

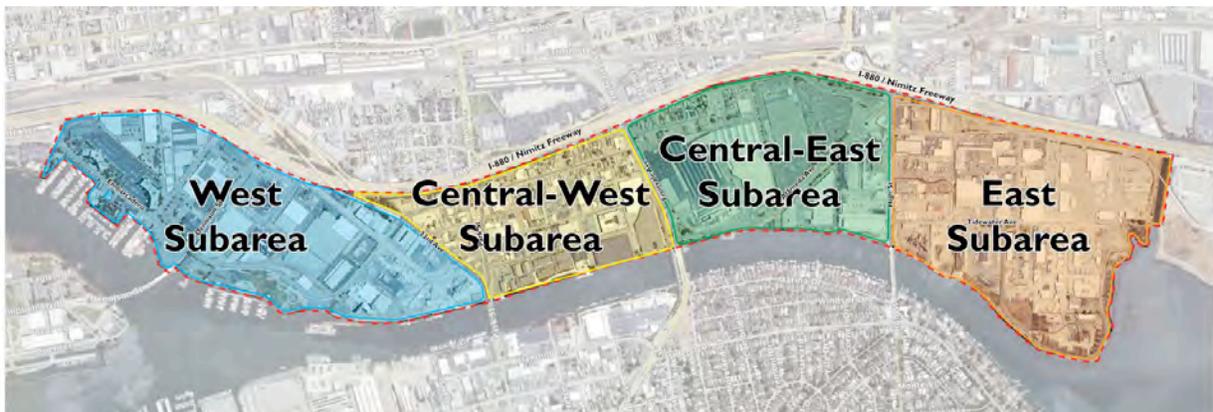
1. Introduction

The Oakland Estuary waterfront is a significant citywide and regional resource that connects the City of Oakland and the surrounding region to the San Francisco Bay. The Central Estuary, the focus of this study, offers substantial opportunity for new residential and industrial development, infrastructure and open space improvement, and general quality of life gains, all of which are welcomed in the area, both by City leaders and policy as well as by local residents and employers. The challenge presented is not whether to develop, but what kind and intensity of development will take best advantage of this outstanding opportunity while maintaining and building upon the area's existing strengths as an employment center and unique residential neighborhood. The Central Estuary Plan, a Specific Plan and EIR for the Central Estuary Area, aims to develop a coordinated vision for the future development of the area that supports both Citywide and neighborhood priorities.

Background

The Central Estuary Plan Area is generally encompassed by 19th Ave. to the north, 54th Ave. to the south, I-880 to the east and the Oakland Estuary to the west. The Plan Area is roughly 416 acres, of which approximately 319 acres are made up of individual parcels and the remainder are public rights-of-way. For the purpose of this study, the area has been divided into four Subareas representing fairly distinct districts within the Plan Area. A detailed description of the existing conditions, challenges and opportunities within the Plan Area is available as a separate Existing Conditions report.

Figure 1.1: Plan Area and Subareas



To arrive at a vision for this area, in-depth study of existing conditions and recent development, coordinated with extensive public outreach, has defined the realm of potential opportunities in the area. The Plan Area is a collection of diverse industrial districts and a unique and thriving existing residential neighborhood with the incredible amenities of a central location in a booming metropolitan region and excellent access to major open space and natural beauty. Such conditions are rarely found in proximity to redevelopment opportunity, as market forces would typically transform such an area. However, in this circumstance, challenging circulation and infrastructure deficiencies have prevented such growth. The need for redevelopment, as evidenced by the poor infrastructure conditions, number of underutilized parcels and need for better amenities, give both justification for and solidify public support behind bold visions for the future of the area. The challenge will be deciding which bold vision best suits the area.

Alternatives Development

Identifying Potential for Change

The analysis below draws on a range of qualitative and quantitative data to isolate the parcels in the Plan Area that represent the greatest opportunities for change over the short- and long-term horizons. This assessment is based on the physical and economic characteristics of individual properties, with a focus on identifying the sites with the fewest barriers to redevelopment and those that are most likely to support higher intensity uses.

Key findings from this analysis include:

- The majority of parcels in the Central-West Subarea are small and owner-occupied; these are unlikely to be redeveloped in the near future.
- Residential and commercial development opportunities may conflict with employment opportunities. Without protections for their current use, many of the most important employment centers in the Plan Area will also represent major opportunities for redevelopment.
- The largest primary opportunity site is the 27-acre Owen-Brockway site in the Central-East Subarea.
- While Con-Agra is not a primary opportunity site, it has an important influence on the viability of redevelopment on adjacent sites. Con-Agra's rail service and industrial character both act as a buffer against conversion of industrial land and a deterrent to new residential development.
- The highest concentration of opportunity sites is in the East Subarea.
- Opportunity sites will change depending on infrastructure improvements and on the location and type of new development.

Methodology

The Opportunity Sites Assessment began by determining which parcels are NOT likely to be redeveloped, (known as "Hard Sites," for the purposes of this analysis). These include parcels on which new buildings have been constructed recently, parcels with highly valuable buildings, parks, schools, and some single family homes.

After the Hard Sites were removed from consideration, the Primary Opportunity Sites were identified. These are sites that, given their physical and economic attributes, are likely to be most attractive to investors interested in converting parcels into more intensive uses. Redevelopment is unlikely to proceed until the regional housing and commercial real estate and national credit markets recover. Furthermore, the amount and type of development interest will depend greatly on the policies enacted in the Plan Area. However, these sites possess characteristics such that they are likely to be seen as strong development opportunities in the near-to-mid term time horizons, even in the absence of redevelopment on adjacent parcels. These were determined by looking at factors such as proximity to the water, parcel size, the character of the buildings, and ownership characteristics.

Finally, a set of Secondary Opportunity Sites were selected. These are properties whose current physical and economic characteristics do not suggest that they represent prime development opportunities. However, these sites generally have at least one of the characteristics that make them attractive for development, as used to identify the Primary Opportunity Sites. In addition, these properties are adjacent either to major arterials or to a cluster of Primary Opportunity Sites. Consequently, these properties may

be considered the long-term development opportunities in the Plan Area. Under current conditions, it is unlikely that they will be redeveloped; depending on the character and extent of redevelopment on Primary Opportunity Sites, however, these parcels may represent the next wave of opportunities.

Sites identified as either opportunity or hard sites by a variety of criteria are indicated on maps included under Appendix A of this report.

Limitations of the Analysis

There are several important caveats to keep in mind when considering the opportunity sites analysis:

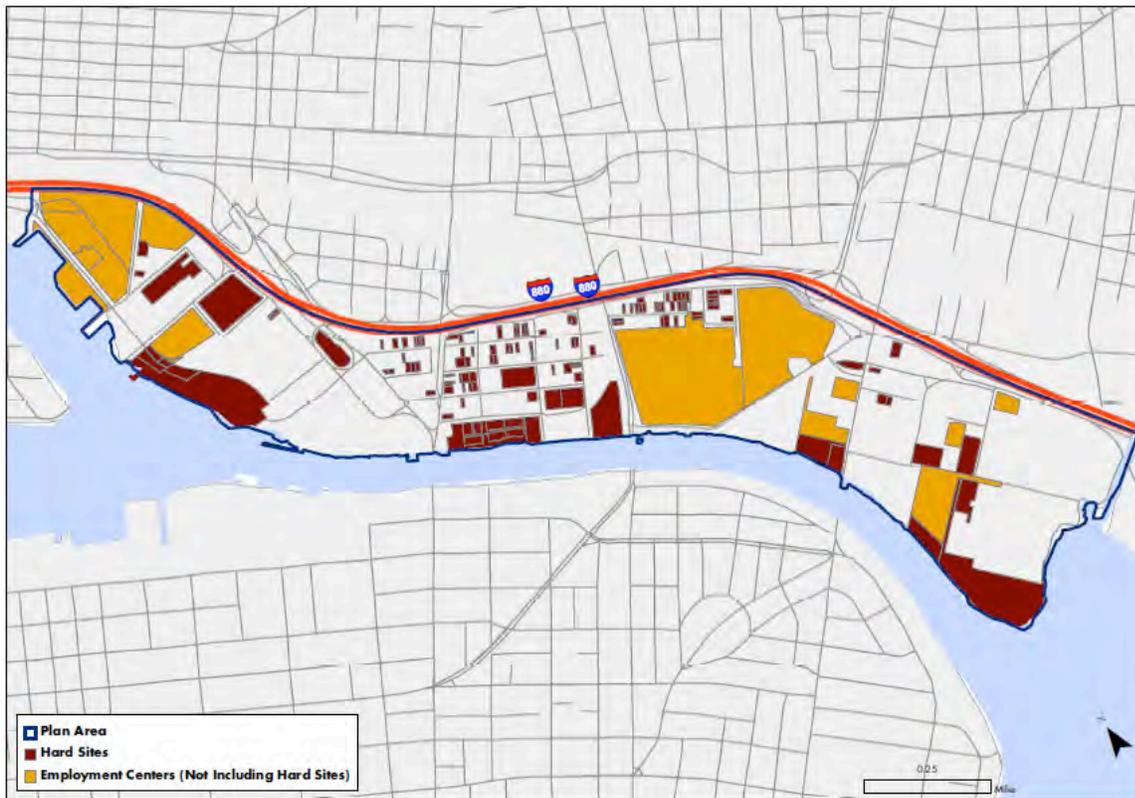
- *The analysis does not consider the strength of existing businesses.* Generally, the key opportunity sites are either vacant or feature low-value industrial buildings. Nevertheless, these properties may be associated with businesses that are profitable and that have little desire to relocate. In these cases, the physical and economic characteristics of the parcel may overstate the likelihood of redevelopment.
- *The analysis does not consider cost of environmental remediation.* While thorough environment assessment of parcels has not been completed, it is likely that a significant amount of the soil in the Plan Area has been contaminated by current or past industrial uses. The cost of remediation or mitigation may make development on some parcels infeasible; in other cases, the costs would only be warranted in the context of a relatively large, high density project. These costs and constraints are not factored into this assessment.
- *The potential for particular land uses is highly variable among opportunity sites.* Some sites, such as those adjacent to the waterfront, may be attractive to residential or office developers, but would be dismissed by retail developers as too far from the highway. Conversely, parcels adjacent to the highway might be unappealing to residential developers, due to concerns about exhaust and noise.
- *Opportunity sites will change depending on the final content of the Central Estuary Plan, as well as on the activity of adjacent parcels.* The analysis below assumes no policy constraints in redevelopment to the “highest and best use.” The policies outlined in the final plan, however, will steer development toward different uses and locations; this will change which sites represent the greatest opportunities for change. Furthermore, as redevelopment occurs on some sites, the likelihood and character of potential redevelopment will change on nearby parcels.

