PIONEER BLUFF

TRANSITION PLAN

DECEMBER 17, 2014

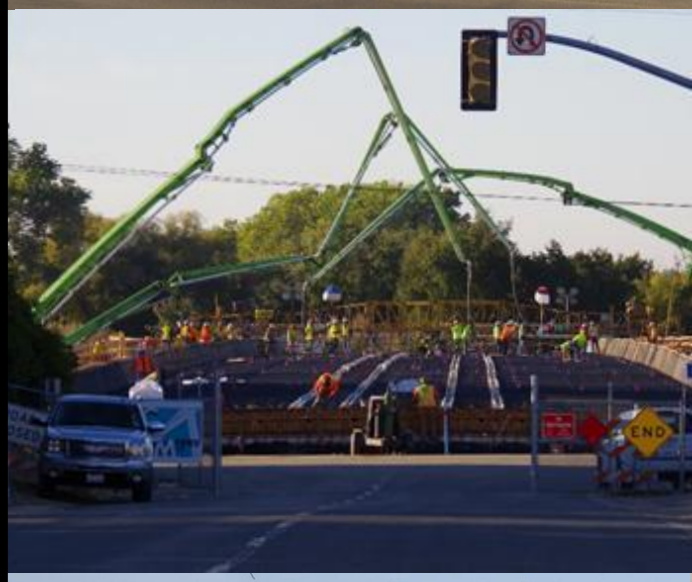


Table of Contents

Chapter 1. Introduction

Pioneer Bluff consists of approximately 125 acres of Sacramento riverfront property situated along a one-mile stretch of South River Road. It is part of West Sacramento's planned urban waterfront and is one of the prime riverfront redevelopment opportunities in the region. Its existing industrial land uses and infrastructure date back to the 1940s when barge and rail were the primary transportation systems serving industrial operations. The area developed first as a regional petroleum storage hub and distribution point and subsequently expanded to include other industrial uses.

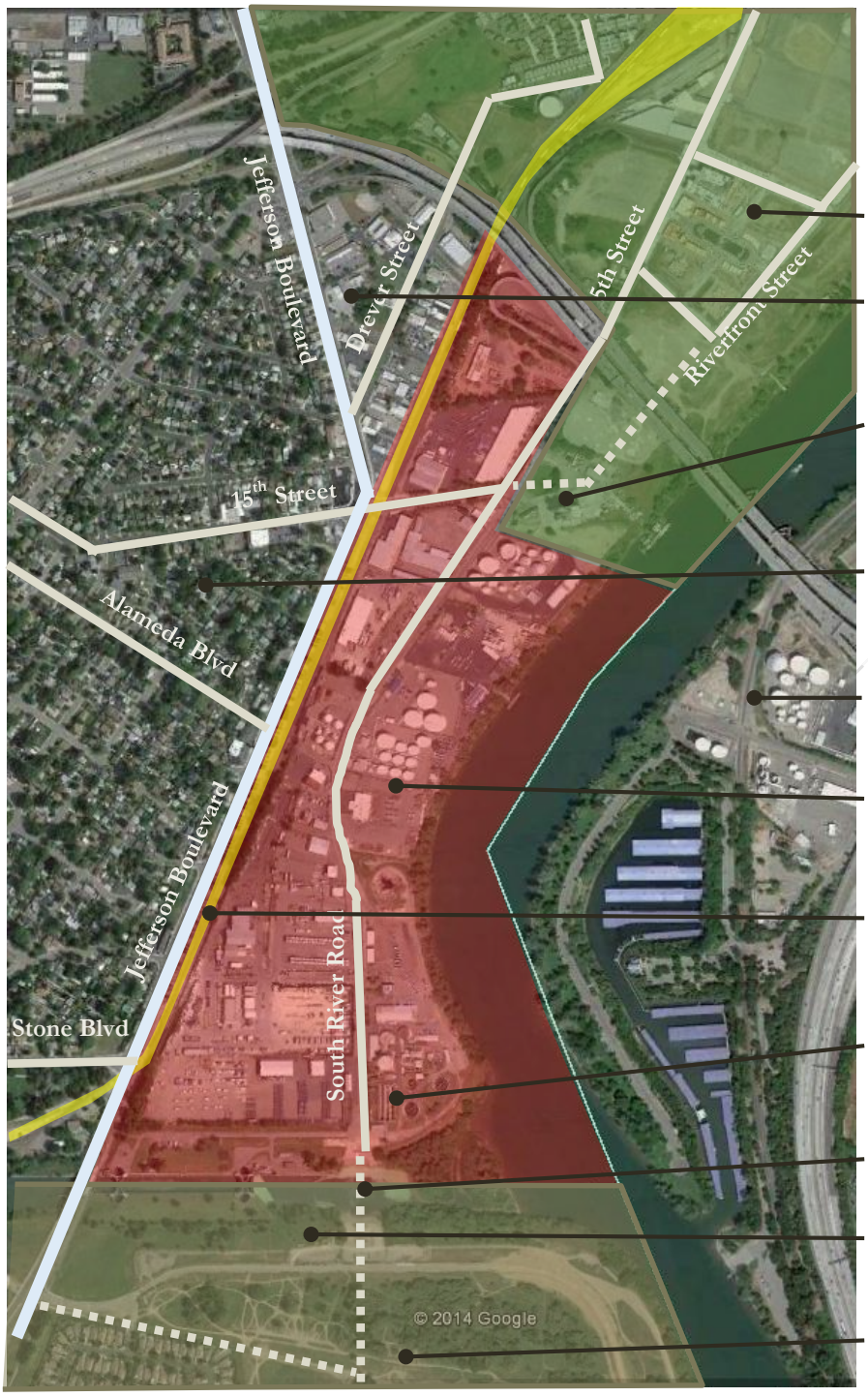
When the Port of West Sacramento and the barge canal were constructed in the late 1950s, South River Road was severed and Pioneer Bluff became a peninsula surrounded by water and rail on three sides, with limited vehicular access at its north end. As an industrial enclave, Pioneer Bluff has thrived for the past 60 years with this configuration, isolated from through traffic and adjacent neighborhoods.

Since incorporation in 1987, the City of West Sacramento has articulated its vision for an urban riverfront. In 1990 the City designated Pioneer Bluff for high density mixed-use development in its *General Plan*. This vision was reiterated in the 2003 *Riverfront Master Plan* and strengthened in 2004 with a land use policy that prohibits the establishment, expansion, or replacement of non-conforming industrial uses in Pioneer Bluff.

The City began implementing its urban riverfront vision in the 1990s in the Washington District with projects such as the Ziggurat building and the River Walk Park. In the 2000s, the City accelerated transition efforts in the Bridge District with the relocation of several major industrial operations, the construction of Raley Field, and the installation of new backbone infrastructure to support urban development. More recently, the City has extended de-industrialization activities into Pioneer Bluff through relocation of the Cemex facility, decommissioning the City's wastewater treatment plant, and construction of the Mike McGowan Bridge. The recent economic recession and the dissolution of redevelopment agencies in California in 2011 has slowed some of the City's riverfront transition efforts, but long-term market trends that support infill development persist.

New urban development in the Bridge District and the completion of the Mike McGowan Bridge are introducing new uses and traffic patterns to the area while impacting the operating landscape for existing businesses in Pioneer Bluff. This trend will accelerate upon completion of the Village Parkway extension project in 2016 just south of Pioneer Bluff and planned new development in the adjacent Stone Lock district. Long planned regional transportation projects, such as the Broadway Bridge and the Sacramento-West Sacramento streetcar system, are progressing and providing additional momentum to riverfront redevelopment efforts.

Exhibit 1: Pioneer Bluff Location



Bridge District (planned urban waterfront)

Jefferson Boulevard commercial corridor

Former Cemex cement terminal

Old West Sacramento neighborhoods

City of Sacramento (planned urban waterfront)

Pioneer Bluff District (urban waterfront)

East-Side Rail Line (Union Pacific)

Decommissioned Wastewater Treatment Plant

Mike McGowan Bridge (under construction)

Stone Lock (planned urban waterfront)

Northeast Village (primarily suburban)

Today, despite substantial progress towards the City Council's vision of an urban waterfront, Pioneer Bluff remains an active industrial area with petroleum tank farms and corporation yards representing the predominant land uses. Trucking and the regional Kinder Morgan petroleum pipeline long ago displaced barge and rail as the primary modes of product movement in Pioneer Bluff, but the rail corridor along Jefferson Boulevard remains in place and poses a significant barrier to traffic circulation and riverfront access. Existing infrastructure is inadequate to serve future urban development.

Transitioning Pioneer Bluff into an urban environment that can be enjoyed by all West Sacramento residents will involve many public and private actions. Existing businesses must be relocated, property cleared, infrastructure rebuilt, buildings developed, new uses attracted, and new services provided. Such processes are necessarily multi-disciplinary, complex, and long-term. The Pioneer Bluff District is at the beginning of this process, and given its complexity, the pace and shape of transition is likely to be incremental and opportunistic rather than linear and methodical.

The *Pioneer Bluff Transition Plan* summarizes the City's analysis of transition processes, scope and projected costs, and defines an Action Plan to expedite and facilitate the continued transition of Pioneer Bluff to urban waterfront uses. This document is intended to advise the discretion of decision-makers and stakeholders in current and future planning efforts. This plan will also serve as the foundation for a forthcoming land use, infrastructure, and financing plan necessary to implement the City's long-term vision for Pioneer Bluff.

Chapter 2. Transition Scope and Economics

This chapter conceptually defines the scope, costs, and economics of transitioning Pioneer Bluff from current (2014) industrial conditions to finished parcels that can support urban waterfront development. The transition scope includes two components:

- **De-industrialization:** This component includes the scope and costs related to making Pioneer Bluff land available for reuse. This process includes business relocation; demolition and environmental remediation; reuse planning; and interim improvements.

- **Backbone Infrastructure:** This component includes the scope and costs of installing public infrastructure necessary to support urban waterfront development. Public infrastructure includes streets, municipal utilities, and parks.

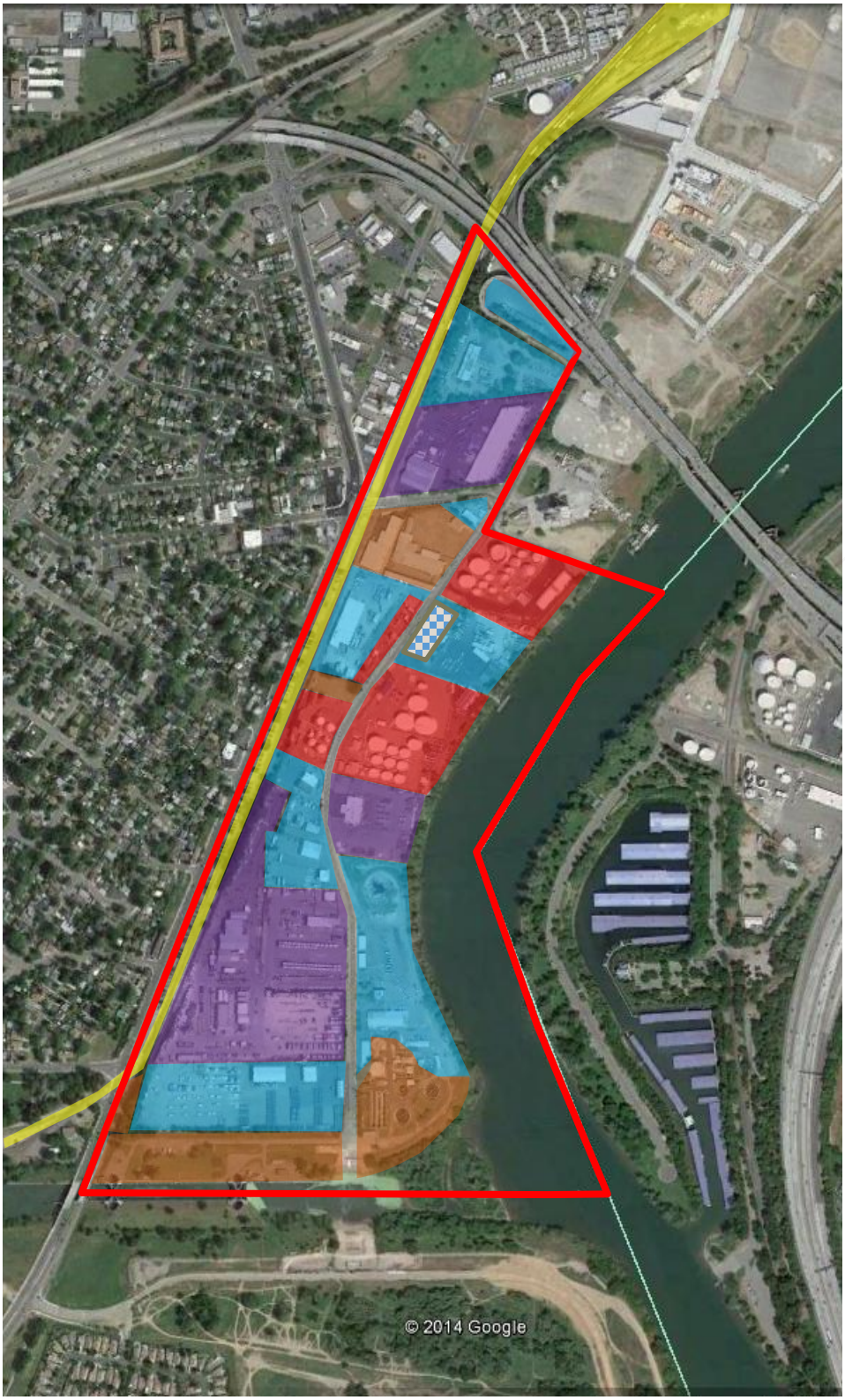
2.1 DE-INDUSTRIALIZATION

Pioneer Bluff (2014) includes about 20 industrial businesses that employ approximately 900 workers, including truck drivers and field workers. There is limited vacant land. The primary land uses are corporation yards, fuel terminals (tank farms), and light manufacturing (see Exhibit 2). Annual business activity is estimated at $120 million per year and the City receives approximately $273,000 in annual property taxes from Pioneer Bluff properties. A significant amount of sales tax is generated from a single card lock/retail fueling facility in Pioneer Bluff, but the sum of annual sales tax received by the City from all other industrial users is approximately $150,000 (the City does not derive any sales tax from the petroleum tank farms).

In the early 2000s, the City and property owners began transition efforts at the northern boundary of Pioneer Bluff and the Bridge District. Activities included relocation of the Cemex terminal, removal of rail spurs, demolition of industrial facilities, and planning for shared backbone facilities. In 2008, the City began transition efforts at the southern boundary of Pioneer Bluff with the decommissioning of its wastewater treatment plant. In 2013, construction of the Mike McGowan Bridge and related improvements began; completion of this project at the end of 2014 marks a pivotal point in the evolution of Pioneer Bluff.

In April 2014, the City Council affirmed South River Road, the City corporation yard, and the fuel terminals as de-industrialization priorities for Pioneer Bluff. In October 2014, the Cities of Sacramento and West Sacramento began a joint feasibility study for a new bridge across the Sacramento River to connect Pioneer Bluff with Broadway in Sacramento (i.e. “Broadway Bridge” alignment).

Exhibit 2: Existing Pioneer Bluff Uses (2014)



Existing Uses

- Corporation Yard
- Light Manufacturing
- Fuel Terminal*

* includes Kinder Morgan pipeworks

- East-Side Rail Line
- Retail Fueling Station
- Vacant

2.1.1 Business Relocation

City of West Sacramento Corporation Yard

This corporation yard is the City's primary operational facility for its Public Works and Parks Departments and is representative of many corporation yards in Pioneer Bluff. The corporation yard maintains and stores vehicles, equipment, and supplies amongst other activities. This facility utilizes 9 acres of land (of its 20 acres) and 20,000 square feet of building space (see Appendix B). It employs 68 workers and is estimated to have an annual budget of $10 million. With some exceptions, most of the facilities are operationally constrained, obsolete, and fully depreciated.

Since the early 2000s, the City has been contemplating a new corporation yard while making incremental investments to existing facilities. Since 2005, the City has been collecting a Corporation Yard Impact Fee to fund new facilities. As of November 2014, this Fund had a net balance of $2,238,044.

As with most Pioneer Bluff business relocations, relocating the City's corporation yard will involve recapitalizing facilities based on current and future operational needs. It will offer the City a rare opportunity to re-align and re-calibrate its operations with new facilities. As such, an operational analysis of corporation yard processes will be a critical part of the relocation process.

Current corporation yard facilities have limited value given their depreciated condition and industrial use restrictions. A new, build-to-suit facility is estimated to cost $12.4 million and will offer an opportunity to substantively improve operational productivity.

Based on analysis of costs, financing sources, and productivity opportunities, relocation of the corporation yard offers challenges, particularly financing challenges, but is critical to forwarding Pioneer Bluff transition efforts in the near-term (see recommendations in Section 3.1). Depending on City priorities, relocating this corporation yard may be possible within 4 years. This is the minimum time necessary to design and develop a new built-to-suit facility.

Fuel Terminals

Pioneer Bluff fuel terminals are owned and operated by Equilon Enterprises LLC (Shell Oil) and Buckeye Partners LP. In total, these terminals utilize approximately 14 acres of property (of their 20 acres) and include approximately 515,000 barrels of fuel storage (38% of Sacramento regional capacity, not including Stockton terminals) (see Appendix C). These terminals operate 24 hours a day and load approximately 190 fuel trucks daily for delivery to local and regional service stations.

The terminals are connected to Bay Area refineries via Kinder Morgan pipelines. Ethanol and other additives are delivered via truck and rail (Buckeye terminal only). The terminals store fuel, blend additives, and load tanker trucks for delivery. With some exceptions, most structures are operationally constrained, obsolete, and nearly fully depreciated. Fixture and equipment conditions vary, but generally continuing investment is required for these items due to regulatory compliance and the nature of fuel terminal operations.

While there is market differentiation, Equilon/Shell, Buckeye, and other terminals compete in a low margin, negative growth business (see Appendix C). Gasoline consumption in California peaked in 2005 and is expected to continue to decline over the near and long-terms. In such markets, there are strong pressures to consolidate operations to increase scale, productivity, and margins. There are also strong incentives to over-consume capital facilities to maintain margins in the face of operational inefficiencies.

Relocating the fuel terminals from Pioneer Bluff will be part of a market-driven, regional consolidation process. It will result in fewer but more efficient and productive terminals. The timing of fuel terminal relocation will be partially governed by the economics of consolidation and the limits of facility consumption. It will also be governed by the unique locational and regulatory challenges inherent in relocation of fuel terminal facilities. Overcoming these challenges is expected to require a regional public-private approach to consolidating fuel terminals.

Equilon/Shell has operated in Pioneer Bluff since the late 1940s, has amortized most of its investments, and is a vertically integrated premium brand. It is likely well positioned for considering relocation at this time. Buckeye Partners purchased its Pioneer Bluff terminal from BP in 2011, has not amortized its investment, and is less integrated/differentiated operationally. It may be less well positioned for considering relocation at this time.

Buckeye's 2011 purchase of the BP fuel terminal valued the facility at $13.3 million (or $46 per barrel of storage) in terms of assessed property value and $3.2 million (or $11 per barrel of storage) in terms of transaction value. The bulk of assessed value is in fixtures and equipment rather than structures and land. The transaction value reflects the net value of this purchase inclusive of other obligations and liabilities (e.g., environmental liabilities, property lease for fuel distribution contractor, etc.).

