average daily wastewater flow was 69 mgd<sup>2</sup> which is less than the projected flow of 80 mgd<sup>3</sup> per the 2005 Urban Water Management Plan.

#### 8.2.2 Collection System

The City of Oakland is responsible for operation and maintenance of the local sanitary sewer system within the Project Area, while EBMUD is responsible for operation and maintenance of interceptor lines and the treatment of sewage. The City's sewer collection system is separated into basins and sub-basins with over 1,000 miles of pipes

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<sup>&</sup>lt;sup>1</sup> EBMUD, 2005 Urban Water Management Plan, page 5-3.

<sup>&</sup>lt;sup>2</sup> EBMUD, 2008 Annual Report, page 14.

<sup>&</sup>lt;sup>3</sup> EBMUD, 2005 Urban Water Management Plan, page 5-2.

ranging in size from 6-inches to 72-inches, 31,000 structures and seven pump stations. Basins and sub-basins are numbered based on location. The Project Area is located within Basin 52 and includes sub-basins 5205, 5206, 5209, 5210, and 5211 (Refer Figure 8.2: North Oakland Sewer System Improvements Basin 52. This figure is adapted from the City of Oakland Sanitary Sewer Design Guidelines, August 2008).

Two main collection systems flow through the project area generally from north to south. One system is within Broadway, while the other collection system flows generally along the eastern limit of the Project Area. The Broadway system consists of parallel 8-inch to 14-inch lines that flow into one 24-inch line at 26<sup>th</sup> Street. The system along the eastern side of the Project Area includes a 12-inch line that collects flow from smaller lines that range in size from 6-inches to 10-inches. Both of these systems connect to a 33- and 36-inch sewer trunk line that flows west within 24<sup>th</sup> Street. The portion of the Project Area that is south of 24<sup>th</sup> Street flows south and eventually connects to the 66-inch sewer trunk line flowing west in 20<sup>th</sup> Street. Both the 33-inch and 66-inch sewer trunk lines flow to the west where they meet in West Grand Avenue and eventually connect to the EBMUD interceptor that flows to the Main Wastewater Treatment Plant (MWWTP).

#### 8.2.3 System Condition

#### Collection System Issues

Based on discussion with the City of Oakland Public Works Agency, both the existing 24-inch line in Harrison Street and the portion of the 66-inch line in 20<sup>th</sup> Street have a history of backing up at the Kaiser Center site (20<sup>th</sup> Street and Harrison Street) due to an accumulation of sediment and grease in the lines. The primary reason for this is the nearly flat slope at which these lines run. These lines have recently been cleaned and require routine maintenance to prevent future backup issues downstream of the Project Area. Given that this will likely be an ongoing maintenance issue, the Project Area will need to consider these local conveyance deficiencies as part of review of redevelopment alternatives.

#### Inflow & Infiltration Correction Program

An ongoing problem with the sanitary sewer system is inflow and infiltration (I&I) of storm water into both the City sewer lines and EBMUD's interceptor lines, which results in higher system flows and subsequent overflow of untreated wastewater during storm events. I&I is primarily the result of storm water entering the sanitary sewer system through fractured sewer pipes, manholes and unpermitted storm drain connections. In 1986, the Wet Weather Program was initiated by EBMUD to increase treatment capacity during wet weather flow, as well as reduce the amount of storm water entering the sewer collection system due to I&I. This program resulted in construction of four wet weather treatment facilities, two storage basins, 7.5 miles of interceptors, and an increase in the capacity of the MWWTP. These improvements have resulted in an increased peak capacity of the system from 290 mgd to 775 mgd.<sup>4</sup>

The City of Oakland has also prepared their own I&I review as part of their 25-year I&I maintenance and rehabilitation program known as the Sewer System Evaluation Survey. In January of 1986, CH2MHill completed a Sanitary Sewer Evaluation Survey (SSES) for North Oakland, including the project area, in collaboration with the City to identify improvements aimed at reducing I&I to provide additional capacity for wastewater flows, including repair of fractured sewer pipes/manholes and removal of unpermitted storm drain connections. Based on discussion with the City, I&I improvements to the sewer system have since been completed for Basin 52.

<sup>&</sup>lt;sup>4</sup> Kaiser Permanente Oakland Medical Center DEIR, page IV.M-5.

#### 8.2.4 System Capacity

The City of Oakland Public Works Agency currently keeps updated records of existing sewer capacity within each basin and sub-basin. Records based on existing land use are reviewed and updated with new projects to evaluate sub-basin capacity and determine sewer impacts and necessary mitigations. Based on discussion with the City, Basin 52 is currently operating over its allocated capacity, and all I&I rehabilitation projects within Basin 52 have been completed. The redevelopment within the Project Area will likely increase sewer generation beyond the existing land use. Therefore, from discussion with the City I&I projects will need to be completed in other basins allowing the additional capacity to be reallocated to Basin 52.

To assist with review of alternatives as part of Phase II "Exploring Alternatives," BKF has prepared a sewer generation estimate based on existing land use within the Project Area. This estimate has been calculated based on sewer generation rates from the City of Oakland Sanitary Sewer Design Guidelines (August 2008) and existing land use intensity. It will serve as an existing condition baseline for review of redevelopment alternatives. The total average daily wastewater flow based on existing land use is 249,600 gallons per day (gpd) (Refer Table 8.1: Sewer Generation Estimate – Existing Land Use in the Infrastructure Appendix).

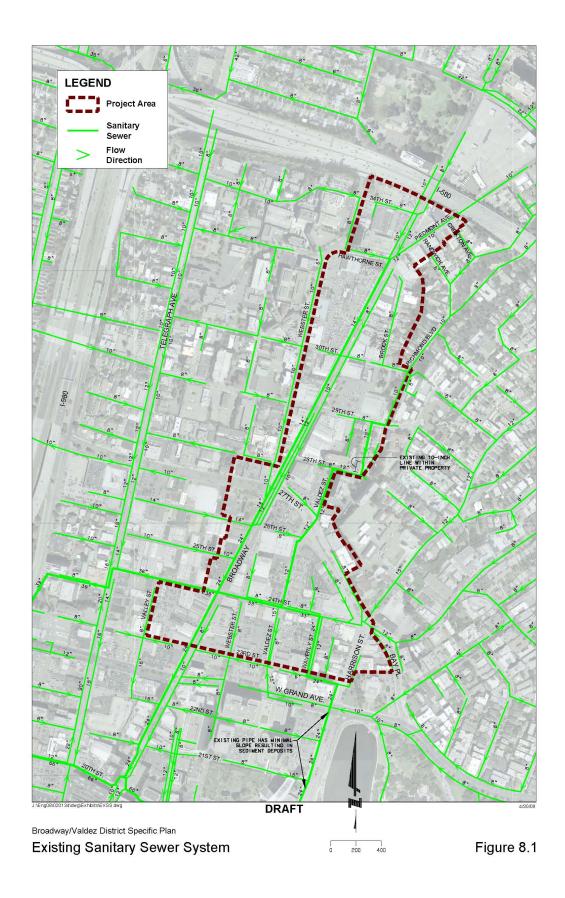
## 8.2.5 Opportunities and Constraints

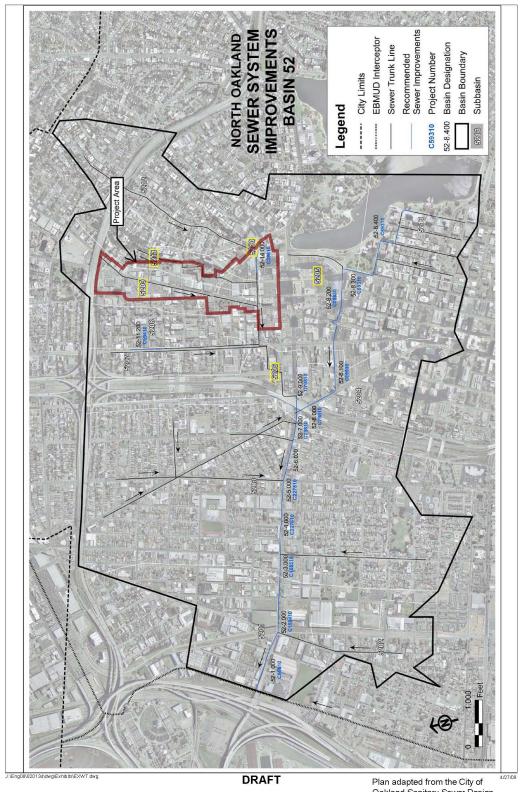
#### **Opportunities**

- 1. All streets within the Project Area have sewer lines providing multiple existing and proposed connection opportunities for redevelopment alternatives.
- 2. Redevelopment of the Project Area may remove existing old service connections and replace with new connections, therefore potentially reducing the volume of stormwater I&I into the sanitary sewer system.

#### **Constraints**

- 1. Basin 52 is currently operating above its allocated capacity. From discussions with the City any increase in sewer generation levels beyond that generated by existing land use will need to be reviewed to assess upgrades to other basins through I&I rehabilitation allowing additional capacity to be reallocated to Basin 52.
- 2. Based on City standards, if there is an increase in sewer flow to existing 6-inch lines, they will need to be upgraded to 8-inch lines
- 3. The 24-inch line in Harrison Street and 66-inch line in 20th Street (east of Broadway) has a history of backing up at the Kaiser Center site (20<sup>th</sup> Street and Harrison Street) due to an accumulation of sediment/grease in the lines. Any increase in sewer generation will need to consider the local deficiencies of the sewer system and potential mitigations to correct these issues.
- 4. A 10-inch line flowing from north to south near the eastern portion of the Project Area between 29<sup>th</sup> Street and 28<sup>th</sup> Street currently runs through Richmond Avenue (a private street), and private parcels at the southern end of Richmond Avenue. Redevelopment in this location will need to be planned around the location of this sewer line to allow maintenance access. Alternatively, this sewer line may need to be relocated into the public right-of-way to accommodate redevelopment.





Broadway/Valdez District Specific Plan North Oakland Sewer System Improvements Basin 52

Oakland Sanitary Sewer Design Guidelines effective August 2008.

Figure 8.2

#### 8.3 Water

Review of existing water for domestic and fire service in the Project Area was conducted both through review of the existing system and coordinating flow and pressure tests through EBMUD to evaluate the capacity of existing water service. To determine a baseline for analysis of the water system, a water demand estimate has been prepared based on existing land use within the Project Area. As with review of existing sanitary sewer, this estimate will serve as a baseline estimate to evaluate the impacts associated with review redevelopment alternatives as part of Phase II. Refer to the Figure 8.3 "Existing Water System" for location of water infrastructure within and surrounding the Project Area.

#### 8.3.1 Water Supply

EBMUD owns and operates water supply and distribution within the Project Area. EBMUD provides water service to approximately 1.3 million people in a 331 square-mile area to portions of Contra Costa and Alameda Counties including the City of Oakland. Historically the Mokelumne River watershed provides approximately 90 percent of the water delivery to EBMUD customers and approximately 10-percent comes from protected watersheds located in the East Bay. Water for the Project Area is provided by the Orinda Water Treatment Plant, which is the largest in Oakland and treats water through coagulation, filtration, and disinfection.

EBMUD has water rights to 325 mgd of water from the Mokelumne River. However, this supply is constrained by upstream water use by users with prior rights, downstream water use including protection of public trust resources, and variations in rainfall and runoff.<sup>6</sup> In 2008, the average daily water production for EBMUD's service area was approximately 205 mgd.<sup>7</sup> EBMUD projects customer demand of 258 mgd by 2010, 267 mgd by 2015 and 277 mgd by 2020<sup>8</sup>. These projections are still well below EBMUD's maximum water rights of 325 mgd for water coming from the Mokelumne River. However, in multiple year droughts, EBMUD's current supply from the Mokelumne River is insufficient to meet customer demand. To make up for this shortfall in demand, EBMUD is actively involved in identifying supplemental water supplies, recycled water programs and continued implementation of water conservation measures.

#### 8.3.2 Distribution System

The existing water system within the Project Area is divided into two water pressure zones. The Aqueduct Pressure Zone (GIAa) serves elevations from approximately 100 to 200 feet and is generally located to the north of 29<sup>th</sup> Street, while the Central Pressure Zone (GOA) serves elevations from approximately zero to 100 feet and is located to the south of 29th Street. One main trunk line within the Project Area consists of a 36-inch line running east-west in 26th Street which turns south east to follow 27th Street at the intersection of 26th Street and 27th Street. Another main is a 12-inch line running in the north-south direction located in Broadway and Webster Street. The Project Area is typically serviced by 6-inch and 8-inch lines which branch off of the main trunk lines located in all streets, except for 24<sup>th</sup>, 25<sup>th</sup>, and Valdez Streets, which currently have 4-inch lines.

Existing fire hydrant coverage in the Project Area currently generally complies with the City's maximum required 300-foot spacing. The need for additional hydrants to accommodate redevelopment will likely be minimal.

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<sup>&</sup>lt;sup>5</sup> EBMUD, 2005 Urban Water Management Plan, page 1-2.

<sup>&</sup>lt;sup>6</sup> EBMUD, 2005 Urban Water Management Plan, page 2-1

<sup>&</sup>lt;sup>7</sup> EBMUD, 2008 Annual Report, page 14.

<sup>&</sup>lt;sup>8</sup> EBMUD, 2005 Urban Water management Plan, Table 4-2, page 4-6

#### 8.3.3 System Capacity

#### Pressure and Flow

EBMUD provided pressure and flow data at three locations within and in the vicinity of the Project Area; 1) the intersection of Webster and Hawthorne Streets (Aqueduct Zone), 2) Broadway and 28<sup>th</sup> Street (Central Zone), and Broadway and West Grand Ave (Central Zone).

Location	1	2	3
Pressure Zone	Aqueduct	Central	Central
Elevation (feet)	71	32	20
Static Pressure (psi)	112	60	66
Residual Pressure at 1,500 gpm (psi)	109	60	65

Note: Information provided by EBMUD Fire Service Available Flow & Pressure Information, request # 3258 on March 10, 2009.

Results from EBMUD test data show the static pressure in the Aqueduct Pressure Zone is 112 pounds per squareinch (psi) while the Central Pressure Zone shows static pressure between 60-66 psi. When each of these test locations are analyzed at a test flow of 1,500 gallons per minute (gpm), there is a minimal decrease at all test locations of 1-3 psi between the static and residual pressure. Based on this data, the available flow at 20 psi per the California Fire Code is approximately 9,500 gpm for the Aqueduct Pressure Zone and between 11,000 to 12,000 gpm for the Central Pressure Zone. This is well above the California Fire Code baseline minimum fire flow of 1,500 gpm, indicating that there is adequate system wide pressure and flow performance within the Project Area. However, during discussion with the City Fire Marshal at the Broadway/Valdez Technical Advisory Committee Meeting on March 19, 2009, the Fire Department noted that there are currently pressure and flow deficiencies within the Project Area for fire service. These deficiencies most likely occur in areas where distribution lines are 6-inches or less. Fire service connections to buildings in locations where mains are 8-inches or greater will likely have sufficient pressure and flow to meet fire flow requirements while fire service connections to 4- and 6-inch may require localized upgrades. Any redevelopment alternatives considered for Phase II will need to be coordinated with the Oakland Fire Department and comply with California Fire Code. Areas where fire service is below minimum code requirements will either require localized upgrades to existing EBMUD distribution lines or installation of onsite fire storage as part of building design in order to meet fire flow requirements.

#### Water Demand

Given that redevelopment within the Project Area will likely increase water demand, the impact of additional growth will need to be reviewed with EBMUD's current water supply projections. To assist with review of redevelopment alternatives with EBMUD as part of Phase II: "Exploring Alternatives," BKF has prepared a water demand estimate based on existing land use within the Project Area. For consistency, since the City of Oakland already has documented average daily flow rates for sewer generation, the average daily water demand rates are simply 10-percent higher than the sewer generation rates to account for system losses and leakage in the system. The total average daily water demand based on existing land use is 274,600 gpd (refer Table 8.2). This estimate represents the existing condition for the Project Area and will serve as a baseline for review of redevelopment alternatives.

<sup>&</sup>lt;sup>9</sup> EBMUD Fire Service Available Flow & Pressure Information, Request # 3258, 3/10/09.

#### CHAPTER 8: INFRASTRUCTURE AND UTILITIES

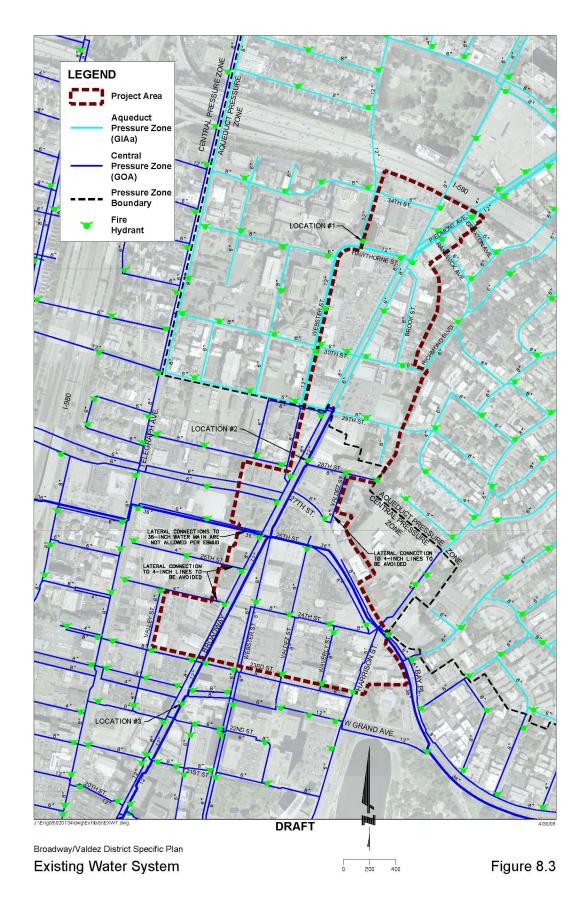
#### 8.3.4 Opportunities and Constraints

#### **Opportunities**

- 1. Existing fire hydrant coverage generally complies with the City's maximum 300-foot spacing, so the need for additional fire hydrants will likely be minimal.
- 2. Pressure and flow testing from EBMUD indicates that the Project Area system capacity is currently above the California Fire Code baseline minimum fire flow of 1,500 gpm.

#### **Constraints**

- 1. A 36-inch transmission main runs through the Project Area in 26<sup>th</sup> Street, and 27<sup>th</sup> Streets. EBMUD does not allow lateral connections to transmission mains, so redevelopment will not be able to have service connections to this main.
- 2. The City of Oakland Fire Department has noted areas within the Project Area that do not have sufficient fire flow. Based on pressure and flow tests received from EBMUD, current fire service issues likely occur where water distribution lines are 6-inches or less. Mitigations may include upsizing existing service lines or onsite storage.
- 3. 4-inch lines are located in 24<sup>th</sup>, 25<sup>th</sup> and Valdez Streets. Redevelopment within the Project Area should avoid lateral connections to these lines since flows and pressures will likely be inadequate to comply with California Fire Code fire service. If service connections are required along these streets, a new distribution line (8-inch minimum) will be required.



#### 8.4 Recycled Water

Existing recycled water infrastructure and future plans for infrastructure expansion were discussed with the East Bay Municipal Utilities District (EBMUD). Refer to the Figure 8.4 "Existing Recycled Water System" for location of recycled water infrastructure.