This analysis offers an assessment of what is most likely to be redeveloped, and should not be considered an indication of what should be redeveloped. Many of the opportunity sites identified are currently in use as industrial lands. There may be important reasons for preserving these industrial lands, including the desire to preserve a particular business that is a critical employment engine or goods/services provider for the city and region. The existing user may also be important in supporting a particular industrial cluster in the area or as a contributor to the local tax base. Finally, it may be desirable to preserve these industrial properties in order to foster future businesses. Consequently, while the analysis may indicate that higher intensity uses are possible on these sites, in some cases the existing use may conform better to the goals of the plan. In this sense, the same parcels that would be considered “Opportunity Sites” from the perspective of potential redevelopment could be considered “Vulnerable Sites” from the perspective of preservation. Ultimately, the overall vision for the Plan Area will be the major determinant of which of these *should* host change, and what change they should facilitate.

Hard Sites

Figure 1.2, below, shows the Hard Sites identified in the Plan Area. These parcels include those currently in use as parks, schools, or single family homes;¹ those with an Improvements to Land Value Ratio of 4 or more; and those on which a new building has been constructed since 1999.² Also considered in this analysis are parcels that currently host a large amount of employment. While these parcels are not less likely to be viewed as opportunity sites from the perspective of potential developers, they may receive special consideration for protection, given the value of their current use.

Figure 1.2: Hard Sites and Employment Centers



Source: *Urban Explorer 2009, Strategic Economics 2009*

As Figure 1.2 shows, much of the Central-West Subarea is composed of small, disjointed hard sites (primarily in the form of single family homes), and larger clusters along the waterfront. These properties consist mainly of parks, schools, and recently constructed or high-value industrial facilities.

Especially noteworthy is that many of the largest parcels in the Plan Area are not Hard Sites, and pose no major barriers to redevelopment, aside from possible environmental remediation or whatever changes in infrastructure or adjacent uses that might be necessary to support specific uses. However, many of these properties do have a large number of on-site jobs, which might be displaced if redevelopment were to take place.

¹ Excluded from the list of hard sites are residential properties where the owners control multiple parcels or are Limited Liability Corporations (LLCs) or Trusts- these are indications these owners are more profit-oriented than other homeowners.

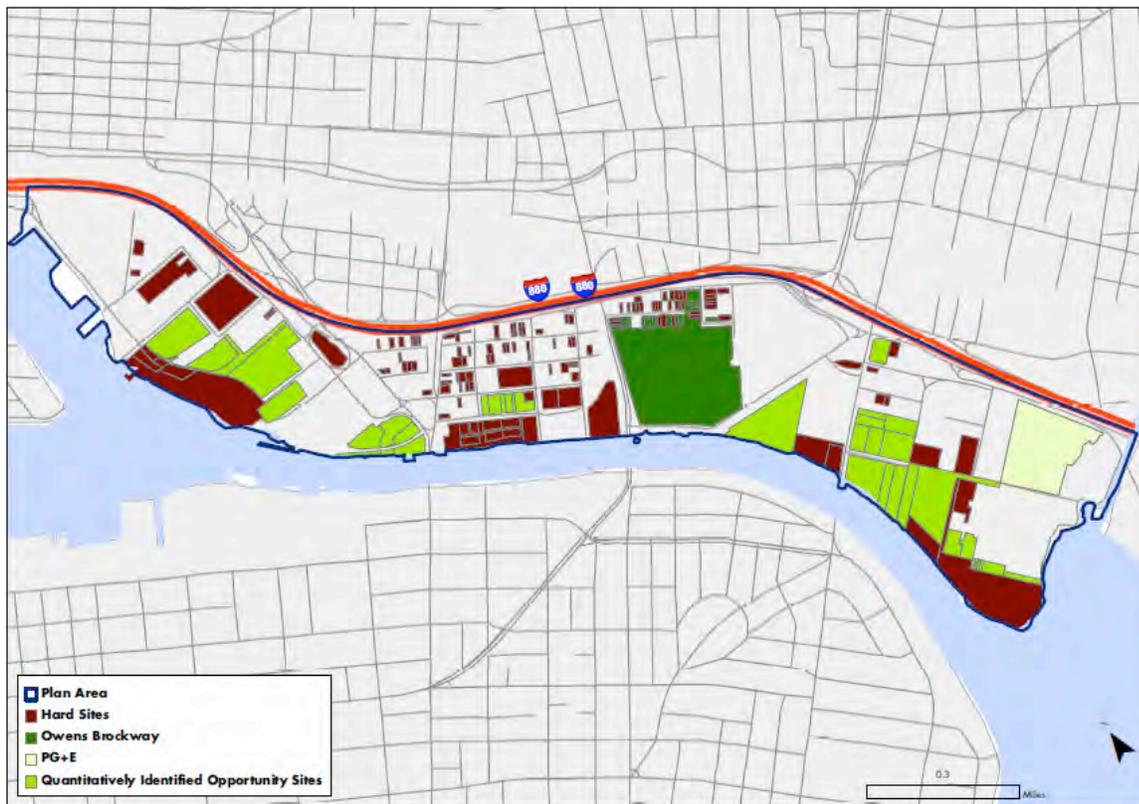
² Maps of these individual characteristics within the Plan Area can be found in Appendix A.

Primary Opportunity Sites

Figure 1.3, below, shows the Primary Opportunity Sites that emerged from a quantitative assessment of parcels within the Plan Area. Factors considered in determining that a parcel would be more easily developed included:

- Parcel size (parcels larger than an acre represent a greater opportunity);
- Ownership (Limited Liability Corporations, Trusts, and owners with more than one property in the area are more likely to entertain offers by developers);
- Recent transactions (owners that purchased properties since 1999 may be more interested in redevelopment);
- Improvements to Land Value Ratio (properties with ratios of 0.5 or below are either vacant or have relatively low-value buildings, and thus may be more easily redeveloped); and
- Water- or park-adjacency (properties facing these amenities may command a premium if placed in residential or commercial use).³

Figure 1.3: Primary Opportunity Sites



Source: *Urban Explorer 2009, Strategic Economics 2009*

³ Maps of these individual characteristics within the Plan Area can be found in Appendix C.

In addition to properties that met several of these criteria, two additional parcels were considered as Primary Opportunity Sites. The **Owens-Brockway facility** is a large, water-adjacent property that has the potential to anchor a major redevelopment project in the Central-East Subarea. Furthermore, while the 27-acre Owens-Brockway site currently supports approximately 180 jobs, on-site employment has been reduced substantially in recent years and the property has been marketed for sale several times, suggesting that the site may become available in the future. The facility's current employment density of approximately one employee per 5,000 square feet is roughly one-tenth the average for fully occupied, contemporary light industrial space. The **Pacific Gas & Electric-owned lot** is a 19.5-acre parcel in the East Subarea serves functions that are duplicated by other nearby facilities. At the outset of the planning process and after initial discussions with PG&E representatives, it appeared that this large site could become available for partial redevelopment within the Plan's 25-year planning horizon. However, in a letter to staff and testimony at the December, 2009 Planning Commission hearing on the community-preferred alternative, a PG&E representative indicated that redevelopment or more intensive use of the site was not compatible with PG&E's goals. Thus, the site has been removed from consideration as a primary opportunity site.

Due partly to the prevalence of small parcels and hard sites, there are very few Primary Opportunity Sites within the Central-West Subarea. The exception to this is the majority of the block bounded by Ford, Glasscock, Derby, and Peterson Streets. There is evidence that these parcels are being aggregated for development and they are directly adjacent to several recently constructed condominium projects; these will likely be among the first properties redeveloped once the housing market recovers.

Much larger Primary Opportunity Sites exist in the West and East Subareas. These, along with the Owens-Brockway site in the Central-East Subarea, occupy a major portion of the Plan Area. Currently, the redevelopment potential of many of these parcels is limited by the existing infrastructure, with the quality and quantity of streets inadequate for non-industrial uses, especially in the East Subarea. This is especially true in the area south of Tidewater, which has many larger Primary Opportunity Sites, but which is also distant from many community amenities (such as retail, restaurants, and public transportation) and lacks a complete road/sidewalk infrastructure. Depending on the cost and real estate market conditions, it might be possible for a developer to address this issue, along with as any potential environmental remediation, as part of a larger redevelopment project. Otherwise, redevelopment of this area will be contingent upon publicly-financed improvements.

The manner in which these properties are (or are not) redeveloped will have a major impact on surrounding parcels. Many of the properties are currently in productive industrial use, and their conversion to residential or commercial uses will make additional residential uses more attractive for adjacent sites, while making industrial uses less viable. Conversely, the decision to preserve industrial land will limit the provision of the infrastructure necessary to support additional residential or commercial uses. Thus, the question of whether Opportunity Sites should be redeveloped or preserved should be evaluated with an understanding of the potential consequences on surrounding uses.

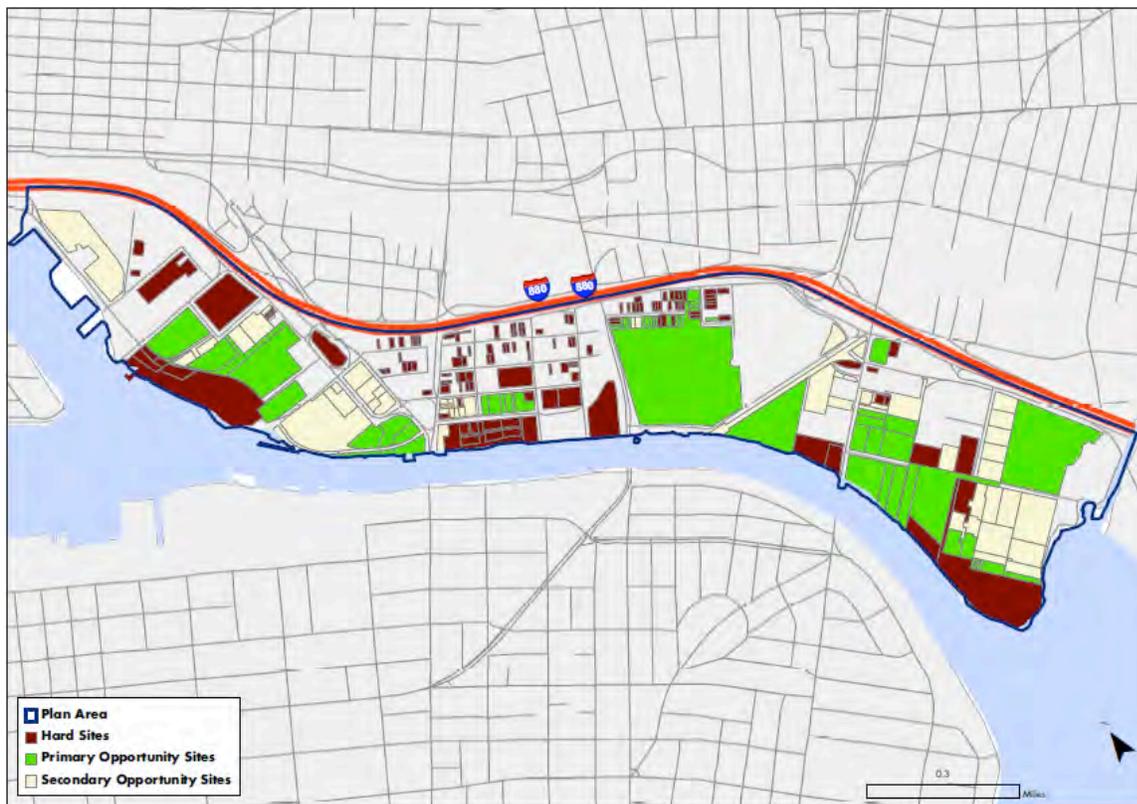
Secondary Opportunity Sites

The Secondary Opportunity Sites, shown in Figure 1.4, below, were identified in a more qualitative manner than the Primary Opportunity Sites. Secondary sites are ones that are more likely to redevelop only if neighboring uses change. While key barriers to development were considered (whether the parcel is vacant or occupied, whether the property is owner-occupied, etc.), these were largely selected as a function of their adjacency to Primary Opportunity Sites. If the Primary Opportunity Sites are to be successfully redeveloped into higher intensity uses, the industrial uses on the Secondary Opportunity

Sites would become less viable. Thus, these properties would be expected to become good opportunities for redevelopment, albeit over a longer time horizon than the Primary Opportunity Sites.