Relocation via consolidation at existing terminal facilities is the lowest cost option given the excess storage capacity in the region. Such relocation would likely involve upgrading existing facilities to handle more throughput. These costs are assumed to be modest and recoverable in the short-term due to improved scale and efficiencies. Existing regional terminals are located across the river from Pioneer Bluff in the City of Sacramento and on Bradshaw Road near Highway 50 in the City of Rancho Cordova. However, both cities have long-term plans to relocate their fuel terminals. Stockton has several fuel terminals located near its port which serve portions of the Sacramento region and may offer some opportunities to consolidate some of the region's capacity. Existing Stockton fuel terminals already serve parts of the Sacramento region.

New fuel terminal construction costs are estimated at approximately $80 to $100 per barrel of storage and will offer a more substantive opportunity to improve operational productivity, especially if part of a strategic regional consolidation process. However, given the specialized infrastructure and operational requirements for fuel terminals (i.e. pipelines, freeway access, etc.), there are limited viable locations for these uses in the region. Additionally, consolidating terminals in one facility may require consolidating terminal operators who are competitors and thus disinclined to collaborate. As such, relocation to new terminal facilities is expected to be a more involved, challenging, and lengthy process.

In 2006, Wickland Pipelines, LLC proposed aggregating up to four of the region's fuel terminals in a new facility at the Port of West Sacramento (SacPort Regional Terminal Plan). This proposal was an aggregation plan, rather than a consolidation plan, since current storage volumes would have been retained (and perhaps expanded) in the new facility. As such, it overstated the actual storage volumes necessary to serve the region and likely did not offer compelling economics for relocating operations. Additionally, the proposal assumed the aggregation of individual owner-operator facilities into one facility with multiple lease-operators, thus representing a major change to longstanding local terminal practices. Due to these and other reasons, this proposal was not embraced by the terminal operators and ultimately was withdrawn.

Given these dynamics, de-industrialization of the fuel terminals will require the City to work proactively with Equilon/Shell, Buckeye Partners, and Kinder Morgan (pipeline owner) to develop realistic and implementable plans for relocation, demolition/remediation, and site reuse planning. This process may also require the City to work with other terminals, jurisdictions, and regulators as part of a regional fuel terminal consolidation process (e.g., SACOG, City of Sacramento, Yolo Air Quality District, etc.). Recommendations for a terminal relocation process are summarized in Section 3.1.

Remaining Businesses

Remaining businesses primarily include corporation yard and light manufacturing uses. Several corporation yards, including those of Ramos Oil and Williams Trucking, have operations that provide services to regional fuel terminals (i.e. delivery, environmental, etc.). Relocation of these corporation yards will likely occur in concert with the relocation of the fuel terminals. Other corporation yard relocations, such as Clark Trucking and International Line Builders, will be driven by other business and operational factors.

Pioneer Bluff light manufacturing businesses include Clark Pacific and CalPly. These businesses utilize approximately 30 acres of property and primarily serve the construction industry. Clark Pacific is the largest land user in Pioneer Bluff at 23 acres and is the largest single employer in Pioneer Bluff with up to 450 workers (depending on market conditions). Clark Pacific engineers and manufactures pre-cast concrete building components, and this facility includes many managers, engineers, and other "office" staff as well as more traditional industrial workers. Clark Pacific also owns a 266-acre facility in Woodland and this facility may be a compelling location to consolidate "manufacturing" operations while West Sacramento may remain a compelling location to retain more traditional "office" operations.

These corporation and light manufacturing uses have many similar dynamics comparable to those of the City's corporation yard. Many facilities are functionally obsolete, operationally constrained, and nearly fully depreciated. In general relocating these uses will involve recapitalizing real-estate and equipment based on current and future needs. The City of West Sacramento and the region have many well-positioned and well-priced locations for corporation yard and light manufacturing uses. In all cases, it is assumed that business relocations can be planned so that businesses will be more productive and less constrained after relocation from Pioneer Bluff. As such, the primary challenge to these relocations is expected to be the financing (re-capitalization) of new facilities.

Based on conceptual analysis of businesses, costs and processes, relocation of the remaining businesses offers many challenges, particularly financing, but may be feasible in the near-term (see recommendations in Chapter 3).

2.1.2 Demolition and Environmental Remediation

City of West Sacramento Corporation Yard Parcels

The City's corporation yard parcels total approximately 20 acres of land and includes the existing 9 acre Public Works/Parks corporation yard as well as the City's decommissioned wastewater treatment facilities, leased lands, and unused land. The wastewater treatment plant was decommissioned in 2008.

As part of the decommissioning process, the City prepared a demolition and environmental analysis in 2007 for the corporation yard parcels. This analysis included Phase 1 and Phase 2 environmental assessments and considered demolition/remediation of all existing facilities on these parcels. This analysis estimated $1.9 million in soils remediation costs, $0.2 million in asbestos remediation costs, and $6.4 million in demolition costs. In total, the demolition and remediation of the corporation yard parcels is estimated to cost $8.5 million.

Fuel Terminal Parcels

The fuel terminal parcels total approximately 20 acres of land and include the Equilon/Shell and Buckeye fuel terminals, a corporation yard for Williams Trucking, and related uses. Both fuel terminals are historic (and suspected current) sources of environmental contamination, particularly petroleum products from leaking tanks and other sources. Groundwater and soil vapor remediation activities began in the 1990s, stabilized the contamination plumes, and continue to this day. Facility and soil contamination is assumed to be significant but final remediation is not possible while the terminals remain in operation.

As part of the 2006 SacPort proposal, a conceptual demolition analysis was performed for existing terminal facilities. Based on this analysis, demolition of the fuel terminals is conceptually estimated to cost approximately $2.0 million. Environmental remediation liabilities for both terminals were conceptually estimated and projected based on Buckeye's transactional valuation of their 2011 purchase of BP's terminal in West Sacramento. This liability is estimated to be $11 million for both terminals.

Remaining Parcels

All of the remaining Pioneer Bluff parcels will have demolition costs and these costs are assumed to be generally modest given the nature of existing structures. Based on limited assessment data, most parcels are expected to require some, but not extensive environmental remediation. Remaining demolition and environmental costs for Pioneer Bluff parcels are conceptually estimated at $16.5 million.

2.1.3 Interim Improvements

Planning and implementing business relocations is assumed to occur over a 5 to 7 year period under the most aggressive action plan scenario (see Chapter 3). During this time, Pioneer Bluff will continue de-industrializing but will still be home to many industrial businesses. Existing infrastructure will be retained to support existing businesses but will be de-industrialized as part of the transition process (e.g., South River Road).

As of 2014 Pioneer Bluff is functionally an industrial peninsula south of 15th Street. This area and its infrastructure are exclusively used by local businesses. Significant portions of the South River Road and 15th Street rights-of-way are currently not under City control. For most segments, the "public" street is only a subset of the right-of way (ROW), with the remainder of the ROW in private use (e.g., behind fence lines, private parking, etc.).

In late-2014, the Mike McGowan Bridge will open and will re-connect (after 60 years) Pioneer Bluff with City neighborhoods south of the barge canal. This will trigger de-industrialization of South River Road as this facility transitions from an industrial cul-de-sac to a facility that will be shared by both industrial businesses and City residents. During this interim period, the City will operate this facility pursuant to the *Interim Traffic Management Plan* (see Appendix D).

Interim improvements to South River Road are estimated to cost $475,000 and include: 1) Intersection, traffic control, striping, and driveway improvements to improve traffic safety; 2) Addition of bike lanes along 15th Street to 5th Street; and 3) ROW and fence-line control improvements (e.g., hardening of Buckeye terminal tanks). Most of these improvements will be installed in early 2015. Continuing, private use of ROW areas will be regulated by licensing agreements during the interim period.

2.1.4 Reuse Planning

The planning for reuse of Pioneer Bluff land for urban waterfront uses will occur concurrently with other de-industrialization processes. These planning activities will define land entitlements, development standards, backbone infrastructure, and financing mechanisms necessary to realize the urban waterfront vision.

Planning elements that are specific to Pioneer Bluff will be included in a future planning document covering the Pioneer Bluff area, herein referred to as the *Pioneer Bluff Land Use, Infrastructure and Financing Plan*, although the actual legal form of the document will be determined in 2015. This document will be prepared by the City based on an extensive and detailed public-private process, which is anticipated to take approximately three years and cost $3.3 million. See Section 3.2 for recommendations on the reuse planning process.

In addition to the *Pioneer Bluff Land Use Infrastructure and Financing Plan*, there are several other regional planning efforts that will materially impact reuse of Pioneer Bluff (see Exhibit 3). These efforts address some of Pioneer Bluff's most critical reuse challenges, namely 1) buildable land and 2) access and circulation. These efforts include:

Flood Protection: Delineation of flood easements and associated restrictions will define the limits of buildable land along the river and canal. For example, the Bridge District north of Highway 50 was mapped to have a flood protection easement that is on average 165 feet from the river's edge.

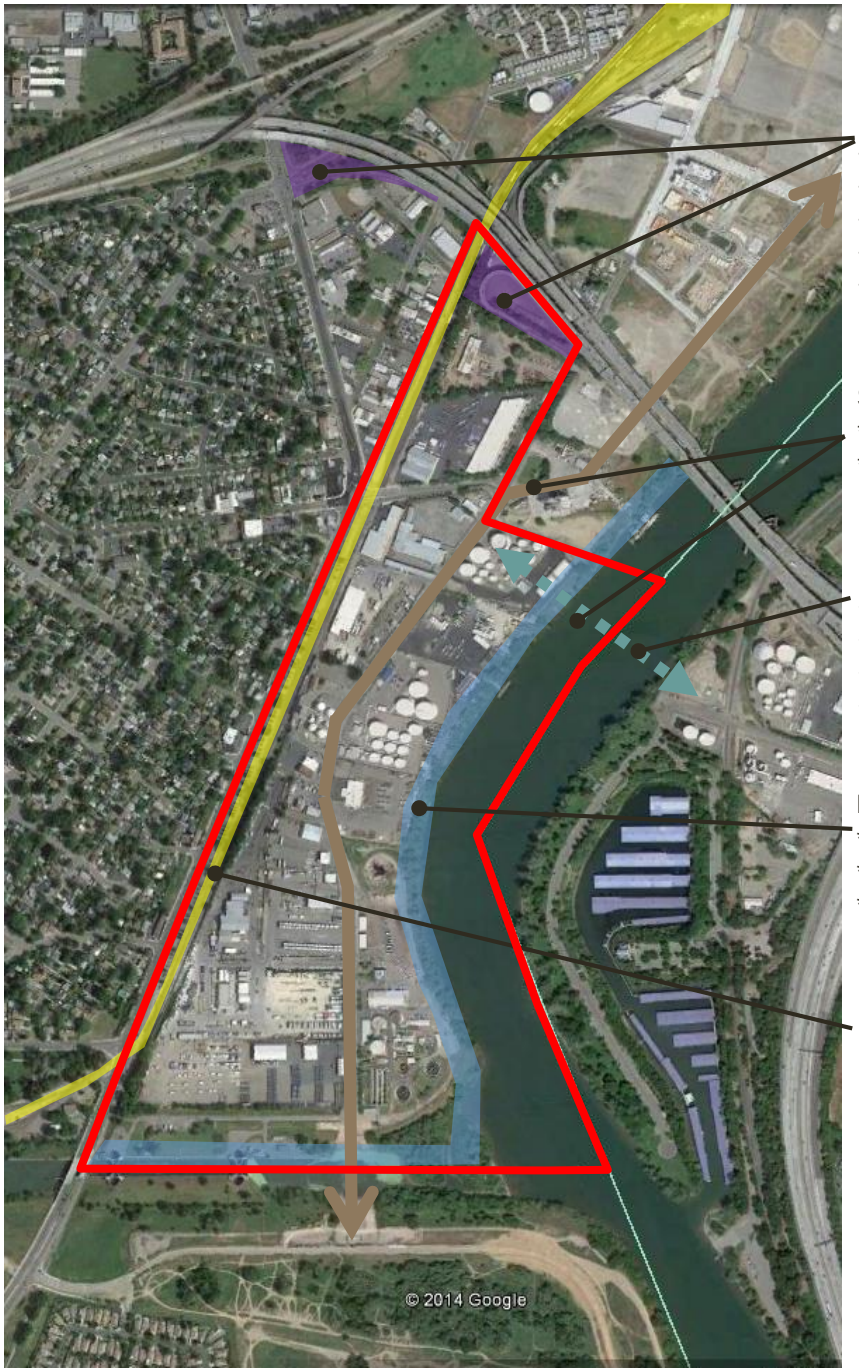
Rail Relocation: The City has longstanding plans to relocate the Union Pacific east-side rail line away from its waterfront districts. Within this rail-line, UP owns a 4,900 foot by 100 foot ROW segment that defines the western area of Pioneer Bluff and the eastern boundary of the Jefferson Boulevard ROW. Relocation of this rail is critical to the transition of Pioneer Bluff (and also the Bridge District) as it would provide much need developable land as well as potential improved traffic circulation and access to the waterfront (especially for neighborhoods west of Jefferson Boulevard).

Broadway Bridge: The Cities of Sacramento and West Sacramento have plans for a new bridge connecting Broadway in Sacramento with Pioneer Bluff. A new bridge would offer a rare connection across the Sacramento River and would be a defining infrastructure and planning element for both sides of the riverfront. In October 2014, the cities initiated a joint project level engineering analysis to evaluate potential bridge alignments, structures, and circulation patterns. This analysis is expected to take approximately 12 months and is being funded by a $500,000 regional grant. An additional $3 million has been appropriated via a TIGER grant and local funds for environmental and preliminary engineering analysis that is expected to occur over an additional 2 to 3 year period.

Highway 50 Interchanges: The Highway 50 on-ramp at South River Road has a steep ramp, sharp turning radius, and limited merge area. This merge occurs just after the Jefferson on-ramp merge in a segment with active traffic movements due to nearby interchanges for Interstate 5. The Jefferson on-ramp also has some deficiencies as well as significant traffic volume pressures. Reconstruction of both ramps is estimated to cost a total of $49 million and is expected to result in different interchange footprints with new traffic patterns. These projects are part of the Sacramento Area Council of Government's (SACOG) 2010 *Metropolitan Transportation Plan* and are currently in early planning stages.

Streetcar: The streetcar network is envisioned to serve the central city areas of Sacramento and West Sacramento. The project is in the first development phase with construction expected to commence in 2016. Streetcar is planned to extend from the Bridge District through Pioneer Bluff and into Southport as part of a later project phase. An additional streetcar line is envisioned to cross from Pioneer Bluff to the City of Sacramento via the proposed Broadway Bridge. Given the urban vision and access constraints, streetcar will be a critical element of Pioneer Bluff's circulation infrastructure.

Exhibit 3: Reuse Planning Conditions (2014)



Highway 50 Ramp Reconstruction
* Major circulation changes, impacts local street grid
* Change South River Road interchange footprint?
* Coordinate w/ Broadway Bridge, Streetcar, Rail Relocation?
* Coordinate w/ transition analysis of Jefferson corridor?
* Funding Priority and Timelines?

Streetcar
* Coordinate/calibrate w/ Pioneer Bluff transition plans?
* Funding Priority and Timelines?

Broadway Bridge
* Major change in access/circulation across the river
* Major impacts on Pioneer Bluff transition planning
* Coordinate project level planning with transition planning?
* Funding Priority and Timelines?

Flood Easement Delineation
* Regulated by the Army Corps of Engineers
* Part of regional flood protection process
* Negotiated process; major impacts on buildable land

UP Rail Line Relocation
* Major access/circulation and development constraint
* Regional issue with Yolo County and Cities of Davis and Woodland
* Involves several local rail served customers

2.2 BACKBONE INFRASTRUCTURE

As with most private facilities in Pioneer Bluff, most of the public infrastructure facilities in this district are obsolete, operationally constrained, and nearly fully depreciated. However, with the exceptions noted under interim improvements, the backbone infrastructure is generally assumed to be operational and serviceable through completion of de-industrialization. Existing backbone infrastructure will be demolished depending on the timing of business relocations and the availability of funding.

New urban waterfront development will require new backbone infrastructure in Pioneer Bluff. The scope and cost of new infrastructure is based on development densities and engineering standards. The City *General Plan* envisions Pioneer Bluff to have similar densities as the Bridge District with similar development standards. This could yield up to a maximum of 10.8 million square feet of development assuming an average gross parcel floor to area ratio (FAR) of 2.0 (*General Plan* assumption). The following sections present a conceptual analysis of new backbone infrastructure to support such development.

2.2.1 Access and Circulation

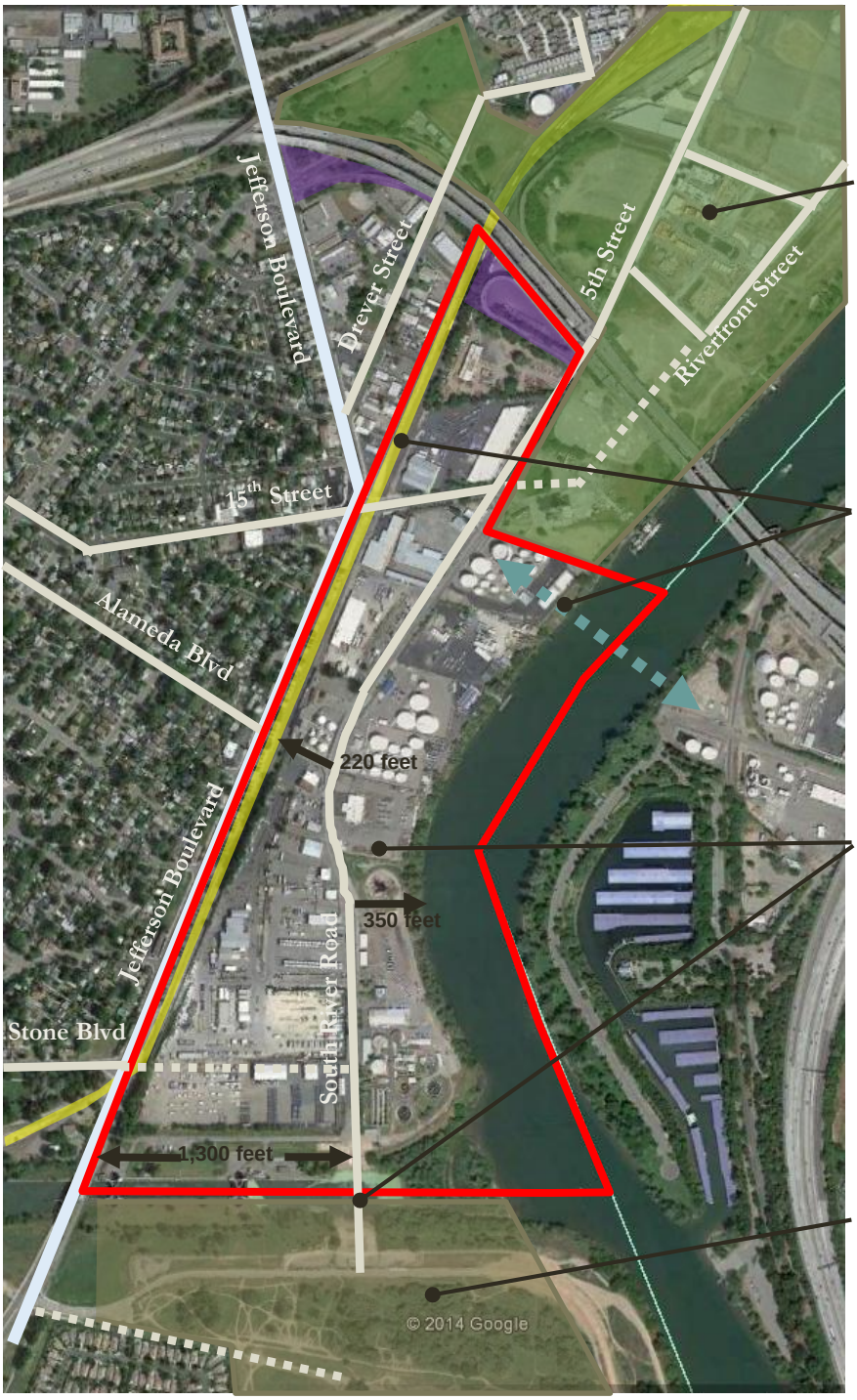
The value in Pioneer Bluff has always been in its access to the regional infrastructure. It developed based on access to the river and then access to rail, Highway 50, pipelines, etc. Contrarily, most of Pioneer Bluff has poor internal access and circulation (see Exhibit 4).