#### 8.4.1 Recycled Water Supply & Distribution System

EBMUD customers currently use a total of almost 6.5 million gallons per day (mgd) of recycled water. EBMUD's 2020 goal is to recycle a total of 14 mgd of water, which would bring the total recycled water use to nearly 5.1 billion gallons annually. <sup>10</sup> EBMUD currently has two recycled water projects under construction including the San Ramon Valley Project and East Bayshore Project. The East Bayshore Project is a multi-phased project planned for portions of the City of Oakland and other neighboring cities including Alameda, Albany, Berkeley and Emeryville. The first phase is currently under construction and will provide 0.7 mgd of additional recycled water for customers through the expansion of the treatment and distribution system. EBMUD will have an annual average of 2.5 mgd of recycled water available to customers in Oakland as well as Alameda, Albany, Berkley and Emeryville when the East Bayshore Project is completed. <sup>11</sup>

There is currently no recycled water within the Project Area. The closest available service is at the intersection of 14<sup>th</sup> Street and San Pablo Avenue (City Hall Plaza), south of the Project Area. Based on discussion with EBMUD, there are currently no plans to extend EBMUD's recycled water distribution system to the Project Area. A regional map showing the scope of the East Bayshore Recycled Water Project is shown on Figure 8.4 "Existing Recycled Water System". This map is based on an EBMUD map with the Project Area overlaid for context.

#### 8.4.2 Opportunities and Constraints

There is currently no recycled water infrastructure or future plans for distribution within the Project Area. The closest available service is located at the intersection of 14<sup>th</sup> Street and San Pablo Avenue (City Hall Plaza). Although recycled water service is currently not available, the Broadway/Valdez District Specific Plan may consider planning for future use of recycled water to allow future flexibility if recycled water is extended to the Project Area. Planning elements could include such things as dual plumbing within buildings and irrigation systems constructed to recycled water standards. These elements could then be connected to an expanded recycled water system in the future.

http://www.ebmud.com/conserving\_&\_recycling/recycled\_water/under\_construction\_recycling\_projects/default.htm

<sup>&</sup>lt;sup>10</sup> East Bay Municipal Utility District, <a href="http://www.ebmud.com/conserving\_&\_recycling/recycled\_water/">http://www.ebmud.com/conserving\_&\_recycling/recycled\_water/</a>, 2009

<sup>&</sup>lt;sup>11</sup>East Bay Municipal Utility District,



#### 8.5 Storm Drain

Review of the existing storm drain system was conducted with the City of Oakland Public Works Agency to assess the general condition of the system and document known capacity issues that may affect redevelopment of the Project Area. Refer to Figure 8.5 "Existing Storm Drain System" for the location of existing storm drain infrastructure, watershed boundaries, topography and Federal Emergency Management Agency (FEMA) designated flood areas.

#### 8.5.1 Collection System

The Project Area generally slopes from northwest to southeast, with elevations ranging from 82-feet at 34<sup>th</sup> and Webster to 12-feet at 23<sup>rd</sup> and Harrison. The Project Area is largely covered with impervious surfaces (buildings and pavement) with the majority of runoff draining overland to curbside inlets that enter the City's piped storm drainage system. Storm drainage from the Project Area generally flows south and east, eventually discharging into the Glen Echo Creek system and Lake Merritt. Lake Merritt discharges south into the Lake Merritt Channel, Oakland Estuary, which ultimately discharges to San Francisco Bay. The Project Area is located within two watersheds including the "Rockridge and Glen Echo Creeks" watershed north of 25<sup>th</sup> Street and "14<sup>th</sup> Avenue Creek, and the San Antonio & Damon Sloughs" watershed south of 25<sup>th</sup> Street.

The "Rockridge and Glen Echo Creeks" watershed extends north and east of the Project Area. This watershed originates above the Mountain View Cemetery at the northern limit of Piedmont Avenue and drains entirely into Lake Merritt. In the upper reaches of the watershed, the Rockridge and Broadway Creeks combine to form the Broadway branch of Glen Echo Creek. Upstream (north) of the Project Area, Broadway Creek has been placed in underground culverts parallel to and west of Broadway. At the northern limit of the Project Area (I-580), Broadway Creek flows south into the Project Area in a 5-foot by 6-foot reinforced concrete box culvert. The Broadway Creek culvert then crosses under Broadway approximately at the Piedmont Avenue intersection before joining with Glen Echo Creek, which has also been largely culverted. Existing storm drain main lines crossing through the Project Area and draining to Glen Echo Creek include (from north to south) the Broadway Creek culvert system previously discussed, 24-inch and 21-inch lines in 30<sup>th</sup> and 29<sup>th</sup> Streets, respectively, and a 30-inch line in 26<sup>th</sup> Street, that drains Telegraph Avenue west of the Project Area from 26<sup>th</sup> Street to 34<sup>th</sup> Street. The area south of 25<sup>th</sup> Street does not drain to Glen Echo Creek.

The "14<sup>th</sup> Avenue Creek and San Antonio & Damon Sloughs" watershed consists of the downtown Oakland area in addition to Jack London Square, West Oakland and the Fruitvale neighborhood. This watershed includes a small portion of the Project Area generally bounded by 22<sup>nd</sup> Street to the south, Martin Luther King Jr. Way to the west, and the Glen Echo Creek watershed boundary to the north and east.

This southern portion of the Project Area drains to a 21-inch line that flows south under Broadway to a 54-inch storm drain in  $22^{nd}$  Street that outfalls directly into Lake Merritt.

#### System Condition City of Oakland

The City of Oakland is responsible for operation and maintenance of the local storm drainage system within the Project Area. The City is also responsible for the part of the Broadway Creek culvert system that crosses through the

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northern portion of the Project Area before joining with Glen Echo Creek, as well as the portion of Glen Echo Creek under 27th and Harrison Streets, between 26th Street and where Glen Echo Creek resurfaces at 23rd Street. 12

In March 2006, the City of Oakland completed the Storm Drainage Master Plan (SDMP), a comprehensive inventory and assessment of Oakland's storm drain infrastructure. According to this report, the City's storm drainage infrastructure is nearing the end of its useful life cycle and is generally in poor condition, primarily due to inadequate resources to keep up with required improvements. The SDMP also states that demand and burden on the system has increased due to infill development and that normal as well as El Nino storm events have lead to increasing instances of flooding, erosion, and property damage.

The SDMP notes that storm drainage structures within the Project Area, as well as much of downtown, were observed to have three inches or more of debris accumulation as observed by CH2MHill in 2003. 13 However, of the three locations within the Project Area that were assessed, two had no silt accumulation and the other only showed a half inch of silt depth as observed by the City in 2004. 14 This data indicates that reduction in capacity due to debris accumulation has a relatively minimal impact to the performance of the Project Area storm drain system

A Capital Improvement Project within the Project Area is identified in the SDMP to increase the capacity of 622 linear feet of storm drain line in 26<sup>th</sup> street between Broadway and 27<sup>th</sup> Street in order to alleviate hydraulic grade line issues. 15 Per discussions with the City, funding is not currently available to begin the required improvements. However, given that this Capital Improvement Project is within the Project Area, improvements to the storm drain system will need to be coordinated with review of redevelopment opportunities.

#### Alameda County Flood Control and Water Conservation District

The Alameda County Flood Control and Water Conservation District (ACFCWCD) is responsible for portions of Glen Echo Creek and other major creeks and flood control channels generally downstream of the City's storm drain facilities. In 2002, the ACFCWCD completed improvements to Glen Echo Creek between 28th and 29th Streets, which included rehabilitation of the seven- by nine-foot culvert and replaced old piping along Glen Echo Creek. These improvements, known as Phase 1, removed flow restrictions to the creek that caused occasional winter flooding at 30<sup>th</sup> Street and Richmond Boulevard.

ACFCWCD also has plans for Phase 2 improvements to Glen Echo Creek that include increasing channel capacity and restoration of the greenbelt from 29th Street upstream (north) to Frisbie Street. However, based on ACFCWCD Annual Reports, Phase 2 of the Glen Echo Creek improvements appears to have been discontinued in 2005 due to lack of funding for the project. <sup>16</sup>

<sup>&</sup>lt;sup>12</sup> Oakland SDMP, Vol. 3, Figure 11-1: Rockridge and Glen Echo Creeks Modeled Pipes.

<sup>&</sup>lt;sup>15</sup> Oakland SDMP, Vol. 3, page 11-13.

<sup>&</sup>lt;sup>16</sup> ACFCWCD Annual Reports, 2001 through 2007: http://www.acgov.org/pwa/acfcdweb/web/annual\_report.html

Given that Glen Echo Creek serves as a major trunk line that drains the majority of runoff from the site, review of redevelopment alternatives within the Project Area will need to consider the ongoing restoration activities by ACFCWCD to coordinate potential improvements to the storm drain system needed as part of the Specific Plan.

#### 8.5.3 Flood Hazards

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), there are existing properties along the eastern edge of the Project Area that are in Zone A19 (100-year flood, base flood elevation of 19), or Zone B (areas between 100-year and 500-year flood elevations, or certain areas subject to 100-year flooding with average depths of less than 1 foot, or areas protected by levees from the base flood). Properties within Zone A19 include those between 29<sup>th</sup> Street and approximately 30<sup>th</sup> Street, east of approximately Valdez and Brook Streets and properties on the east side of the southern portion of Brook Street. Properties within Zone B include those south of 29<sup>th</sup> Street, and east of approximately Valdez, 27<sup>th</sup>, and Harrison Streets (see Figure 8.5: Existing Storm Drain System).

In addition to flooding documented by FEMA, the City of Oakland Storm Drainage Master Plan (SDMP) has also identified flooding in two locations of Glen Echo Creek along the eastern boundary of the Project Area, at 30<sup>th</sup> Street and Richmond Boulevard, and at 24<sup>th</sup> and Harrison.<sup>17</sup> Based on preliminary review of the portion of Glen Echo Creek adjacent to the Project Area, it appears that the flooding at 30<sup>th</sup> Street and Richmond Boulevard is likely due to a capacity restriction at the inlet upstream of 29<sup>th</sup> Street, where the open channel portion of Glen Echo Creek ends as it enters the seven- by nine-foot culvert. The flooding at 24<sup>th</sup> Street and Harrison Street is likely due to the existing reverse slope of a section of pipe at this intersection.<sup>18</sup> This data is also consistent with the 100-year flood area documented by FEMA.

#### 8.5.4 Storm Water Management

The following section includes discussion related to regulatory requirements that will to need to be considered for redevelopment alternatives developed during Phase II. Although these requirements do not necessarily relate to the existing condition of the Project Area, they have been included to assist with understanding planning considerations listed as part of the Opportunities and Constraints discussion.

#### Storm Water Runoff

The City of Oakland Storm Drainage Design Guidelines require the post-project peak discharge rate be maintained at a level less than or equal to the pre-project peak discharge. To the extent possible, the City has set a goal of reducing the peak runoff into the City's storm drains by 25-percent. Given the existing urban nature of the Project Area, we do not anticipate that redevelopment of the Project Area will increase storm drain runoff since the majority of existing surfaces are already paved. However, if new development within the Project Area is to meet the City's goal of reducing peak runoff by 25-percent, storm water detention will be required.

Redevelopment alternatives for the Project Area may therefore need to consider detention as an individual site-bysite requirement to store runoff needed to reduce the peak runoff flow. Alternatively, a communal detention solution

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<sup>&</sup>lt;sup>17</sup> Oakland SDMP, Vol. 3, Figure 11-3: Rockridge and Glen Echo Creeks Capacity Improvement Project.

<sup>&</sup>lt;sup>18</sup> Oakland SDMP, Vol 3, Page 11-3.

<sup>&</sup>lt;sup>19</sup> City of Oakland Public Works Agency, Engineering Design and ROW Management Division, Storm Drainage Design Guidelines, July 2006.

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(eg: detention pond within a park area) funded by developers may reduce or remove the individual site burden of complying with detention requirements. The feasibility of each or a combination of these detention alternatives will therefore need to reviewed and coordinated with review of redevelopment alternatives assessed as part of Phase II.

#### Storm Water Quality

The City of Oakland is a member of the Alameda Countywide Clean Water Program (ACCWP), and is therefore subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) municipal storm water permit issued to the ACCWP by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Provision C.3 of the NPDES permit is the section of the permit containing storm water pollution management requirements for new development and redevelopment projects. Redevelopment of the Project Area will need to implement storm water treatment as required by Provision C.3.

The ACCWP provides the C.3 Stormwater Technical Guidance Handbook as a reference to assist developers and builders with design of post-construction storm water controls. During discussion at the Broadway/Valdez Technical Advisory Committee Meeting on March 19, 2009, the City of Oakland recommended Emeryville's Stormwater Guidelines for Green, Dense Redevelopment as storm water quality solutions appropriate for similarly-urbanized Oakland. ACCWP's C.3 Stormwater Technical Guidance handbook and the City of Emeryville's Stormwater Guidelines for Green, Dense Redevelopment<sup>20</sup> will therefore be two main references for reviewing options in addressing storm water treatment challenges in development of Project Alternatives.

As with the storm water detention requirements discussed in the Storm Water Runoff section, redevelopment alternatives for the Project Area will need to consider incorporating storm water treatment as an individual site-by-site requirement. Alternatively, more global or communal solutions that take advantage and help shape the design of streetscape and park areas may be considered in the development of Project Alternatives during Phase II.

#### 8.5.5 Opportunities and Constraints

#### **Opportunities**

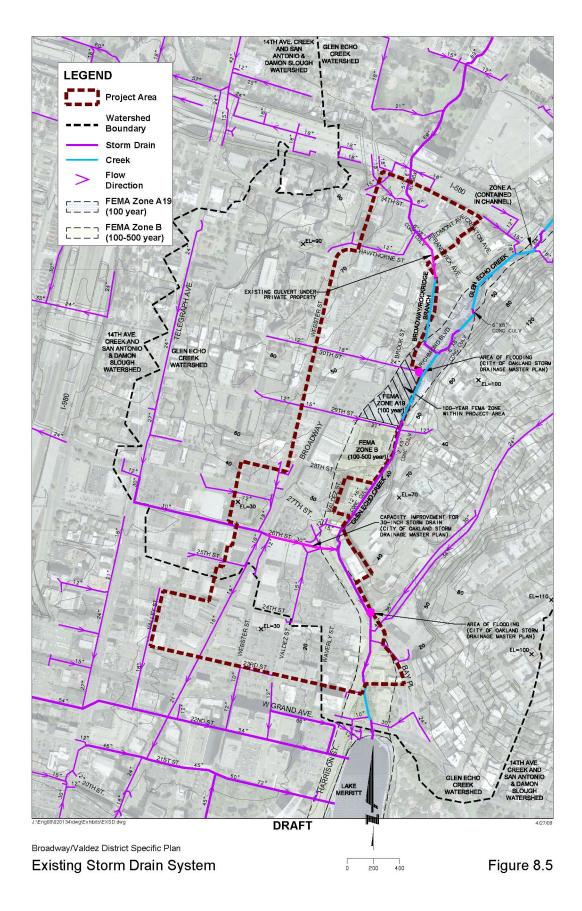
1. Streetscape design alternatives for redevelopment of the Project Area may provide an opportunity to address requirements to reduce and treat storm water within the public right-of-way.

#### **Constraints**

- 1. Currently there is one Capital Improvement Project within the Project Area as identified in the City of Oakland Storm Drain Master Plan. The Capital Improvement Project is located on 26<sup>th</sup> Street between Broadway and 27<sup>th</sup> Street. The scope and timing of this improvement may need to be coordinated with development of Project Alternatives during Phase II.
- 2. The culverted section of the Rockridge/Broadway branch of Glen Echo Creek flows under an existing building through parcel APN 009 070300100 (at the intersection of Piedmont Avenue and Randwick Avenue) and along the back of the parcels along Brook St. to the south. Redevelopment in this location will need to consider the location of the storm drain line. Alternatively, this pipe may need to be relocated into the public right-of-way to accommodate redevelopment.

<sup>&</sup>lt;sup>20</sup> City of Emeryville, Planning & Building Department, Stormwater Guidelines for Green, Dense Redevelopment, December 2005: http://www.ci.emeryville.ca.us/planning/stormwater.html

- 3. Areas of flooding have been documented by FEMA along the eastern edge of the Project Area from 23<sup>rd</sup> Street to Randwick Avenue. Properties within the 100-year flood area include those between 29<sup>th</sup> Street and approximately 30<sup>th</sup> Street, east of approximately Valdez and Brook Streets and properties on the east side of the southern portion of Brook Street. With the development of Project Alternatives during Phase II it will be necessary to consider mitigations such as raising the parcels out of the flood plain, reduction of flooding through system capacity improvements, or the purchase of insurance for the parcels located within the flood plain.
- 4. Flooding has been observed by the City, as noted in the Storm Drainage Master Plan, near the 30<sup>th</sup> Street & Richmond Boulevard and 24<sup>th</sup> Street & Harrison Street intersections. Mitigations such as raising the parcels out of the flood plain or reduction of flooding through system capacity improvements will need to be considered with the development of Project Alternatives during Phase II.
- 5. The City's Storm Drainage Design Guidelines require the post-project discharge rate be maintained less than or equal to the pre-project peak discharge. To the extent possible, the City has set a goal of reducing the peak runoff into the City's storm drains by 25-percent. Redevelopment of the Project Area will need to account for detention storage for land planning alternatives.
- 6. Individual lots within the Project Area will likely need to provide onsite stormwater treatment. However, streetscape design alternatives for redevelopment of the Project Area may provide an opportunity to address requirements to reduce and treat storm water within the public right-of-way.
- 7. Landscape-based storm water treatment methods are preferred by the ACCWP over mechanical storm water treatment devices. Redevelopment of the Project Area will need to consider landscape based storm water treatment methods as part of the redevelopment of the parcels within the Project Area.



#### 8.6 Electric & Gas Service - PG&E

Pacific Gas and Electric Company (PG&E) owns and operates gas and electric service within the City of Oakland including the Project Area. Review of the existing gas and electric facilities was conducted with PG&E to assess known capacity issues in serving the Project Area. Refer to the Figure 8.6 "Existing Electric System" and Figure 8.7 "Existing Gas System" exhibits for location and size of electrical and gas infrastructure within and surrounding the Project Area.

#### 8.6.1 Electric Distribution and Capacity

The majority of electrical infrastructure for the Project Area is comprised of 12-kilovolt (kV) transmission lines from the PG&E substation located in 21<sup>st</sup> Street west of Telegraph Avenue. The substation receives 155 kV and transmits electrical power to both the Upper Downtown and West Oakland areas. The majority of electrical power provided within the Project Area (approximately 8,000 linear feet) is currently undergrounded.

Policy N.12.4 of the Oakland General Plan requires overhead lines to be undergrounded in commercial and residential areas, except where such conditions as limited visibility of poles and lines make this unnecessary. Approximately 4,000-feet of existing overhead lines within the Project Area will therefore need to be considered for underground relocation as part of review of redevelopment alternatives.

Based on discussion with PG&E there are no known capacity problems with the existing electric system.