A particularly important parcel, among these secondary opportunity sites, is the one currently occupied by the **ConAgra** mill. As a thriving business with a strong affinity for its current location, this site is unlikely to be redeveloped in the near future without eminent domain or major changes in local economic or physical conditions. However, much of the potential for change in the surrounding area, paradoxically, depends on this parcel. Currently, it is responsible for the large majority of the demand for the rail spur that runs through the Plan Area- as long as a train is running on those tracks, development potential will be limited. The heavy industrial character of the facility may further limit the potential for new residential development on adjacent parcels. If it were redeveloped, other parcels, including those currently identified as Primary Opportunity Sites, would become more viable; if it were preserved, it would serve as a buffer against the conversion of industrial land in the West Subarea.

Figure 1.4: All Opportunity Sites



Source: Urban Explorer 2009, Strategic Economics 2009

Secondary Opportunity Sites are located primarily in the eastern portion of the Plan Area. In the East Subarea, few parcels north of Tidewater have the infrastructure, services, or amenities to support anything other than industrial uses. However, if residential or high-density commercial development occurred on opportunity sites south of Tidewater, it would likely push these uses out of the Plan Area. This would likely make parcels north of Tidewater attractive to developers, especially for retail or commercial (which could take advantage of highway visibility). Likewise, the warehouse/industrial character of the West Subarea limits the potential for new office or residential development. If some Primary Opportunity Sites were converted to residential use, however, it would likely draw more neighborhood-serving retail, which would make the Secondary Opportunity Sites more attractive to office users. In each case, a combination

of restrictive land use policies and appropriate requirements through mechanisms such as design guidelines for residential and industrial development could provide better interface between new uses and industry and reduce conflicts. Such a case is explored in the south and north of Tidewater areas in Alternative 3, described later in this report.

Description of Alternatives

Based on the breadth of opportunity described above, the priorities expressed by local residents, business owners, and policymakers, and the direction of technical experts, three alternative development concepts have been developed for the Plan Area. The alternatives represent market-feasible possible development scenarios. The alternatives are illustrative, meaning that each alternative is not intended to represent exactly which land uses or building configurations would be allowed on particular parcels, but rather to illustrate a range of possibilities for development and investment, providing a basis for the analysis of potential benefits and drawbacks of a range of possible futures.

A description of common elements shared across all alternatives is provided below. Detailed investigation and analysis of each, in a variety of topical areas, is provided in subsequent sections. Based on these three alternatives and the technical analysis of each, community stakeholders and City representatives will engage in a process of refining these concepts to develop a single preferred alternative for the area which will provide the basis for the Plan and EIR and future policy for the area. The preferred alternative will be detailed in future iterations of this report.

For reference, existing Plan Area land uses and landmarks are shown on page 12.

Common Elements Across the Alternatives

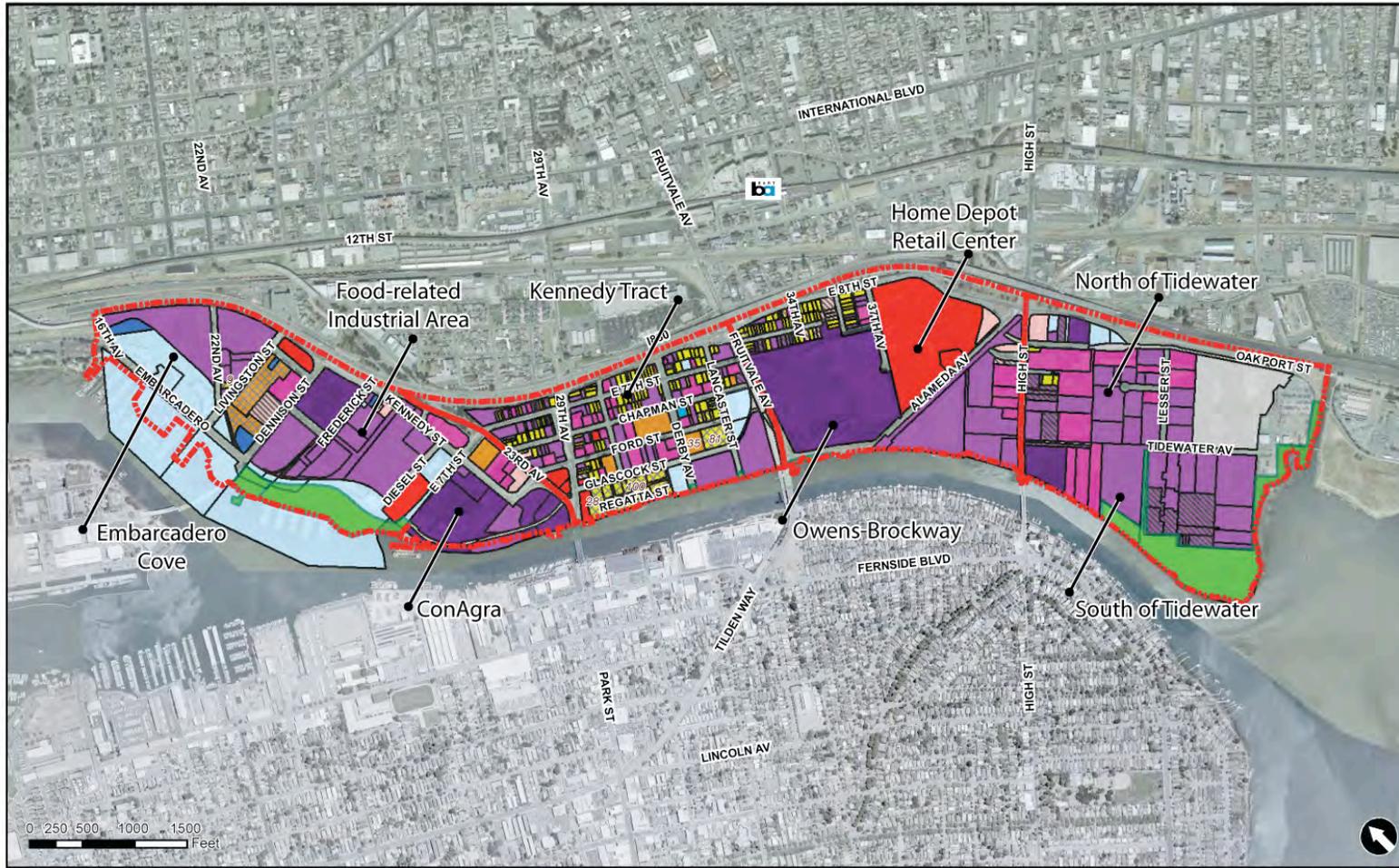
Many important elements of the alternatives are shared across all visions for the future of the area but the amount, location or design may vary slightly between alternatives.

Of particular note is the desire by current Plan Area residents, business owners and other interested parties to preserve many of the elements of the area that make it unique. To this end, all three alternatives share a common theme to preserve, protect and in some cases expand those elements that the public voiced strong support of through the public outreach process. These elements include:

- Maintain the mix of housing and industry: Each alternative adds new housing and creates modern industrial space that is attractive to area businesses.
- Create more housing opportunities near parks and the waterfront: Each alternative clusters new residential development in areas with park and waterfront access.
- Preserve and create more opportunities for small businesses: In addition to maintaining live-work designation for infill in the majority of the Kennedy Tract, all three alternatives provide small format light industrial space that meets the needs of area businesses.
- Continue to connect the Bay Trail and connect people to the two major waterfront parks: Each alternative seeks to provide a continuous Bay Trail connecting waterfront parks. Alternatives 2 and 3 provide additional waterfront parkland.
- Provide better connectivity, especially for walking, biking and transit access: Each alternative divides some of the larger sites into more fine-grained neighborhood-scale blocks that will make circulation more direct. New development in each alternative will provide necessary revenue to

make some of the other desired public infrastructure improvements as well. In addition to the continuous Bay Trail, each alternative may add better bike and pedestrian infrastructure across I-880 depending on level of development in the plan area and its ability to contribute to such infrastructure.

- Maintain the food-related industry area in the West Subarea: Each alternative maintains this area, with Alternative 1 protecting it from further residential encroachment, and Alternatives 2 and 3 allowing residential infill to continue as it is currently occurring.
- Maintain the eclectic character of the Kennedy Tract Neighborhood in the Central West Subarea: Preservation of the live-work infill designation on most of the Kennedy-Tract will ensure that major redevelopment does not happen in the existing residential neighborhood. New residential development at its edges will expand the neighborhood in varying amounts and scales in each alternative.



Existing Land Uses and Major Area Landmarks

Subarea Boundaries	Utilities	Mixed Use	Industrial Lot
Existing Land Use	Automotive	Retail/Commercial	Commercial Lot
Industrial (Heavy)	Residential	Office	Vacant Lot
Industrial (Light)	Condominium	Institutional	Parking Lot
Industrial (Warehouse)	Live/Work	Publicly Owned	Parks - Existing/Under Construction

Alternative 1

Alternative 1 strikes a balance between industrial and residential development by securing an industrial future in the west Subarea and at the Owens-Brockway site, while allowing intensive residential development in the eastern end of the Plan Area. This alternative secures the food-related industry in the West Subarea by maintaining the ConAgra facility to discourage residential expansion and restricting new residential development in food-related industrial areas. It also provides new smaller-format industrial space at the Owens-Brockway site to accommodate new and growing businesses in the Plan Area. Alternative 1 adds the most retail of any alternative, providing a major new retail center north of Tidewater Avenue in the East Subarea. New waterfront residential development is concentrated in the south of Tidewater area where there is easy access to the Martin Luther King Shoreline Park and in the waterfront area between Alameda Avenue and High Street.