The transition of Pioneer Bluff from industrial to urban waterfront will similarly involve a re-shaping of regional infrastructure, namely Broadway Bridge construction, west side rail relocation, reconstruction of Highway 50 interchanges, installation of streetcar, and other facilities. All of these projects are already in the early planning stages, but none have specific implementation plans. Implementation of all of these projects will be necessary to realize Pioneer Bluff's full development potential.

Even with these planned regional improvements, Pioneer Bluff will still have access and circulation challenges. These challenges include:

Limited Integration: Pioneer Bluff has limited opportunities to integrate with adjacent street grids. It is bounded by the river, canal, Highway 50, and rail. These barriers limit access and circulation and focus traffic on a few key streets. Pioneer Bluff's best opportunity for integration is with the "State Streets" residential street grid to the west of Jefferson Boulevard. This opportunity will be challenged by the difficulties of connecting streets across the Jefferson arterial, a facility with intense traffic demands, and by the need to relocate the rail line to create additional connections. There may be a near-term opportunity to connect Stone Boulevard from Jefferson Boulevard to South River Road by modifying the existing rail crossing at Stone and Jefferson, but even that connection will require a substantial private property acquisition.

Exhibit 4: Access and Circulation (2014)



Bridge District (urban waterfront)
* 9 million square feet of planned urban waterfront
* Shares many critical backbone circulation facilities
* Development will have first claim on shared facilities

Limited Potential New East-West Access
* Except at Stone Blvd extension and Broadway Bridge
* Remainder not possible until after rail relocation
* Also limited due to Jefferson traffic demands

Limited Potential New North-South Access
* None expected across barge canal
* Limited opportunity from north – extend Riverfront St?
* Very constrained for continuous internal N-S street

Stone Lock and remainder Northeast Village
* 5.6 million sqft of potential future development
* Shares several critical backbone circulation facilities
* Development will have first claim on shared facilities

Land Constraints: There is and will continue to be strong pressure to add more north-south circulation capacity in the southern part of the City (i.e., the dominant directions of traffic). Many areas of Pioneer Bluff are dimensionally very narrow, especially net of flood protection setbacks. There will be limited opportunity to provide additional continuous north-south streets in Pioneer Bluff and traffic capacity will always be constrained in these directions.

Competition: Pioneer Bluff will be adding significant development along with other local infill projects (e.g., Bridge District) and greenfield projects (e.g. Southport). Pioneer Bluff will likely be adding development capacity last when roadway capacity is very constrained and traffic pressures are the most intense. As such, quality pedestrian, transit, and bicycling facilities will be especially critical to the implementation and competitiveness of Pioneer Bluff development.

Of all the backbone facilities, the Pioneer Bluff access and circulation system will be the most critical, comprehensive, and expensive investment necessary to realize the urban waterfront vision. Most of the initial backbone investments will be regional in nature and benefit a much broader area than Pioneer Bluff (e.g., west side rail relocation, Broadway Bridge). Remaining investments will be for local access and circulation. Particular emphasis will be placed on pedestrian, transit, and bicycling facilities. Total access and circulation investments to support Pioneer Bluff transition are estimated at $225.5 million inclusive of regional projects.

2.2.2 Municipal Utilities

Municipal utilities include City backbone water, sewer, drainage, and joint trench facilities. Urban waterfront development will require complete re-construction of all Pioneer Bluff municipal utilities. Re-construction is assumed to occur pursuant to urban demand factors similar to those assumed for the Bridge District. The scope and cost assumptions for municipal utilities are summarized as follows:

Water: The backbone water system will require a new storage tank and new water distribution pipelines. Pursuant to the City's *Water System Master Plan*, the storage tank will be shared with new development in the Stone Lock District. Based on development assumptions, this tank is estimated to require 3 million gallons of storage, two acres of land, and $6.4 million in investment. Additionally, distribution pipelines are estimated to cost $1.7 million.

Sewer: The backbone sewer system will require new collection pipelines that connect to central systems under Jefferson Boulevard. New sewer infrastructure is estimated to cost $5 million.

Storm Drainage: As with the Bridge District, most Pioneer Bluff drainage flows are assumed to be mitigated within the District given the lack of capacity in the Jefferson Boulevard collection system. Drainage improvements are estimated to cost $6.5 million.

Joint Trench: As with the Bridge District, most Pioneer Bluff streets will include underground joint trench facilities to accommodate private utilities (e.g., electricity, telecommunications, etc.). These joint trench facilities are assumed to cost $1.1 million (not including the cost of private utilities).

2.2.3 Parks and Other Public Spaces

Pioneer Bluff will include both regional and neighborhood park facilities. Most of these facilities will be adjacent to or oriented to the waterfront. The Riverfront Master Plan envisions extending the River Walk improvements south of the Bridge District through Pioneer Bluff and along the canal to Jefferson Boulevard (1.1 miles). These improvements will include pedestrian and bicycling facilities as well as distributed recreational elements. These backbone improvements are estimated to cost $13.3 million.

Additionally Pioneer Bluff will contain park facilities that will be specifically designed to serve neighborhood residents and workers. These facilities will be integrated with the River Walk, private development, and other Pioneer Bluff facilities. These backbone improvements are estimated to cost $14.3 million.

2.3 TRANSITION ECONOMICS

Table 1 on the following page summarizes conceptual Pioneer Bluff de-industrialization and backbone costs (see Appendix E for details). These costs total approximately $325 million and are conceptually allocated on a fair-share basis to "Regional," "Pioneer Bluff," and "Other" categories. These categories reflect the primary beneficiaries of these improvements. For example, Regional costs are those with primary regional or citywide benefits, Pioneer Bluff costs primarily benefit properties within the district, and Other costs benefit a specific district located outside of Pioneer Bluff.

De-industrialization costs are estimated to total $51.5 million. These costs predominately reflect the costs to de-industrialize parcels, namely business relocation ($6.6 million) and facilities demolition/remediation ($38.2 million). Interim improvements ($0.6 million) and reuse planning ($6 million) are primarily regional costs as these are driven by citywide and regional processes.

New backbone infrastructure costs are estimated to total $274 million including several major planned regional improvements that benefit a much broader area than Pioneer Bluff (e.g., Broadway Bridge, west side rail relocation, etc.). Infrastructure costs allocated to Pioneer Bluff are estimated at $74.6 million. Other costs include certain improvements that benefit Stone Lock (e.g., water storage).

Table 1: Conceptual Summary of Pioneer Bluff Transition Costs and Allocations

		COST ALLOCATION					
		Regional		Pioneer Bluff[1]		Other[2]	
TRANSITION COST	TOTAL COST	Allocation	% of total	Allocation	% of total	Allocation	% of total
De-Industrialization							
Business Relocation	**$6,600,000**	$600,000	9%	$6,000,000	91%	$0	0%
Parcel Demolition/Remediation	**$38,172,160**	$214,700	1%	$37,957,460	99%	$0	0%
Interim Improvements	**$625,000**	$475,000	76%	$150,000	24%	$0	0%
Reuse Planning	**$6,050,000**	$5,550,000	92%	$500,000	8%	$0	0%
Total De-industrializaton Costs	**$51,447,160**	**$6,839,700**	**13%**	**$44,607,460**	**87%**	**$0**	**0%**
Backbone Infrastructure							
Access and Circulation	**$225,508,928**	$190,928,928	85%	$34,580,000	15%	$0	0%
Municipal Utilities	**$20,700,000**	$0	0%	$19,100,000	92%	$1,600,000	8%
Riverfront Promenade	**$13,269,000**	$6,634,500	50%	$6,634,500	50%	$0	0%
Neighborhood Parks	**$14,265,000**	$0	0%	$14,265,000	100%	$0	0%
Total Backbone Costs	**$273,742,928**	**$197,563,428**	**72%**	**$74,579,500**	**27%**	**$1,600,000**	**1%**
TOTAL TRANSITION COST	**$325,190,088**	**$204,403,128**	**63%**	**$119,186,960**	**37%**	**$1,600,000**	**0%**

[1] includes parcel costs and district costs.

[2] allocation to Stone Lock development for new shared water storage tank.

Table 2 on the following page provides a conceptual land residual analysis based on estimated Pioneer Bluff transition costs. Currently, Pioneer Bluff has approximately 125 parcel acres of land area. Of this total, approximately 86 acres are estimated to be buildable; 20 acres estimated to be required for new streets; and 18 acres estimated to be required for parks (most of this land will be in the flood protection zone to preserve buildable land).

Currently, most industrial land in Pioneer Bluff is valued at approximately $220,000 per acre of land ($5 per square foot). Land that is in the flood protection zone has a value of approximately $150,000 per acre. After de-industrialization and installation of backbone improvements, buildable land will have an estimated value of $1.7 million per acre ($40 per square foot land). This value is consistent with recent property transactions in the Bridge District and reflects the value of finished parcels that are served by backbone infrastructure and entitled for urban waterfront development.

Table 2: Conceptual Land Residual Analysis

		COST			
	Quantity		Unit Cost	Total Cost	NOTES
1 Urban Waterfront Land Value					exclusive of existing street ROWs
a Net Buildable Land	85.6	acres	$1,700,000 per buildable acre	$145,538,686	estimated based on recent sales in the Bridge District
b New Backbone Streets ROW	20.3	acres	$220,000 per acre	$4,466,000	assumes land acquired at current values
c Backbone Riverfront and Parks Land	17.8	acres	$180,000 per acre	$3,204,000	assumes land acquired at current values
d Other Non-Buildable Land	1.0	acres	$220,000 per acre	$220,000	assumes land acquired at current values
Total Urban Waterfront Land Value	**124.7**	**acres**	**$1,230,274 per acre**	**$153,428,686**	**total 2014 parcel area**
2 (Less Transition Costs)					not including Regional and Other costs
a (De-industrialization costs)	**124.7**	acres	($357,687) per acre	($44,607,460)	from Table 1
b (Backbone infrastructure costs)	**124.7**	acres	($598,019) per acre	($74,579,500)	from Table 1
Total Transition Costs	**124.7**	**acres**	**($955,705) per acre**	**($119,186,960)**	
3 Net Land Value After Transition Costs	**124.7**	**acres**	**$274,569 per acre**	**$34,241,726**	not including Regional and Other costs
4 (Less Land Carrying Costs and Profit)	**$153,428,686**	**land value**	**5% of land value**	**($7,671,434)**	incl. vacant land costs (property taxes, insurance, etc.)
5 Residual Land Value	**124.7**	**acres**	**$213,055 per acre**	**$26,570,292**	not including Regional and Other costs
6 (Less Current Land Value)	**124.7**	**acres**	**($220,000) per acre**	**($27,436,418)**	current land basis
7 Net Incremental Land Value (Deficit)	**124.7**	**acres**	**($6,945) per acre**	**($866,127)**	not including Regional and Other costs
per net buildable land	**85.6**	**acres**	**($10,117) per buildable acre**	**($866,127)**	

Transition costs allocated to Pioneer Bluff are conceptually estimated to be $44.6 million for de-industrialization and $74.6 million for backbone infrastructure. After netting out estimated transition costs, carrying costs and current land values, Pioneer Bluff has a land residual value that is conceptually estimated at negative $0.9 million. This value is equivalent to break-even given the magnitude of transition costs and the conceptual nature of transition assumptions.

The break-even land residual value implies that financing the $119.2 million in costs allocated to Pioneer Bluff is potentially feasible, but is not assured given the timing and magnitude of required investments. This conclusion is highly sensitive to the assumptions made in this analysis, especially the transition scope, cost, timing and buildable land assumptions. See Chapter 3 for recommendations on how to proceed with these assumptions.

In addition to financing costs allocated to Pioneer Bluff, the $204.4 million in costs allocated to Regional will need to be financed in order to complete the urban waterfront vision. These costs are substantial, even on a regional basis, and reflect complicated inter-governmental projects that compete locally, regionally, and nationally for limited funds. As such, the feasibility of Pioneer Bluff transition is also highly sensitive to the scope, cost, and timing associated with these projects. See Chapter 3 for recommendations on how to proceed with these assumptions.

Chapter 3. Recommended Action Plan

One of the primary challenges of the transition process is overcoming the momentum of long-standing Pioneer Bluff uses, practices and expectations, especially since transition timelines are unclear. While the City has a reuse vision for Pioneer Bluff, it does not have a well-defined transition timeline. As such, business/property owners, planners, and other stakeholders do not have a clear, unified, and integrated perspective of how transition will proceed. Currently many Pioneer Bluff stakeholders have expectations that the status quo will continue for the foreseeable future and that transition is deferred to some undefined later time.

Changing this perspective will require the City to clearly articulate a transition strategy and implement this strategy through regular and consistent action. Critical to this strategy is the timing of de-industrialization activities, particularly business relocations. The nature of business relocations typically requires a timeframe of at least 5 to 7 years to define, prepare, and implement relocation plans. Moreover, this time-frame represents an aggressive yet realistic schedule for initiating construction of the regional transportation projects impacting Pioneer Bluff (e.g. Broadway Bridge, West Side Rail relocation). As such, 5 to 7 years represents the most aggressive timeline for de-industrialization of Pioneer Bluff and serves as the conceptual basis for the Action Plan recommended in this section.

Actual business relocation processes and timelines will be determined as part of future public-private de-industrialization planning efforts and are likely to occur opportunistically. The following recommended actions related to business relocations have been tailored to allow for flexibility so that transition progress is not dependent on a rigid, linear process. These actions are summarized in Exhibit 5 on the following page and described in the following sections. The Action Plan focuses on two processes: 1) de-industrialization activities; and 2) coordination of transition planning and city/regional planning activities. The Action Plan is intended to be a living document and will be used as a management tool for Pioneer Bluff and related planning processes. The Action Plan will be periodically updated and calibrated to reflect the status of public and private transition planning efforts.

Exhibit 5: Recommended Action Plan for Pioneer Bluff Transition

TASK/PROCESS	RESPONSIBILITY	2015	2016	2017	2018	2019	2020	2021+
1 De-industrialization Activities								
a Infrastructure De-industrialization	Transportation Department	Construction	Ensure/Enforce performance; Calibrate w/ de-industrialization activities					
b City Corporation Yard Relocation	Public Works Department	Relocation Planning		New Construction		Relocation		
c Fuel Terminals Relocation	Pioneer Transition Team	Negotiations	Relocation Planning			Relocations (no later than 2021)		
d Remaining Business Relocations	Pioneer Transition Team	Outreach	Relocation Planning			Relocations (no later than 2021)		
e Demolition and Remediation	Pioneer Transition Team	Assess Scope/Costs		Demolition & Remediation Plans			Demolition/Remediation	
2 Coordination with City and Regional Planning								
a City Plan Refinements	Community Development	Calibrate City regulations, plans, and policies with transition planning						
b Coordination w/ Other Project Planning	Pioneer Transition Team	Coordinate transition planning with regional project planning						
c Land Use and Infrastructure Plan	Community Development	Infrastructure Financing District			Define Entitlements and Implementation Plans			
Estimated City Costs (Action Plan Budget)		**$1,750,000**			**TBD**	**TBD**	**TBD**	**TBD**

Action Plan Budget

While the actual cost to complete all items listed in Exhibit 5 is difficult to estimate at this time, the City has budgeted a total of $1.75 million for de-industrialization and planning activities for the next three years. Funding sources for these activities include a $377,561 grant awarded to the City earlier this year from the State of California Strategic Growth Council's Sustainable Communities Planning Grant program, along with $1.5 million in local Measure G funds authorized by the City Council in June 2014 as part of the Capital Improvement Plan update. Approximately $120,000 of the Measure G allocation will cover the cost of interim traffic safety improvements on South River Road related to the opening of the McGowan Bridge. The balance of the Measure G funds and the Sustainable Communities Planning Grant will be used to support Action Plan activities targeted for completion during the next three years.

Additionally, over the past 18 months the Cities of West Sacramento and Sacramento have received a significant amount of planning grant funding for the Broadway Bridge project. In 2013, SACOG awarded a Regional-Local Program grant of $442,650 to complete a feasibility analysis for the project and in 2014 the United States Department of Transportation awarded another $1.5 million from the TIGER grant program for engineering, design, and environmental work. These grants were matched by over $1.5 million in local funds split between the two cities. Although these funds will not directly support Pioneer Bluff de-industrialization activities, the Broadway Bridge is a key component of Pioneer Bluff infrastructure and its planning will have significant impacts on transition efforts.

3.1 DE-INDUSTRIALIZATION ACTIVITIES

The following sections present a set of recommended actions related to the de-industrialization of Pioneer Bluff. The initial stage of the de-industrialization process focuses on preparing and carrying out a series of public-private de-industrialization plans. These plans are intended to define an integrated and coordinated strategy for Pioneer Bluff business relocations, demolition/remediation activities, interim improvements, and reuse planning. Plans will be prepared in consultation with Pioneer Bluff business/property owners and customized to define specific assumptions with respect to transition processes, timelines, and expectations.

3.1.1 Infrastructure De-industrialization

A key element of the de-industrialization of Pioneer Bluff is the integration of this district with the rest of the City. During the de-industrialization period while industrial operations continue, existing facilities and uses will need to be adapted to better integrate with adjacent communities and changes to traffic patterns. The following summarizes recommended next step actions and sub-tasks, with projected timeframes for completion noted in parenthesis:

A. Resolve "ethanol by rail" public safety and traffic issues through non-renewal of existing use permits. (December 2014)

B. Implement the *South River Road Interim Traffic Management Plan* in Appendix D. (Early 2015)
- Complete installation of interim traffic improvements.
- Monitor and enforce safe street performance.
- Update *Interim Traffic Management Plan* as necessary to ensure safe street performance.

C. Resolve right-of-way encroachment issues. (Current to 2015)
- Direct property owners to cure encroachment issues in conflict with *Interim Traffic Management Plan*.
- Where not in conflict with the *Interim Traffic Management Plan*, encroachment issues may be resolved via temporary property license from the City.

3.1.2 Corporation Yard Relocation

The City has long acknowledged the need for a new corporation yard. Timely relocation of the corporation yard will demonstrate the City's resolve with respect to Pioneer Bluff transition and will outline an approach for future business relocations. The following summarizes recommended next step actions:

A. Identify and secure property for a new corporation yard. (Early to Mid-2015)

B. Engage an operations engineer to prepare a facility needs analysis. (Mid-2015)
- Identify long-term operating assumptions for corporation yard (e.g., services, levels of service, etc.).
- Define new facility needs/practices based on long-term operating assumptions.

- Define specifications for design and engineering of a new built-to-suit corporation yard.
- Refine cost estimates and define operating program for new facility.

C. Complete a Relocation and Financing Plan for a new built-to-suit corporation yard (Late 2015)
- Identify and evaluate financing options/limits/timing for relocation.
- Complete budget, schedule, and sources of funds for corporation yard relocation.

D. Engage architects/engineers to design new corporation yard (2016)
- Identify design options/considerations based on specifications and budget.
- Prepare construction drawings with final budgets and schedules per specifications.