#### 8.6.2 Gas Distribution and Capacity

Existing gas lines within the Project Area include low pressure lines and semi-high pressure lines that range in size from 2- to 24-inches. The low pressure lines are generally larger diameter than the semi-high pressure lines. The main gas service line within the Project Areas is a 16-inch semi-high pressure line which runs in Broadway. Connections will be available through PG&E for future development to both the low pressure and the semi-high pressure lines throughout the Project Area.

Based on discussion with PG&E, there are no known capacity problems with the existing gas system.

#### 8.6.3 Opportunities and Constraints

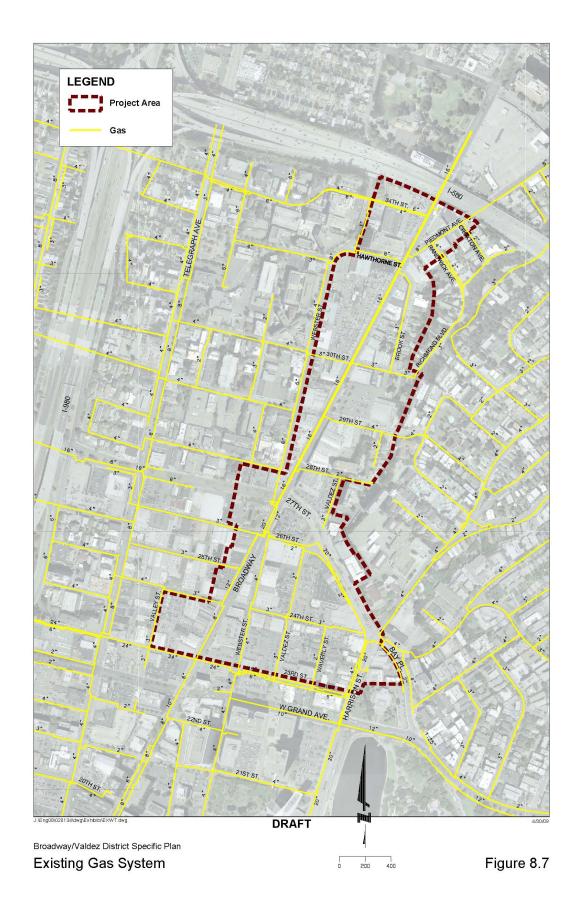
#### **Opportunities**

- 1. A majority of the Project Area has electrical lines that are already undergrounded (see Figure 8.6 for locations).
- 2. New development may connect directly to both low- or semi high-pressure gas lines, providing multiple opportunities for redevelopment alternatives.

#### **Constraints**

1. Existing overhead electrical and communication lines (approximately 4,000-feet) will need to be undergrounded in as required by Policy N.12.4 of the Oakland General Plan.





#### 8.7 Communication

Review of the existing communication infrastructure was conducted by compiling base maps from several communication providers including AT&T and Comcast. Existing fiber optic lines in the Project Area and vicinity were mapped in an effort to identify major service lines that may be costly to relocate if impacted by redevelopment alternatives. The location of conduits currently owned and operated by AT&T are also included. Refer to Figure 8.8 "Existing Communication System" for location of fiber optic and conduit infrastructure within and surrounding the Project Area.

Fiber optic communication line locations have been received from Comcast, AT&T (Core) and AT&T (TCG). Additionally, conduit locations have been received from AT&T-Pac Bell. AT&T-Pac Bell will not release information showing the location of main utilities due to proprietary and security restrictions. However, AT&T-Pac Bell have stated that if there are additional fiber optic or major service lines, they will fall within the conduits shown on Figure 8.8. Given this information, project alternatives reviewed as part of Phase II will need to be further coordinated to verify impacts to major service lines (fiber optic) where conduits are shown. For example, if a project alternative proposes relocation or abandonment of an existing public street with a known AT&T conduit, this street will need to be reviewed by AT&T to verify impacts to major service lines.

#### 8.7.1 Existing Communication Distribution

AT&T and Comcast provide residential and commercial communication service within Downtown Oakland and the Project Area including telephone, television and high speed internet. In addition AT&T also provides wireless phone services. Existing fiber optic lines located in Waverly, 24<sup>th</sup>, and 29<sup>th</sup> Streets are currently being operated by Comcast. AT&T is required by the California Public Utilities Commission to anticipate and serve new growth. In order to meet this requirement AT&T continuously adds new facilities and infrastructure to conform to regulations and tariffs as needed to meet customer demand in the City. Generally trenches are shared between Comcast, AT&T as well as PG&E, however AT&T and Comcast operate separate underground conduit substructures.

Redevelopment alternatives within the Project Area will need to consider the location of fiber optic lines to understand the potentially high relocation costs and disruption to service.

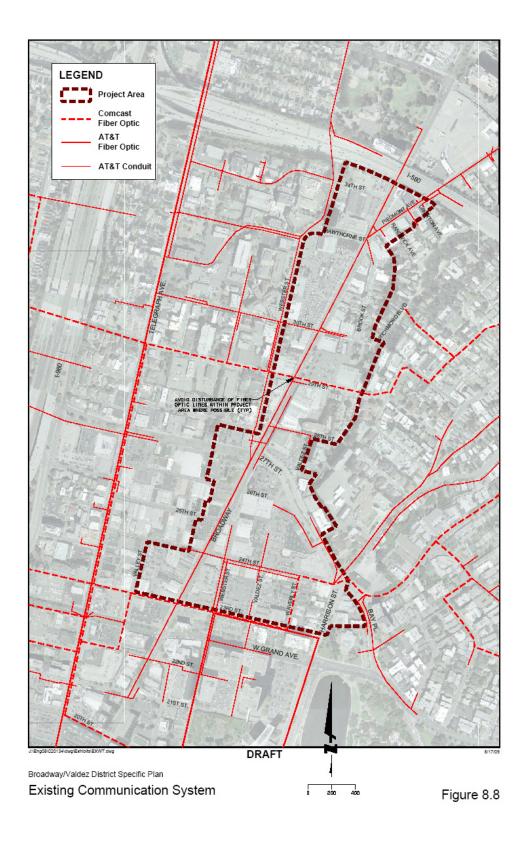
#### 8.7.2 Opportunities and Constraints

#### **Opportunities**

AT&T is required to serve new growth by the California Public Utilities Commission.
 Availability of communication service will therefore not constrain redevelopment of the Project Area.

#### **Constraints**

1. Relocation of the existing fiber optic lines located in Waverly, 24<sup>th</sup> and 29<sup>th</sup> Streets should be avoided to prevent interference to system wide service and potentially high relocation costs.



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# Chapter 9: Community Services and Facilities

#### 9.1 Introduction

The following sections discuss existing conditions in the Project Area that may have implications for future redevelopment. Community service topics discussed in this chapter include fire protection and emergency medical services, police protection, schools, and parks and recreation. Following the discussion of the existing conditions for each environmental factor is a brief summary of potential opportunities and constraints associated with implementing the Broadway/Valdez District Specific Plan.

#### 9.2 Fire Protection and Emergency Medical Services

Fire protection and emergency medical response services in the Project Area are provided by the Oakland Fire Department. The Fire Department operates 25 fire stations, including one at Oakland International Airport. The Fire Department maintains 24 engine companies with approximately four personnel per engine, four truck companies with four personnel per truck, and three truck companies with five personnel per truck. Total Fire Department staffing consists of 500 uniformed personnel. The actual number of assigned personnel per station depends on the needs of that station. All personnel are trained as Paramedics or Emergency Medical Technicians (OFD, 2009).

The nearest fire station to the Project Area, Station 15, is located at 455 27th Street approximately 600 feet west of Broadway. Two other stations in the vicinity include Station 5 and Station 10. Station 5 is located at 934 34th Street (approximately one-mile west of Broadway); Station 10 is located at 172 Santa Clara Avenue (about 1/2-mile east of Broadway) (OFD, 2009).

The Oakland Fire Department Dispatch Center (FDDC) is located in downtown Oakland and is responsible for fire and medical emergency coordination and response. The FDDC receives approximately 60,000 calls for response annually, of which 80 percent are medical emergencies. Fire Station 15 responded to approximately 4,543 calls in 2007. The Fire Department's response time goal is seven minutes or less, 90 percent of the time. In most cases, Station 15 responds to calls in four to six minutes or less (OFD, 2009).

#### 9.3 Police Protection Services

The Oakland Police Department provides police protection services throughout the city. The Police Department is headquartered at 455 7th Street in downtown Oakland, approximately one mile from the Project Area. The Police Department has approximately 803 sworn police officers and a civilian staff of about 340. Under the Area Command structure, the City is geographically divided into three areas containing a total of 35 patrol beats. One Problem Solving Officer is assigned to each of 57 community policing beats and is responsible for long term projects on the beat. Neighborhood Service Coordinators are civilian employees who serve as a liaison between the community and the Police Department and work with residents, businesses, schools, and other institutions to set priorities and develop strategies to

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improve public safety and reduce crime. Each Neighborhood Services Coordinator handles multiple patrol beats (OPD, 2009).

The Project Area is located within patrol beat/community policing beat 8X. Beat 8X is generally bounded by 40th Street and I-580 to the north, Grand Avenue to the south, Harrison Street/Orange Street to the east, and I-980 to the west. Patrol beats have one officer assigned 24 hours a day. Officers generally work twelve-hour shifts alternating three and four day work weeks. Resources are distributed based on calls for service and staffing varies throughout the day. Afternoons, evenings, and weekends receive higher volumes of calls and are staffed accordingly. At any time of the day, three watch commanders and at least six supervising sergeants are on duty citywide. The Traffic Operations Unit generally staffs about 18 officers throughout the day, with additional staff available for special events and periods of special staffing needs (OPD, 2009).

Police Department incident reports for Beat 8X over the 90-day period from January 23, 2009 through April 22, 2009 give a reasonable snapshot of the types and frequency of criminal activities that occur in the vicinity of the Project Area. However, it is also important to note that the Project Area is a small subset of the much larger Beat 8X area. By far the most common crime in Beat 8X over this time period is theft, with 109 incidents reported. Narcotics and vehicle theft are the next most reported incidents at 45 and 40, respectively. Between 20-40 incidents of aggravated assault, burglary, simple assault, and vandalism were reported during this period. Three murders were also reported in Beat 8X (OPD, 2009).

All emergency (911) and non-emergency calls for police services are received through the Police Department's communications center located at 7101 Edgewater Drive. Calls for fire and medical services are routed to the Oakland Fire Department for dispatching. Priorities for responding to police calls are set by a computer-aided dispatch system that may be overridden by dispatchers. Police officers are dispatched from the police communications center by radio and/or laptop computers mounted in police vehicles (OPD, 2009).

#### 9.4 Schools

The Oakland Unified School District (OUSD) operates the public school system in the city of Oakland. The OUSD administers 65 elementary schools, 19 middle schools, and 14 high schools. It is also responsible for four alternative schools, two special education schools, and three continuation schools. Total school enrollment for elementary and secondary students for the 2008-2009 academic year is 46,538 (OUSD, 2009).

The Project Area is served by multiple elementary schools, one middle school, and two high schools. Lakeview Elementary School is located at 746 Grand Avenue, approximately one-mile east of Broadway. Total enrollment at Lakeview is 335 students during the 2008-2009 school year. Lafayette Elementary School is located at 1700 Market Street, approximately 1/2-half mile southwest of Broadway. Total enrollment at Lafayette is 285 students. Hoover Elementary School is located at 890 Brockhurst Street, approximately 3/4-mile west of Broadway. Total enrollment at Hoover is 325. Piedmont Avenue Elementary School is located at 4314 Piedmont Avenue, approximately 3/4-mile northeast of Broadway. Total enrollment at Piedmont Avenue is 359 students during the 2008-2009 school year (OUSD, 2009).

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Westlake Middle School is located at 2629 Harrison Street, less than 1/4-mile east of Broadway. Total enrollment at Westlake Middle School is 621 students during the 2008-2009 school year. Oakland Technical High School is located at 4351 Broadway, approximately 3/4-mile northeast of the Project Area, and Far West High School is located at 5263 Broadway Terrace, approximately one-mile northeast of the project area. Total enrollment at Tech High School was 1,714 students and 183 at Far West High School (OUSD, 2009).

Other schools in the vicinity of the Project Area include the OUSD Emiliano Zapata Street Academy High School (managed by the Street Academy Foundation) at 417 29th Street and St. Paul's Episcopal School (K-8) at 116 Montecito Avenue (OUSD, 2009; CDE, 2009).

#### 9.5 Parks and Recreation

The City of Oakland's Office of Parks and Recreation manages the City's parks and recreation centers within the city boundaries. Oakland's Public Works Agency maintains the parks and park facilities. Oakland has approximately 3,381 acres of parkland, including parkland within the East Bay Regional Parks District (EBRPD). Oakland's parks are categorized by size and intended service area. Generally, local-serving parks "meet the active recreational needs of the community" surrounding the park, rather than the city as a whole (OPR, 2009).

The Project Area is located in the City's Central Planning Area, as identified by the Open Space, Conservation, and Recreation (OSCAR) Element of the Oakland General Plan. As stated in the OSCAR, the Central Planning Area has a per capita park acreage of 1.65 acres per 1,000 residents, which is higher than the citywide average of 1.33 acres but less than half the adopted standard of 4.0 acres (City of Oakland, 1996).

There are no public parks located within the Project boundaries. The nearest parks to the Project Area include the 11-acre Mosswood Park, located across I-580 from the northern boundary of the Project Area; Oak Glen Park northeast of the Project Area; Adams Park at the southeast corner of the Project Area; and the 75-acre Lakeside Park surrounding Lake Merritt. Amenities at Mosswood Park include tennis and basketball courts as well as the Mosswood Recreation Center. Lakeside Park features paved trails for biking and walking and several specialty gardens including the Japanese Bonsai and Suiseki Gardens and other vegetable and fruit demonstration gardens. The park is also home to the historic Camron-Stanford House. Adams Park features the Veterans' Memorial Building, which is the site of the Downtown Oakland Senior Center. Oak Glen Park is a small (less than 3 acres) undeveloped park located along Glen Echo Creek as it flows underneath I-580 (OPR, 2009).

#### 9.6 Other Public Services and Facilities

Additional public services and facilities located within or in the vicinity of the Project Area include libraries, senior centers, and child care services. The nearest public libraries to the Project Area are the Main Library at 125 14th Street and the Lakeview Branch at 1427 88th Avenue (OPL, 2009). The City sponsors senior centers at six locations throughout Oakland that provide a broad range of classes and special events, as well as free or low-cost meals, for senior citizens (DHS, 2009). The nearest senior center to the Project Area is the Downtown Oakland Senior Center located at 200 Grand Avenue in

Adams Park. Child care services such as Head Start and Early Head Start provide comprehensive child development programs and parent education services to low-income families and their children. No Head Start or Early Head Start facilities are located within the Project Area. The nearest Head Start facility is located at 274 12th Street and the nearest Early Head Start center is located at 1117 10th Street. In addition, the Downtown Oakland YMCA is located within the Project Area at 2350 Broadway.

#### 9.7 Potential Opportunities and Constraints

- Potential constraints to development of the Project Area include ensuring the ability of the police and
  fire department to serve new development and maintain existing emergency response times and the
  ability of local schools and parks to serve the potential increase in population living within the Project
  Area.
- Redevelopment of the Project Area will provide opportunities to increase public open space and
  recreational activities in the Project Area by creating new parks, plazas, or other recreational
  amenities, and enhancing pedestrian/bicycle connections to existing surrounding parks for the use of
  future residents and visitors.

The perception that the Project Area suffers from a lack of public safety represents a potential constraint for attracting retail development to the area. If retailers perceive the area as unsafe, they will not invest in the area. On the other hand, redevelopment of the area, if done properly, creates opportunities to increase actual and perceived security in the Project Area. New mixed use development can increase the presence of people in the area during all times of the day and the week, it can enhance pedestrian activity and the public's sense of pride and ownership in the neighborhood, and well-designed buildings and public spaces can provide "eyes on the street" that inhibit inappropriate behavior.

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APPENDIX A: INFRASTRUCTURE AND UTILITIES

# **APPENDIX A**

Infrastructure and Utilities

APPENDIX A: INFRASTRUCTURE AND UTILITIES

#### Table 8.1: Sewer Generation Estimate – Existing Land Use

#### Methodology

To assist with review of alternatives as part of Phase II "Exploring Alternatives," BKF has prepared a sewer generation estimate based on existing land use within the Project Area. This estimate has been calculated based on sewer generation rates from the City of Oakland Sanitary Sewer Design Guidelines (August 2008) and existing land use intensity information received from WRT on April 23<sup>rd</sup>, 2009. It will serve as an existing condition baseline for review of redevelopment alternatives. The Floor-Area Ratio is based on multiplying the building footprint square footage by the number of stories. Therefore, it is a slight overestimate of usable square footage. On parcels with multiple structures, the highest number of stories were applied to all buildings. The total average daily wastewater flow based on existing land use is 249,600 gallons per day (gpd) (Refer Table 8.1: Sewer Generation Estimate – Existing Land Use).