West Subarea

The existing cluster of food-related industries in the West Subarea is a major area, City, and regional resource, providing significant employment and helping the region's air quality and congestion levels through its central location in the region. Alternative 1 goes furthest, relative to existing policy and the other alternatives, to secure the viability and future of this industry in the area by discouraging new residential or mixed-use development and maintaining the supportive functions of the ConAgra facility. Because mixed-use and residential development are slowly displacing industry due to market forces and these two land use types are often in conflict with each other, continued residential encroachment is incompatible with the long-term viability of this industrial cluster. Additionally, the ConAgra facility is a major amenity to many of these food-related businesses and is a relatively successful business in its own right. Further, it serves as an important barrier to the expansion of residential development from east to west. Alternative 1 protects the long-term viability of this area for industry.

Central West Subarea

The unique mixed-use neighborhood in the Central West area is a viable and thriving neighborhood with some opportunities for infill and many opportunities to improve infrastructure. In this alternative, a new park is provided in the Park Street triangle area to provide an amenity for the community and Bay Trail users. New residential development is targeted to the waterfront site of the Oakland Museum Women's Board Warehouse and another large grouping of parcels near the waterfront. Small-scale live/work infill will continue on underutilized parcels in the area, maintaining the diverse character of the area.

Central East Subarea

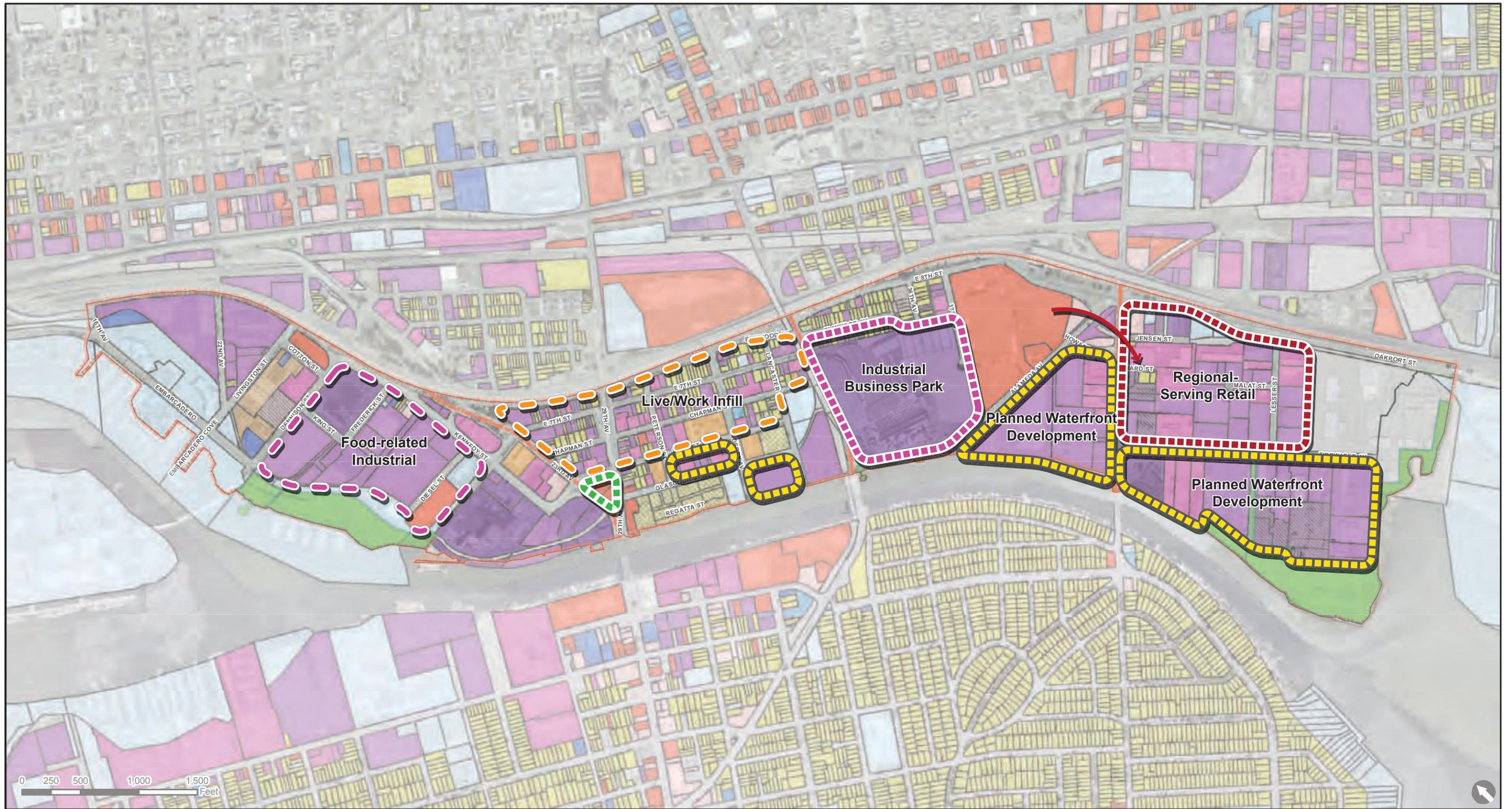
The long-term prospects of the Owens-Brockway industrial facility are not strong, but this large parcel and adjacent parcels under aggregated ownership provide a substantial opportunity for redevelopment. The desire to maintain industry in this area could be accommodated here, as well as the need for a variety of types of industrial spaces for new and developing businesses. New industrial facilities on this site could provide the format and types of industrial space that are in demand within the Plan Area, City, and region. Additionally, the new business park could capture the relocation of businesses that may move from areas east of Alameda Avenue into upgraded facilities as the areas east of Alameda are intended to redevelop into residential and regional-serving retail uses.

East Subarea

The area to the north of Tidewater, which is easily visible and accessible from I-880, would redevelop as a large regional-serving retail complex with potentially two major anchors and multiple smaller chain retail tenants. South of Tidewater would be redeveloped as a new planned waterfront residential development composed of three- to five-story condominiums with views of the estuary and easy access to

the adjacent park and to I-880 via High Street. This and the waterfront development to the west would provide substantial new waterfront housing in the area.

Note: The land use maps shown for each alternative on subsequent pages are conceptual only and do not represent final plans. The exact block and building locations and footprints are not meant to be implied, as they would depend on parcels to be redeveloped, further detailed study by the City agencies and/or private developers responsible, and opportunities and constraints based on potential for adaptive reuse of existing buildings, environmental conditions, and transportation considerations. Similarly, the conceptual local street networks reflected would be modified based on detailed study to provide improved traffic circulation and connectivity. Exact alignments are not meant to be implied.



Alternative 1

Subarea Boundaries	Utilities	Mixed Use	Industrial Lot	Parks - Exist & Under Const
Land Use	Automotive	Retail/Commercial	Commercial Lot	
Industrial (Heavy)	Residential	Office	Vacant Lot	
Industrial (Light)	Condominium	Institutional	Parking Lot	
Industrial (Warehouse)	Live/Work	Publicly Owned		

Residential

Park

Retail

Industrial

Live/Work Infill

Live/Work Infill



September 16, 2009

CENTRAL ESTUARY PLAN
 A Vision for Oakland's Waterfront
 COMMUNITY DESIGN + ARCHITECTURE
 REGION • CITY • NEIGHBORHOOD • BUILDING

Alternative 2

Alternative 2 strikes a balance between industrial and residential development, by allowing new mixed-use development and planned waterfront development in the western half of the Plan Area and focusing industrial development and job growth in the eastern Subareas. New waterfront residential development at the location of the ConAgra facility and near Union Point Park expands the Kennedy Tract residential neighborhood to the West. The Owens-Brockway site is redeveloped as light-industrial and R&D space around a technology incubator that helps generate new businesses to reinvest in not only that site, but also the industrial areas between Alameda Avenue and High Street and also to the South of High Street. This alternative adds the fewest new residents, loses least industrial space, and adds the most jobs of any alternative.

West Subarea

In recent years, mixed-use infill development has brought new diversity of businesses and some residential use into the area surrounding Embarcadero Cove to the North and East. There is an opportunity to support more vibrancy and the development of a mixed-use neighborhood in this area through redevelopment of certain parcels. Additionally, the ConAgra facility site and adjacent industrial parcels are not compatible with increasing residential use of the area, and do not take best advantage of the waterfront location from the perspective of residents. Redevelopment of this eastern side of the Subarea would provide a substantial new waterfront residential opportunity. This could include the provision of a small waterfront park connected to the Bay Trail through this area, which would provide amenity and waterfront access for both existing and new area residents.

Central West Subarea

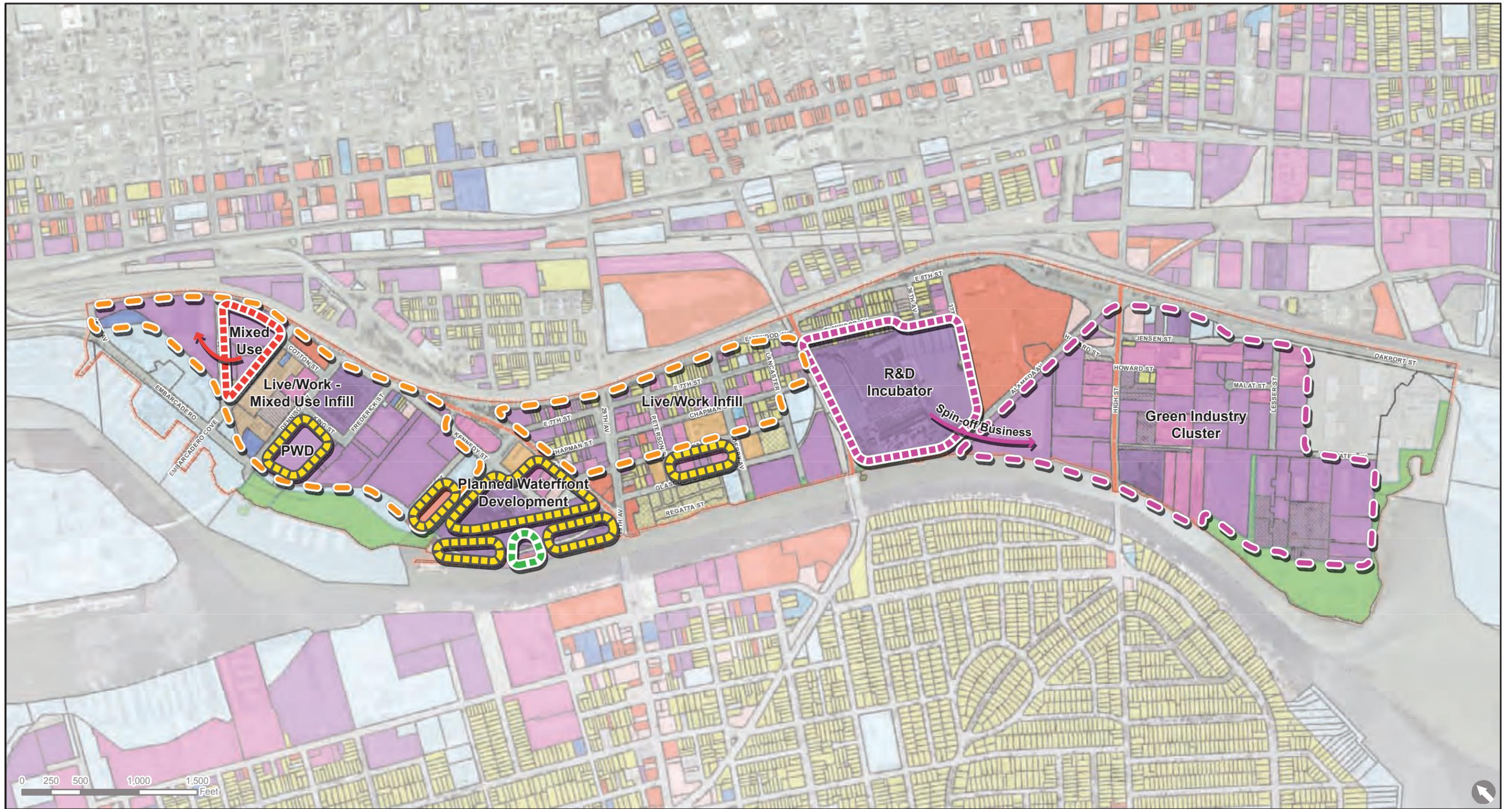
The unique mixed-use neighborhood in the Central West area is a viable and thriving neighborhood with some opportunities for infill and many opportunities to improve infrastructure in the area. Because of the provision of a new waterfront park in the West Subarea, the Park Street triangle would not need to be redeveloped as a park, and could remain a neighborhood-serving retail site. New residential development is targeted to a large grouping of parcels near the waterfront. Small-scale live/work will continue to infill under-utilized parcels in the area, maintaining the diverse character of the area.