E. Construct corporation yard. (2017 to 2018)

F. Complete relocation to new corporation yard. (2019)

3.1.3 Fuel Terminals Relocation

Given their unique infrastructure needs, logistical complexity, and market dynamics, the fuel terminals may be the most challenging and complex of Pioneer Bluff business relocations. Additionally these properties will likely require significant environmental remediation after terminal relocation. These terminals are emblematic of the industrial status quo and the lack of relocation plans strongly contributes to the expectations that the Pioneer Bluff status quo will continue for the foreseeable future. As such, it is critical that the City proactively engage Equilon/Shell and Buckeye on terminal relocation planning in the near-term. Recommended next step actions include:

A. Initiate fuel terminal relocation negotiations. (Early 2015 through 2016)
- Engage Equilon/Shell, Buckeye, and Kinder Morgan in negotiations to relocate fuel terminals.
- Confirm the Port of West Sacramento as a preferred and viable regional relocation site and consider other potential regional locations.
- Establish City-business work teams to formulate/evaluate terminal relocation options.
- Explore coordinating West Sacramento terminal relocations with City of Sacramento relocations, to the extent such an arrangement would facilitate the feasibility of a new fuel terminal facility.
- Coordinate terminal relocations with SACOG, Regional Air Quality Board, CalEPA, and other stakeholders.
- Coordinate terminal relocation process with future Pioneer Bluff land use/financing plans and Broadway Bridge planning.
- If negotiations are unsuccessful, explore land use amortization strategy.

B. Negotiate Fuel Terminal Relocation Agreements and Plans. (2016 through 2017)
- Negotiate and execute relocation agreements.
- Complete relocation project plans, budget, financing plan, and schedule.

C. Relocate Fuel Terminals. (No later than 2021)

3.1.4 Relocation Planning (Other Businesses)

Most of the remaining businesses in Pioneer Bluff have a bias to continue the industrial status quo and will not be motivated to relocate unless transition appears certain and imminent. In this respect, constant and tangible progress in de-industrialization activities will be critical to motivating business relocation. Recommended next step actions include:

A. Prioritize remaining business relocation negotiations. (Early 2015)
- Evaluate remaining relocations by difficulty, strategic interest, and relative need for city participation.
- Identify additional business relocation priorities and define an approach for remaining relocations.
- Incentivize early business relocations.

B. Develop and implement public-private de-industrialization and relocation plans. (Mid-2015 through 2016)
- Engage business/property owners in a public-private de-industrialization and relocation planning process.
- Define public-private actions, policies, process, and timelines related to de-industrializing specific properties and relocating specific businesses.
- Coordinate City actions/plans and business actions/plans during remaining industrial (interim) period.

3.1.5 Demolition and Remediation of Corporation Yard and Wastewater Treatment Plant

The current estimated costs to demolish, remediate, and re-grade the corporation yard parcels are significant and likely higher than the reuse value of the land. As such, financing these costs will be difficult. Recommended next step actions include:

A. Refine demolition, remediation, and grading program based on reuse expectations. (Late 2015 through 2016)
- Engage an environmental consultant to update existing Phase II environmental analyses based on current conditions.
- Complete remediation work plan and obtain work plan approval from CalEPA.
- Define reuse assumptions for parcels and update demolition/remediation costs and residual land value analysis.
- If advantageous to achieve cost savings, coordinate with neighboring property demolition/remediation activities.

B. Evaluate Funding Sources and Complete Demolition and Remediation Financing Plan (2016 through 2017)
- Pursue opportunities for cleanup grant funding, as available.
- Complete financing plan and timelines for demolition and remediation activities.

C. Implement demolition/remediation. (2018 through 2020)
- Phase demolition beginning with wastewater treatment plant and ending with corporation yard.
- Complete remediation and obtain site closure from CalEPA.

3.1.6 Demolition and Remediation of Fuel Terminals

The current estimated costs to demolish, remediate and re-grade the fuel terminal parcels are conceptual but anticipated to be significant. These costs could be higher than the reuse value of the land. Demolition, environmental remediation, and site reuse are expected to be topics that are part of the business relocation negotiations with Equilon/Shell and Buckeye. Recommended next step actions include:

A. Define demolition, remediation, and grading program as part of fuel terminal relocation plans. (2015 through 2016)
   - Request updated Phase I and Phase II environmental analyses based on current conditions from fuel terminal operators.
   - Define business relocation and parcel reuse assumptions, and complete residual land value analysis.
   - Coordinate with fuel terminal operators on remediation strategies (regulatory oversight approach, environmental insurance, potential developer partnerships, etc.).

B. Implement demolition/remediation. (no later than 2021)

3.1.7 Demolition and Remediation Planning (Other Businesses)

The estimated costs to demolish, remediate and re-grade the remaining parcels are conceptual and based on limited information. Additional due diligence will be required to better define demolition, remediation and re-grading plans and expectations. Recommended next step actions include:

A. Define property-specific demolition and remediation approaches and plans. (2015 through 2016)
   - Contract with an environmental consultant with experience in similar industrial to urban mixed-use transition projects.
   - Complete an area-wide Phase I environmental analysis based on current conditions.
   - Perform Phase II environmental analysis where significant contamination is suspected.
   - Refine demolition, remediation, and grading assumptions and update costs.
   - Coordinate with property owners to develop implementation plans for demolition/remediation.

B. Implement demolition and remediation plans in coordination with business relocations. (2016 and later)

3.2 COORDINATION WITH CITY AND REGIONAL PLANNING ACTIVITIES

As described in Chapter 2, the transition potential of Pioneer Bluff will be shaped by several major City and regional infrastructure and development projects that are currently proceeding on more or less independent paths. An integrated, strategic approach to these project planning activities will be critical to achieving timely transition of Pioneer Bluff.

Additionally, urban development requires efficiency, especially with respect to land use and circulation. This will be especially true in Pioneer Bluff given its constraints related to access/circulation and buildable land. Clear, realistic, and

consistent assumptions for density and circulation will be critical in the planning of efficient backbone infrastructure and development sites in order to achieve the City's mixed-use urban waterfront vision for Pioneer Bluff.

The following sections summarize recommended actions to coordinate Pioneer Bluff transition planning with other relevant City and regional planning efforts. The final section concludes with a list of considerations and recommendations for future land use and infrastructure planning involving Pioneer Bluff.

3.2.1 City Plan Refinement to Reflect Pioneer Bluff Objectives

The City is in the process of updating its *General Plan*, which currently designates the entire Pioneer Bluff area as Riverfront Mixed-Use. This update presents an opportunity to affirm or revise existing land use policies pertaining to Pioneer Bluff, particularly Land Use Policy 10, which prohibits the establishment, expansion, or replacement of non-conforming uses in Pioneer Bluff. Revisions to the City's *Zoning Ordinance* will follow the *General Plan* update. The following are specific Action Plan recommendations related to the *General Plan* and *Zoning Ordinance* updates:

A. Incorporate existing land use policies pertaining to Pioneer Bluff in the *General Plan* update. (2015)
   - Affirm existing Land Use Policy 10.
   - Maintain Riverfront Mixed-Use as the *General Plan* land use designation of the entire Pioneer Bluff area.

B. Revise the *Zoning Ordinance* to prevent land use inconsistencies with desired Pioneer Bluff development. (2015)
   - Amend the *Zoning Ordinance* to designate fueling stations as existing non-conforming uses in the Waterfront Zone.

3.2.2 Coordination with Other Project Planning Activities

The following recommendations are intended to integrate Pioneer Bluff transition planning efforts with broader City and regional planning activities related to major infrastructure projects and land use plans. Recommended next steps include:

A. Reconcile Pioneer Bluff developable land assumptions with flood protection requirements. (2015)
   - Contract with a qualified consultant to prepare a flood survey, initial levee delineation, and a flood protection concept for the waterfront area between the Pioneer Bridge and the Stone Lock barge canal.

B. Integrate West Side Rail Relocation timeline with Pioneer Bluff business relocation timeline. (2015 and later)
   - Coordinate West Side Rail Relocation with the Yolo Regional Rail Relocation Project.
   - Initiate relocation discussions with Union Pacific.
   - Refine rail relocation due diligence, scope, costs, and timelines.

C. Coordinate Southport and Pioneer Bluff planning efforts, particularly transportation projects such as the Village Parkway extension. (2015-16)

D. Coordinate Broadway Bridge, streetcar, and Highway 50 projects with transition planning. (2015 and later)
- Consider integrating major project concepts and approaches into a single waterfront master circulation plan.
- Coordinate West Sacramento and Sacramento urban waterfront development and circulation plans.
- Refine project priorities, financing and timelines for SACOG's *2016 Metropolitan Transportation Plan* update.

3.2.3 Integration with Infrastructure Financing District Planning

In 2014, state legislation was enacted to provide cities the ability to establish Infrastructure Financing Districts (IFD) as a tax increment financing mechanism in areas previously covered by redevelopment such as Pioneer Bluff. IFDs can be utilized to finance a wide array of infrastructure improvements, brownfield remediation, property acquisition, and other items with potential application in Pioneer Bluff. The City recently established an IFD in the Bridge District, and planning is currently underway for the next IFD(s) covering other parts of West Sacramento. IFDs are expected to be an integral part of the City's future infrastructure financing plans, particularly with major regional projects like the Broadway Bridge and future phases of streetcar. Recommended next step actions include:

A. Incorporate Pioneer Bluff transition planning activities and future projects into IFD planning process. (2015)
- Include Pioneer Bluff within an IFD.
- Direct tax increment revenue generated from Pioneer Bluff to assist with infrastructure improvements, brownfield remediation, and property acquisition within Pioneer Bluff.

B. Direct tax increment collected from other parts of the City to regional infrastructure projects. (2015 and later)
- Allocate citywide tax increment revenue to major regional projects located within Pioneer Bluff, including the Broadway Bridge, the River Walk Park extension, remediation of the former wastewater treatment plant, South River Road reconstruction, future phases of streetcar, and the Highway 50 interchange reconstructions.

3.2.4 Preparation of Pioneer Bluff Land Use, Infrastructure, and Financing Plan

This *Transition Plan* is intended to establish the basis for preparing a detailed *Pioneer Bluff Land Use, Infrastructure, and Financing Plan* that will be necessary for the City to ultimately implement its vision for Pioneer Bluff. Development of that plan will be a multi-year process and a coordinated public-private effort. The legal form of the plan has yet to be decided (i.e. a Specific Plan or similar document), but the plan will identify land use entitlements, development standards, backbone infrastructure plans and costs, and an infrastructure financing plan. The process for completing the plan will be modeled after the City's successful de-industrialization and ongoing redevelopment of the Bridge District, involving a public-private team of City staff, consultants, and Pioneer Bluff property owners.

A. Begin the preparation of a *Pioneer Bluff Land Use, Infrastructure, and Financing Plan*. (2015)
- The plan should incorporate the following set of reuse principles and assumptions related to Pioneer Bluff:

    1. Pioneer Bluff's designated land use is riverfront mixed use with a maximum average gross parcel Floor to Area Ratio of 2.0 for the entire district.

2. South River Road should function as a transit and alternative transportation-supportive, neighborhood-friendly street.

3. South River Road right-of-way should be normalized from 80 feet from 15th Street to the McGowan Bridge.

4. Stone Boulevard should be extended from the existing rail crossing at Jefferson Boulevard to South River Road to provide an additional east-west connection to Pioneer Bluff.

5. Potential realignments of South River Road and 15th Street should be evaluated to rectify the street grid.

6. The barge canal/lock should be re-purposed for recreational and other public use.

7. The River Walk should be extended from the Bridge District to the Stone Lock barge canal assuming the same flood protection setbacks and requirements as the Bridge District will apply to Pioneer Bluff north of the barge canal. It is assumed that flood setbacks will be different along the barge canal and that this portion of the River Walk may have different characteristics.

8. The extension of Riverfront Street from the Bridge District to 15th Street and South River Road should be re-evaluated in the context of Pioneer Bluff transition and Broadway Bridge planning.

9. The addition of a continuous north-south street parallel to South River Road is critical for Pioneer Bluff circulation.

10. Additional east-west connections across Jefferson should be explored if West Side Rail Relocation is successful.

11. The future Pioneer Bluff water storage tank should be shared with Stone Lock development.

12. All future storm drainage in Pioneer Bluff should be mitigated within the district.

13. To the extent possible, Pioneer Bluff park space should be accommodated within flood protection setbacks.

14. The Stone Lock parcels should be included into an integrated land use and infrastructure financing plan for Pioneer Bluff to achieve greater cost efficiencies with respect to backbone infrastructure and to potentially realize higher residual land values after transition.

15. A separate planning effort is recommended for the commercially-zoned, triangular area bounded by Jefferson Boulevard on the west, the Westgate Yard on the east, and Highway 50 on the north. From a land use, economics, and infrastructure standpoint, this area relates more to the Jefferson Boulevard commercial corridor or the western edge of the Bridge District than the Pioneer Bluff District.

APPENDIX A

General Background Materials

APPENDIX A

Bibliography

The following is a list of the major sources that were reviewed and consulted to develop the analysis in Chapter 2.

City of West Sacramento General Plan, City of West Sacramento (2000)

West Sacramento Corporation Yard Project Design Manual, Dreyfuss Blackford Architects (2008)

Corporation Yard Impact Fee Nexus Study, City of West Sacramento (2005)

Wastewater Treatment Plant Decommissioning and Demolition Study, Psomas (2007)

Wastewater Treatment Plant Decommissioning and Demolition EIR, EDAW *(2007)*

Bridge District Specific Plan, City of West Sacramento (2008)

Bridge District Implementation Strategy, City of West Sacramento (2009)

General Plan Policy Document, City of West Sacramento (2008)

Southport Framework Plan, City of West Sacramento (1998)

West Sacramento Water Master Plan, City of West Sacramento (2005)

Traffic Impact Fee Update, DKS (2005)

Sacramento River Crossings Alternatives Study, Fehr & Peers (2011)

Super Cumulative Traffic Study: Analysis of Six Combined Development Projects in Southport, DKS (2005)

West Sacramento Levee Improvement Program Draft Alternatives Analysis, WestSACFA (2009)

General Plan Background Report, City of West Sacramento (2009)

SacPort Regional Petroleum Terminal Draft EIR, Michael Brandman Associates (2008)

Policy Recommendations for the Evaluation and Mitigation of Significant Impacts from Local Development Projects on the State Highway System, DKS (2009)

2010 Metropolitan Transportation Plan, SACOG (2010)

2016 Metropolitan Transportation Plan Background Materials, SACOG (2014)

2020 California Transportation Outlook: The Decarbonisation Drive, Bloomberg Finance (2014)

Bike, Pedestrian, and Trails Master Plan, City of West Sacramento (2013)

Relocation Agreement By and Between the Redevelopment Agency of the City of West Sacramento and RMC Pacific Materials, Inc. (2006)

Trends in Sources of Crude Oil 2014 IEPR Workshop, Gordon Schremp (2014)

Corporation Yard Phase I and Phase II Environmental Site Assessments, Engeo (2007)

APPENDIX A

Corporation Yard Asbestos Containing Materials and Lead-Based Paint Pre-Demolition Survey Report, Versar (2007)

SACOG Regional Goods Movement Study, The Tioga Group (2006)

South River Road Preliminary Title Reports and Grant Deeds, Dokken (2014)

Project Study Report in the City of West Sacramento on US50 at the Jefferson Boulevard and South River Road Interchanges, City of West Sacramento (2008)

Sustainable Design at the Confluence of Rural and Urban Landscapes on the Sacramento, John Anthony Miki, thesis for Master of Urban Design, UC Berkeley (2006)

Pioneer Bluffs The Final Piece to the Sacramento Riverfront, Levi Rynearson, UC Davis Department of Landscape Architecture (2012)

Pioneer Bluff Property Owners: Clark Trucking, Clark Pacific/Tecon Pacific, Ramos Family Trust/Kent Ramos, Barker, Buckeye Terminals, Kinder Morgan (Santa Fe Pacific Pipeline), Shell (Equilon), Roberts, Conrad, Ralston (2014).

The City of West Sacramento

General Plan

Policy Document

Prepared by

The City of West Sacramento

Community Development Department

June 2000

Includes October 2008 Housing Element Update

- Consider the use of Transfer of Development Rights (TDR) provisions to provide for an equitable distribution of the economic returns from future development for all property owners in the Southport area.

- Provide for an orderly sequence of development based on the extension of public facilities and services.

8. Redevelopment incentives and powers shall be used judiciously to promote and assist development and revitalization within the Redevelopment Project Area.

9. In existing developed areas designated for new uses (e.g., conversion from industrial to riverfront mixed use), the City shall promote the phasing out of existing uses and the orderly transition to uses consistent with the adopted general plan designations while promoting the continuing viability of existing uses during the transition period.

10. Transitioning of uses in the South River Road area between Pioneer Bridge and the barge canal shall be guided by the following policy:

a. Uses consistent with the Riverfront Mixed Use designation may be established at any time in accordance with an adopted master development plan.

b. Existing Non-Conforming Uses:

Year 2005	**May be expanded by right up to 30 percent of the 1996 improvements and may be further expanded subject to discretionary approval.**
Year 2006	**Any expansion will require discretionary approval.**
Year 2007 and beyond	**Activities are limited to ordinary maintenance and repair of the existing non-conforming use.**

c. Replacement Non-Conforming Uses:

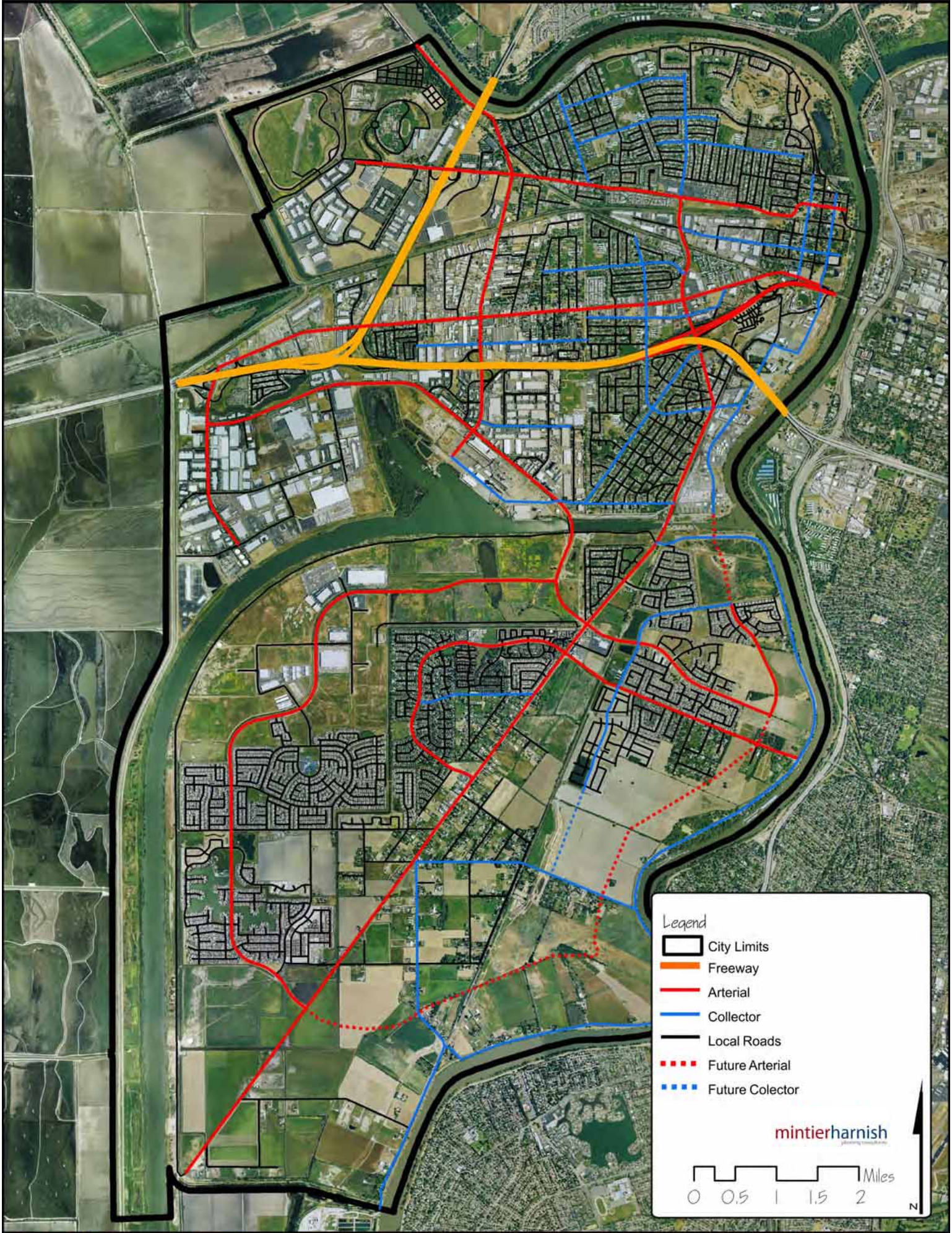
Year 2004 and beyond	**An existing non-conforming use may be replaced with another non-conforming use that is determined by the City to be of the same or a more restrictive nature, subject to discretionary approval. Thereafter activities are limited to ordinary maintenance and repair of the non-confirming use.**

d. New Non-Conforming Uses with New Construction:

Year 2004 and beyond	**May not be established**

e. The City shall explore all feasible means for accelerating the conversion of the existing non-confirming heavy industrial uses in this area.