USe AR-DEAL	Description Former Porsche/Audi Showroom (vacant) Former Porsche/Audi Showroom (vacant)	Number Street	(st)	FAR 0.919	Blag Sr	Residential (gpd/unit)	Dwelling Units	Daily Flow (gpd)	Residential (gpd/sf)	Units	Average Daily Flow (gpd)	Flow (gpd)
ARDEAL	Former Porsche/ Audi Showroom (vacant) Former Porsche/ Audi Showroom (vacant)	224F RDOADWAY	1100	0.919	000			_		10000		000
AR DEAL	Former Porsche/Audi Showroom (vacant)	2343 DROMUNAI	0,000		5,380	0	0	2	0,10	5,380151	538	220
ARDEAL		2343 BROADWAY	5,515	1.000	5,515	0	0	0	0.10	5,515 SF	552	552
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	Former Porsche/ Audi Showroom (vacant)	2337 BROADWAY	12,317	0.463	2,698	0 0	0 0	0 0	0.10	5,698 SF	5/0	5/0
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	Activa	245 27TH ST	42 379	0.700	19,044	0 0	0 0	0 0	0.10	27 728 SF	2773	2 773
AR-DEAL	Acura Auto Sales	306 24TH ST	43.297	0.706	30.572	0	0	0	0.10	30.572 SF	3.057	3.057
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	VW Auto Sales Yard	2456 VALDEZ ST	5,630	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL	VW Auto Sales Yard	2460 VALDEZ ST	3,232	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	Audi Showroom	2550 WEBSTER ST	19,805	0.965	19,105	0	0	0	0.10	19,105 SF	1,911	1,911
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	OK Enterprises	2500 WEBSTERST	6,246	1.000	6,246	0	0	0	0.10	6,246 SF	625	625
AR-DEAL AR-DEAL AR-DEAL AR-DEAL AR-DEAL	Saturn of Oakland (Showroom and Sales Lot) Vacant	2417 BROADWAY	29,583	0.215	6,375	0	0	0	0.10	6,375 SF	638	638
AR-DEAL AR-DEAL AR-DEAL AR-DEAL	Bay Bridge Jeep , Z Cafe	2735 WEBSTERST	28,455	2.000	56,909	0	0	0	0.10	28,454 SF	2,845	2,845
AR-DEAL AR-DEAL AR-DEAL	Volkswagen (Sales Lot)	2710 BROADWAY	12,732	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL AR-DEAL	Audi Sales Lot	2630 BROADWAY	47,686	0.133	6,357	0	0	0	0.10	6,357 SF	636	636
AR-DEAL	Volkswagen	2720 BROADWAY	62,462	1.013	63,248	0	0	0	0.10	31,624 SF	3,162	3,162
	Nissan Showroom	2800 BROADWAY	13,253	2.217	29,382	0	0	0	0.10	29,382 SF	2,938	2,938
AR-DEAL	Nissan Showroom	2820 BROADWAY	30,794	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL	NorCal Motors Inc	2857 BROADWAY	3,499	1.000	3,499	0	0	0	0.10	3,499 SF	350	350
AR-DEAL	Nissan Used Cars Lot	2855 BROADWAY	17,196	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL	Kia Showroom (vacant)	2819 BROADWAY	7,799	0.926	7,219	0	0	0	0.10	7,219 SF	122	722
AR-DEAL	Mercedes Benz of Oakland		6,734	1.000	6,734	0	0	0	0.10	6,734 SF	673	673
AR-DEAL	Mercedes Benz of Oakland	2901 BROADWAY	5,134	1.000	5,135	0	0	0	0.10	5,135 SF	513	513
AR-DEAL	Mercedes Benz of Oakland	BROADWAY	27,343	0.756	20,6/2	0 8	0	0	0.10	20,672 SF	2,067	7,067
009 070300100 AR-DEAL	Honda	3326 PIEDMONT AVE	10,454	1.000	10,454	330	_	330	0	0 N/A	0	330
AR-DEAL	Green World Auto Sales	3028 BROOK ST	5,154	0.135	969	330	- 0	330	0	0 N/A	0	330
AR-DEAL	Horida (Sales Lot)	2	05,250	0.000	0.00		0	0 0		A/N O 010 01	0	0 6
	Retall Showroom (Vacant)	250 301H SI	19,270	000.	0/7/61			0	0.10	19,270 SF	1,927	1,927
AR-DEAL	Davides Auto Contor Head Care (one small bldd)	3093 BROADWAT	40,237	0.000	34,390	0 0	0 0	0 0	0.10	34,390 SF	3,440	3,440
AR-DEAL	Bay Bridge Auto Center Used Cars (One Striath Drug)	3001 BROADWAY	42.068	0000	0 0	0 0	0 0	0 0	0 0	N/A	0 0	0 0
AR-DEAL	Bay Bridge Auto Center Used Care	3015 BROADWAY	10 147	0000	0 0	0	0 0	0	0	A/M O	0	0 0
AR-DEAL	Bay Bridge Auto Center Used Cars	3025 BROADWAY	15,560	000:0	0	0	0	0	0	0 N/A	0	0
AR-DEAL	Bay Bridge Auto Center Used Cars	3039 BROADWAY	15,211	0.000	0	0	0	0	0	0 N/A	0	0
AR-DEAL	Honda of Oakland (Sales Lot)	3359 BROADWAY	8,017	0.000	0	0	0	0	0	0 N/A	0	0
١.	Honda of Oakland - Used Cars	3329 BROADWAY	4,804	1.000	4,804	0	0	0	0.10	4,804 SF	480	480
	Honda of Oakland	3330 BROADWAY	15,066	0.990	14,920	0	0	0	0.10	14,920 SF	1,492	1,492
AR-DEAL	Honda of Oakland (Sales Lot)	3401 BROADWAY	27,978	0.000	0	0	0	0	0		0	0
008 066901100 AR-PG	Parking Structure	260 23RD SI	12.32	000%	133,192	0	0	0	0.025	14,799 SF	3/0	3/0
AR-Sel V	Parking/service lot (vacant)	433 241H 31	12,223	0.000	0 0	0 0	0 0	0 0	0 0	N/N O		0 0
AR-3el V	Former Carage (vacant)	443 241H 31	16,410	0000	0 0	0 0	0 0	0 0	0 005	16 507 SE	415	115
AR-Serv	Parking/service lot (vacant)	2333 BROADWAY	5.277	0000	0	0	0	0	0	0 N/A	0	0
AR-Serv	Parking/service lot (vacant)	2336 VALLEY ST	10,257	0.000	0	0	0	0	0	0 N/A	0	0
AR-Serv	Parking/service lot (vacant)	2320 VALLEY ST	21,000	0.000	0	0	0	0	0	0 N/A	0	0
	Former Garage (vacant)	444 23RD ST	11,500	1.000	11,500	0	0	0	0.025	11,500 SF	288	288
AR-Serv	Parking/service lot (vacant)	VALLEY ST	3,750	0.000	0	0	0	0	0	0 N/A	0	0
AR-Serv	Besa Auto Care	2350 WEBSTER ST	6,500	1.538	10,000	0	0	0	0.10	10,000 SF	1,000	1,000
AR-Serv	Former Garage (vacant)	320 23RD ST	5,475	0.000	0	0	0	0	0	0 N/A	0	0
006 066601103 AR-361V	Auto Garage & Service Lot	2344 WEBSTER ST	5,002	0.000	2 755	0 0	0 0	0 0	010	2 745 SF	275	27.5
AR-Serv	Former Garage - now used for parking	2302 VALDEZ ST	12,609	1.000	12,609	0	0	0	0.025	12,609 SF	315	315
AR-Serv	Ho Auto Detail	2342 VALDEZ ST	8,750	0.438	3,831	0	0	0	0.10	3,831 SF	383	383
AR-Serv	Wheel Works	2359 HARRISON ST	11,127	0.990	11,020	0	0	0	0.10	11,020 SF	1,102	1,102
AR-Serv	VIP Collision Repair	293 27TH ST	2,177	1.000	2,177	0	0	0	0.10	2,177 SF	218	218
AR-Serv	Acura	300 24TH ST	6,500	1.000	6,500	0	0	0	0.10	6,500 SF	650	650
008 06/102400 AR-Serv	Acura (Parking Lot)	310 24 IH SI	3,000	0.000	10 00	0 0	0 0	0 0	0 0	10 00 CT	1 001	1 001
AR-Sel V	Auto sociales parting york	329 201H 31	19,003	0000	600,41	0 0	0 0	> <	0.10	17,000 SF	1,901	196,1
AD-Son	Auto service parking yard	24.41 VALDE7 ST	0,125	0.000	0 0	0 0	0	0	0 0	O N/V	0 0	0 0
AR-Serv	Auto service parking yard	2433 VALDEZ ST	6.250	0.000	0	0	0	0	0	0 N/A	0	0
008 067300200 AR-Serv	Best Detail, Inc.	2436 BROADWAY	10,020	866:0	966'6	0	0	0	0.10	9,996 SF	1,000	1,000
AR-Serv	5	403 28TH ST	13,071	0.329	4,300	0	0	0	0.10	4,300 SF	430	430
AR-Serv	Collision Service Center, Auto Care Shop	295 29TH ST	25,171	0.635	15,980	0	0	0	0.10	15,980 SF	1,598	1,598
AR-Serv	King Kovers - King of Seat Covers	288 28TH ST	4,002	1.000	4,002	0	0	0	0.10	4,002 SF	400	400
009 068507000 AR-Serv	Auto Trends Body Shop	2840 BROADWAY	966'6	1 2001	9,010	0	0	0 0	0.10	9,010 SF	901	901
AR-Selv	Mail KINDITIS THES	20/3 REDADWAY	12 23/1	1.004	7.537	0 0	0 0	0 0	0.10	7 510 SF	751	75.1
AR-Serv	Lee Myles Hallstillssolls Mercedes Benz of Oakland	2937 BROADWAY	4.964	0.989	4.910	> c	> C	, 0	0.10	4,910 SF	491	491

Total Average Daily Flow (gpd)	0	779	312	0	664	515	603	598	418	254	926	316	2	0	3,379	546	1 786	1,874	0	0	3,200	2,000	2,400	1,800	800	1,800	8,160	4,800	330	330	330	099	330	009	330	330	330	330	330	330	330	009	330	330	330	330	330	330	330	330	22,050	009	800	008	800	009	008	0007	400
Non-Residential Use Average Daily Flow (gpd)	0	779	312	0	664	515	603	598	8 6	254	926	316	8 0	0	3,379	546	1 786	1,874	0	0	0 0	0 0	0	0	0	0	8,160	0	0		0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0 0	22,050	0	0	0 0	0	0	0 0	0	
Non-Residential Units	0 N/A	789	3, 120 SF	0 N/A	6,641 SF	5.147 SF	6,033 SF	5,976 SF	4,177 SF	2,540 SF	9,764 SF	3,160 SF	18/8/	ON/A	33,792 SF	5,462 SF	4,727 SF	6,246 SF	0 N/A	0 N/A	0 N/A	N/A	0 N/A		0 N/A	0 N/A	% BED	0 N/A	0 N/A	0 0//A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	147 RM	0 N/A	0 N/A	O N/A	0 N/A	0 N/A	0 N/A	0 N/A	
Average Flow Rate Non- Residential (qpd/sf)	0	0.10	0.10	0	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0	0.10	0.10	0.10	0.30	0	0	0 0	0 0	0	0	0	0	85	0	0		0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0	0	0 0	0	0	0 0	150	0	0	0 0	0	0	0	0 0	
Residential Average Daily Flow (qpd)	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0	3,200	2,000	2,400	1,800	800	1,800	0 0	4,800	330	330	330	099	330	009	330	330	330	330	330	330	330	009	330	330	330	330	330	330	330	330	0	009	800	900	800	009	008	000	
Residential Dwelling Units	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	91 01	2 2	12	6	4 (	9	0	24		- -		2	- 0	2 2	-							2	-		-			1		2	0	2	4	4 6	4 4	2	4 (	7	
Average Daily Flow - Residential (gpd/unit)	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	200	200	200	200	200	200	0	200	330	330	330	330	330	300	330	330	330	330	330	330	330	300	330	330	330	330	330	330	330	330	0	300	200	300	200	300	200	300	
Bldg SF	0	7,789	3,120	0	6,641	5.147	6,033	5,976	4,1//	2,540	9,764	3,161	80 0	0	67,583	5,462	4,727	6,246	0	0	5,769	10,621	10,499	6,365	10,838	2,164	55,047	21,814	1,378	2 0 2 3	1,270	1,817	1,592	2,950	1,391	1,223	1,134	1,082	1,100	2,465	1,400	1,037	1,688	2,828	973	1 207	1,907	3,540	2,477	7,246	0	3,095	4,306	3.443	23,153	3,464	2,570	5	
Land Use FAR	0.000	1.000	0000	0.000	0.694	1,000	1.000	1.000	0.650	0.559	1.000	0.569	9/0:0	0000	1.696	0.69.0	1.000	1.000	0.000	0.000	1.459	2.550	0.841	1.479	1.354	0.551	1.437	3.147	0.459	0.000	0.391	0.559	0.531	0.944	0.458	0.454	0.413	0.344	0.638	0.541	0.502	0.354	0.575	0.418	0.135	0.000	0.393	0.652	0.658	1127	0.000	1.075	0.983	0.780	5.758	0.898	0.506	0.000	-
Parcel Area (sf)	6,237	7,789	3,120	3,635	9,576	5.147	6,033	5,976	0,423	4,543	9,763	5,554	71,354	7,236	39,859	7,916	7,282	6,246	525	161	3,955	4.165	12,483	4,303	8,005	3,927	38,312	6,931	3,001	3 200				3,125	3,037	2,	3.201	ກັຕາ	← (	3 237	2	2,	2,934	6,760	7,185	5,280	4,848	5,426	3,764	2,455	14,216	2,880	4,380	0,252	4,021	3,859	5,082	3,700	
Address Number Street	2927 BROADWAY		340 29TH ST	2930 WEBSTER ST	3050 BROOK ST	3074 BROADWAY	3068 BROADWAY	3060 BROADWAY	3044 BROADWAY	3040 BROADWAY	3000 BROADWAY	3022 BROADWAY	3030 BROADWAY	3093 BROADWAY	327 34TH ST	2344 HARRISON ST	2340 HARRISON SI 326 23PD CT	2442 WEBSTERST	2500 BROADWAY	BROADWAY	461 24 IH SI	2346 VAIDEZ ST	2337 HARRISON ST	206 23RD ST	2306 WAVERLY ST	262 28TH ST	3030 WEBSTER ST	123 BAY PL	2353 WAVERLY ST	2330 WAVERLY ST	2334 WAVERLY ST	2338 WAVERLY ST	2342 WAVERLY ST	2429 VALDEZ SI 281 29TH ST	277 29TH ST	2831 RICHMOND AVE	2827 RICHMOND AVE	2819 RICHMOND AVE	2820 RICHMOND AVE	2824 RICHMOND AVE	2836 RICHMOND AVE	273 29TH ST	269 29 IH SI	243 30TH ST	235 30TH ST	244 30TH ST	3016 BROOK ST	3032 BROOK ST	3009 BROOK ST	3384 PIFDMONT AVE	2332 HARRISON ST	325 24TH ST	319 24TH ST	245 WAVERLY SI 265 24TH ST	2315 HARRISON ST	2307 HARRISON ST	2326 WAVERLY ST	2346 WAVERLY SI	
Description	Mercedes Benz of Oakland (parking lot)	Mercedes Benz of Oakland	Mercedes Benz of Oakland (harking lot)	Mercedes Benz of Oakland (parking lot)	AAMCO Transmissions	Automotive Collision Repair	Precision Motors	Auto Smog Test Center	AAU Seat Covers Broadway Smon Time in (narking lot)	Broadway Smog Tuneup	Union Auto	Roger's Autoworks	Enterprise Car Rental CMC Booties Buick Cadillas (parking lot)	GMC-Pontiac, Buick, Cadillac (parking lot)	Honda of Oakland	H Beck BMW Service	Rouse Lire Lakeside Cafe Burrito Gordo Sonrano Manyda Thai	MUA Restaurant			Multi-Family Residential - Apartments Multi-Family Desidence	Multi Family Residential	Multi-Family Residence (Apartment Bldg) Valdez Blaza Assisted Higher Community	Senior Care Housing	Multi Family Residence (apartment bldg)	Single Family Residence	Multi-Family Residence (Duplex)   Multi-Family Residence (Duplex)	Single Family Residence - grey & write Single Family Residence - brown shingle	Single Family Residence	Single Family Residence	Single Family Residence Multi-Family Residence (Dunlex)	The Merritt Hotel	Multi Family Residence (2)	Multi Family Residence	Multi-Family Residence (2)	Width and residence (2)		Multi-Family Residence (4)	Mutti Family Residence (2)	:																			
WRT Land Use	AR-Serv	AR-Serv	AR-Serv			AR-Serv	ПП		AR-Serv	Т			AR-Serv				AK-Serv FNT			X	ž d	ž ž	E E		HDR	HDR			ž		Т		T	Т					E CE			LDR.	T				ž		ă	T	Ī.,	ш		MDR MDR		MDR		MDK	
APN	00900102000	009 070100900	009 070101000	009 070101200	009 070303700	009 070400 100	009 070400300	009 070400400	009 0 / 0400500	009 070400700	009 070401200	009 070401400	009 0 70401601	009 070500108	009 073000104	010 07 68 00 201	010 0 / 6800204	008 067202000	008 067300100	009 073201300	008 066600200	008 066800203	008 067000500	008 067000900	008 067001000	009 068506201	009 070500101	010 076800300	008 066900500	008 06900600	008 067001300	008 067001400	008 067001500	008 06/200600	009 068504700	009 068504800	009 068504900	009 068505100	009 068505200	009 068505300	009 068505600	009 068505700	009 068505800	009 070200500	009 070200600	009 070302500	009 070303000	009 070303400	009 070400900	009 0 / 0401 000	010 076800500	008 066 900 200	008 000 000 000 000 000 000 000 000 000	008 06 7000 200	008 06 700 0 700	0080002900	008 06 700 1 100	008 06 /001600	