Central East Subarea

The long-term prospects of the Owens-Brockway industrial facility are not strong, but this large parcel and adjacent parcels under aggregated-ownership provides a substantial opportunity for redevelopment. The desire to maintain industry in this area could be accommodated here, as well as the need for a variety of types of industrial spaces for new and developing businesses. This area could be the site of a new research and development (R&D) facility that serves as an incubator for new businesses. Such a facility could be developed in partnership with local or regional institutions looking to spin-off the work of researchers into new businesses. The remainder of the Owens Brockway site as well as infill opportunities in the industrial area east of Alameda Avenue would provide a substantial area for growth and industrial redevelopment to capture these new businesses.

East Subarea

The industrial area east of High Street could remain industrial, but be improved with better circulation and infrastructure to make it more appealing to industry looking to locate in Oakland. In particular, new facilities at scales that are currently in high demand in the region or are fitted out specifically with the amenities desired by green- and clean-tech business, such as those that might develop from the R&D incubator planned for the Central East Subarea, could replace existing older industrial facilities.



Alternative 2

Subarea Boundaries	Utilities	Mixed Use	Industrial Lot	Parks - Exist & Under Const
Land Use	Automotive	Retail/Commercial	Commercial Lot	
Industrial (Heavy)	Residential	Office	Vacant Lot	
Industrial (Light)	Condominium	Institutional	Parking Lot	
Industrial (Warehouse)	Live/Work	Publicly Owned		

Residential

Mixed Use

Park

Industrial

Live/Work Infill

Industrial Infill



September 16, 2009

CENTRAL ESTUARY PLAN

A Vision for Oakland's Waterfront

COMMUNITY DESIGN + ARCHITECTURE
REGION • CITY • NEIGHBORHOOD • BUILDING

Alternative 3

Alternative 3 maximizes waterfront residential development opportunities while providing targeted industrial space for the two major industrial opportunities – green and bio technology startups and food production - in the Plan Area. Alternative 3 provides the necessary development opportunities and associated revenues to potentially facilitate the creation of a continuous Embarcadero Boulevard as envisioned by the Estuary Policy Plan. Though it may not be feasible for the roadway to run along the waterfront as envisioned, whether or not it runs along the waterfront or further inland, its greatest contribution is a continuous roadway connection through the Plan Area which could dramatically improve walking, biking and transit availability in the Plan Area. Alternative 3 provides the most new residential development of any alternative, focusing new residential on locations near parks and the waterfront including the ConAgra site and the area South of Tidewater. In the area north of Tidewater, industrial space targeted to green business and R&D startups is provided to capture spinoff businesses from an R&D incubator space that is potentially located on PG&E’s facility or on another parcel north of Tidewater. This alternative adds the most new residents and loses the most industrial space. However, it still loses less than half of the total industrial space and will likely add more jobs than it loses due to higher intensity industrial and office uses being added.

West Subarea

In recent years, mixed-use infill development has brought new diversity of businesses and some residential use into the area surrounding Embarcadero Cove to the North and East. There is an opportunity to support more vibrancy and the development of a mixed-use neighborhood in this area by allowing continued mixed-use infill. Additionally, the ConAgra facility site and adjacent industrial parcels are not compatible with increasing residential use of the area, and do not take best advantage of the waterfront from the perspective of the residential public. Redevelopment of this eastern side of the Subarea would provide a substantial new waterfront residential opportunity and create the conditions to provide a waterfront Embarcadero Boulevard. A small amount of supporting neighborhood-serving retail could locate at the western edge of this development, fronting onto the new park on the Park Street triangle, providing amenity to the new residents here and existing residents of the Kennedy Tract neighborhood.

Central West Subarea

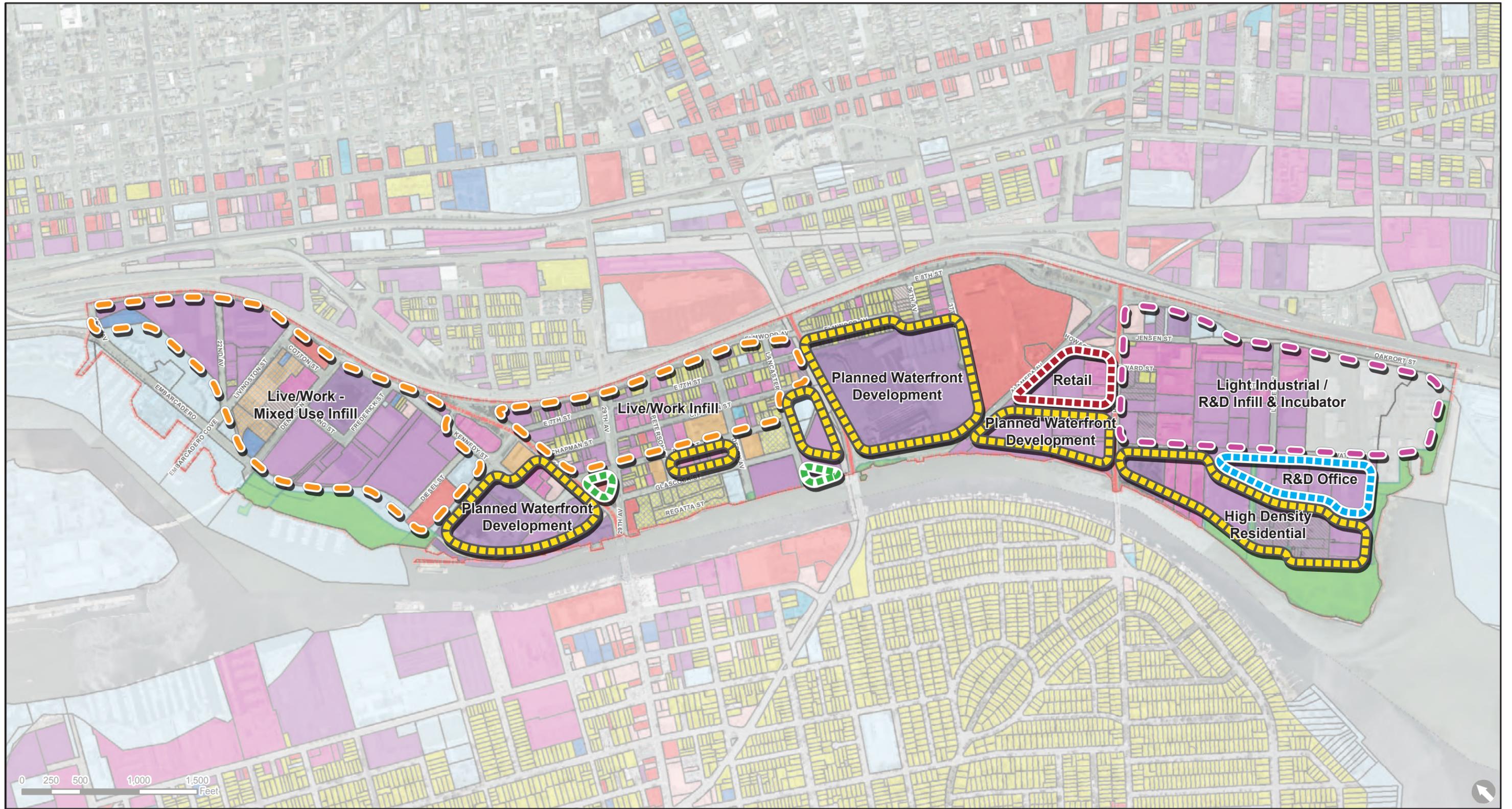
The unique mixed-use neighborhood in the Central West area is a viable and thriving neighborhood with some opportunities for infill and many opportunities to improve infrastructure in the area. In this alternative, a new park is provided on the site of the Park Street triangle as an amenity to new residents of the West Subarea and existing residents of the Central West Subarea. New residential development is targeted to a large grouping of parcels near the waterfront and the warehouses between Lancaster and Park Streets. Because of the alignment of the new Embarcadero, a small waterfront park is created at the east end of this Subarea as well. Small-scale live/work will continue to infill under-utilized parcels in the area, maintaining the diverse character of the area.

Central East Subarea

The long-term prospects of the Owens-Brockway industrial facility are not strong, but this large parcel and adjacent parcels under aggregated-ownership provides a substantial opportunity for redevelopment. This site could provide a substantial planned waterfront residential development opportunity, which would be a substantial extension of the Kennedy Tract neighborhood across Fruitvale Avenue. Additionally, the area between Alameda Avenue and High Street would be redeveloped as planned residential development along the waterfront and retail nearer to I-880 where visibility and traffic access are higher. Both areas of waterfront development would front onto a waterfront Embarcadero and the western area would also likely include a park.