11. For proposed projects outside the city limits but within the West Sacramento General Plan Study Area, the City shall work with project proponents to ensure general plan amendments include



City of West Sacramento
Background Report

Functional Roadway Classifications
Figure 5-2

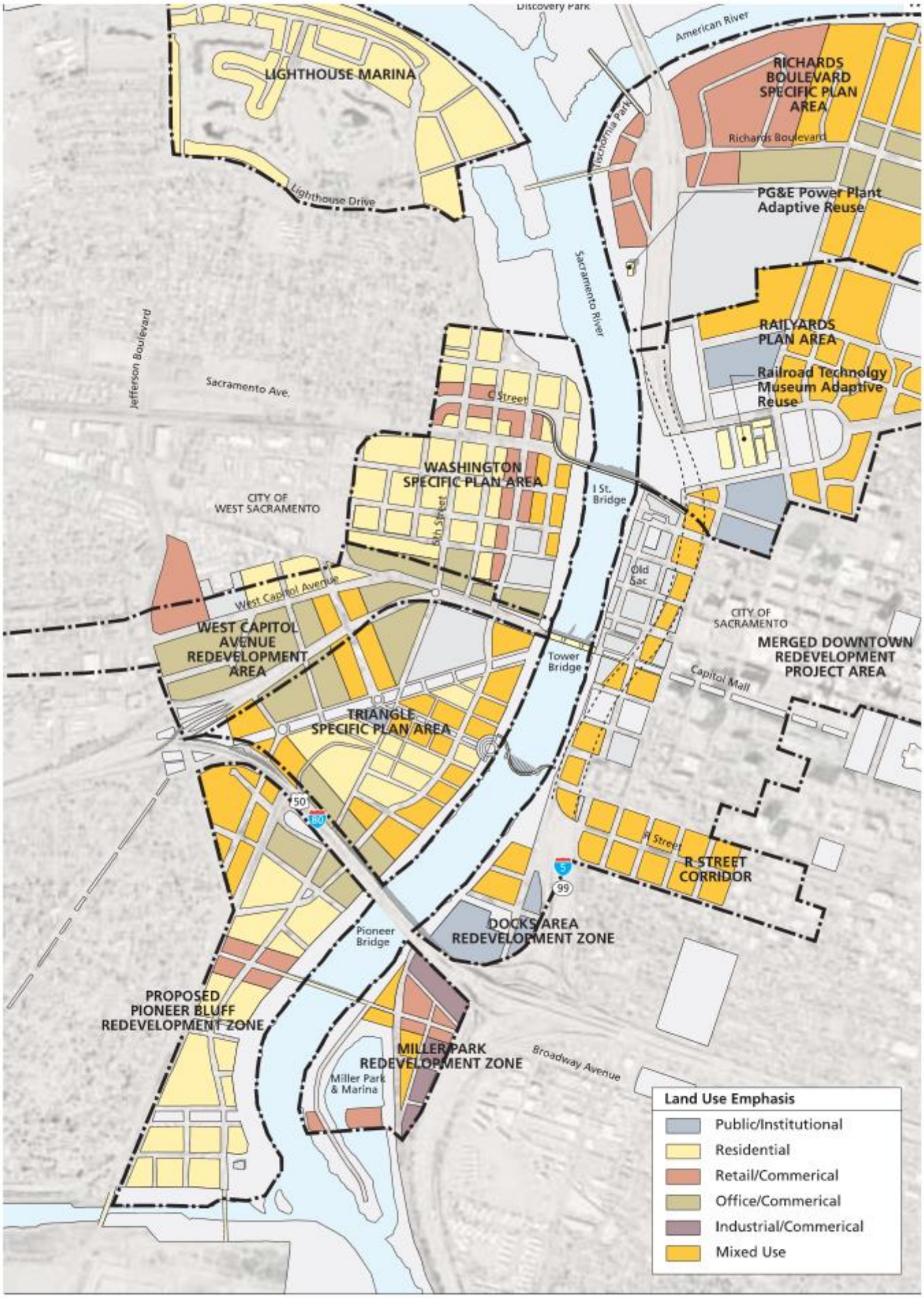
CELEBRATING OUR RIVER

Sacramento Riverfront Master Plan

A Partnership between
the Cities of West Sacramento
and Sacramento

July 2003

WRT | SOLOMON ★ E.T.C.



Sacramento Riverfront Master Plan

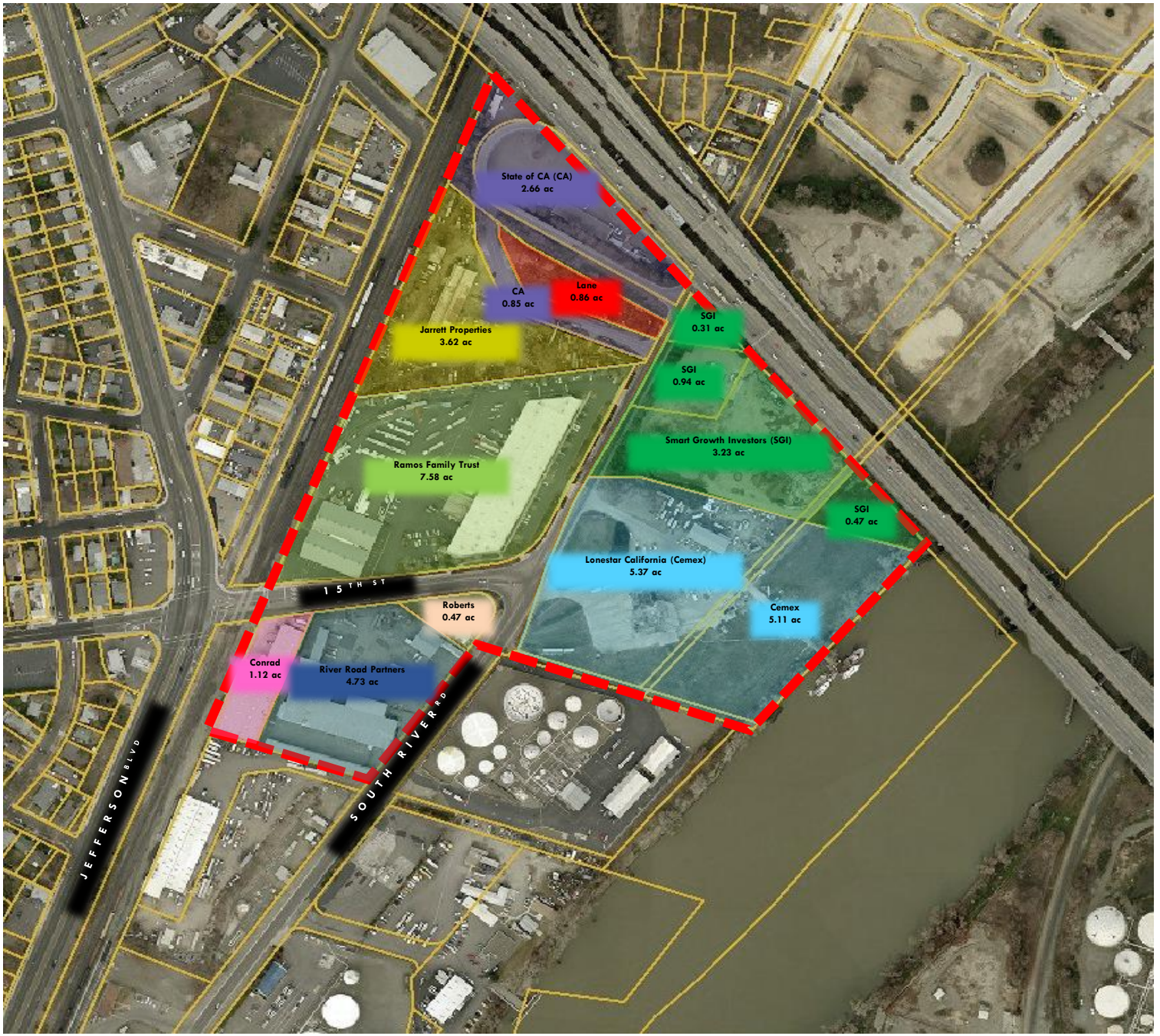
REDEVELOPMENT & LAND USE

0 450 900 1800 feet

WRT | SOLOMON E.T.C

July 2003

APPENDIX A: NORTH AREA PARCELIZATION



APPENDIX A: CENTRAL AREA PARCELIZATION

APPENDIX A: SOUTHERN AREA PARCELIZATION

APPENDIX A: BARGE CANAL CONSTRUCTION

APPENDIX A: BARGE CANAL OPERATIONS

APPENDIX B

Corporation Yard Materials

Table B1: Inventory of Corporation Yard Plus Parcels, Current Land Uses and Estimate of Net Buildable Area

Inventory	Parcel (all quantities in acres) 067-180-001	058-260-019	058-260-018	058-260-017	058-260-016	TOTAL
1 Parcel Ownership	**West Sac. (RDA SA)**	**West Sacramento**	**West Sacramento**	**West Sacramento**	**West Sacramento**	
2 Gross Parcel Area (land area only)	**5.80**	**4.97**	**1.71**	**3.57**	**4.19**	**20.24**
3 Current Land Use[1]						
a Corporation Yard (active)	0.50	1.40	1.51	3.07	2.39	**8.87**
b Wastewater Treatment Plant (inactive)	0.80	3.47	0.00	0.00	0.00	**4.27**
c Clark Pacific Lease Area	0.00	0.00	0.00	0.00	1.50	**1.50**
d Waterside Area (beyond fenceline)	4.50	0.10	0.20	0.50	0.30	**5.60**
Total Current Land Use	**5.80**	**4.97**	**1.71**	**3.57**	**4.19**	**20.24**
4 Estimate of Net Buildable Area						
a Gross Parcel Area	5.80	4.97	1.71	3.57	4.19	**20.24**
b (Less Flood Easement)[2]	(4.50)	(0.10)	(0.20)	(0.50)	(0.30)	**(5.60)**
c (Less Public ROWs)[3]	(0.10)	(0.30)	(0.20)	(0.40)	(0.40)	**(1.40)**
Total Net Buildable Area	**1.20**	**4.57**	**1.31**	**2.67**	**3.49**	**13.24**
as percent of Gross Parcel Area	***21%***	***92%***	***77%***	***75%***	***83%***	***65%***

[1] estimated based on Exhibit A1, site visits, and aerials.

[2] assume 165 foot flood easement

[3] assume east-west streets every 400 feet and one north-south street.

Table B2: Inventory of Existing Corporation Yard Plus Workforce

Workforce	Inventory		Allocation to Operating Unit					
			Utilities Maintenance	Facilities Maintenance	Equip. & Fleet Maintenance	Parks and Recreation	Other	TOTAL
1 Public Works and Parks Operations Workforce[1]								
a PW Operations Manager	1.0	job	0.8	0.1	0.1	0.0	0.0	**1.0**
b PW Administration Manager	1.0	job	0.8	0.1	0.1	0.0	0.0	**1.0**
c PW Superintendent	3.0	jobs	1.0	1.0	1.0	0.0	0.0	**3.0**
d PW Clerical Support	2.0	jobs	1.6	0.2	0.2	0.0	0.0	**2.0**
e Chief Maintenance Worker	3.0	jobs	3.0	0.0	0.0	0.0	0.0	**3.0**
f Maintenance Worker	16.0	jobs	16.0	0.0	0.0	0.0	0.0	**16.0**
g Equipment Mechanic II	3.0	jobs	0.0	0.0	3.0	0.0	0.0	**3.0**
h Electrical Technician	2.0	jobs	0.0	0.0	2.0	0.0	0.0	**2.0**
i Plant Mechanic II	4.0	jobs	0.0	0.0	4.0	0.0	0.0	**4.0**
j Instrumentation Technician	1.0	job	0.0	0.0	1.0	0.0	0.0	**1.0**
k Stationary Engineer	2.0	jobs	0.0	2.0	0.0	0.0	0.0	**2.0**
l Facility Maintenance Worker	3.0	jobs	0.0	3.0	0.0	0.0	0.0	**3.0**
m Parks Manager	1.0	job	0.0	0.0	0.0	1.0	0.0	**1.0**
n Chief Parks & Ground Worker	4.0	jobs	0.0	0.0	0.0	4.0	0.0	**4.0**
o Urban Forest Manager	1.0	job	0.0	0.0	0.0	1.0	0.0	**1.0**
p Parks and Grounds Worker	6.0	jobs	0.0	0.0	0.0	6.0	0.0	**6.0**
q Groundskeeper	2.0	jobs	0.0	0.0	0.0	2.0	0.0	**2.0**
r Park Maintenance Aids	9.0	jobs	0.0	0.0	0.0	9.0	0.0	**9.0**
Total PW and Parks Operations	**64.0**	**FTE positions**	**23.2**	**6.4**	**11.4**	**23.0**	**0.0**	**64.0**
as percent of total PW + Parks			***36%***	***10%***	***18%***	***36%***	***0%***	***100%***
2 Other Workforce at the Corporation Yard								
a Contractor staff (constr. Mgmt)	3.0	FTE positions	0.0	0.0	0.0	0.0	2.0	**2.0**
b Clark Lease area staff	1.0	FTE position	0.0	0.0	0.0	0.0	2.0	**2.0**
Total Other Workforce	**4.0**	**FTE positions**	**0.0**	**0.0**	**0.0**	**0.0**	**4.0**	**4.0**
Total Corporation Yard Plus Workforce	**68.0**	**FTE positions**	**23.2**	**6.4**	**11.4**	**23.0**	**4.0**	**68.0**

[1] Source: City of West Sacramento 2013/14 Authorized Position List

Table B3: Inventory of Corporation Yard Plus Facilities and Space Use

Facility	Inventory		Use of Space: Office	Employee Support	Shop and Storage	Yard and Support	City Hall/ Other	TOTAL
1 Existing Buildings (currently in use)								
a Public Works Operations Building	15,840	square feet bldg	3,400	2,800	9,040	0	600	**15,840**
b Parks/Recreation Ops Building	4,225	square feet bldg	1,600	1,400	1,225	0	0	**4,225**
Total Existing Buildings	***20,065***	square feet bldg	***5,000***	***4,200***	***10,265***	***0***	***600***	***20,065***
per employee	***295***	sqft/employee	***74***	***62***	***151***	***0***	***9***	***295***
2 Enclosed Spaces (currently in use)								
a "Parks Warehouse"	3,568	square feet bldg	0	0	3,568	0	0	**3,568**
b "Sludge De-watering Building"	3,435	square feet bldg	0	0	3,435	0	0	**3,435**
Total Enclosed Spaces	***7,003***		***0***	***0***	***7,003***	***0***	***0***	***7,003***
3 Covered Areas								
a Public Works Fleet Covered Area	10,000	square feet	0	0	0	10,000	0	**10,000**
b Public Works Oil Wast Disposal	300	square feet	0	0	0	300	0	**300**
c Parks Fleet Covered Area	6,000	square feet	0	0	0	6,000	0	**6,000**
Total Enclosed Spaces	***16,300***		***0***	***0***	***0***	***16,300***	***0***	***16,300***
4 Open Storage Areas								
a Fleet Open Storage	16,400	square feet land	0	0	0	16,400	0	**16,400**
b Bulk Storage Bins	1,000	square feet land	0	0	0	1,000	0	**1,000**
c Nursery Yard	1,000	square feet land	0	0	0	1,000	0	**1,000**
d Recycling/Disposal	5,000	square feet land	0	0	0	5,000	0	**5,000**
e Other Bulk Storage	15,000	square feet land	0	0	0	15,000	0	**15,000**
Total Open Storage Areas	***38,400***	**square feet land**	***0***	***0***	***0***	***38,400***	***0***	***38,400***
5 Employee and Visitor Parking								
a Frontyard Spaces (formal)	42	parking spaces	0	0	0	38	4	**42**
b Informal Spaces	30	parking spaces	0	0	0	30	0	**30**
Total Parking Spaces	***72***	***parking spaces***	*0*	*0*	*0*	*68*	*4*	***72***

Source: Public Works and Parks Departments; see Exhibits A1, A2, A3, and A4.