Total Average Daily	Flow (gpd)	000	009	009	800	800	009	800	925	674	1,037	825	12,793	11,727	679	0	0	1,280	2 244	841	457	758	1,946	1,593	1,082	1,190	1,715	1241	1,004	4.35	451	50	0	0	0	0	0	0	0		0 0	0 0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0					0 0	0	872	5,330	797	1.264
ntial Use	ଚ	5 0	0 0	0	0	0	0	0 0	925	674	1,037	825	12,793	11,727	679	0	0	1,080	960	441	127	86	346	393	282	390	515	1241	+00'- 3CF	435	451	2	0	0	0	0	0	0				0 0	0 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0					0 0	0	872	5,000	797	951
NON-RESIDENTIAL Non-Residential	Units	D N/A	A/NO	0 N/A	0 N/A	0 N/A	0 N/A	1 032 CE		2.248 SF	3,457 SF	2,750 SF	42,643 SF	469,070 SF	2,265 SF	0 N/A	0 N/A	10,804 SF	2,657 CF	1 470 SF	1,274 SF	976 SF	3,455 SF	3,932 SF	2,825 SF	1,948 SF	5,750 SF	4,210 SF	0,044 SF	2,174 SF	2,255 SF	5.476 SF	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	O N/A	O N/A	N/N O	1 339 SF	A/N/O	1.414 SF	0 N/A	0 N/A		0 N/A	0 N/A	0 N/A	O N/A	O N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	0 N/A	4,015 5F	O N/A	O N/A	O N/A	O N/A	0 N/A	8,723 SF	1,000 SEAT	2,657 SF	9,511 SF 12,643 SF
Average Flow Rate Non-	Residential (gpd/sf)	> 0	0 0	0	0	0	0	0 0	0.30	0:30	0:30	0:30	0.30	0.025	0.30	0	0	0.10	0.10	0.0	0.10	0.10	0.10	0.10	0.10	0.20	0.10	0.10	0.10	0.20	0.20	0.20	0	0	0	0	0	0	0		0 0	0 0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0					0 0	0	0.10	2	0.30	0.10
Residential Average	_	000	009	009	800	800	009	008	0	0	0	0	0	0	0	0	0	200	3,000	400	330	099	1,600	1,200	800	800	1,200	0 0	0 0		0 0	0	0	0	0	0	0	0	0		0	0 0	0 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0					0 0	0	, 0	330	0	0 0
Residential Residential	Dwelling Units	7 (	3 8	5 2	4	4	2	4 0	0	0	0	0	0	0	0	0	0	- 0	0 5	2 6	-	2	8	9	4	4	9	0 0	0	0 0	0 0	0	0	0	0	0	0	0	0		0 0	0 0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	5 0				0 0	0	, 0	-	0	0 0
Average Daily Flow -	Residential (gpd/unit)	330	300	300	200	200	300	700	0	0	0	0	0	0	0	0	0	200	000	200	330	330	200	200	200	200	200	0 0	0 0	0 0	0 0	0	0	0	0	0	0	0	0		0 0	0 0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0					0 0	0	, 0	330	0	0 0
Rida SF	5 600	0,400	1,724	3,487	3,405	4,083	3,893	2,868	5,004	4.496	6,915	5,500	511,712	469,070	4,529	0	0	43,215	7.67	7,7,	2,547	2,927	6,911	11,797	5,650	3,896	25,751	8,420	10,044	7 750	2.255	0	0	0	0	0	0	0	0		0	0 0	0 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0			0		0 0	0	17,445	0	5,313	9,511
LandUse	FAR	0.295	0.474	0.670	0.613	0.497	1 130	9701	0.670	066.0	1.144	0.711	9.731	8.920	0.988	0.000	0.000	3.989	0.000	0000	1.359	1.169	1.988	2.303	1.351	1.999	1.697	1.994	0.999	1 070	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0000	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	1.390	0.000	0.620	1.000
Parcel Area	(sf)	2 440	3,640	5,203	5,558	8,223	8,337	5,198	9.211	4.541	6,044	7,737	52,585	52,585	4,586	4,400	4,400	10,833	2 901	1750	1,875	2,505	3,476	5,122	4,183	1,949	15,178	4,223	10,039	7 251	167'	11.745	1,056	17,187	44,829	4,331	6,252	6,252	6,250	0,230	0007	3 706	4 300	3,600	2,000	7,500	1,900	3,328	3,120	3,016	3,016	4 3 4 2	5,170	3,760	3,125	6,250	4,177	1,390	4,308	3,947	4,047	4,922	4,394	3,633	6,557	12,547	58,772	8,567	9,510
Address	Number Street	251 301H SI	3010 BROOK SI	3018 BROOK ST	3024 BROOK ST	3036 BROOK ST	3048 BROOK ST	3060 BROOK SI	300 27TH ST	2938 WFBSTFRST	2944 WEBSTERST	3120 WEBSTERST	3300 WEBSTERST	3300 WEBSTERST	3324 WEBSTERST	3340 WEBSTERST	349 34TH ST	415 24TH ST	241 24TH ST	35.2 24TH ST	354 24TH ST	358 24TH ST	2404 BROADWAY	3000 BROOK ST		3388 PIEDMONT AVE	3400 BROADWAY	2865 BROADWAY	3074 BROOK SI	2845 WAVERLY 31	265 29TH ST	WFBSTFR ST	WEBSTER ST	2315 VALDEZ ST	2330 WEBSTER ST	2340 WEBSTER ST	2335 WAVERLY ST	2321 WAVERLY ST	2316 VALDEZ SI	2229 VALDEZ SI	2322 VALDEZ 31	271 24TH ST	2350 WAVERIY ST	2356 WAVERLY ST	322 24TH ST	326 24TH ST	338 24TH ST	2412 VALDEZ ST	2416 VALDEZ ST	2424 VALDEZ ST	2426 VALDEZ ST	2430 VALDEZ 31	VALDEZ ST	2452 VALDEZ ST	VALDEZ ST	2425 VALDEZ ST		2409 VALDEZ ST	VALDEZ ST	VALDEZ SI	245 301H SI	3050 BROOK SI	3070 BROOK SI	3416 PIFDMONT AVE	BAY PL	2333 HARRISON ST	2619 BROADWAY	3334 WEBSTER ST	2301 BROADWAY 299 29TH ST
Description	Cloud Comity Decide and a consequent of the constant	Z Single ramily Residences on same lot	Need to confirm multiple units - blue frim	Need to confirm multiple units - set back	Multi-family residential (3) - yellow	Need to confirm multiple units	Multi-family residential (2)	Mord World Second Deficient	Wold Works speech ratificions: Office Building	2	McKinnon Massage Institute	Medical-Dental Building	Bank of the West, Parking Structure, Medical Office	Parking Structure	2	Parkinglot	Parkinglot	Restaurant/Retail, Residential Lofts (upper floors)	Mont Market (downstairs) Decidential (10) (unstairs)	Daycare/art space (instairs) Residential (instairs)	Vacant (downstairs), Residential (upstairs)	Unclear (downstairs), Residential (upstairs)	Retail (vacant), Residential (upstairs)	Live/work (6)	Drunken Fish, Traci's Nails, Residential	DeLugach & DeLugach CPA's, Residential (4)	Emerson Personal Training, Pledmont Ave. Lofts (6)	Rids in Motion, Uffice/Live-work space upstairs	Deservational Offices (E)	Molessional Offices (5)	Office Building	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Parking lot	Vacant office/church	First Presbyterian Church	ć	Pet Store, Bay Area Wilderness Training Broadway Liguor
WRTLand	Use	MOK			MDR		MDR							Ъ	T			₽:	T	Π		ΠM			ΩM				MOCIM		5 5			Ы	П														Ы																				RET
NdA	000000000000000000000000000000000000000	009 070200300	009 0 / 0302800	009 070303100	009 070303200	009 0 203 0 300 0 0 0 0 0 0 0 0 0 0 0 0 0 0	009 070303600	009 0 / 030 3800	009 068502901	009 070101300	009 070101400	009 07 05 00 10 7	009 07 3000402	009 07 30 00 40 2	009 07 3000805	009 073001102	009 073001202	009009990800	008 066/00602	008 067201000	008 067201100	008 067201200	008 067300300	009 070302600	009 070304300	009 073100100	009 073200600	009 068600101	000 077304700	008 068900700	009 06/100402	008 066700503	008 066800202	008 066800400	008 066800907	008 066801102	008 0090000	008 066901000	008 066901300	008 066901400	008 086901500	008 062701000	008 067001700	008 067001800	008 067102500	008 067102600	008 067102702	008 067102802	008 067102902	008 067103002	008 067103102	008 067103302	008 067103402	008 067103502	008 067200701	008 067 200 702	008 067 200 800	008 067 200 900	009 068502700	009 068502800	009 070200400	009 070303900	009 070304000	009 073103902	010 076800203	009 0020000	009 068400302	009 073000904	008 066601300

								RESIDEN HAL			NON-RESIDENTIAL		
NDV	WRT Land		Address	Parcel Area	Land Use	DINASE	Average Daily Flow -	Residential	Residential Average	Average Flow Rate Non-	Non-Residential	Non-Residential Use	Total Average Daily
Z Z	Nse	Description	Number Street	(st)	FAR	or find	Residential (gpd/unit)	Dwelling Units	Daily Flow (gpd)	Residential (gpd/sf)	Units	Average Daily Flow (gpd)	Flow (gpd)
009 070200101	RET	Grocery Outlet	2910 BROADWAY	102,330	0.326	33,317	0	0	0	0.10	33,317 SF	3,332	3,332
009 070200102	RET	Grocery Outlet (Parking Lot)	2910 BROADWAY	29,017	0.000	0	0	0	0	0	0 N/A	0	0
010076800100	RET	7-Eleven	2350 HARRISON ST	6,153	0.375	2,307	0	0	0	0.10	2,307 SF	231	231
010 076800205	RET	Vacant storefront	2336 HARRISON ST	4,261	0.000	0	0	0	0	0	0 N/A	0	0
010 079800307	RET	Kelley Paper Store	296 27TH ST	19,130	0.599	11,453	0	0	0	0.10	11,453 SF	1,145	1,145
010 079800308	RET	Label Art of California	290 27TH ST	26,428	0.742	19,613	0	0	0	0.10	19,613 SF	1,961	1,961
008 066701 100	SER	YMCA, Parking Structure	2330 WEBSTER ST	45,027	7.329	330,021	0	0	0	0.30	41,253 SF	12,376	12,376
008 066701100	굽	YMCA, Parking Structure	2330 WEBSTER ST	45,027	6.413	288,768	0	0	0	0.025	288,768 SF	7,219	7,219
008008990800	SER	Creative Growth	355 24TH ST	9,992	1.000	9,992	0	0	0	0.10	9,992 SF	666	666
008 067201303	SER	Callrade Bindery	366 24TH ST	5,004	1.172	5,865	0	0	0	0.10	5,865 SF	587	587
008 067201401	SER	Soja- Kung Fu Studio, Roberts Electric	2406 WEBSTERST	7,706	1.000	7,706	0	0	0	0.10	7,706 SF	171	771
008 067201500	SER	Hertz Car Rental	2400 WEBSTERST	5,861	966:0	5,840	0	0	0	0.10	5,840 SF	584	584
008 067201800	SER	Gill's Electric	2410 WEBSTERST	6,246	1.000	6,246	0	0	0	0.10	6,246 SF	625	625
008 067201900	SER	Bay Area Bikes, Avis Car Rental	2428 WEBSTERST	12,492	1.000	12,492	0	0	0	0.10	12,492 SF	1,249	1,249
009 068300200	SER	Rosewood House	2523 BROADWAY	3,679	0.931	3,426	0	0	0	0.10	3,426 SF	343	343
006008890600	SER	Safe Co, Shasamane, Gods Gym	2511 BROADWAY	12,407	0.911	11,308	0	0	0	0.10	11,308 SF	1,131	1,131
002 008 90 600	SER	Just Pet Me	2555 BROADWAY	15,634	0.830	12,972	0	0	0	0.10	12,972 SF	1,297	1,297
009 070100300	SER	Summit Bank	2951 BROADWAY	10,541	606:0	9,586	0	0	0	0.10	9,586 SF	626	626
009 070401500	SER	Harry Clark Plumbing	3026 BROADWAY	5,312	716.0	5,193	0	0	0	0.10	2,596 SF	260	260
009 0731 016 02	SER	Dulux Paints	3356 PIEDMONT AVE	14,271	0.445	6,346	0	0	0	0.10	6,346 SF	635	635
009 073200502	SER	٤	3403 PIEDMONT AVE	2,284	176.0	2,219	0	0	0	0.10	2,219 SF	222	222
0009058906000	VACR	VacantLot	256 28TH ST	4,399	0.000	0	0	0	0	0	0 N/A	0	0
009 0731 021 00	VACR	Vacant	3378 PIEDMONT AVE	2,353	0.000	0	0	0	0	0.10	1,459 SF	146	146
008 06 66 01 901	WARE	Warehouse (vacant)	2354 VALLEY ST	8,270	0.628	5,190	0	0	0	0.10	2,595 SF	260	260
											Total		249,600

1) The Land Use floor are aratio (FAR) is calculated by dividing the estimated building square footage by the parcel area.

2) Where more destinate information was not available building square footage is calculated by multiplying the building robin properties.

2) Where more destinate information was not available building square footage is calculated by multiplying the buildings.

3) If a particular parcel industed multiple buildings with differing number of stories only the greatest number of stories were counted for all buildings.

4) For automotive retail assume generation is equal to "commercial" average flow rate.

5) For water observation estimate calculates average daily (Those you grady and does not account for peak flows.

7) All apartments are assumed to have a generation rate of 200 gpd/unit unless otherwise noted.

8) For assisted living community assume generation rate is equal to 150 gpd/unit unless otherwise resisted into commercial/retail are as sarimed to be equal to the building footprint.

9) For mixed use, first floor commercial/retail are as sarimed to be equal to the building footprint.

10) Sewer generation has been included for parking structures only (not parking lots).

(From City of Oakland Sanitary Sewer Design Guidelines, revised August 2008)

Automobile parking	15/pdb cz0:0	lbd/st
Automobile repair garage	0.10 gpd/sf	Js/pdi
Church - Fixed Seat	5 9	5 gpd/seat
Commercial	0.10 gpd/sf	Js/pdi
Gymnasium	0.30 gpd/sf	Js/pdi
Manufacturing - industry	0.10 gpd/sf	Js/pdi
Medical Building	0.30 gpd/sf	Js/pdi
Motel	150 g	150 gpd/room
Office Building	0.20 gpd/sf	Js/pdl
Residential - 1 bedroom apt. or condo	150 g	150 gpd/unit
Residential - 2 bedroom apt. or condo	200 g	200 gpd/unit
Residential - duplex	300 g	300 gpd/unit
Residential - single family dwelling	330 g	330 gpd/unit
Residential - artist dwelling	0.30 gpd/sf	Js/pdi
Residential artist dwelling	100 g	100 gpd/unit
Rest Home	85 g	85 gpd/bed
Restaurant - fixed seat	50 g	50 gpd/seat
Retail Area	0.10 gpd/sf	Js/pdi

APPENDIX A: INFRASTRUCTURE AND UTILITIES

#### Table 8.2: Water Demand Estimate – Existing Land Use

#### Methodology

To assist with review of redevelopment alternatives with EBMUD as part of Phase II: "Exploring Alternatives," BKF has prepared a water demand estimate based on existing land use within the Project Area. For consistency, since the City of Oakland already has documented average daily flow rates for sewer generation, the average daily water demand rates are simply 10-percent higher than the sewer generation rates to account for system losses and leakage in the system. The Floor-Area Ratio is based on multiplying the building footprint square footage by the number of stories. Therefore, it is a slight overestimate of usable square footage. On parcels with multiple structures, the highest number of stories were applied to all buildings. The total average daily water demand based on existing land use information received from WRT on April 23<sup>rd</sup>, 2009 is 274,600 gpd (refer Table 8.2). This estimate represents the existing condition for the Project Area and will serve as a baseline for review of redevelopment alternatives.

WRTland		Address	Parcel Area			Average Dally Flow - 1	Residentia	100 100 100 100 100 100 100 100 100 100	Average Flow Rate Non-		120712	> 100
APN Use	Description	Number Street		AR	Bldg SF	Residential (gpd/unit)	Dwelling Units	Daily Flow (gpd)	Residential (gpd/sf)	Units	Average Daily Flow (gpd)	Flow (gpd)
	Former Porsche/Audi Showroom (vacant)	2345 BROADWAY	5,855	0.919	5,380	0	0	0	0.11	5,380 SF	592	592
	Former Porsche/Audi Showroom (vacant)		5,515		5,515	0	0	0	0.11	5,515 SF	607	409
	Former Porsche/Audi Showroom (vacant)	2337 BROADWAY	12,317		2,698	0	0	0	0.11	5,698 SF	627	627
601401 AR-DEAL	Former Mazda Showroom (vacant)	2315 BROADWAY	26,894		19,044	0	0	0	0.11	19,044 SF	2,095	2,095
H	Acura	265 27TH ST	42,379		27,728	0	0	0	0.11	27,728 SF	3,050	3,050
	Acura Auto Sales	306 24TH ST	43,297		30,572	0	0	0	0.11	30,572 SF	3,363	3,363
008 067103602 AR-DEAL	VW Auto Sales Yard	2456 VALDEZ ST	5,630		0	0	0	0	00:00	0 N/A	0	0
008 067103703 AR-DEAL	VW Auto Sales Yard	2460 VALDEZ ST	3,232	0.000	0	0	0	0	00:00	0 N/A	0	0
008 067200100 AR-DEAL	Audi Showroom	2550 WEBSTERST	19,805	0.965	19,105	0	0	0	0.11	19,105 SF	2,102	2,102
	OK Enterprises	2500 WEBSTERST	6,246	1.000	6,246	0	0	0	0.11	6,246 SF	687	687
H	Saturn of Oakland (Showroom and Sales Lot) Vacant	2417 BROADWAY	29,583		6.375	0	0	0	0.11	6,375 SF	701	701
	Bay Bridge Jeep , Z Cafe	2735 WEBSTERST	28.455	T	56.909	0	0	0	0.11	28.454 SF	3.130	3.130
t	Volkswagen (Salec Lot)	2710 BROADWAY	12 732		0				0	A/N/O	0	0
$^{+}$	And Calce Lot	AAMONO 01/2	17 696	0.000	0 0	0 0	0	0 0	011	4 25.7 CE	6007	089
+	Vollemone	2030 BROADWAI	47,000	T	076 67			> <		0,007 05	2 470	940
+	Volkswagen	2720 BROADWAY	62,462	t	63,248	0	0	0	0.11	31,624 SF	3,479	3,479
+	Nissan Showroom	2800 BROADWAY	13,253	1	29,382	0	0	0	0.11	29,382 SF	3,232	3,232
+	Nissan Showroom	2820 BROADWAY	30,794	0.000	0	0	0	0	0	0 N/A	0	0
+	NorCal Motors Inc	2857 BROADWAY	3,499	1.000	3,499	0	0	0	0.11	3,499 SF	385	385
	Nissan Used Cars Lot	2855 BROADWAY	17,196	0.000	0	0	0	0	0	0 N/A	0	0
	Kia Showroom (vacant)	2819 BROADWAY	661'1	0.926	7,219	0	0	0	0.11	7,219 SF	794	794
L	Mercedes Benz of Oakland	2919 BROADWAY	6,734	1.000	6,734	0	0	0	0.11	6,734 SF	741	741
009 070100800 AR-DEAL	Mercedes Benz of Oakland	2901 BROADWAY	5,134	1.000	5,135	0	0	0	0.11	5,135 SF	565	565
L	Mercedes Benz of Oakland	2964 BROADWAY	27,343	0.756	20,672	0	0	0	0.11	20,672 SF	2,274	2,274
L	Honda	3326 PIEDMONT AVE	10.454	1.000	10,454	363	-	363	0	0 N/A	0	363
L	Green World Auto Sales	BROOK ST	5.154	0.135	969	363	-	363	o	0 N/A	0	363
	Honda (Sales Lot)	3318 PIEDMONT AVE	3,250	0.000	0	0	0	0	0	0 N/A	0	0
H	Retail Showroom (vacant)		19 270		19 270	c	U	O	0.11	19 270 SF	2 120	2 120
	GMC-Pontiac. Buick. Cadillac	3093 BROADWAY	40.237		34.396	0	0	0	0.11	34.396 SF	3.784	3.784
_	Bay Bridge Auto Center Used Cars (one small bldg)	3073 BROADWAY	80,813	l	8.900	0	0	0	0	0 N/A	0	. 0
t	Bay Bridge Auto Center Used Cars	3001 BROADWAY	42.068		0	0	0	0	0	0 N/A	0	0
H	Bay Bridge Auto Center Used Cars	3015 BROADWAY	10.147	0.000	0	0	0	0	0	0 N/A	0	0
H	Bay Bridge Auto Center Used Cars	3025 BROADWAY	15,560	0.000	0	0	0	0	0	0 N/A	0	0
H	Bay Bridge Auto Center Used Cars	3039 BROADWAY	15,211	0.000	0	0	0	0	0	0 N/A	0	0
H	Honda of Oakland (Sales Lot)	3359 BROADWAY	8,017	0.000	0	0	0	0	0	0 N/A	0	0
009 073000300 AR-DEAL	Honda of Oakland - Used Cars	3329 BROADWAY	4,804	1.000	4,804	0	0	0	0.11	4,804 SF	528	528
009 073200700 AR-DEAL	Honda of Oakland	3330 BROADWAY	15,066	0.66.0	14,920	0	0	0	0.11	14,920 SF	1,641	1,641
009 073300407 AR-DEAL	Honda of Oakland (Sales Lot)	3401 BROADWAY	27,978		0	0	0	0	0	0 N/A	0	0
008 06 69 01 100 AR-PG	Parking Structure	260 23RD ST	14,800	000.6	133,192	0	0	0	0.028	14,799 SF	407	407
008 066600300 AR-Serv	Parking/service lot (vacant)	455 24TH ST	12,225	0.000	0	0	0	0	0	0 N/A	0	0
	Parking/service lot (vacant)	443 24TH ST	5,416	0.000	0	0	0	0	0	0 N/A	0	0
_	Former Garage (vacant)	421 24TH ST	16,695	0.000	0	0	0	0	0.028	16,597 SF	456	456
	Parking/service lot (vacant)	2333 BROADWAY	5,277	0.000	0	0	0	0	0	0 N/A	0	0
H	Parking/service lot (vacant)	2336 VALLEY ST	10,257		0	0	0	0	0	0 N/A	0	0
	Parking/service lot (vacant)	2320 VALLEY ST	21,000		0	0	0	0	0	0 N/A	0	0
$\dashv$	Former Garage (vacant)	444 23RD ST	11,500	1.000	11,500	0	0	0	0.028	11,500 SF	316	316
$\dashv$	Parking/service lot (vacant)	VALLEY ST	3,750		0	0	0	0	0	0 N/A	0	0
-	Besa Auto Care	2350 WEBSTER ST	6,500		10,000	0	0	0	0.11	10,000 SF	1,100	1,100
$\dashv$	Former Garage (vacant)	320 23RD ST	5,475	0.000	0	0	0	0	0	0 N/A	0	0
+	Torchio's Brake Service	2344 WEBSTER ST	4,450	0.000	0	0	0	0	00:00	0 N/A	0	0
+	Auto Garage & Service Lot	2359 WAVERLY ST	2,002	0.551	2,755	0	0	0	0.11	Z,755 SF	303	303
+		2302 VALDEZ ST	12,609	1.000	12,609	0	0	0	0.028	12,609 SF	347	347
+	- 1	2342 VALDEZ ST	8,750	0.438	3,831	0	0	0	0.11	3,831 SF	421	421
_	Wheel Works	2359 HARRISON SI	11,12/	+	020,11	0	0	0	0.11	11,020 SF	1,212	1,212
+	VIP Collision Repair	293.2/IHSI	7/1/7	000.1	2,177	0	0	0	0.11	2,177 SF	239	739
+	Acura	300 24 IH SI	0,500	000.1	005,0	0	0	0	0.11	-K 0000'9		715
+	Acura (Parking Lot)	310 241H31	3,000	t	0 0		0		0 0	0 N/A		0 470
008 067200300 AR-Serv	Audi Parts & Service	329 201H SI	19,805	000.	c08/61	0 0		0	I.0	18,805 51		2,179
+	Auto service parking yard	329 20 III 31	0,125	0.000	0 0	0 0	0	0		A M O		> <
+	Auto service parking yard	2433 VALDEZ 31	4,230	0.000	0 0	0 0	0		0 0	O N/A		0
+	Rest Detail Inc	2436 RROADWAY	10.020	800.0	900 0		0	0	011	0 000 CF		1100
+	2000 Determine:	403 28TH ST	13.071	0.329	4 300	0	0	0 0	0.11	4 300 SF		473
t	Collision Service Center, Auto Care Shop	295 29TH ST	25,171	0.635	15,980	0	0	0	0.11	15,980 SF	1,758	1,758
H	King Kovers - King of Seat Covers	288 28TH ST	4,002	1.000	4,002	0	0	0	0.11	4,002 SF		440
009 068507000 AR-Serv	Auto Trends Body Shop	2840 BROADWAY	966'6	0.901	9,010	0	0	0	0.11	9,010 SF		991
	Mark Morris Tires	2850 BROADWAY	7,226	1.004	7,257	0	0	0	0.11	7,257 SF		798
-	Lee Myles Transmissions	2943 BROADWAY	12,234	0.614	7,510	0	0	c	0.11	170 01		100
		VALAIGA COOL TOOC						,		1,5 IU SF		826