East Subarea

The waterfront Embarcadero Boulevard would continue across High Street into the East Subarea, running between the edge of the MLK Shoreline Park and the major new residential development south of Tidewater. The majority of the area south of Tidewater would be developed as five residential towers. The towers would have a three to five story base of townhomes or flats, with set-back towers reaching up to 240 feet. Along the eastern half of Tidewater, R&D office buildings would provide a buffer between the new residential uses and the industrial uses to the north of Tidewater. A major new green technology R&D incubator space of approximately 10,000 to 30,000 sq. ft. could be located on any of several sites either north or south of Tidewater, allowing spin-off businesses to inhabit rehabilitated and redeveloped industrial parcels in the north of Tidewater area. This R&D facility could be a partnership between private industry, local government and a major area institution, designed to capture new technologies developed by the research institution and private industry and turn them into a source of new 21st Century industrial jobs – capitalizing on available area land, resources, and skilled workforce to enhance the industrial jobs base in this area.



DRAFT Alternative 3

September 16, 2009

Subarea Boundaries	Utilities	Mixed Use	Industrial Lot	Parks - Exist & Under Const
Land Use	Automotive	Retail/Commercial	Commercial Lot	
Industrial (Heavy)	Residential	Office	Vacant Lot	
Industrial (Light)	Condominium	Institutional	Parking Lot	
Industrial (Warehouse)	Live/Work	Publicly Owned		

Residential

Park

Retail

Industrial

Office

Live/Work Infill

Industrial Infill



Detailed Site Studies

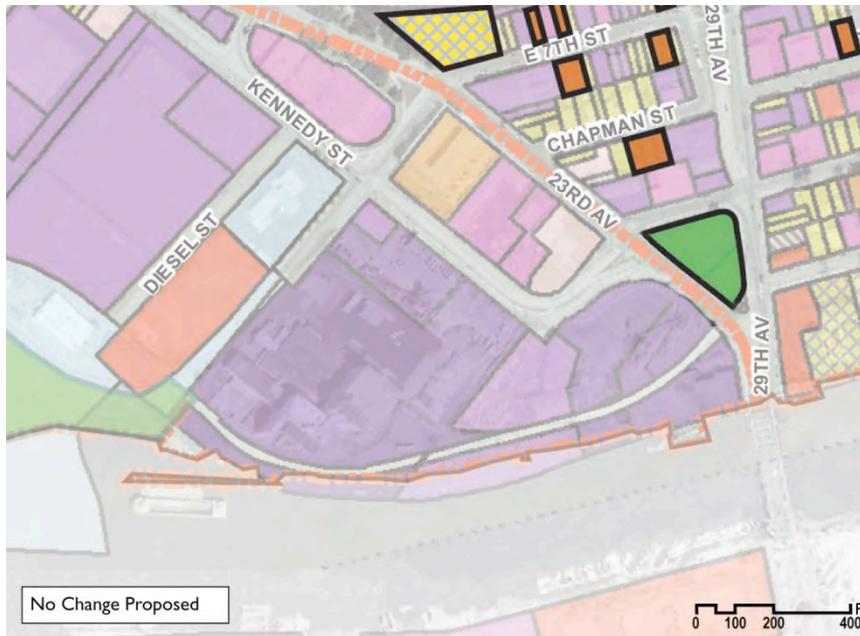
Three major redevelopment opportunity sites present themselves in the Plan Area. Each serves as a catalyst for surrounding development, defining the character of not only the large areas that constitute these opportunity sites, but also influencing how land uses will change over time in the surrounding areas. More detailed study of the opportunity for major redevelopment of each of these sites is detailed below.

The alternative development concepts for each of these sites are conceptual. Each development would require more detailed study of circulation, infrastructure, and environmental opportunities and constraints. For example, the continuous roadway paralleling the waterfront would require additional detailed study to coordinate with traffic operation of bridges, existing intersections, and freeway on and off-ramps. However, if such a continuous roadway is an option supported by the community and deemed economically feasible, the potential for such a connection could be explored, and other alignments could be studied to find a preferred option that best improves circulation and safety throughout the Plan Area and vicinity.

These plans are conceptual and meant only to illustrate potential ideas and opportunities. They reflect typical development common in the current marketplace. The developer of each site, in consultation with the City and area stakeholders would develop more specific site layouts when these properties become available and are purchased for development.

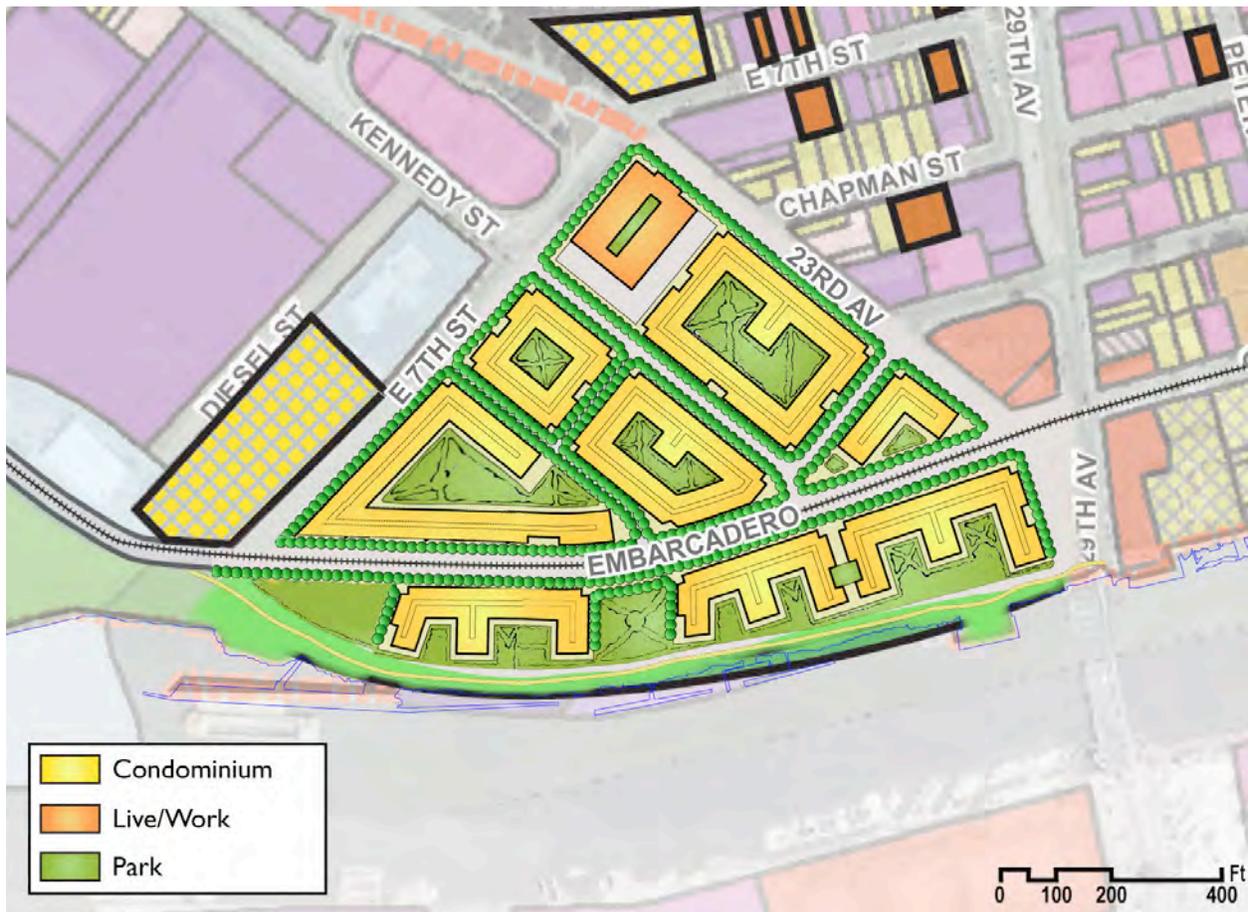
ConAgra Waterfront

Alternative 1



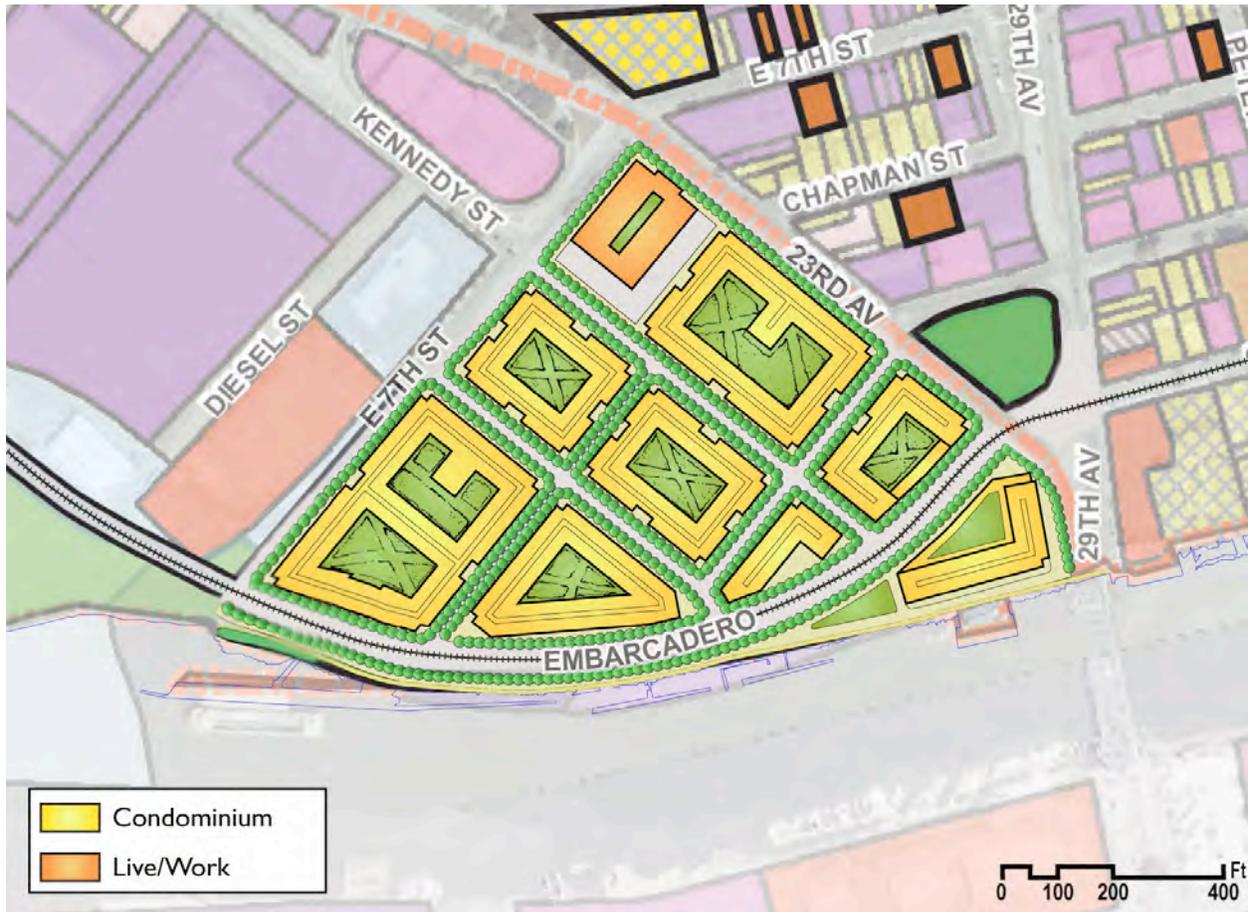
- No change to this area is anticipated as part of Alternative 1.
- The Bay Trail would go around the ConAgra area to the north on City streets.
- Note that the park indicated on the east side of 23rd Avenue may or may not be advisable due to traffic safety considerations.