Table B4: Corporation Yard Plus Current Space Use versus Space Need

Facility	Space Use[1]		Space Needed[2]		Comments
1 Existing Buildings (currently in use)					
a Office	5,000	square feet bldg	4,500	square feet bldg	redundant but undersized work & common areas
b Employee Support	4,200	square feet bldg	4,000	square feet bldg	redundant but undersized spaces
c Shop and Storage	10,265	square feet bldg	12,000	square feet bldg	undersized work areas, consolidate storage
Total Existing Buildings	***19,465***	square feet bldg	***20,500***	square feet bldg	
2 Enclosed Spaces (currently in use)					
a Shop and Storage	7,003	square feet bldg	5,000	square feet bldg	underutilized space
3 Covered Areas					
a Public Works/Parks Fleet	16,000	square feet	32,400	square feet	currently undersized
b Oil Waste Disposal Area	300	square feet	300	square feet	
Total Enclosed Spaces	***16,300***		***32,700***		
4 Open Storage Areas					
a Fleet Open Storage	16,400	square feet land	-	square feet land	all fleet under cover?
b Bulk Storage Bins	1,000	square feet land	1,000	square feet land	consolidate PW and Parks
c Nursery Yard	1,000	square feet land	1,000	square feet land	
d Recycling/Disposal Area	5,000	square feet land	5,000	square feet land	Includes container bins, disposal and sorting area
e Sweeper/Sludge Disposal Area	15,000	square feet land	15,000	square feet land	
f Other Bulk Storage	16,000	square feet land	16,000	square feet land	consolidate PW and Parks
Total Open Storage Areas	***54,400***	**square feet land**	***38,000***	**square feet land**	
5 Employee and Visitor Parking					
a Frontyard Spaces (formal)	42	parking spaces	80	parking spaces	no informal parking spaces
b Informal Spaces	30	parking spaces	0	parking spaces	no informal parking spaces
Total Parking Spaces	***72***	***parking spaces***	***80***	***parking spaces***	

1 Source: Table 3: Inventory of Corporation Yard Facilities and Space Use

2 Estimated space needed based on current operational needs and trends.

Table B5: Conceptual Estimate of New Corporation Yard Development Costs

Cost Item	COST Quantity	Unit Cost	Total Cost	Notes
1 Pre-development Costs				
a City Staff Due Diligence			$100,000	assume FY 2014/15
b Consultant Due Diligence				
i Process/Program Engineer			$50,000	defines operational processes and development specifications
ii Site Planning, Design, Cost Estimates			$50,000	prepares site and planning studies per specifications; cost estimates
c Design-Build Bid, Negotiation and Contract			$100,000	staff, legal, etc.
Total Pre-development Costs			**$300,000**	
2 Land Costs				
a Land Acquisition	10.00 acres	$250,000 per acre	$2,500,000	assume minimal property improvements
b Due Diligence and Transactional Costs		5% of land price	$125,000	sales, title, legal, etc.
Total Land Cost			**$2,625,000**	
3 Hard Costs				
a Public and Semi-Public Facilities (off-site costs)				
i Backbone Roadway/Traffic Improvements			$200,000	
ii Backbone Sewer Improvements			$20,000	
iii Backbone Storm Drainage Improvements			$20,000	
iv Backbone Water Improvements			$20,000	
Subtotal Public and Semi-Public Facilities)			***$260,000***	
b Sitework (not including 2a items)				
i Site Preparation	435,600 square feet	$0.35 per square foot	$152,460	
ii Site Utilities			$250,000	
iii Employee and Visitor Parking	80 spaces	$2,500 per space	$200,000	
iv Bulk Storage Bins	1,000 square feet	$25 per square foot	$25,000	
v Nursery Yard	1,000 square feet	$20 per square foot	$20,000	
vi Recycling/Disposal Area	5,000 square feet	$10 per square foot	$50,000	container and sort bins
vii Sweeper/Sludge Disposal Area	15,000 square feet	$15 per square foot	$225,000	drainage and disposal improvements; wash area
viii Other Bulk Storage Areas	16,000 square feet	$10 per square foot	$160,000	
ix Other paved areas (circulation)	20,000 square feet	$8 per square foot	$160,000	
x Covered Areas	32,700 square feet	$25 per square foot	$817,500	vehicle and equipment storage
xi Enclosed Areas	5,000 square feet	$40 per square foot	$200,000	storage
xii Landscaping, Lighting, Fencing, & Other Site	435,600 square feet	$2.75 per square foot	$1,197,900	
Subtotal Sitework			***$3,457,860***	***$3.2M = $9.20/ sqft parcel***
d Building Construction (warm shell)				
i Flex Building - low bay area	18,000 square feet	$80 per sqft	$1,440,000	assume one storey tilt up construction
ii Flex Building - high bay area	2,500 square feet	$100 per sqft	$250,000	assume one storey tilt up construction
e Tenant Improvements (includes FF&E)				
i Office Area - low bay area	4,500 square feet	$40 per sqft	$180,000	
ii Employee Support - low bay area	4,000 square feet	$50 per sqft	$200,000	Kitchen, restrooms, breakrooms, locker rooms, etc.
iii Storage Area - low bay area	4,500 square feet	$20 per sqft	$90,000	Rack space, shelves, cabinets
iv Shop Area - low bay area	5,000 square feet	$50 per sqft	$250,000	
v Shop Area - high bay area	2,500 square feet	$60 per sqft	$150,000	

Table B5: Conceptual Estimate of New Corporation Yard Development Costs

Cost Item	COST Quantity	Unit Cost	Total Cost	Notes
Subtal Building + Tenant Improvements			***$2,560,000***	***$2.5M = $122/sqft building area***
Subtotal Basic Hard Costs			***$6,277,860***	
e General Conditions		6.00% of basic hard costs	$376,672	
f Contractor Bonds and Insurance		3.00% of basic hard costs	$188,336	
g Contractor Fee		3.00% of basic hard costs	$188,336	
h Escalation		2.00% of basic hard costs	$125,557	
i Contigency (Hard Costs)		10.00% of basic hard costs	$627,786	
Total Hard Costs			**$7,784,546**	
4 Soft Costs				
a Design and Engineering		10.00% of hard costs	$778,455	
b Fees and Permits		1.50% of hard costs	$116,768	
c Testing and Inspection		0.50% of hard costs	$38,923	
d Legal, Accounting & Other Services		1.50% of hard costs	$116,768	
e Property Taxes, Insurance, Utilities (to opening)		0.50% of hard costs	$38,923	
f Developer Fee		3.00% of hard costs	$233,536	
g Developer Construction Management/Related		1.00% of hard costs	$77,845	
h City Construction Management/Related		1.50% of hard costs	$116,768	
i Contingencies (Soft Costs)		10.00% of soft costs	$151,799	
Total Soft Costs			**$1,669,785**	
5 Financing Costs				
a Construction Financing Fees and Origination				
b Construction Financing Interest				
Total Financing Costs			**$0**	
TOTAL PROJECT COSTS			**$12,379,332**	
per square foot parcel			***$28***	

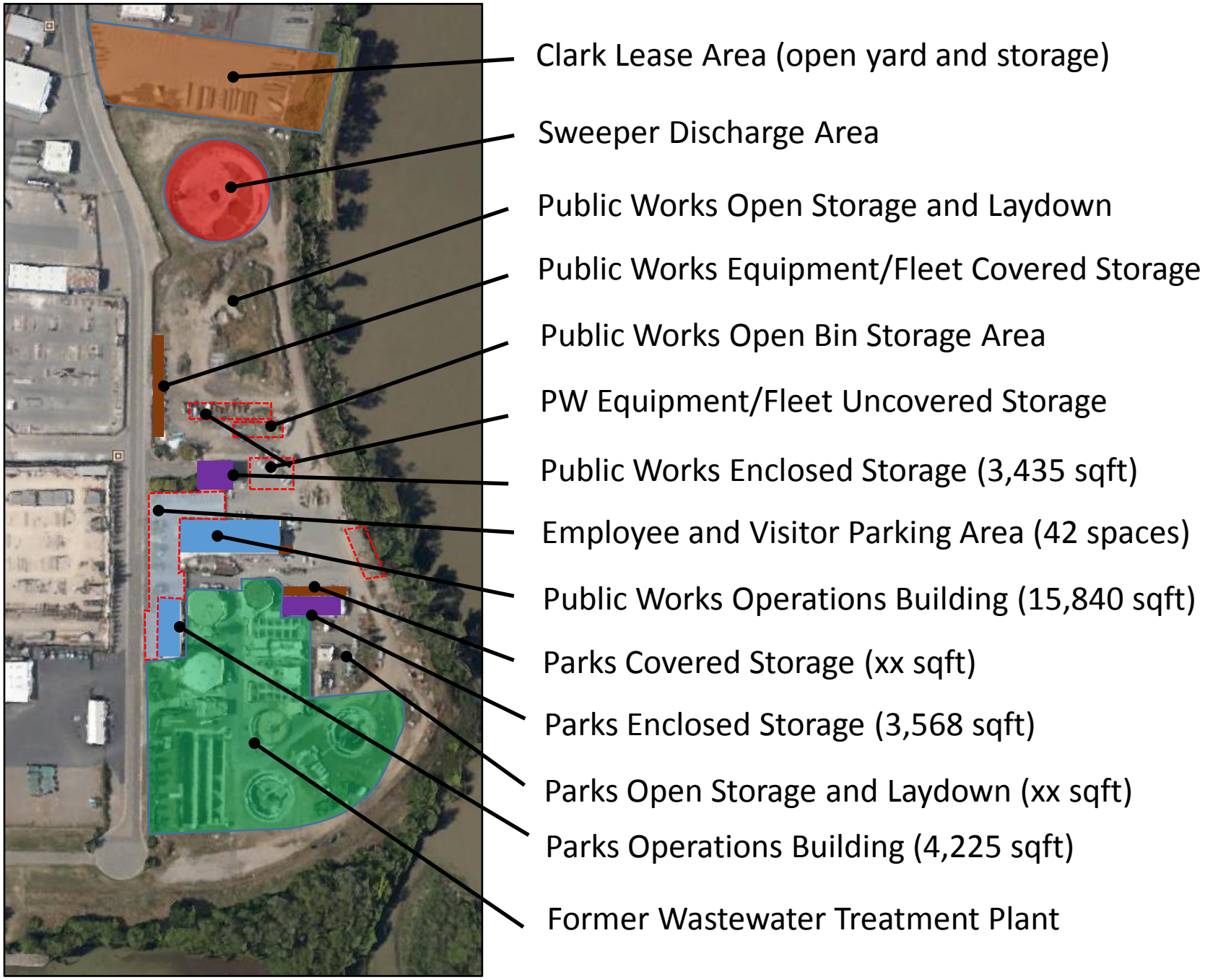


Exhibit A1: Corporation Yard Plus Parcels: Functional Use Areas

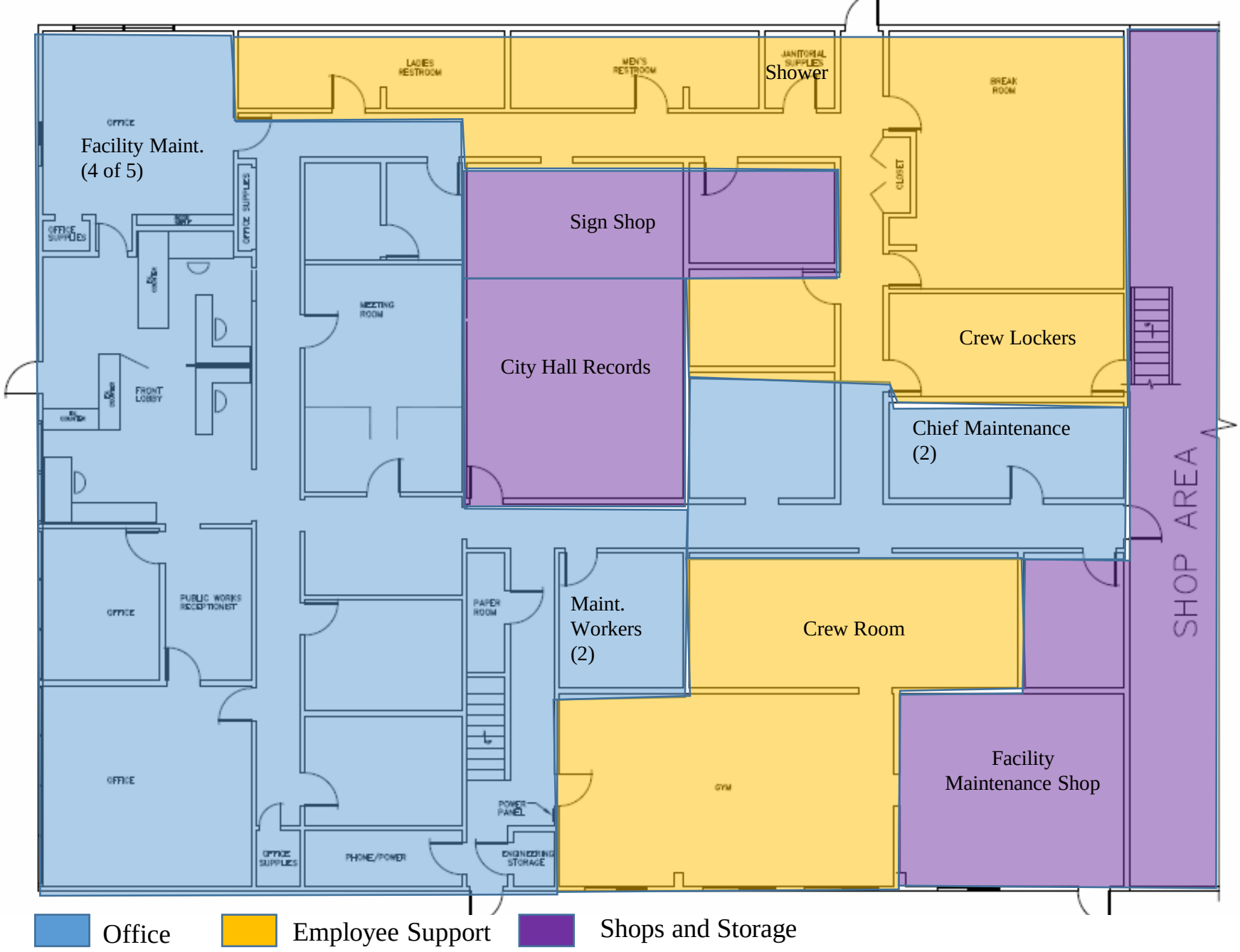


Exhibit A2: Public Works Operations Building – First Floor Functional Use (1 of 2)

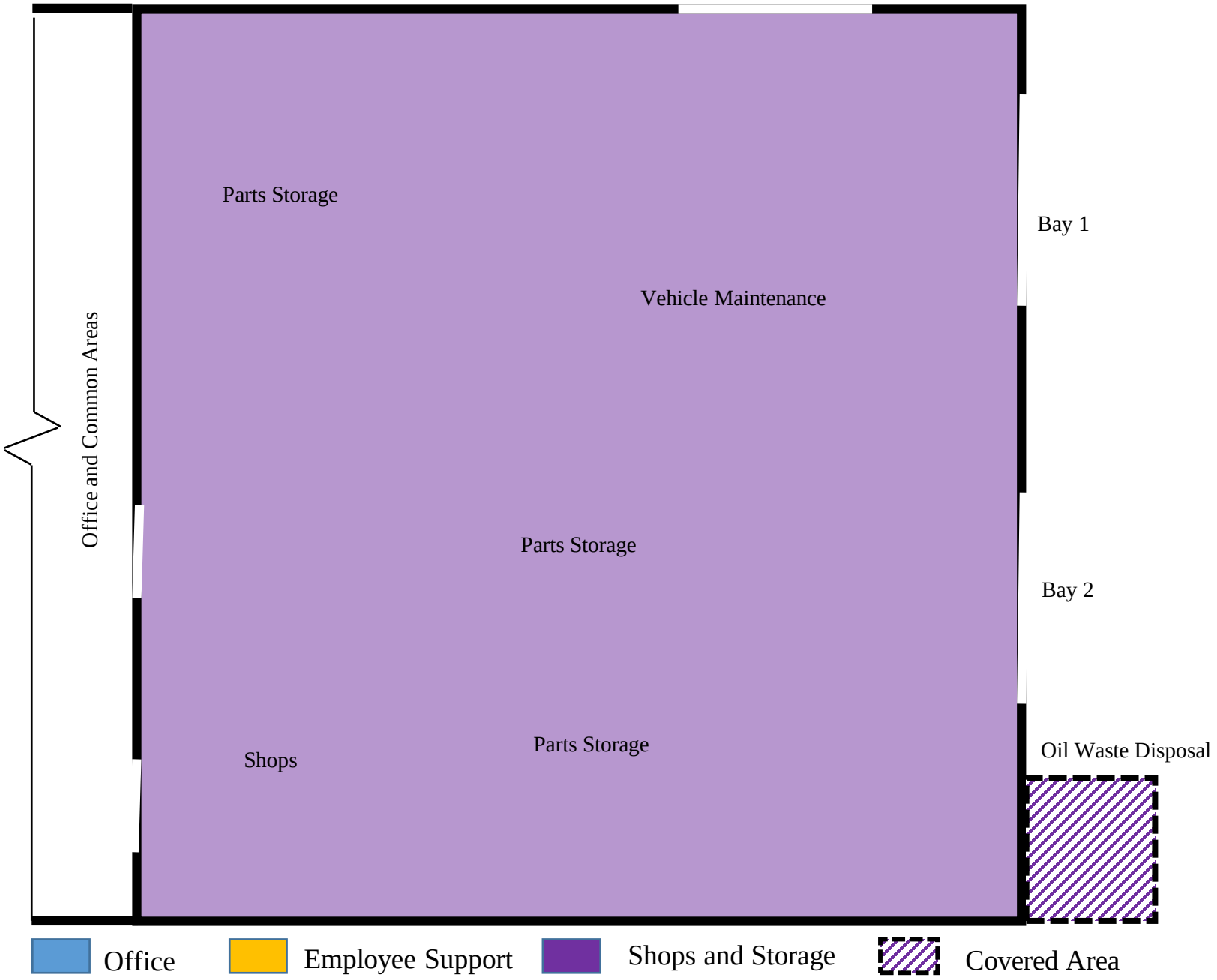
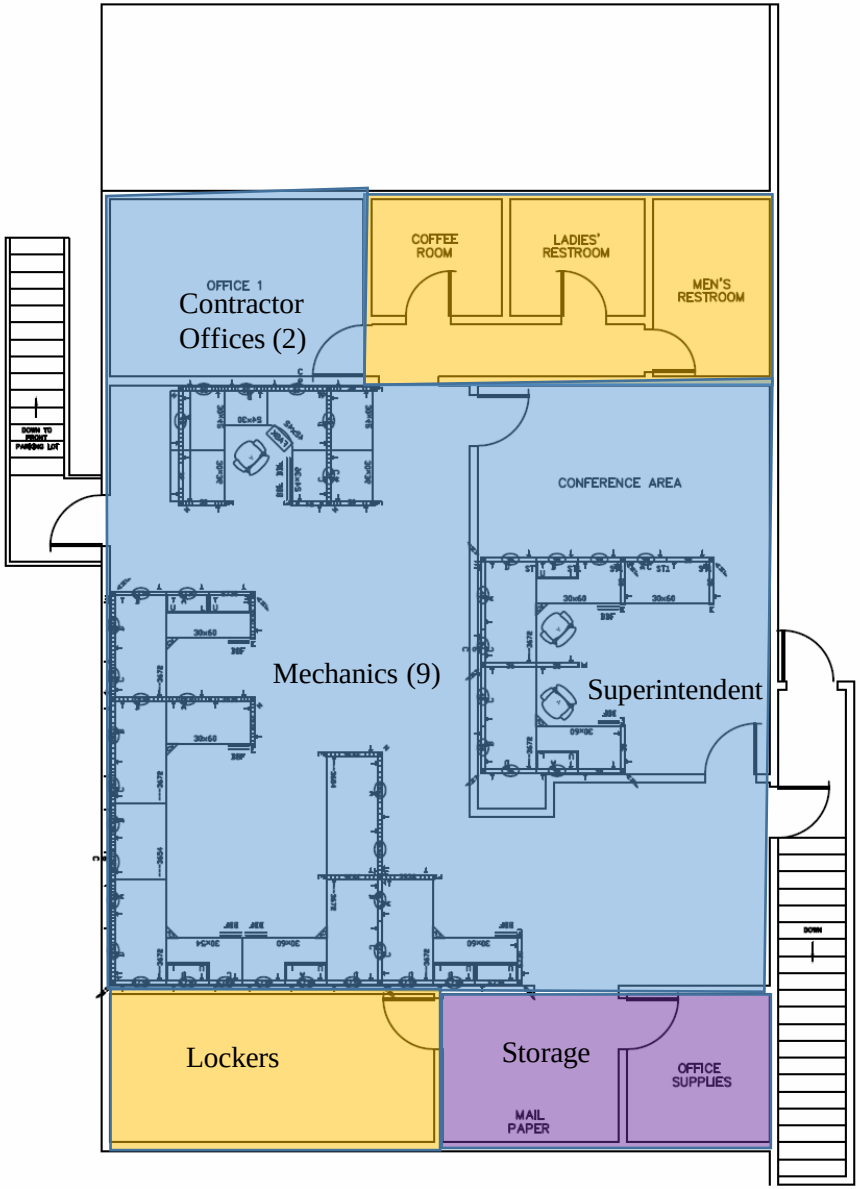


Exhibit A2: Public Works Operations Building – First Floor Functional Use (2 of 2)