18   18   18   18   18   18   18   18		WRTIand		Address	Parcel Area			Average Daily Flow - 1	Residential	-	Average Flow Rate Non-	Non-Residentia	Non-Residential Use	Total Average Da
All control property   All control property		Use	Description	_	(sf)	Land Use FAR	Bldg SF	Residential (gpd/unit)	Units	Flow (gpd)	Residential (gpd/sf)	Units	Average Daily Flow (gpd)	Flow (gpd)
	$\vdash$	AR-Serv	Mercedes Benz of Oakland (parking lot)	2927 BROADWAY	6,237	0.000	0	0	0		0.00	0 N/A	0	0
	+	AR-Serv	Mercedes Benz of Oakland	340 29TH ST	7,789	1.000	7,789	0 0	0 0	0 0	0.11	7,789 SF	857	857
No.   No.	+	AR-Serv	Mercedes Benz of Oakland Mercedes Benz of Oakland (narking lot)	340 29TH ST	3,120	000.	3,120	0 0	0 0	0 0	0.11	3,120 SF	343	343
May   Manufacturent   May   Manufacturent   May   May   May   May   May   Manufacturent   May   May	+	AR-Serv	Mercedes Benz of Oakland (parking lot)	2930 WEBSTERST	3,635	0.000	0	0	0	0	0	0 N/A	0	0
Control Activation of	Н		AAMCO Transmissions	3050 BROOK ST	9,576	0.694	6,641	0	0	0	0.11	6,641 SF	730	730
New York mean water with the control of the	_		American Auto Upholstery and Glass	3080 BROADWAY	5,985	1.000	5,985	0	0	0	0.11	5,985 SF	658	658
ANNY MANONALIMENT CONTRINGUAL STATE AND	+		Automotive Collision Repair	30/4 BROADWAY	5,147	1.000	5,14/	0	0	0	0.11	5,147 SF	266	996
Actor   Designation   Designation   Actor   Designation   Actor	+		Precision Motors Auto Smon Test Center	3060 BROADWAY	5.976	1,000	5.976	0 0	0 0	0 0	0.11	5.976.SF	657	657
Act   Act	+		AAU Seat Covers	3052 BROADWAY	6,423	0.650	4.177	0	0	0	0.11	4,177 SF	459	459
	+	AR-Serv	Broadway Smog Tuneup (parking lot)	3044 BROADWAY	4,747	0.000	0	0	0	0	0.11	503 SF	52	32
Column   C	Н	AR-Serv	Broadway Smog Tuneup	3040 BROADWAY	4,543	0.559	2,540	0	0	0	0.11	2,540 SF	279	279
Object Programme (Account Account Accou	$\dashv$	AR-Serv	Union Auto	3000 BROADWAY	9,763	1.000	9,764	0	0	0	0.11	9,764 SF	1,074	1,074
CASE OF TRANSPORTER STATE AND ADMINISTRATION OF TRANSPORTER STATE ADMINISTRATION OF	$\dashv$	- 1	Roger's Autoworks	3022 BROADWAY	5,554	0.569	3,161	0	0	0	0.11	3, 160 SF	348	348
Control         Control <t< td=""><td><math>\dashv</math></td><td>- 1</td><td>Enterprise Car Rental</td><td>3030 BROADWAY</td><td>10,354</td><td>0.076</td><td>787</td><td>0</td><td>0</td><td>0</td><td>0.11</td><td>787 SF</td><td>87</td><td>87</td></t<>	$\dashv$	- 1	Enterprise Car Rental	3030 BROADWAY	10,354	0.076	787	0	0	0	0.11	787 SF	87	87
Open State of All State And All Sta	+	- 1	GMC-Pontiac, Buick, Cadillac (parking lot)	3093 BROADWAY	21,057	0.000	0	0	0	0	0	0 N/A	0	0
Region from the control of t	+	- 1	GMC-Pontiac, Buick, Cadillac (parking lot)	3093 BROADWAY	7,236	0.000	0	0	0	0	0	0 N/A	0	0
The control many statement	+	AR-Serv	Honda of Oakland	327 34TH ST	39,859	1.696	67,583	0	0	0	0.11	33, 792 SF	3,717	3,717
11   A. C.	+	AR-Serv	H Beck BMW Service	2344 HARRISON ST	7,916	0.690	5,462	0	0	0	0.11	5,462 SF	601	601
FIG.         TABLE AND ADMINISTRATION OF ADMINISTRAT	+	AR-Serv	Rouse Tire	2340 HARRISON ST	7,282	0.649	4,727	0	0	0	0.11	4,727 SF	520	520
CF. Ministry Statement Approaches (2016)	903000		Lakeside Care, Burnto Gordo, Soprano, Manyda Inal	326 23KU SI	5,950	1,000	5,753		0	0 0	0.33	5,953 SF	1,964	1,964
E. S.         Description         Color	202000		MUA RESIGNIALI	2442 WEBSIERSI	0,240	0000	0,240		0	0 0	0.33	0,240 3F	2,001	190'7
Risk Aucht für gelenden Verhartenste bild Varianten vom den Aucht für gelenden Verhartenste berunden vom den Aucht für gelenden vom den Aucht gelenden vom den Aucht für gelenden vom den Aucht	300100	2		2300 BROADWAT	323	0.000	0		0	0 0	0	O N/A	> 0	
High Multi-projections of the projection of	201300	Z E	Multi Eamily Docidential Anartments	U BROADWAY	101	0.000	072.3	0.00	0 %	0 2 0	0	O N/A		0 0
December   December	000000	¥ 5	Multi-ramily Residential - Apartments	401 241H 51	3,955	1.459	60/10	027	0 5	3,520	0 0	0 N/A	0 0	3,520
Mail Finity Residence (Apparticulation)   2015 Mail Finity Residence (Apparity Residence (Apparticulation)   2015 Mail Finity Residence (Apparity Residence (Apparticulation)   2015 Mail Finity Residence (Apparti	800203	ž	Multi-Family Residence	367 24 IH ST	5,000	1.335	6,673	220	01	2,200	0	0 N/A	0	2,200
Fig. Not   Fig.   Fig	000000	ž	Multi Family Kesidential	2346 VALDEZ SI	4,165	2.550	10,621	077	77	2,640	0 0	0 N/A	0	2,640
Heap   Multi-Timp   Multi-Tim	000000	Ě	Multi-ramily Residence (Apartment Bldg)	2337 HARRISON SI	12,483	0.841	10,499	770	71	2,640	0	0 N/A	0	2,640
In this first in incidence   2000	000000	ž	Mutti-Family Residence (Apartment Bldg)	206 23RD SI	4,303	1.479	6,365	077	6 -	086'1	0 0	0 N/A	0	086'1
HIST MARIE TIME MARIET MARIE	001000	ž	Multi-ramily residence (Apartment Bldg)	2300 WAVERLY SI	8,005	1.354	10,838	027	4 0	980	0	O IWA	0 0	880
HOR Stage from full positioner operation of the full from the f	100000	ž	Multi-Family Residence (Apartment Bldg)	262 281H31	3,92/	0.551	2, 164	77.6	, i	086,1	0 0	O N/A	0 0	1,980
(MR Stage from the placeties (paper from the pl	200002	ž	Valdez Plaza - Assisted Living community	780 Z81H 31	44,360	5.253	234,004	100	061	067,42	0 6	A W A	0 02	750.0
10. Stype from Mycolarene 2000 Mode of the Stype from Mycolarene 2000 Mod	101000		Multi Camily Decidence (apartment bide)	122 BAV BI	50,312	2 1 4 7	21 017	000	0 6	0 200	43.0	40 BED	0/4/0	0,970
CDR         STAGE CONTRIBITION         CONTRIBUTION         CONTRIBITION         CONTRIBUTION         CONTRIBUTION <td>000000</td> <td>1 2</td> <td>Viole Family Decidence (apartment bridg)</td> <td>225 DAT FL</td> <td>2 001</td> <td>0.450</td> <td>1 270</td> <td>24.3</td> <td>+7</td> <td>36.3</td> <td>0 0</td> <td>V/N/O</td> <td></td> <td>363</td>	000000	1 2	Viole Family Decidence (apartment bridg)	225 DAT FL	2 001	0.450	1 270	24.3	+7	36.3	0 0	V/N/O		363
LDR         Stage Family Residence         23.00 WANTERNEYSTY         3.250         0.914         2.92         8.83         1         8.83         0         0         0.MA           LDR         Stage Family Residence         23.80 WANTERNEYSTY         3.250         0.591         1.297         8.83         1         2.25         0         0         0.MA           LDR         Stage Family Residence         22.80 WANTERNEYSTY         3.250         0.591         3.83         1         2.25         0         0         0.NA           LDR         Marita Family Residence Capabob         2.32 WANTERNEYSTY         3.250         0.591         3.83         0         0         0         0.NA           LDR         Marita Family Residence Capabob         2.32 WANTERNEYSTY         3.75         0.481         3.83         1         3.83         0         0         0.NA           LDR         Stage Family Residence         2.32 WANTERNEYSTY         3.75         0.481         3.83         1         3.83         0         0         0         0.NA           LDR         Stage Family Residence         2.32 WANTERNEYSTY         2.75         0.481         3.83         1         3.83         0         0         0         <	000006	Z Z	Single Family Residence	2333 WAVERLI 31	2 951	0.000	0/6'-	363	- (-	363	0 0	O N/A	0 0	363
LDR         Significantly Residence         2234 WAVERNESYST         3.250         0.591         1.77         8.35         1.9         7.00         0.MA           LDR         Significantly Residence         2234 WAVERNESYST         3.250         0.591         1.7         8.3         2         7.20         0.0         0.0           LDR         Single Family Residence         2242 WAVERNESYST         3.250         0.531         3.29         3.2         2         7.20         0.0         0.0           LDR         Malari Family Residence         2243 WAVERNESYST         3.20         0.531         3.20         0.0	001200		Single Family Residence	2330 WAVERIY ST	3 200	0.000	2 923	363	-  -	363		A/M O		363
LDR         Symple Family Residence         2322 MANASTY ST.         2320         1877         2320         22         220         100 MAN           LDR         Symple Family Residence         2322 MANASTY ST.         1320         0.545         3.50         2         2.60         0         0.04A           LDR         MANI Family Residence (Dupley)         2322 MANASTY ST.         13.75         1.59         3.50         2         660         0         0.04A           LDR         MANI Family Residence (Dupley)         231 ZATI ST.         1.75         1.59         3.50         1         5.65         0         0         0.04A           LDR         Stapp family Residence (Dupley)         231 ZATI ST.         1.75         1.75         1.75         0.45         1.75         3.60         0	001300		Single Family Residence	2334 WAVEDIV ST	3.250	0.301	1 270	363		363		A/N/O		363
LDR         Stapple Family Residence Dipulard         2222 MANIETY         3 000         0.11         5.95         0.05         0.06         0.06           LDR         Multiframily Residence Dipulard         2.222 MANIETY         3.177         0.175         1.559         3.03         1         5.65         0         0         0.06           LDR         Stapple Family Residence Dipulard         2.217 (STHTST)         0.175         1.259         3.03         1         5.63         0         0         0         0         0           LDR         Stapple Family Residence Dipulard         2.217 (STHTST)         0.175         1.323         3.63         1         5.63         0 <td>001300</td> <td></td> <td>Single Family Residence</td> <td>2338 WAVERIY ST</td> <td>3.250</td> <td>0.559</td> <td>1 817</td> <td>363</td> <td>- 6</td> <td>726</td> <td></td> <td>A/M O</td> <td></td> <td>726</td>	001300		Single Family Residence	2338 WAVERIY ST	3.250	0.559	1 817	363	- 6	726		A/M O		726
LDR         Stage Entity Residence Option         2272 PHIST         31725         6.04         2.99         330         2         660         0         0 MAA           LDR         Stage Entity Residence Option         2287 PHIST         3.1725         1.599         3.60         1         0.04         0.04           LDR         Stage Entity Residence Option         2272 PHIST         3.627         1.223         3.62         1         3.63         0         0         0.04           LDR         Stage Entity Residence         2282 RICHAMOND ARE         2.741         1.292         3.63         1         3.63         0	001500		Single Family Residence	2342 WAVERLY ST	3.000	0.531	1.592	363	-	363	0	0 N/A	0	363
LDR         Stage family Residence Duples)         2217 (2014) STATE STATE         1.559         3.60           1         0 <td< td=""><td>200600</td><td>2</td><td> Multi-Family Residence (Duplex)</td><td>2429 VALDEZ ST</td><td>3.125</td><td>0.944</td><td>2.950</td><td>330</td><td>2</td><td>099</td><td>0</td><td>0 N/A</td><td>0</td><td>099</td></td<>	200600	2	Multi-Family Residence (Duplex)	2429 VALDEZ ST	3.125	0.944	2.950	330	2	099	0	0 N/A	0	099
LDR         Stage Family Besidence         277, 2781 Binchandrin Mr.         2,00.4         1,93.1         3.6.3         1         3.6.3         0         0 MA           LDR         Stage Family Besidence         2222 Binchandrin Mr.         2,60.4         1,13.4         3.6.3         1         3.6.3         0	504600		Multi-Family Residence (Duplex)	281 29TH ST	3.177	0.475	1.509	330	2	099	0	0 N/A	0	099
LDR         Stage Family Residence         2287 (RCHANDAID AME         2.84         1.128         36.94         1.95         1.09 (Mark Participation)         1.00 (Mark Participation) <td>504700</td> <td>2</td> <td>Single Family Residence</td> <td>277 29TH ST</td> <td>3.037</td> <td>0.458</td> <td>1.391</td> <td>363</td> <td>-</td> <td>363</td> <td>0</td> <td></td> <td>0</td> <td>363</td>	504700	2	Single Family Residence	277 29TH ST	3.037	0.458	1.391	363	-	363	0		0	363
LDR         Study Entity Residence         2222 RICHIANDO ME         2.27.1         0.113.4         36.3         1         3.83.5         0         D (MA)           LDR         Study Entity Residence         2222 RICHIANDO ME         2.20.1         1.104         36.3         1         3.83         0         0         0.MA           LDR         Study Entity Residence         2.20.2 RICHIANDO ME         1.72.4         0.546         1.106         36.3         1         0         0         0.MA           LDR         Study Entity Residence         2.20.2 RICHIANDO ANE         2.27.5         1.106         36.3         1         0 </td <td>504800</td> <td></td> <td>Single Family Residence</td> <td>2831 RICHMOND AVE</td> <td>2,696</td> <td>0.454</td> <td>1,223</td> <td>363</td> <td>-</td> <td>363</td> <td>0</td> <td></td> <td>0</td> <td>363</td>	504800		Single Family Residence	2831 RICHMOND AVE	2,696	0.454	1,223	363	-	363	0		0	363
LDR         Stage Family Residence         2287 BICH HANDON ME         3.20.1         0.40.6         1.30.5         36.3         1         36.5         0         0.10.A           LDR         Straple Family Residence         2287 BICH HANDON ME         1.724         0.544         1.002         36.3         1         36.3         0         0.10.A           LDR         Straple Family Residence         228.3 BICH HANDON ME         1.724         0.548         36.3         1         36.3         0         0.10.A           LDR         Straple Family Residence         228.3 BICH HANDON ME         2.727         1.002         36.3         1         36.3         0         0.10.A           LDR         Straple Family Residence         228.3 BICH HANDON ME         2.724         0.550         1.729         36.3         1         36.5         0         0.10.A           LDR         Straple Family Residence         2.725         0.50         1.725         36.3         1         36.5         0         0.10.A           LDR         Straple Family Residence Cross A white         2.725         0.50         1.725         36.3         1         36.2         0         0.10.A           LDR         Straple Family Residence Cross A white	504900		Single Family Residence	2827 RICHMOND AVE	2,747	0.413	1,134	363	-	363	0		0	363
LDR         Single Feath-Residence         228.0 RCHANDOD MYE         3.14.2         0.34.4         0.34.3         1         3.65.3         0         0 MA           LDR         Single Feath Residence         228.0 RCHANDOD MYE         2.14.5         6.26.4         1.100         36.3         1         36.3         0         0         0 MA           LDR         Single Feath Residence         228.0 RCHANDOD MYE         2.27.5         1.109         36.3         1         36.3         0         0         0 MA           LDR         Single Feath Residence         228.0 RCHANDOD MYE         2.77.1         0.57.5         1.140         36.3         1         36.3         0         0         0 MA           LDR         Single Feath Residence         2.28.0 RCHANDOD MYE         2.77.1         0.57.5         1.160         36.3         1         36.3         0         0         0 MA           LDR         Single Feath Residence         2.29.0 PRINT         2.79.1         2.70.0         0.57.5         1.160         36.3         1         36.3         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	205000		Single Family Residence	2823 RICHMOND AVE	3,201	0.408	1,305	363	-	363	0		0	363
U.D.         Stage fremly besidence         2220 ROHMANDAM         1724         1100         88.3         1         35.3         0         0 NA           U.D.         Straple Framily Besidence         2220 ROHMANDAM         2.245         1.106         2.465         3.33         1         3.33         0         0         0 NA           U.D.         Straple Framily Besidence         2220 ROHMANDAME         2.757         0.026         1.409         3.83         1         3.83         0         0         0 NA           U.D.         Straple Framily Besidence         2270 2711571         2.794         0.526         1.468         3.83         1         3.83         0         0         0 NA           U.D.         Straple Framily Besidence         2.275 2711571         2.704         0.526         1.269         3.83         1         3.83         0         0         0 NA           U.D.         Straple Framily Besidence         2.245 000000000000000000000000000000000000	505100		Single Family Residence	2819 RICHMOND AVE	3,142	0.344	1,082	363	-	363	0		0	363
LDR         Stage Family Residence         222 BIRCHANON NATE         2.225         1.175         3.63         0         0         NA           LDR         Stage Family Residence         2236 RICHANON NATE         2.225         1.175         3.63         1         3.63         0         0         0         NA           LDR         Stagle Family Residence         2236 RICHANON NATE         2.294         0.582         1.07         3.63         0         0         0         NA           LDR         Stagle Family Residence         2295 ZIPH ST         2.794         0.575         1.688         3.63         1         3.63         0         0         0         NA           LDR         Stagle Family Residence         2243 ZIPH ST         2.794         0.797         0.797         3.63         0         0         0         NA           LDR         Stagle Family Residence         2243 ZIPH ST         2.794         0.794         0.797 <t< td=""><td>505200</td><td></td><td>Single Family Residence</td><td>2820 RICHMOND AVE</td><td>1,724</td><td>0.638</td><td>1,100</td><td>363</td><td>-</td><td>363</td><td>0</td><td>0 N/A</td><td>0</td><td>363</td></t<>	505200		Single Family Residence	2820 RICHMOND AVE	1,724	0.638	1,100	363	-	363	0	0 N/A	0	363
LDR         Stage Fearing Fearing Residence         2.8.9 (RICHMONDOM NE. 2.791         1.750         36.3         1         36.3         0         0 MA           LDR         Stage Fearing Residence         2.8.9 (RICHMONDOM NE. 2.794         1.075         3.33         1         0.00 <td>505300</td> <td></td> <td>Single Family Residence</td> <td>2824 RICHMOND AVE</td> <td>2,225</td> <td>1.108</td> <td>2,465</td> <td>363</td> <td>-</td> <td>363</td> <td>0</td> <td>0 N/A</td> <td>0</td> <td>363</td>	505300		Single Family Residence	2824 RICHMOND AVE	2,225	1.108	2,465	363	-	363	0	0 N/A	0	363
LDR         Single Enroll Residence         273 (2014)         570 (375)         1400         363         1         363         0         0 MA           LDR         Single Enroll Residence         226/27H35T         2.944         0.575         1.468         363         1         363         0         0         0 MA           LDR         Single Enroll Residence         226/27H35T         2.734         0.575         1.688         363         1         363         0         0         0 MA           LDR         Single Enroll Residence         224/3 GM14ST         2.735         1.087         363         1         363         0         <	505500		Single Family Residence	2830 RICHMOND AVE	3,237	0.541	1,750	363	-	363	0	0 N/A	0	363
LDR         Single Family Residence         2373 (29H ST)         2.944         0.354         1.077         330         2         660         0         0         NA           LDR         Single Family Residence         2.99 (29H ST)         2.135         2.09 (29H ST)         2.353         0         0         0         NA           LDR         Single Family Residence         2.24 (20H ST)         2.135         2.00         4.270         2.20         0         0         0         NA           LDR         Single Family Residence         2.24 (20H ST)         2.25         0.00         0         3.63         0	205600		Single Family Residence	2836 RICHMOND AVE	2,791	0.502	1,400	363	-	363	0		0	363
OKADORODOR LDR         DRAMIT Family Residence         2.99 FAMERIER ST         2.90 FAMERIER ST         0.57 FAMERIE	505700		Single Family Residence	273 29TH ST	2,934	0.354	1,037	330	2	099	0	0 N/A	0	099
OBM         ABM         MAILT-Emnily Residence         2.866   WIRSE FIRST         2.135         2.000         4.270         2.00         4.270         0.00 <td>505800</td> <td></td> <td>Single Family Residence</td> <td>269 29TH ST</td> <td>2,934</td> <td>0.575</td> <td>1,688</td> <td>363</td> <td>-</td> <td>363</td> <td>0</td> <td>0 N/A</td> <td>0</td> <td>363</td>	505800		Single Family Residence	269 29TH ST	2,934	0.575	1,688	363	-	363	0	0 N/A	0	363
ODDORDOR IDIN Presidence         LIABRE SIDE Family Residence         C A ADDORDOR SIDE AND PRESIDENCE         S A S A S A S A S A S A S A S A S A S A	600102		Live/work	2866 WEBSTER ST	2,135	2:000	4,270	220	1	220	0	0 N/A	0	220
OLOGO         LIDR         Single Family Residence         CALL         Single Family Residence         CALL         Single Family Residence         ONA         ONA           22500         LIDR         Single Family Residence         244 30THST         5,280         0.600         0.600         1         363         0	200500	LDR	Single Family Residence	243 30TH ST	092'9	0.418	2,828	363	1	363	0	0 N/A	0	363
DRAY         DRAY         STAGE         0.000         0.00         3.63         1         3.63         0         0         NA           3300         LDR         Single Family Besidence: grapk white         3.06 BROOK ST         2.434         0.529         1.287         3.63         1         3.63         0         0         NA           3300         LDR         Single Family Besidence: crown shingle         30.2 BROOK ST         2.445         0.652         3.477         3.63         1         3.63         0         0         NA           3300         LDR         Single Family Residence         30.0 BROOK ST         2.455         0.577         1.246         3.63         1         3.63         0         0         NA           3300         LDR         Mark Mark Family Residence (Opies)         30.0 BROOK ST         2.455         0.57         1.246         3.63         1         3.63         0         0         NA           3300         LDR         Mark Mark Family Residence (Opies)         3.384 PREMOVIX ME         2.189         1.172         2.45         6.67         0         0         0         0         0         0         0         0         0         0         0         0	200600	LDR	Single Family Residence	235 30TH ST	7,185	0.135	973	363	-	363	0	0 N/A	0	363
DRA         DRA         Single Family Residence, grey & white         BROOK ST         24.44         0.529         1.287         36.3         1         36.3         0         0 NA           33000         LDR         Single Family Residence, grey & white         300.6 BROOK ST         4.546         0.393         1.907         36.3         1         36.3         0         0         NA           33000         LDR         Single Family Residence         200.0         1.246         36.3         1         36.3         0         0         NA           23000         LDR         Single Family Residence         300.7 BROOK ST         3.744         6.68         2.477         36.3         1         36.3         0         0         NA           2200         LDR         Single Family Residence         2.467         3.63         3.6         0         0         0         NA         0         0         0         0         NA         0         0         0         0         0         NA         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	302500		Single Family Residence	244 30TH ST	5,280	0.000	0	363	-	363	0	0 N/A	0	363
LDR         Single Family Residence brown shingle         3010 BROOK ST         4,48 b         0,997         36.5         1         36.3         0         0 INA           LDR         Single Family Residence         3023 BROOK ST         3,744         0.658         2,477         36.3         1         36.3         0         0         0 INA           LDR         Single Family Residence         3007 BROOK ST         2,445         0.658         2,477         36.3         1         36.3         0         0         0 INA           LDR         Single Family Residence (Loples)         3007 BROOK ST         2,445         0.650         1,245         3.0         0	302700		Single Family Residence - grey & white	3008 BROOK ST	2,434	0.529	1,287	363	-	363	0	0 N/A	0	363
LDR         Single Family Residence         3002 (RHOW ST)         5,42.6         0.652         3,54.0         36.3         1         36.3         0         0 INA           LDR         Single Family Residence         3002 (RHOW ST)         3,764         0.659         2,47         36.3         1         36.3         0         0         0 INA           LDR         Single Family Residence (Duplex)         3304 [RLOW ST)         2,455         0.507         1,246         36.3         0	303000		Single Family Residence - brown shingle	3016 BROOK ST	4,848	0.393	1,907	363	1	363	0	0 N/A	0	363
UDR         Single Family Residence         CONDITION         3.75 A         0.658         2.47 B         3.65 B         1         3.63 B         0         0 INA           LDR         Multi-Family Residence (Duplex)         3.394 PIEDMONT AVE         2.189         1.124         3.63         1         3.63         0	303400		Single Family Residence	3032 BROOK ST	5,426	0.652	3,540	363	-	363	0	0 N/A	0	363
UDR         MINITE-family Residence (Duplex)         300 IRROWSKY         2.455         0.57         1.246         36.3         1         36.3         0         0 INA           LODG         The Meritt Hotel         232 IARREGON TATE         2.189         1.127         2.00         0         0         0         1.65         1.07 IMA         2.24           LODG         The Meritt Hotel         232 IARREGON TATE         1.127         2.00         0         0         0         0         1.65         1.07 IMA         2.24           NOR         Multi Family Residence (2)         3.55 ZHH ST         2.880         1.075         3.30         2.2         6.60         0         0         1.01 IMA         2.01 IMA         2.01 IMA         2.01 IMA         2.01 IMA         2.02         0.04         4         880         0<	400900	E	Single Family Residence	3009 BROOK ST	3,764	0.658	2,477	363	-	363	0	0 N/A	0	363
UDR         Multi-family Residence (Duplex)         334 PIEDMONT AVE         2,189         1,172         2,467         330         2         660         0         0         NA           LODG         Threath Pesidence (2)         334 PIEDMONT AVE         1,4216         0.000         0         0         0         0         145         147 RM         247           MOR         Multi-family Residence (2)         335 24148; T         2,880         1,075         3,095         3,20         4         880         0         0         NA           MOR         Multi-family Residence (2)         2,345 MAVERLY ST         6,252         0,749         4         880         0	401000	ĕ	Single Family Residence	3007 BROOK ST	2,455	0.507	1,246	363	-	363	0	0 N/A	0	363
LOG         Multi Family Residence (2)         223 EJHARRISON ST         14216         0.000         0         0         0         0         165         147 RM         234           MDR         Multi Family Residence (2)         326 EJHARRISON ST         4.326         0.083         4.306         220         4         880         0 <td>102200</td> <td>E</td> <td>Multi-Family Residence (Duplex)</td> <td>3384 PIEDMONT AVE</td> <td>2,189</td> <td>1.127</td> <td>2,467</td> <td>330</td> <td>2</td> <td>099</td> <td>0</td> <td>0 N/A</td> <td>0</td> <td>099</td>	102200	E	Multi-Family Residence (Duplex)	3384 PIEDMONT AVE	2,189	1.127	2,467	330	2	099	0	0 N/A	0	099
MOR Multi Family Residence (2)         325 JTH ST         2.880         1,075         3,095         330         2         660         0 INA           MOR Multi Family Residence (2)         319 JATH ST         4,380         0,0983         4,396         220         4         880         0         0 INA           MOR Multi Family Residence (2)         2343 MAVERI YST         4,413         0,789         3,443         330         2         660         0         0 INA           MOR Multi Family Residence (2)         236 JATH ST         4,413         0,789         3,443         330         2         660         0         0 INA           MOR MULT Family Residence (2)         236 JATH ST         4,413         0,789         3,443         330         2         660         0         0 INA           MOR MULT Family Residence (3)         236 JATH ST         5,682         0,596         2,570         2,20         4         880         0         0         INA           MOR MULT Family Residence (3)         2346 IAMAVERLY ST         5,082         0,596         2,570         2,20         4         880         0         0         INA           MOR MULT Family Residence (3)         2346 IAMAVERLY ST         3,700         0,000	800500	5001	The Merritt Hotel	2332 HARRISON ST	14,216	0.000	0	0	0	0	165	147 RM	24,255	24,255
MDR         Multi Family Residence         319 2H HS         4,380         0,983         4,380         220         4         880         0         0 INA           MDR         Multi Family Residence (2)         2.34 [MAVERTS T         6,252         0,749         3,443         220         4         880         0         0 INA           MDR         Multi Family Residence (2)         2.345 [MAVERTS T         4,413         0,780         3,443         320         4         880         0         0 INA           MDR         Multi Family Residence (2)         2.375 [MARRISONST         4,021         5,786         2,315         3         2         660         0         0         0 INA           MDR         Multi-Family Residence (3)         2.356 [MAVERLY ST         5,082         0,596         2,570         2         4         880         0         0         0 INA           MDR         Multi-Family Residence (2)         2.356 [MAVERLY ST         5,082         0,596         2,570         2         6         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	900200	MDR	Multi Family Residence (2)	325 24TH ST	2,880	1.075	3,095	330	2	099	0	0 N/A	0	099
MOR Multi-family Residence (2)         226 Jath RTR VILL         4.35 A 443         220         4         880         0         0 INA           MDR Multi-family Residence (2)         226 Jath RTR VILL         4.13 A 443         320         2         660         0         0 INA           MDR Multi-family Residence (3)         237 HARRISON ST         3.859         8.899         3.444         330         2         660         0         0 INA           MDR Multi-family Residence (4)         237 HARRISON ST         3.859         0.899         3.444         330         2         660         0         0 INA           MDR Multi-family Residence (2)         23.64 MAVERIX ST         5.082         0.506         2.570         4         880         0         0         0 INA           MDR Multi-family Residence (2)         23.64 MAVERIX ST         3.700         0.000         0         3         2         660         0         0 INA           MDR Multi-family Residence (2)         23.64 MAVERIX ST         3.700         0.057         1         3         2         660         0         0         0         0           MDR Multi-family Residence (2)         23.64 MAVERIX ST         3.700         0.057         1.83         2         660 </td <td>900300</td> <td>MDR</td> <td>Multi Family Residence</td> <td>319 24TH ST</td> <td>4,380</td> <td>0.983</td> <td>4,306</td> <td>220</td> <td>4</td> <td>880</td> <td>0</td> <td>0 N/A</td> <td>0</td> <td>880</td>	900300	MDR	Multi Family Residence	319 24TH ST	4,380	0.983	4,306	220	4	880	0	0 N/A	0	880
MDR         Multi Family Residence (2)         2.86_JTH ST         4,413         0,786         3,443         330         2         660         0         0 INA           MDR         MDR         Alternity Residence (4)         2315_IARRISON ST         3,859         0,896         3,464         330         2         660         0         0 INA           MDR         Multi-Family Residence (4)         2326_IMAVERLY ST         5,082         0,506         2,570         220         4         880         0         0 INA           MDR         Multi-Family Residence (3)         2326_IMAVERLY ST         5,082         0,506         2,570         220         4         880         0         0 INA           MDR         Dulyler- 2 units         2346         2370         0,000         0         330         2         660         0         0 INA           MDR         Pulpler- 2 units         2386 INST         3,700         0,007         1330         2         660         0         0 INA           MDR         Multi-Family Residence (Dulpex)         288 [281+ST         3,700         0,067         2,274         330         2         660         0         0 INA	_	MDR	Multi Family Residential (4)	2343 WAVERLY ST	6,252	0.749	4,683	220	4	880	0	0 N/A	0	880
MUR         MURIFFamily Residence (4)         2.30f JAMAVERIV ST         4.021         5.768         2.3,454         3.20         4         880         0         0 INA           MOR         Multi-Family Residence (4)         2.30f JAMAVERIV ST         5.082         0.506         2.570         2.20         4         880         0         0         INA           MOR         Multi-Family Residence (2)         2.346 JAMAVERIV ST         3.700         0.000         0         3         2         660         0         0         INA           MDR         Duplex - 2 units         2.228 [AVAVERIV ST         3.181         0.067         3.30         2         660         0         0         INA           MDR         Multi-family Residence (2)         2.283 [CH-MONDAVE         3.181         0.067         3.30         2         660         0         0         INA           MDR         Multi-family Residence (2)         2.283 [CH-MONDAVE         3.181         3.40         0.652         2.274         3.30         2         660         0         0         INA		MDR	Multi Family Residence (2)	265 24TH ST	4,413	0.780	3,443	330	2	099	0	0 N/A	0	099
MOR         Multi-family Residence (4)         2320   JARRRSON ST         3.859         0.888         3.464         330         2         660         0         0   NA           MOR         Multi-family Residence (2)         2326   WAVERLY ST         5,082         0.506         2,570         220         4         880         0         0   NA           MOR         Multi-family Residence (2)         2346   WAVERLY ST         3,700         0.000         2         660         0         0   NA           MDR         Multi-family Residence (2) uples)         258   281H ST         3,181         0.657         183         30         2         660         0         0   NA           MDR         Multi-family Residence (Duples)         258   281H ST         3,490         0.652         2,274         330         2         660         0         0   NA		MDR		2315 HARRISON ST	4,021	5.758	23,153	220	4	880	0	0 N/A	0	880
MOR Multi-family Residence (4)         2.326 IMAVERLY ST         5.08.2         0.50.0         2.570         2.20         4         880         0         0 IMA           MDR Multi-family Residence (2)         2.336 IMAVERLY ST         3,700         0.000         0         2         660         0         0 IMA           MDR Molex 2 units         2.838 IRAH ST         3,810         0.657         183         3.30         2         660         0         0 IMA           MDR MDR Molti-family Residence (Duplex)         2.58 28TH ST         3,490         0.652         2.274         330         2         660         0         0 IMA	008000	MDR		2307 HARRISON ST	3,859	0.898	3,464	330	2	099	0	0 N/A	0	099
MOR Multifamily Residence (2)         2346 [MAVRELY ST         3,700         0.000         0         330         2         660         0         0 INA           MOR Duplex 2 units         2 (28.28) [ROHMOND AVE         3.181         0.067         3.39         2         660         0         0 INA           MMR [Multi-Tamily Residence (Duplex)         228 [281+5]         3.40         0.652         2.274         330         2         660         0         0 INA		MDR	Multi-Family Residence (4)	2326 WAVERLY ST	5,082	0.506	2,570	220	4	880	0	0 N/A	0	880
MDR         Duplex - 2 units         Duplex - 2 units         2828 RICHMOND AVE         3,181         0.057         183         330         2         660         0         0 INA           MDR         Multi-Family Residence (Duplex)         258 (28TH ST         3,490         0,652         2,274         330         2         660         0         0 INA		MDR	Multi Family Residence (2)	WAVERLY ST	3,700	0.000	0	330	2	099	0	0 N/A	0	099
MDR Multi-Family Residence (Duplex) 236 (28TH ST 3,490 0.652 2,274 330 2 660 0 0 IV/A	-		Duplex - 2 units	RICHMOND A	3,181	0.057	183	330	2	099	0	0 N/A	0	099
			Multi-Family Residence (Duplex)	258   28TH ST	3,490	0.652	2,274	330	2	099	0	V/N/O	_	099