Alternative 2



- Alternative 2 includes new waterfront residential development with housing that would have views of the waterfront, internal open space and a new park.
- New residential developments would reflect an urban industrial style similar to recent development in the Plan Area. Three to five story buildings are composed of units that front onto adjacent streets or interior courtyards.
- The new residential development would provide public open space between residential buildings and the waterfront and a waterfront public park connected to the Embarcadero and the Bay Trail.
- New streets and a continuous waterfront Bay Trail would provide improved connectivity for all modes between Embarcadero Cove, I-880 and the Kennedy Tract neighborhood. The new roadway connection across 23rd and 29th Avenues may not be possible as shown. Further traffic study would be required to determine potential alternative alignments, such as connecting Embarcadero to Ford Street.

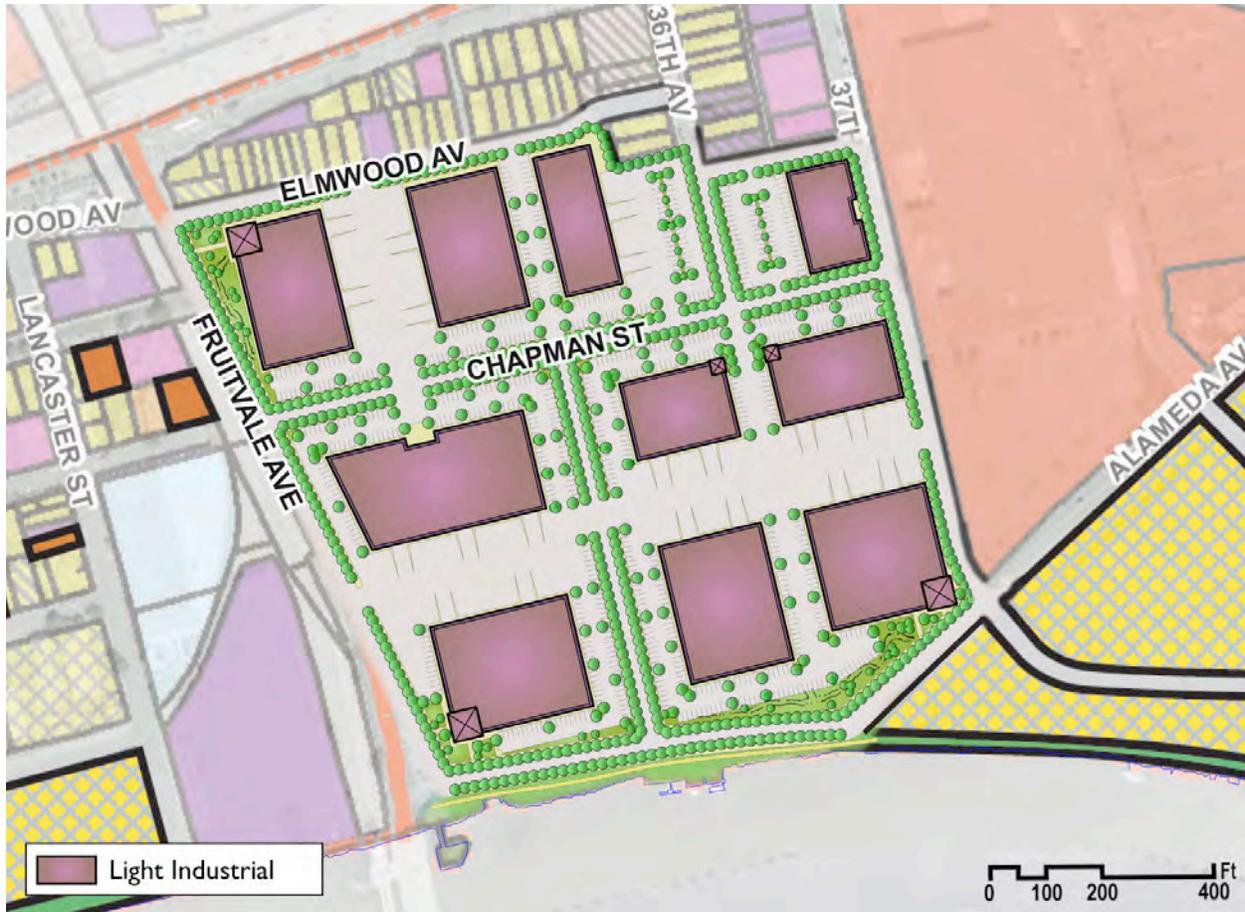
Alternative 3



- Alternative 3 includes new waterfront residential development with housing that would have views of the waterfront and internal open space.
- New residential developments would reflect an urban industrial style similar to recent development in the Plan Area. Three to five story buildings would be composed of that front onto adjacent streets or interior courtyards.
- A key element of this concept is a continuous waterfront Embarcadero Boulevard and adjacent Bay Trail. These features and new streets would provide improved connectivity for all modes between Embarcadero Cove, I-880 and the Kennedy Tract neighborhood. The high density of Alternative 3 would potentially justify transit along the Embarcadero.
- The eastern-most development on the north side of the Embarcadero could include ground-floor retail or a café fronting onto the new park in the adjacent Park Street Triangle.

Owens-Brockway

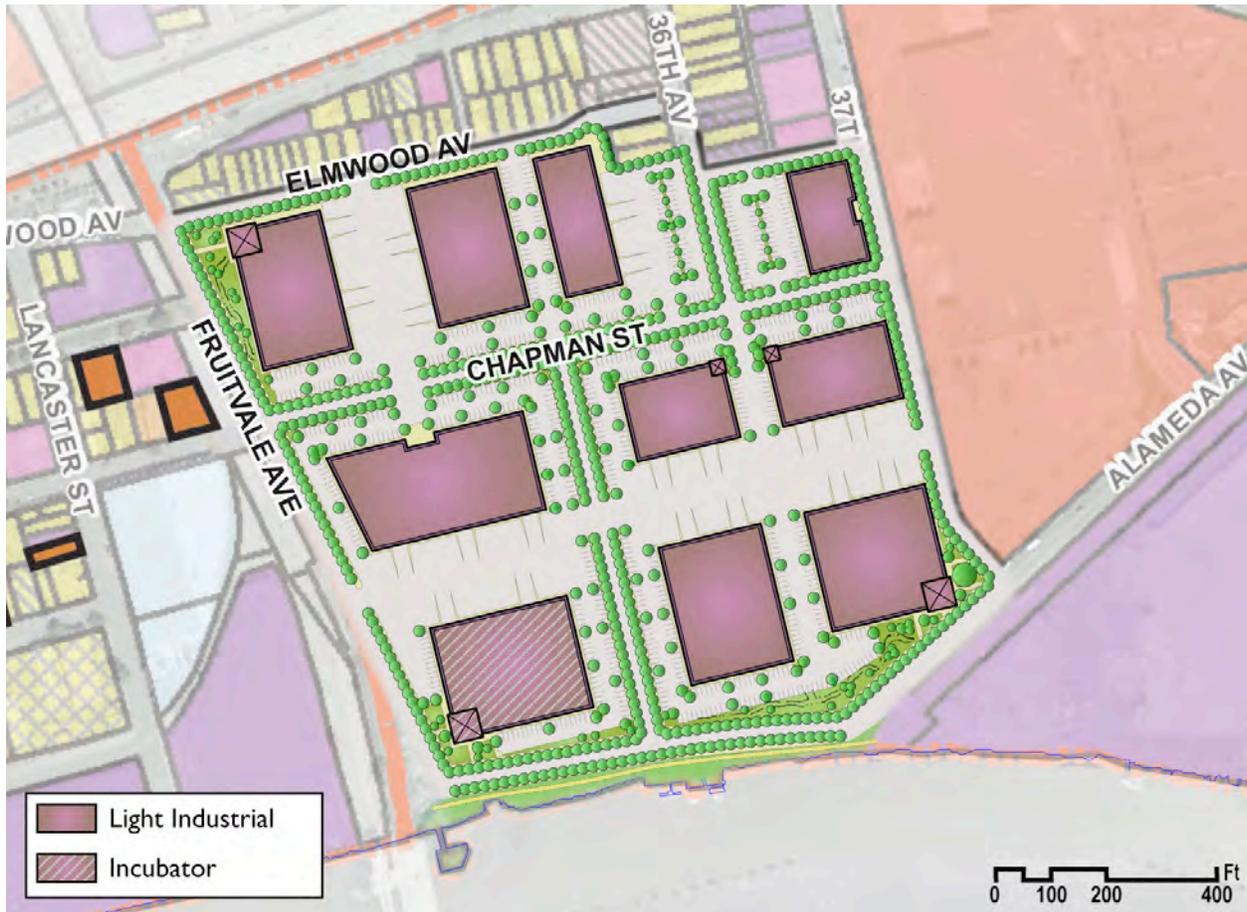
Alternative 1



Note: Light Industrial and R&D land uses are relatively interchangeable in use, building design standards and market potential. This and subsequent illustrations designate areas Light Industrial where either use may be anticipated.

- The Owens Brockway industrial facility would be replaced by an industrial business park comprised of high quality light industrial and R&D space.
- Light industrial and R&D buildings would be smaller formats that are in high demand in the area and the region for small to mid-size businesses.
- Landscape buffers around each site and the orientation of buildings to the street and primary corners would create more attractive and active street frontage.
- New streets for truck access and circulation would improve access to both this area and the Elmwood Avenue residential neighborhood to the north.
- Unused railroad line parcels along the west side of Fruitvale Avenue could be beautified or used for additional right-of-way for street improvements such as adding improved sidewalks or bicycle lanes.

Alternative 2



- The Owens Brockway industrial facility would be replaced by an industrial business park composed of high quality light industrial and R&D space.
- The business park would be anchored by a green technology and small business incubator located at one of the prominent corners of the area.
- Light industrial and R&D buildings would be smaller formats that are in high demand in the area and the region for small to mid-size businesses. The buildings could include more office and lab space for start-up businesses.
- Landscape buffers around each site and the orientation of buildings to the street and primary corners would create more attractive and active street frontage.
- New streets for truck access and circulation would improve access to both this area and the Elmwood Avenue residential neighborhood to the north.