Office Employee Support Shops and Storage

Exhibit A3: Public Works Operations Building – Second Floor Functional Use

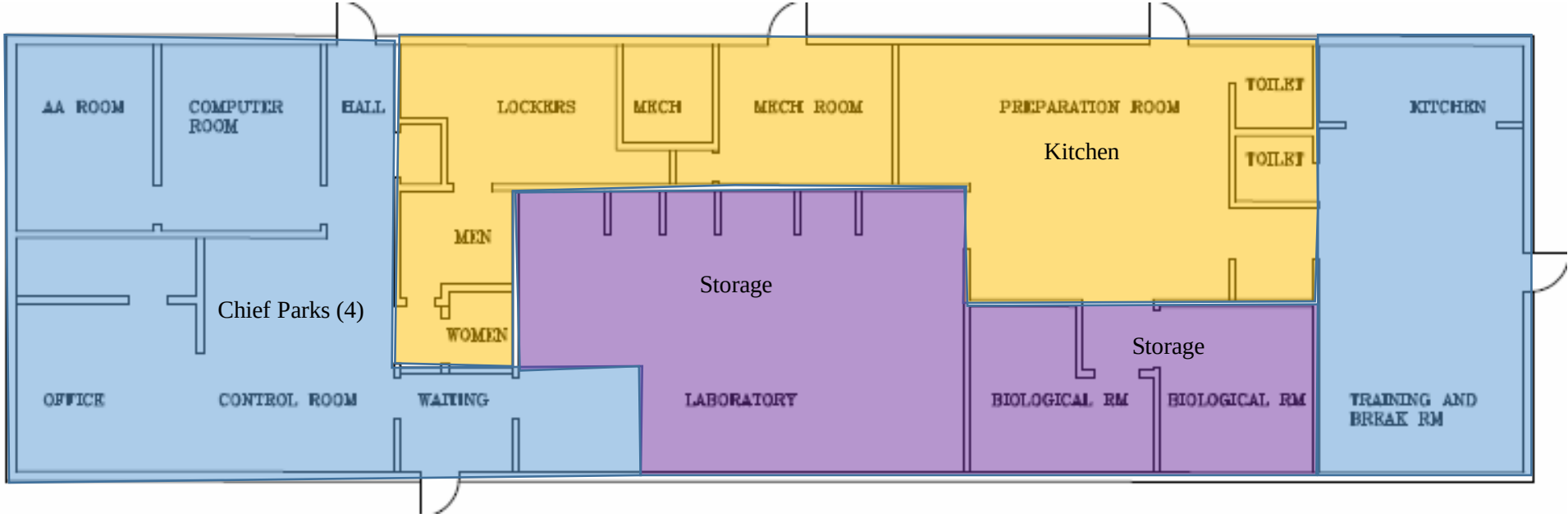


Exhibit A4: Parks Operations Building Functional Use

APPENDIX C

Fuel Terminal Materials

TABLE C1: CALCULATION OF NET CEMEX RELOCATION COST
Pioneer Bluff Transition Plan

	2006	2007	2008	2009 to 2026	2027 to 2056
Relocation Costs					
Construction Payment	($5,890,000)				
Initial Relocation Payment	($2,000,000)	$0			
Annual Relocation Payment		($191,000)	($191,000)	($191,000)	
Net Lease Revenue					
Minimum Lease Payment		$200,000	$300,000	$400,000	$680,973
(Less Operating Costs)[1]		($20,000)	($30,000)	($40,000)	($68,097)
Net Lease Revenues		**$180,000**	**$270,000**	**$360,000**	**$612,876**
Total Cash Flow	**($7,890,000)**	**($11,000)**	**$79,000**	**$169,000**	**$612,876**
NPV through 2056 @ 5%	**($13,033)**				
NPV through 2026 @ 5%	**($4,834,999)**				

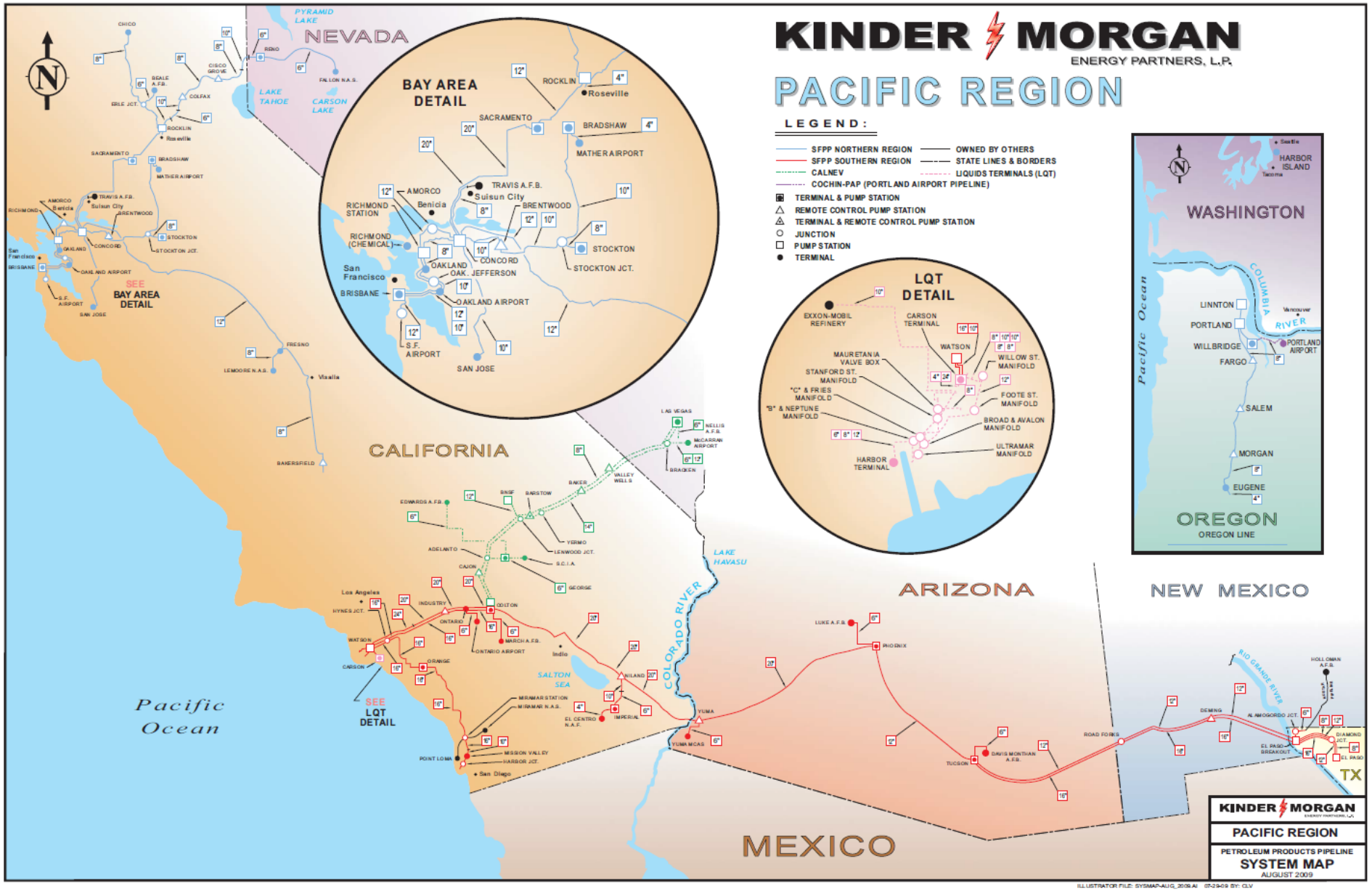
[1] Assume 10 percent of lease payment

Table C2: Inventory of Regional Terminal Capacities
Pioneer Bluff Transition Plan

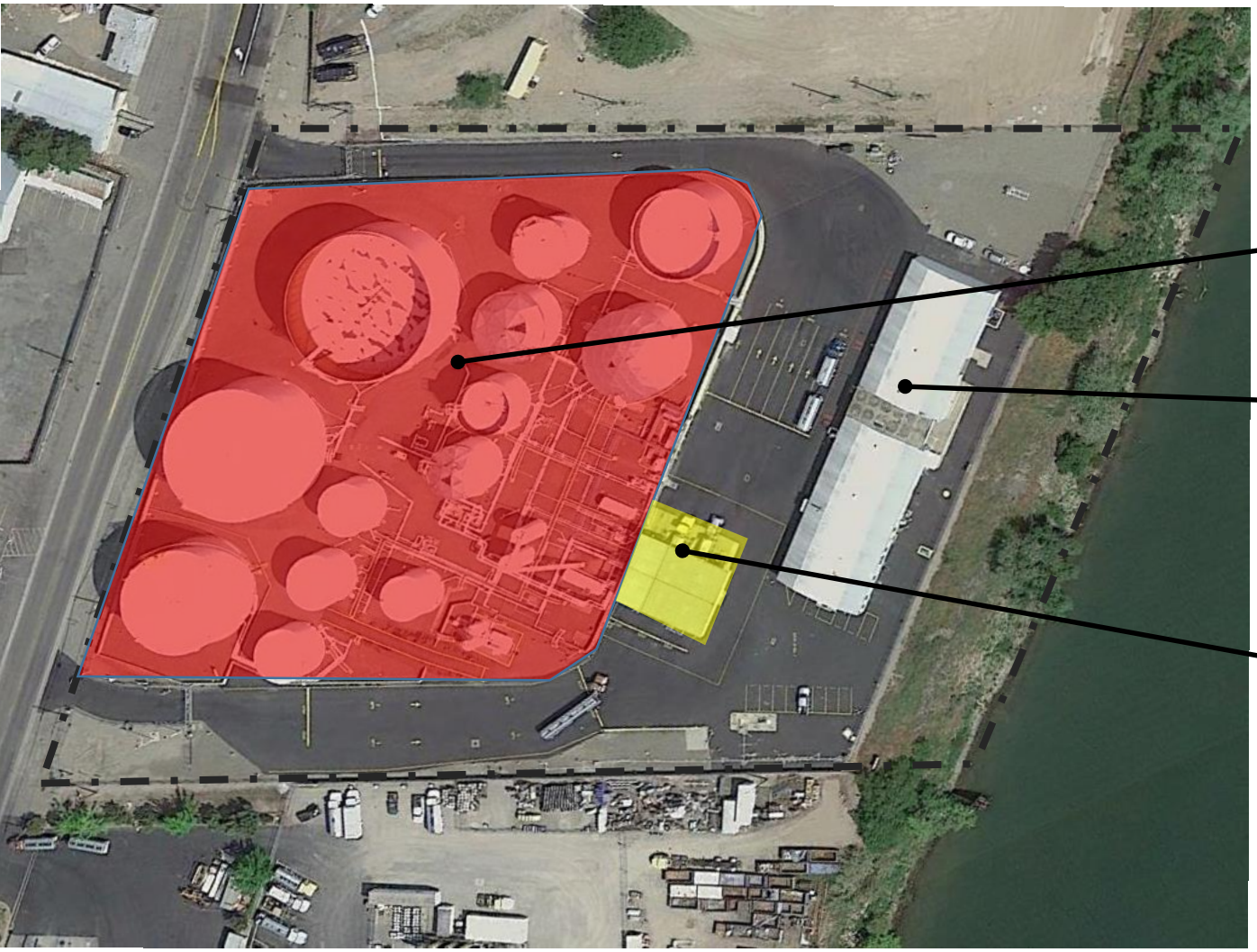
	Sacramento Region Terminals					
Inventory	**Shell**	**Buckeye**	**Chevron**	**Conoco**	**Kinder Morgan**	**TOTAL**
Storage Capacity (in barrels)[1]						
Gasoline	143,720	214,268	145,000	98,500	N/A	**601,488**
Diesel	70,570	55,337	69,286	20,240	N/A	**215,433**
Ethanol	16,180	15,047	24,526	10,000	N/A	**65,753**
Total Storage Capacity	**230,470**	**284,652**	**238,812**	**128,740**	**446,200**	**1,328,874**
percent of regional total	***17%***	***21%***	***18%***	***10%***	***34%***	

[1] Source: SacPort DEIR and Kinder Morgan

APPENDIX C: KINDER MORGAN PIPELINES



APPENDIX C: SHELL FUNCTIONAL USE AREAS

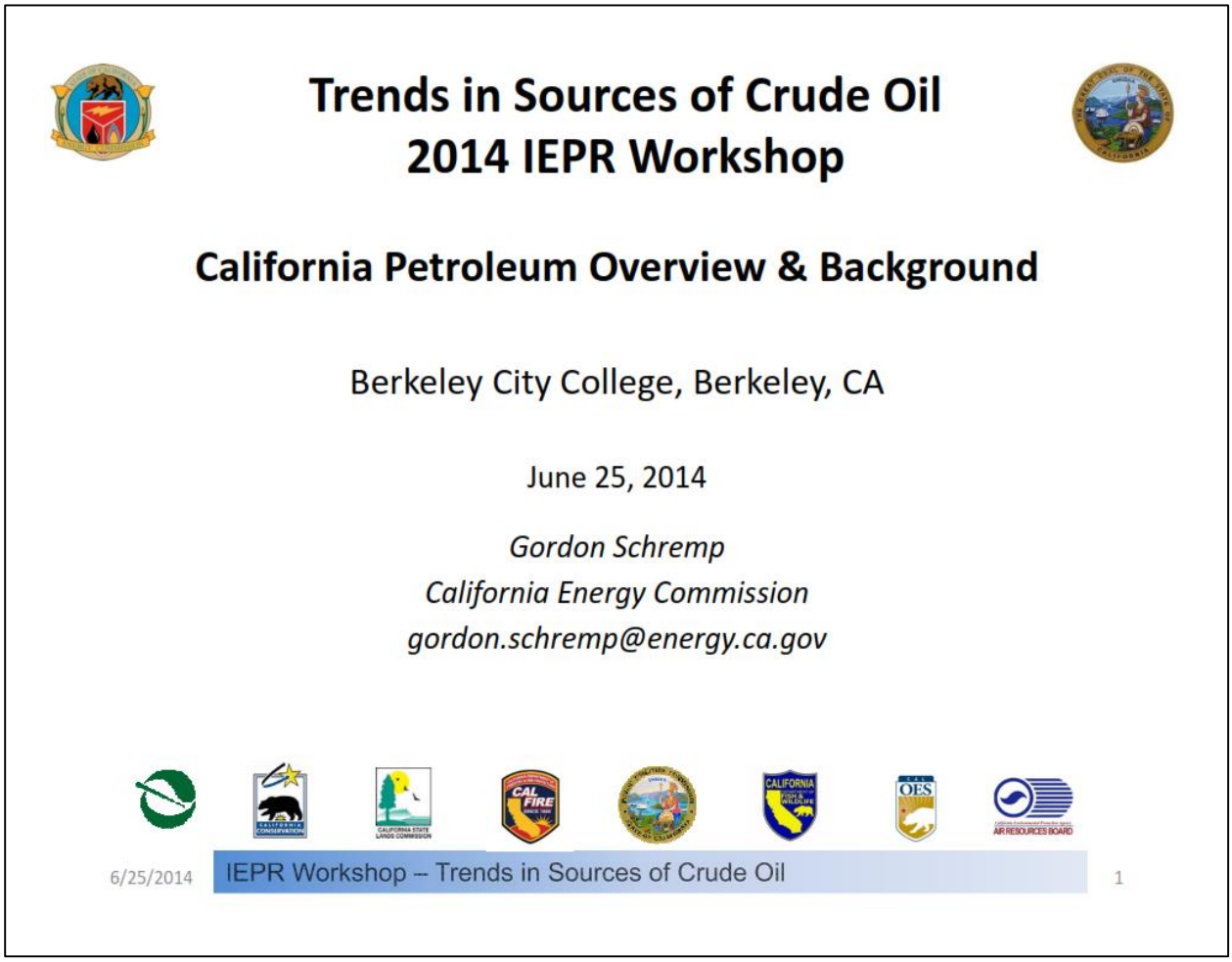


APPENDIX C: BUCKEYE FUNCTIONAL USE AREAS

Appendix C

The Schremp Presentation, "Trends in Sources of Crude Oil 2014 IEPR Workshop," may be viewed at the following hyperlink:

http://www.energy.ca.gov/2014_energypolicy/documents/2014-06-25_workshop/presentations/01_Schremp_Final_2014-06-25.pdf



Bloomberg
NEW ENERGY FINANCE

18 March 2014 **ADVANCED TRANSPORT – WHITE PAPER**

Contents

2020 California transport outlook: the decarbonisation drive

Californian fuel demand, and its vehicle fleet, will be reshaped in the coming six years through a combination of regulatory and economic factors. The coming change to its transport system will point to potential alterations in other Western economies.

- Gasoline demand in the state of California will contract from today's 12.3bn to 11.2bn gallons a year by 2020, a 9% drop, according to our base-case scenario. Federal efficiency regulation will be the primary factor behind this erosion of fuel demand. The Californian zero-emissions vehicle programme (ZEV), federal Renewable Fuel Standard (RFS2) and California Low Carbon Fuel (LCFS) standard will all also contribute to driving down gasoline demand in the state.
- In an alternative scenario, under a plausible if more aggressive set of adoption conditions, gasoline demand contracts to 10.6bn gallons, representing a 13% drop. In this scenario we assume efficiency standards are strictly adhered to and that the fleet renewal rate increases slightly. Both scenarios effectively play out a trend that started over a decade ago. Since 2002, Californian gasoline demand has fallen from 15.4bn gallons, primarily the result of consumers travelling slightly fewer miles and the fleet becoming more fuel-efficient.
- We project that diesel demand will remain approximately flat at 3.7bn gallons per year between 2014 and 2020: interestingly, this is despite the vehicle-miles-travelled data for diesel vehicles increasing during the same period. We believe liquefied natural gas, or LNG, consumption in the state will increase fivefold as it will be approximately $1 per diesel gallon equivalent cheaper than diesel. LNG should therefore effectively displace 600m gallons of Californian diesel demand.
- Stronger diesel efficiency regulation will likewise start to have an impact on diesel demand later in the decade. Biodiesel blending meanwhile could comfortably exceed the modest mandate of 5% due to the economics of complying with the LCFS.
- In addition there will be a greater penetration of cars with no tailpipe emissions entering the vehicle fleet. Shrinking gasoline demand, and the pressure of tightening regulation, could see crude oil refineries lower utilisation rates and the state's refining sector could therefore be subject to consolidation.

1. INTRODUCTION AND METHODOLOGY OVERVIEW

Change in California can frequently be viewed as a precursor for nationwide change across the US. The Californian transport system now appears on the point of such change. But it will be more evolution than revolution in the coming seven years, although its speed may catch some fuel refiners and retailers by surprise. We believe the coming changes to the Californian transport system, with the emphasis on tailpipe-emission reduction and fleet efficiency, will point to alterations in other Western transport sectors.

Harry Boyle
+44 (0)20 3216 4365
hboyle3@bloomberg.net

Salim Morsy
+1 212 617 2495
smorsy@bloomberg.net

There are currently four distinct pieces of regulation that will expedite change for the Golden State before 2020, in addition to one clear economic consideration. The will is there to operate more electric vehicles, consume gasoline more economically, blend the right type of biofuels and do it at more affordable levels to the consumer. In the following *White Paper* we examine if such ambitions are achievable while weaving the necessary regulation and economic considerations together to draw some bottom-up conclusions on how transport fuel demand will change.

The methodology first concentrates on the construction of a plausible base-case scenario. The first step was to gather data and an understanding of historical population, vehicle fleet growth, GDP per capita, vehicle miles travelled and efficiency level statistics – as measured by gC02 per mile or miles-per-gallon. The data gathering and analysis however also looked at alternative fuel demand and economics, historical diesel and gasoline demand, vehicle classifications (light-duty trucks versus heavy-duty trucks) and fleet renewal rates. It was important to examine and formulate an opinion on two federal regulations – Corporate Average Fuel Economy (CAFE) standards and the Renewable Fuel Standard (RFS2) – and other state pieces of regulation, namely, the Low Carbon Fuel Standard and the Zero Emission Vehicle programme. The US CAFE standards will have a particularly significant effect on eroding fuel demand.