Nam (s)	251 3014 57 301 BROOK ST 301 BROOK ST 301 BROOK ST 302 BROOK ST 302 BROOK ST 303 BROOK ST 304 BROOK ST 304 BROOK ST 304 BROOK ST 304 BROOK ST 304 BROOK ST 305 BROOK ST 306 BROOK ST 307 BROOK ST 307 BROOK ST 307 BROOK ST 308	(sf) (sf) (sf) (sf) (sf) (sf) (sf) (sf)	0.295 6,400 0.474 1,724 0.384 1,724 0.670 3,487	6,400 Residential (gpd/unit) 6,400 363 1,724 330	Dwelling Units	Daily Flow (gpd) 726	Residential (gpd/sf) 0 0 0 0	Units Aver 0 N/A 0 N/A 0 N/A	erage Daily Flow (gpd) 0	Flow (gpd) 726
9	10 II 30 II 18 II II 18 II II 18 II II II 18 II II II II II II II II III	21,097 3,640 4,493 5,203 5,558 8,337 5,198 5,198 6,044 7,517 5,7,585			7 0	97/	000	0 N/A 0 N/A	0 0	97/
9	H   BROOK ST	4,493 5,203 6,203 8,223 8,233 8,337 5,198 9,211 4,541 6,044 7,77 5,7,865			7	099	0	0 N/A	_	000
al Office floors) corner) pstairs)	B BROOK ST	5,203 5,558 8,223 8,337 5,198 3,024 9,211 4,541 4,541 7,737 57,585			n 60	099			0	099
æ	48 BROOK ST 48 BROOK ST 48 BROOK ST 60 BR	5,558 8,223 8,337 5,198 3,024 9,211 4,541 6,044 7,73 57,585			2	099	0	0 N/A	0	099
œ.	86 BROOK ST 89 BROOK ST 60 BROOK ST 60 BROOK ST 100 ZTH ST 100 ZTH ST 100 BROSK	8,223 8,337 5,198 3,024 9,211 4,541 6,004 7,73 57,585			4	880	0	0 N/A	0	880
9	BROOK ST 60 BROOK ST 60 BROOK ST 60 BROOK ST 61 41 Z714 ST 61 2771 ST 71	8,337 5,198 3,024 9,211 4,541 6,044 7,737 52,585			4	880	0	0 N/A	0	880
8	00 BROOK SI 00 IZTH SI 01 IZTH SI 02 IZTH SI 03 IMBSIRES SI 04 WEBSIRES SI 00 WEBSIRES SI 01 WEBSIRES SI 03 AH SI 04 AMBSIRES SI 05 ATH SI 05 ATH SI 06 IZ ATH SI 07 I	5,198 3,024 9,211 4,541 6,044 7,737	T		2	099	0	0 N/A	0	099
9	01 27 H ST 02 77 H ST 03 WEBSTREST 04 WEBSTREST 00 WEBSTREST 14 WEBSTREST 15 27 H ST 15 27 H ST 16 27 H ST 17 A WEBSTREST 16 27 H ST 17 A WEBSTREST 16 27 H ST 17 A WEBSTREST 17 A WEBSTREST 18 27 H ST 18 27 H ST 18 27 H ST 19 27 H ST 10 27	3,024 9,211 4,541 6,044 7,737 52,585	T		4	880	0	0 N/A	0	880
	88 WEBSTERST WEBSTERST OU WEBSTERST ON WEBSTERST	6,044 7,737 52.585		864 0	0	0	0.11	1,932 SF	213	213
9	44 WEBSTERST  90 WEBSTERST  90 WEBSTERST  90 WEBSTERST  91 WEBSTERST  91 WEBSTERST  93 AH AT  90 WEBSTERST  91 AH AT  92 AH AT  93 AH AT  94 AH AT  95 AH  96 AH  97 AH  97 AH  98 AH  98 AH  98 AH  99 AH  90 AH  9	6,044 7,737 52.585	T		0 0	0 0	0.33	3,084 SF	810,1	810,1
9	74 WEBSIERST 74 WEBSIERST 75 WEBSIERST 76 WEBSIERST 76 WEBSIERST 77 WEBSIERST 78 JATH ST 78 JAT	7,737	T		0 0	0 0	0.33	2,248 3F	747	747
(6)	200 WEBSTERST 000 WEBSTERST 24 WEBSTERST 24 WEBSTERST 24 WEBSTERST 24 WEBSTERST 25 24 HT ST 000 WEBSTERST 25 24 HT ST 25 24 HT ST	52.585	T	0 0		0	0.33	3,457 SF	1,141	1,141
(6	00 WEBSTERST 40 WEBSTERST 40 WEBSTERST 51 AN STATE 52 ATH ST 52 ATH ST 53 ATH ST 54 ATH ST 55 ATH ST 56 ATH ST 56 ATH ST 57 ATH ST	Coc. /c	T				0.33	2,750 SF	34.072	3,4,072
<u>(ā)</u>	24 WEBSTER ST 24 WEBSTER ST 49 34TH ST 50 WEBSTER ST 51 24TH ST 51 24TH ST 52 24TH ST 52 24TH ST 53 24TH ST	1 2 2	Ť				0.33	42,043 35	14,072	12,002
<u>(ā)</u>	24 WEB STERST 49 34TH ST 15 24TH ST 00 WEBSTER ST 61 24TH ST 62 24TH ST	22,383	8.920	469,070			0.028	409,070 SF	747	12,899
(iz)	40 WEBSIERS   49 34TH ST   12 24TH ST   12 24TH ST   12 24TH ST   21 2	4 400					0.33	2,203 35	ż	÷
(is)	447 341H 31 115 24TH ST 00 WEBSTER ST 61 24TH ST 64 24TH ST	9 4 60						A/NO		
(S)	00 WEBSTER ST 61 24TH ST 52 24TH ST	4,400		0 0	5 -	0 80	0 2	A/NO 04	0 7	9
irs)	61 24TH ST 52 24TH ST	11 979		`	- <	077	0.11	10,004 35	1,100	7,400
	52 24TH ST	1000			> 5	0000	0.11	JC 000'0	200	2 402
pstalls)	52 241H 51	3,901	l		2 6	2,200	0.13	14 470 57	767	2,492
stairs)		06/1			7	0440	0.33	70,470 5	604	674
	24 24111 21	6/8/1	1.359 2,		_ <	303	0.11	1,274 SF	140	503
	358 24 IH SI	2,505			7	97/	0.11	7/0 2	/01	833
t), Residential (upstairs)	04 BROADWAY	3,476	1		00	1,760	0.11	3,455 SF	380	2,140
	3000 BROOK ST	5,122			9	1,320	0.11	3,932 SF	433	1,753
	3310 BROADWAY	4,183			4	880	0.11	2,825 SF	311	1,191
	88 PIEDMONT AVE	1,949		3,896 220	4	880	0.22	1,948 SF	429	1,309
(9) s	3400 BROADWAY	15,178			9	1,320	0.11	5,150 SF	267	1,887
stairs	2865 BROADWAY	4,223			0	0	0.11	4,210 SF	463	463
	3074 BROOK ST	16,659	0.999		0	0	0.11	16,644 SF	1,831	1,831
	45 WAVERLY ST	6,252			0	0	0.22	2,174 SF	478	478
	95 27TH ST	7,251			0	0	0.22	3.880 SF	853	853
fitute	265 29TH ST	2.934	t		0	0	0.22	2.255 SF	496	496
	O WERSTER ST	11 745	t		0	0	0	5 476 SF	2	2
Parking lot	O WERSTER ST	1 056			0 0	0	0	N/A		, ,
	15 VAI DEZ ST	17 187	0000		0	0	0	N/A	0	0 0
	2330 WEBSTED ST	44 820	0000			0		N/N/O		
Tarking lot	40 WEBSTER ST	44,027	0000					C 200		
	40 WEBSIER SI	4, 331	0.000	0	0	0	0	O IVA	0	0
Parking lot	2335 WAVERLY SI	6,252	0.000	0	0	0	0	0 N/A	0	0
	21 WAVERLY ST	6,252	0.000	0 0	0	0	0	0 N/A	0	0
	2316 VALDEZ ST	6,250	0.000	0 0	0	0	0	0 N/A	0	0
Parking lot	0 VALDEZ ST	6,250	0.000	0 0	0	0	0	0 N/A	0	0
	28 VALDEZ ST	4,750	0.000	0 0	0	0	0	0 N/A	0	0
Parking lot 233	2332 VALDEZ ST	4.000	0.000	0	0	0	O	0 N/A	0	0
	271 24TH CT	3 706	0000			0 0		1 330 CE		
	71 Z41 II 31	3,700	0.000		0	0 0		10 700,1	0 0	
	Z350 WAVERLY SI	4,300	0.000	0 0	0 0	0	0	N/A	0 0	0 6
	2356 WAVERLY ST	3,600	0.000	0 0	0	0	0	1,414 SF	0	0
	22 24TH ST	2,000	0.000	0 0	0	0	0	0 N/A	0	0
	326 24TH ST	7,500	0.000	0 0	0	0	0	0 N/A	0	0
	38 24TH ST	1,900	0.000	0 0	0	0	0	0 N/A	0	0
	12 VALDEZ ST	3.328	0000	0	0	0	C	0 N/A	C	C
	14 VAIDEZ CT	2 120	0000			0		V/N/O	o c	
	2410 VALDEZ 31	3,120	0000			0 0		K/N 0	0 0	0 0
	24 VALDEZ SI	3,010	0.000	0 0	0 6	0 0	0	O N/A	0 0	0 0
	Z6 VALDEZ SI	3,016	0.000	0	0	0	0	O N/A	0	0
	30 VALDEZ ST	2,989	0.000	0 0	0	0	0	0 N/A	0	0
Parking lot 243	2436 VALDEZ ST	4,342	0.000	0 0	0	0	0	0 N/A	0	0
	0 VALDEZ ST	5,170	0.000	0 0	0	0	0	0 N/A	0	0
	2452 VALDEZ ST	3,760	0.000	0 0	0	0	0	0 N/A	0	0
	0 VALDEZ ST	3,125	0.000	0 0	0	0	0	0 N/A	0	0
Parking lot 242	2425 VALDEZ ST	6,250	0.000	0 0	0	0	0	0 N/A	0	0
	2415 VALDEZ ST	4.177	0.000	0	0	0	0	0 N/A	0	0
	09 VALDEZ ST	1,390	0.000	0	0	0	0	0 N/A	0	0
	0 VALDEZ ST	4.308	0000	0	0	0	C	N/A	0	c
Parking lot	3	3.947	0000	0	0	O	0	4.015 SF	0	, c
	245 30TH ST	6.047	0000		0	0		A/N O		
	T3 AOO 0700	000	0000					V/N/O		
	3070 BDOOK ST	4,722	0.000					V/NO		
	70 BROOK ST	4,074	0.000					A/M O		
	30/0 BROOK SI	6444	0.000			0 0	0	O N/A	0 0	0 0
	O PAY DI	2,033	0.000					K/N 0	0 0	
	U BAY PL	0,557	+		0 0	0	0 0	A/NO OF O	0 0	0.00
	33 HARRISON SI	12,547	+	45	0	0	0.11	8,723 SF	959	959
First Presbyterian Church 261	2619 BROADWAY	58,772			-	363	5.5	1,000 SEAT	5,500	5,863
	3334 WEBSTERST	8,567	0.620 5,	5,313 0	0	0	0.33	2,657 SF	87.1	877
Pet Store, Bay Area Wilderness Training 230	2301 BROADWAY	9,510			0	0	0.11	9,511 SF	1,046	1,046