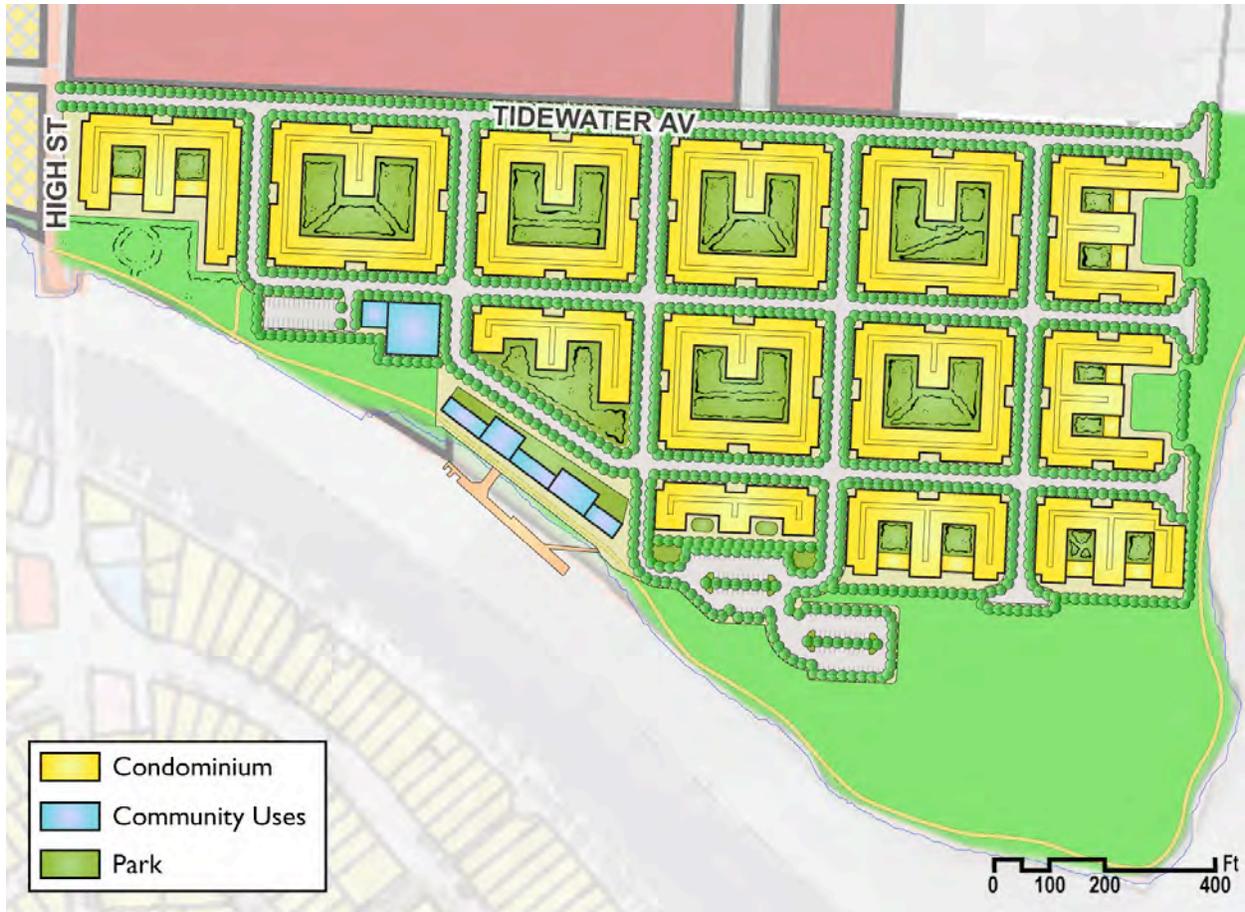
Alternative 3



- Alternative 3 includes new waterfront residential development with housing that would have views of the waterfront and internal open space.
- The area would function as an extension of the Kennedy Tract neighborhood, replicating its block and building scale and pattern.
- New residential developments would reflect an urban industrial style similar to recent development in the Plan Area. Three to five story buildings would be composed of units that front onto adjacent streets or interior courtyards.
- New streets would extend Ford and Chapman across Fruitvale Avenue creating better connectivity and more walkable conditions to connect the neighborhood.
- A tree-lined Embarcadero Boulevard along the waterfront would provide a more substantial green buffer between the Bay Trail and traffic. This continuous boulevard might include transit.

South of Tidewater

Alternative 1



- Alternative 1 includes new waterfront residential development with housing that would be oriented to views of the waterfront, Martin Luther King Shoreline Park and internal open space.
- New residential developments would reflect an urban industrial style similar to recent development in the Plan Area. Three to five story buildings would be composed of units that front onto the park and adjacent streets or interior courtyards.
- A high density of new streets would provide a high level of connectivity to create a very walkable neighborhood.
- A continuous waterfront Bay Trail would be provided through the potentially slightly expanded Martin Luther King Regional Shoreline Park.
- A waterfront community center near the western edge of the residential development and adjacent to the Tidewater Boathouse would provide an amenity to new residents.

Alternative 2



- Some consolidation and redevelopment of underutilized industrial parcels might occur due to market forces.
- East Bay Regional Park District land currently leased for industrial storage could be converted to park space.
- A continuous waterfront Bay Trail could be provided if redevelopment of certain waterfront industrial uses were to occur.

Alternative 3



- Alternative 3 includes new waterfront residential towers that would be oriented to maximize views of the Estuary and Bay. Similar to recent waterfront redevelopment in Vancouver, BC, towers would be set back from the street within a ring of three to four story townhomes or flats that create a smaller scale street frontage.
- To buffer residential uses south of Tidewater and industrial uses north of Tidewater from each other, R&D spaces with a large office component would be located along the south side of the eastern half of Tidewater Avenue. These would create a more compatible street frontage facing the residential development.
- Residential density and jobs/housing balance in this area might justify the provision of neighborhood-serving retail and a higher level of transit service along Embarcadero and/or High Street.
- A high density of new streets would provide a high level of connectivity to create a very walkable neighborhood.
- A well-landscaped Embarcadero Boulevard would provide an attractive and continuous connection between this area and the Plan Area to the west.
- A continuous waterfront Bay Trail would be provided through the potentially slightly expanded Martin Luther King Regional Shoreline Park.

Summary Comparison of Land Use Changes

The alternatives are compared in detail through the body of this report. Many of these analyses depend on in-depth technical conclusions that were developed based on parcel-by-parcel consideration of redevelopment potential of each site, as described in the Identifying Potential for Change section earlier in this chapter, to result in the previously described alternatives. Traffic, economic, and workforce impacts, for example, all depend on not only qualitative but also quantitative understanding of the impacts of proposed land use changes. A quantitative summary of the changes are summarized below.

Table I.1: Quantitative Summary of Land Use Changes

Subarea	Existing			Alternative 1			Alternative 2			Alternative 3		
	Existing Residential (Units)	Existing Commercial (Sq. Feet)	Existing Industrial (Sq. Feet)	Change in Residential (Units)	Change in Commercial (Sq. Feet)	Change in Industrial (Sq. Feet)	Change in Residential (Units)	Change in Commercial (Sq. Feet)	Change in Industrial (Sq. Feet)	Change in Residential (Units)	Change in Commercial (Sq. Feet)	Change in Industrial (Sq. Feet)
West	108	179,764	1,328,292	11	0	0	1,190	169,699	-759,588	788	5,000	-349,851
Central West	593	25,336	593,894	367	-6,211	-188,380	211	0	-92,017	417	0	-196,740
Central East	209	200,100	1,219,699	587	2,944	-635,762	15	2,944	-269,313	1,403	67,713	-1,184,967
East	6	5366	823,864	966	439,678	-788,413	0	0	146,848	1,122	200,290	-132,806
TOTAL	916	410,566	3,965,749	1,931	436,412	-1,612,555	1,416	172,643	-974,070	3,730	273,000 ⁴	-1,864,364 ⁵

The land use program for each Plan Alternative identifies redevelopment areas within the Plan Area. New land use classifications and development intensities were recommended for each of these redevelopment areas. Parcels outside these redevelopment areas were assumed to remain unchanged within the Plan’s time horizon– i.e., the parcels maintain their current land use classification and development intensity.

⁴ Note: The original estimate of 279,213 square feet of commercial use in Alternative 3 was revised to remove the effect of redeveloping the PG&E site.

⁵ Note: The original estimate of -1,897,176 square feet of industrial use in Alternate 3 was revised to remove the effect of redeveloping the PG&E site.

For each alternative, the total land inventory for major land use classifications was developed by adding the increment of change (positive or negative) to the existing stock. Appendix B provides a general land use overview and comparison. Chapter 8, Sustainability, and the associated Appendix F provide a discussion of the implications associated with the conversion of various land uses that occurs within each Plan Alternative.

For each land use classification, the land area was then converted from acres to estimates of gross floor area (GFA), population, and employment using a series of conversion factors. These factors represent common industry and planning averages and include the number of dwelling units (DUs) per acre, persons per DU, floor-to-area ratio (FAR), and the amount of GFA per employee. Many of the transportation and utility demand calculations require data to be expressed in these terms.

Table I.2: Residential and Non-Residential Conversion Factors

Land Use Category	Land Use Conversion Factor	Population and Employment Conversion Factors
Residential	DU¹ / Acre	Persons per DU
Single-Family Residential	15	2.82
Multi-Family Residential	60	1.85
Live/Work – Live	15	2.11
Mixed-Use - Residential	40	1.85
Industrial	FAR²	GFA (sq. ft.) per Employee
Industrial Heavy & Light	0.50	1,000
Industrial Warehouse	0.50	1,500
Industrial Business Park	0.50	1,000
Industrial R&D	0.50	700
R&D Incubator	0.50	500
Mixed-Use Commercial		
Mixed-use – Office	0.60	300
Commercial		
Office	0.50	300
Automotive	0.20	500
Retail	0.25	500
Other	FAR	Conversion
Parks & Bay Trail	n/a	4 employees per acre
Institutional & Utilities	n/a	500 GFA (sq. ft.) per employee
Notes:		
(1) DU = dwelling unit		
(2) FAR = floor-to-area ratio. Average FARs were calculated based on existing land uses and the proposed land use programs.		
Source: BOMA International (2004), Dun & Bradstreet (2008), ABAG (2007), EDD (2006), Urban Explorer (2009), Strategic Economics (2009); compiled by Arup (2009)		

Table I.3: Land Use Inventory – Population and Employment by Plan Alternative

	Alternative 1	Alternative 2	Alternative 3
Residential Population			
All housing types	4,216	3,094	8,150
Employment			
Industrial, Office, Retail, Other	5,157	5,493	5,016 ⁶
Source: Arup (2009)			

These land use, population and employment figures were used to develop various analyses in the sections that follow.

⁶ Note: The original estimate of 618 new jobs in Alternative 3 was revised to remove the effect of redeveloping the PG&E site, resulting in the total number of jobs changing from 5,414 to 5,016.