								KESIDENIIAL			NON-KESIDEN HAL		
7404	WRTLand		Address	Parcel Area		10	Average Daily Flow -	Residential	Residential Average	Average Flow Rate Non-	Non-Residential	Non-Residential Use	Total Average Daily
AFIN	Use	Description	Number Street	(st)	Land Use FAK	Blag St	Residential (gpd/unit)	Dwelling Units	Daily Flow (gpd)	Residential (gpd/sf)	Units	Average Daily Flow (gpd)	Flow (gpd)
009 070200101	RET	Grocery Outlet	2910 BROADWAY	102,330	0.326	33,317	0	0	0	0.11	33,317 SF	3,665	3,665
009 070200102	RET	Grocery Outlet (Parking Lot)	2910 BROADWAY	29,017	0.000	0	0	0	0	0	0 N/A	0	0
010 076800100	RET	7-Eleven	2350 HARRISON ST	6,153	0.375	2,307	0	0	0	0.11	2,307 SF	254	254
010 076800205	RET	Vacant storefront	2336 HARRISON ST	4,261	0.000	0	0	0	0	0	0 N/A	0	0
010 079800307	RET	Kelley Paper Store	296 27TH ST	19,130	0.599	11,453	0	0	0	0.11	11,453 SF	1,260	1,260
010 079800308	RET	Label Art of California	290 27TH ST	26,428	0.742	19,613	0	0	0	0.11	19,613 SF	2,157	2,157
008 066701100	SER	YMCA, Parking Structure	2330 WEBSTERST	45,027	7.329	330,021	0	0	0	0.33	41,253 SF	13,613	13,613
008 066701100	Ч	YMCA, Parking Structure	2330 WEBSTERST	45,027	6.413	288,768	0	0	0	0.028	288,768 SF	7,941	7,941
008 09990 300	SER	Creative Growth	355 24TH ST	9,992	1.000	9,992	0	0	0	0.11	9,992 SF	1,099	1,099
008 067201303	SER	CalTrade Bindery	366 24TH ST	5,004	1.172	5,865	0	0	0	0.11	5,865 SF	645	645
008 067201401	SER	Soja- Kung Fu Studio, Roberts Electric	2406 WEBSTERST	7,706	1.000	7,706	0	0	0	0.11	7,706 SF	848	848
008 067201500	SER	Hertz Car Rental	2400 WEBSTERST	5,861	966'0	5,840	0	0	0	0.11	5,840 SF	642	642
008 067201800	SER	Gill's Electric	2410 WEBSTERST	6,246	1.000	6,246	0	0	0	0.11	6,246 SF	189	687
008 067201900	SER		WEBSTERST	12,492	1.000	12,492	0	0	0	0.11	12,492 SF	1,374	1,374
009 068300200	SER	Rosewood House	2523 BROADWAY	3,679	0.931	3,426	0	0	0	0.11	3,426 SF	377	377
008008300300	SER	Safe Co, Shasamane, Gods Gym	2511 BROADWAY	12,407	0.911	11,308	0	0	0	0.11	11,308 SF	1,244	1,244
004 068303700	SER	Just Pet Me	2555 BROADWAY	15,634	0.830	12,972	0	0	0	0.11	12,972 SF	1,427	1,427
009 070100300	SER	Summit Bank	2951 BROADWAY	10,541	606:0	9,586	0	0	0	0.11	9,586 SF	1,054	1,054
009 070 401 500	SER	Harry Clark Plumbing	3026 BROADWAY	5,312	716.0	5,193	0	0	0	0.11	2,596 SF	286	286
009 073101602	SER	Dulux Paints	3356 PIEDMONT AVE	14,271	0.445	6,346	0	0	0	0.11	6,346 SF	869	869
009 073 200 502	SER	٤	3403 PIEDMONT AVE	2,284	0.971	2,219	0	0	0	0.11	2,219 SF	244	244
000905890600	VACR	Vacant Lot	256 28TH ST	4,399	0.000	0	0	0	0	0	0 N/A	0	0
009 073102100	VACR	Vacant	3378 PIEDMONT AVE	2,353	0.000	0	0	0	0	0.11	1,459 SF	160	160
008 066601901	WARE	Warehouse (vacant)	2354 VALLEY ST	8,270	0.628	5,190	0	0	0	0.11	2,595 SF	285	285
											Total		274 600

1) The average daily water demand rates are 10-percent higher than the sewer generation rates to account for system losses and leakage in the system.

2) The Land Use floor area ratio (FAR) is calculated by dividing the estimated building square footage by the parcel area.

3) Building square footage is standarded by multiplying the building footprint by the number of stories.

4) If a particular parcel included multiple buildings with differing number of stories only the greatest number of stories was counted for all buildings.

5) For automotive retail assume demand is equal to "commercial" average flow rate.

6) For warehouse assume demand is equal to "commercial" average flow rate.

7) Existing water demand estimate calculates average daily flows only and does not account for peak flows.

8) All apartments are assumed to have a demand rate to \$20 gpd/unit unless otherwise noted.

9) For rasked using mornarulity assume demand rate is equal to 16 pgd/unit unless otherwise noted.

9) For rasked using mornarulity assume demand rate is equal to the building footprint.

10) For mixed use, first floor commercial/retail area is assumed to be equal to the building footprint.

Average Flow Rates Used of Water Demand Calculation (Adapted Pflow Rates Used Of Water Demand Posigin Guidelines, revised August 2008) Automobile reviews.

Automobile parking	0.028 gpd/sf	1/ST
Automobile repair garage	0.11 gpd/sf	1/sf
Church - Fixed Seat	5.5 gpd/seat	1/seat
Commercial	0.11 gpd/sf	1/sf
Gymnasium	0.33 gpd/sf	1/sf
Manufacturing - industry	0.11 gpd/sf	1/sf
Medical Building	0.33 gpd/sf	1/sf
Motel	165 gpd/room	l/room
Office Building	0.22 gpd/sf	1/sf
Residential - 1 bedroom apt. or condo	165 gpd/unit	J/unit
Residential - 2 bedroom apt. or condo	220 gpd/unit	J/unit
Residential - duplex	330 gpd/unit	J/unit
Residential - single family dwelling	363 gpd/unit	J/unit
Residential - artist dwelling	0.33 gpd/sf	1/sf
Residential artist dwelling	110 gpd/unit	J/unit
Rest Home	93.5 gpd/bed	J/bed
Restaurant - fixed seat	55 gpd/seat	1/seat
Retail Area	0.11 gpd/sf	1/st

APPENDIX A: INFRASTRUCTURE AND UTILITIES

#### Table 8.3

## **Agency Contacts**

Contact	Company	Phone Number
Sanitary Sewer		
Allen Law	City of Oakland - Public Works (Sanitary Sewer)	(510) 238-6939
Domestic Water		
David Rheinstrom	EBMUD, Water Service Planning Section	(510) 287-1365
Bonifacio Rivera	EBMUD - Mapping Services	(510) 287-1875
Bill McGowen	EBMUD	(510) 287-1031
R.C. Mercurio	EMBUD Design Division	(510) 287-1096
Phillip Basada	City of Oakland Fire Department (Fire Prevention Bureau)	(510) 238-7080
David Mog	City of Oakland – Building Services	(510) 238-3892
Recycled Water		
Vince Pon	EBMUD - Wastewater Department	(510) 287-1658
Storm Drain		
Jose Martinez	City of Oakland - CEDA-Engineering Design	(510) 238-6864
Lesley Estes	City of Oakland – Environmental Services	(510) 238-7431
Electrical & Gas		
Anthony Thompson	PG&E	(510) 437-2110
Rodney Chew	PG&E	(510) 437-2079
John Klavdianos	PG&E	(510) 437-2235
Denise Lee	PG&E - Service Planning Department	(510) 437-2211
Communication		
Wayne Puffer	AT&T (TCG)	(510) 238-5516
Rosemary Hamill	AT&T (Core)	(925) 944-8416
Ed Rose	AT&T (Pac Bell)	(925) 823-6992
Lee Gouveia	Comcast	(925) 349-3520



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