2. BASE-CASE SCENARIO

In formulating a base-case scenario, as mentioned above, we closely examined data on the Californian transport sector between 1990 and 2013. Based on this assessment, and while searching for strong relationships between various datasets, we concluded the following variables would be particularly influential on a forecast:

- **Vehicle miles travelled**: Past data reveal a clear correlation between the Californian state population and the number of miles travelled each year, and their respective growth rates. Using the California Department of Finance's projection on how the state population will develop in the coming seven years, we plotted a linear regression with vehicles-miles-travelled. Between 2012 and 2020, the amount of people in Californian population should grow from 38m to 40.6m, as total annual vehicle-miles-travelled increase from 356bn to 396bn per year.
- **Number of heavy-duty vehicles**: There was a need to judge how many vehicles will be on the road in California in the next decade, and this required separating the fleet into two buckets – heavy-duty and light-duty. Historically there was a strong relationship between GDP and heavy-duty vehicle sales. We have therefore used a linear regression, based on the US Department of Labor GDP projections, to form a view on how many heavy-duty vehicles will be on the road. We also drew on Californian Mobile Sources Emissions Inventory (EMFAC) data.
- **Number of light-duty vehicles**: Passenger cars currently represent about half of the total fleet size and we expect this proportion to hold until 2020, highlighting the importance of this dataset. New passenger vehicle sales averaged 0.8m from 2008 to 2012 while light-duty truck sales averaged 0.5m units a year, but sales projections for 2013 are more bullish. It is believed 1.1m passenger vehicles and 0.6m light-duty trucks were sold last year. We assume passenger vehicle sales will remain constant at 1.1m units while light-duty vehicle sales drop slightly to 0.5m in our base-case scenario. Net fleet additions will represent between 0.2m and 0.4m passenger cars and light-duty vehicles per annum, after accounting for annual retirements.
- **Federal fuel economy measures**: it quickly became apparent how influential nationwide efficiency regulation would be in shaping Californian fuel demand. In our base-case scenario, we took into account that there is some flexibility in regards to meeting the requirements laid out by. Car manufacturers will still come very close to meeting these efficiency standards. We

used the projections of the US National Highway Traffic Safety Administration (NHTSA) in terms of plausible fleet-wide miles per gallon.

- **Alternative fuel demand** (diesel, gasoline, LPG or biofuels): In our base-case scenario, we project biomass-based diesel blending will increase from 3% to 5%. We believe the ongoing $1 discount of a delivered gallon of LPG will act as enough of an incentive to heavy-duty truck fleet owners.

Statistical analysis aside, we believe there are four bits of regulation and one economic factor that will have a considerable impact on Californian fuel demand. In our base-case scenario, we are conservative nevertheless in a projection of how such policies will impact future fuel demand.

Figure 1: Projected California gasoline demand and sources of displacement (*base case*), 2014-20 (bn gallons)

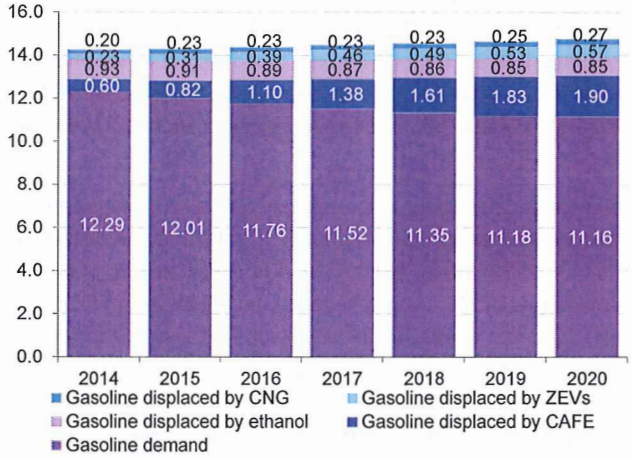
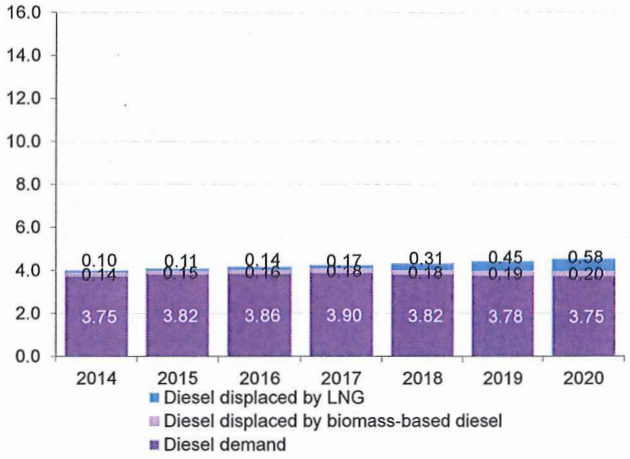


Figure 2: Projected California diesel demand and sources of displacement (*base case*), 2014-20 (bn gallons)



Source: Bloomberg New Energy Finance Note: All volumes are expressed in gasoline gallon equivalents (GGE) in the left-hand chart and in diesel gasoline equivalents (DGE) in the right-hand chart. Volumes of displacement are measured relative to the demand for gasoline and diesel that would have occurred had the drivers of displacement not existed at all.

2.1. Fleet fuel efficiency and CAFE standards

US Corporate Average Fuel Efficiency (CAFE) standards were weak for 10 years, and ultimately ended up mimicking California's more stringent fuel efficiency standards. In 2009 the US Environmental Protection Agency granted California a waiver allowing it to determine its own state-level tailpipe emissions, in tacit acknowledgement of its advanced perspective. And in point of fact, the Golden State's policies ended up influencing national standards on vehicle fleet emissions. For this reason we believe California acts as something of a looking glass for other US state and global transport sectors.

In light of this legislation, we forecast there will be fuel efficiency improvements of 10% for gasoline vehicles and 15% for diesel vehicles for new models sold between 2014 and 2018. By 2020, national CAFE standards will require new passenger cars on average to consume 49 miles per gallon from today's 36 miles, while light-duty trucks will move from 27 miles in 2014 to 33 miles by 2020. Heavy-duty gasoline consuming vehicles will also improve their fuel efficiency levels but at a less aggressive rate of 1.5% over the same period. This efficiency regulation will indirectly displace 1.9bn gallons of gasoline demand – had such policy not been in place.

2.2. Biofuel blending and the Renewable Fuel Standard

Demand for gasoline and diesel in California will continue being displaced by biofuels, but this loss of market share will slow because of a 10% technical limit on how much ethanol can be

blended with gasoline – commonly known as the "blend wall". Recent modifications to the national Renewable Fuel Standard will lessen some of the threat posed by biofuels.

In the US, 13bn gallons of corn ethanol and 1.3bn gallons of biodiesel were produced and blended, with California representing approximately 10% of the market. But due to shrinking gasoline demand, the requirement to blend 10% ethanol will see demand drop marginally from 1.35bn gallons in 2014 to 1.18bn gallons by 2020. Gasoline blended with 85% ethanol – or E85 – could push up demand slightly from today's 6.5m to 16m gallons by 2020 if more fuelling stations serving E85 came online, as forecast by the California Energy Commission.

2.3. Decarbonising the Californian transport sector

The Global Warming Solutions Act of 2006 in California aims to cut greenhouse gas emissions to 1990 levels by 2020. It aims to achieve this ambition through a combination of regulation including a cap-and-trade carbon scheme, its renewable portfolio standard (RPS), Pavley fuel economy targets and its Low Carbon Fuel Standard (LCFS). The LCFS seeks to reduce the overall average carbon intensity of transport fuels sold in California by 10%. As a result, the make-up of the total biofuel pool between 2014 and 2020 will depend both on biofuel blending economics and the carbon intensity of such fuels.

The LCFS serves therefore another driver for blending greater volumes biofuels. But its full effects will be more keenly felt in the diesel markets than with gasoline and ethanol due to the blend wall, and there is already evidence of this. In 2013, some 140m gallons of biodiesel and renewable diesel were sold – amounting to a blend rate of 3% – which is above the federal mandate of 1%. LCFS in short serves to improve the economics of blending biodiesel, and we expect the blending rate to grow to 5% by 2020 in our base-case scenario, or 200m gallons.

2.4. Electric vehicles and the zero-emission vehicle programme

The state of California through its ZEV programme mandates car manufacturers to sell specific types of low-emission cars before 2020. Such stipulations are determined by a credit system, five different vehicle classifications and how many units each manufacturer sells each year. For example, the Tesla Model S and Nissan Leaf, as completely electric vehicles, can both generate up to 9 ZEV credits – compared to 0.2 credits for a high efficiency fossil fuel vehicle like the Ford Fusion. Car manufacturers require a certain number of credits to meet their annual compliance target, which is a percentage of total annual vehicle unit sales.

In total a minimum of 2.5m low or zero-emission vehicles must be sold be before 2020, each of these vehicles will of course be subject to the nationwide CAFE fuel efficiency standards, which will indirectly displace diesel and gasoline demand. In our base-case scenario, we assume the basic requirements of the zero-emission vehicle programme are met. This is a comparatively conservative assumption though, because in 2013 Californian policy targets were already being exceeded. Under our minimum compliance assumptions, we project the ZEV programme will displace a cumulative volume of 3bn gallons of blended gasoline between 2014 and 2000.

2.5. Natural gas and California transport

In our base-case scenario, we project liquefied natural gas (LNG) demand will increase fivefold from today's 117m to 654m gallons of gasoline equivalent (GGE). Heavy-duty trucks will be the most likely consumers due to their intensive annual mileage. This vehicle class is likewise best placed to absorb the higher capital expenditure associated with moving over to either compressed natural gas (CNG) or LNG – the incremental upfront costs for a heavy-duty truck can amount to as much as $50,000 above a standard diesel truck. However, we believe these high upfront costs will be offset by lower fuel prices: as current prices stand, both CNG and LPG prices are almost $1 cheaper than low-sulphur diesel. For fuel retailers considering building CNG or LPG stations, we believe a $0.90 per gallon discount to diesel will return 20% on their investment, over a three-

year payback period. The Californian shift towards natural gas fuels, we believe, we be echoed across the wider US.

Table 1: Scenarios for projecting transport fuel demand in California (all metrics correspond to 2020 levels)

Scenario	VMT (bn miles)	Passenger cars sold per year (m)	Light trucks sold per year (m)	CAFE compliance	Biomass-based diesel blend rate	California share of total US demand for LNG / CNG (%)
Base	396	1.1	0.5	Flexible	5%	35%
Alternative		1.2	0.7	Base	15%	40%

Source: Bloomberg New Energy Finance

3. ALTERNATIVE SCENARIO

Under our alternative scenario conditions, diesel and gasoline demand will respectively drop 12% and 13%. We assume fractionally more passenger cars and light-duty trucks are sold, which increases the overall fleet renewal rate and qualifies more vehicles under the CAFE and Pavley fuel economy standards. In the alternative scenario, biodiesel's market share increases to 15% and not 5%.

Figure 3: Projected California gasoline demand and sources of displacement (*alternative case*), 2014-20 (bn gallons)

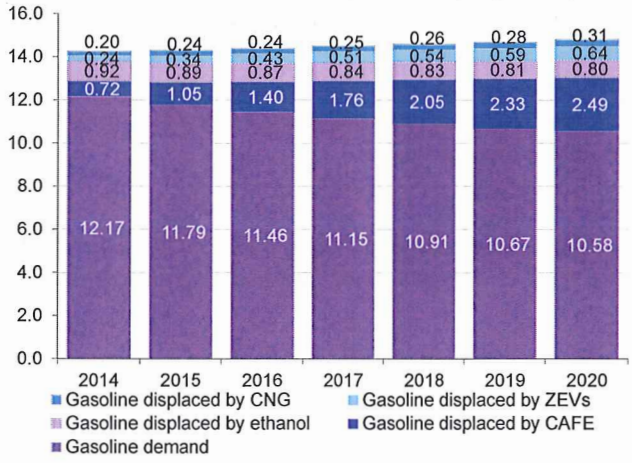
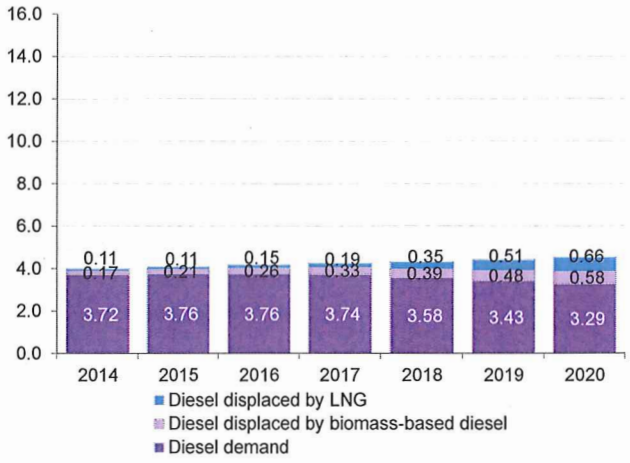


Figure 4: Projected California diesel demand and sources of displacement (*alternative case*), 2014-20 (bn gallons)



Source: Bloomberg New Energy Finance Note: All volumes are expressed in gasoline gallon equivalents (GGE) in the left-hand chart and in diesel gasoline equivalents (DGE) in the right-hand chart. Volumes of displacement are measured relative to the demand for gasoline and diesel that would have occurred had the drivers of displacement not existed at all.

There is another plausible condition, which we elected not to model, namely that there is a greater take-up or sale of vehicles qualifying under the zero-emission vehicle programme. We took the view that it would be difficult to put an upper bound on greater electric vehicle sales. But the most influential variable change driving the fall in fuel demand is in not giving car manufacturers any wiggle room in regards to their obligations under CAFE. In the alternative scenario CAFE requirements will displace 2.49bn gallons of gasoline demand.

4. CONCLUSIONS AND RAMIFICATIONS

With current refining capacity in California standing at 2m barrels per day, the state can produce 15bn gallons of gasoline and 4.4bn gallons of diesel. Our analysis suggests this capacity will exceed demand of between 10.6bn and 11.2bn gallons for gasoline and 3.3bn to 3.7bn for diesel by 2020. Utilisation rates at Californian refiners are therefore likely to drop in the coming seven years, unless markets outside state lines cannot be found.

Figure 5: Oil refining market share in California, 2014

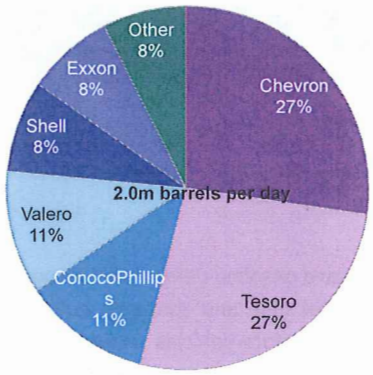
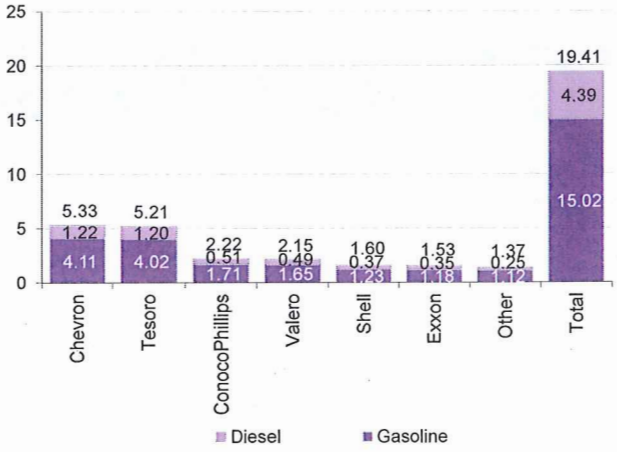


Figure 6: Gasoline and diesel production capacity in California, 2014 (bn gallons)



Source: Bloomberg New Energy Finance, California Energy Commission Note: Other includes Kern Oil, San Joaquin Refining Company, Greka Energy and Lunday Thagard

The transport fuel market is perhaps already beginning to see the first consequences of these structural shifts in demand. As of the second quarter of 2013, BP controlled 12% of the California refining market with 240,000 barrels per day of capacity but in June last year it then sold its Carson refinery to Tesoro for $2.4bn. We believe further consolidations are now increasingly likely as smaller refiners shut down or are sold to larger groups.

This White Paper is based on Salim Morsy's more extensive Research Note of 28 February 2014, "California transport outlook to 2020: the decarbonisation drive", which is available to Bloomberg New Energy Finance clients.

ABOUT US

SUBSCRIPTION DETAILS

Advanced Transportation **sales.bnef@bloomberg.net**

CONTACT DETAILS

Harry Boyle, Head of Applied Research	hboyle3@bloomberg.net	+44 (0)20 3216 4365
Salim Morsy, Associate, Advanced Transportation	smorsy@bloomberg.net	+1 212 617 2495

COPYRIGHT

DISCLAIMER

APPENDIX D

South River Road Materials

APPENDIX D: SOUTH RIVER ROAD INTERIM TRAFFIC SAFETY PLAN

Purpose and Intent

This *South River Road Interim Traffic Management Plan* is based on longstanding City of West Sacramento plans to transition industrial waterfront areas to urban waterfront uses. This *Traffic Plan* was developed by the City's Traffic Engineer Consultant, DKS Associates. Its overarching objective is safe and controlled traffic circulation within and through Pioneer Bluff during the de-industrialization period.

Preparation of this *Traffic Plan* was catalyzed by the construction of the McGowan Bridge which will re-connect South River Road segments north and south of the barge canal. The opening of the McGowan Bridge in late 2014 will substantively change traffic patterns in Pioneer Bluff and especially along South River Road. South River Road will change from an industrial cul-de-sac to a facility that will be shared by all City travelers.

The *Traffic Plan* focuses on de-industrializing the existing South River Road facility prior to future re-construction of this facility (and other infrastructure) to support future urban waterfront uses. For the purposes of the Plan, this period is assumed to be at least five years. During this interim period, industrial uses will continue to utilize South River Road, but this facility will no longer be managed as an exclusive, industrial facility. Rather, during this period this facility will be more fully integrated into the City's circulation system and will be more fully utilized by adjacent City neighborhoods.

This *Traffic Plan* defines an integrated City approach for de-industrializing South River Road. Specifically, this plan defines 1) traffic management objectives, 2) interim street improvements, and 3) monitoring and enforcement actions. This *Traffic Plan* will be amended as necessary to ensure desired traffic performance and de-industrialization objectives.

Actual traffic performance on South River Road will be monitored and enforced by the Transportation, Police, and Fire Departments for compliance with Traffic Management Objectives and other relevant regulations.

APPENDIX D

8950 Cal Center Drive
Suite 340
Sacramento, CA 95826
916.368.2000
www.dksassociates.com

MEMORANDUM

To: Mike Luken

From: John Long

DATE: November 7, 2014

SUBJECT: Summary of South River Road Interim Traffic Management Plan

---

Due to the forecasted increases in traffic volumes on South River Road after the McGowan Bridge over the canal is opened to traffic, changes to driveway access and parking/stacking along South River Road, together with "active" speed/warning signs, should be implemented to improve safety. The changes recommended by DKS are based on the following objectives and potential measures.

Objectives and Interim Measures on South River Road

- Maximize Sight Distance at Critical Driveways
    - No stopping signs on curves in areas affecting sight distance, especially inside curves
- Define Specific Areas for Parking
    - Within public ROW:
        - no parking in gravel areas
        - for paved areas, allow only parallel or angled parking in marked spaces.
    - Design spaces so that parking maneuvers (including spaces outside public ROW) will occur off-street (e.g., vehicles will not back out of spaces onto South River Road travel lanes)
- Clearly Define Driveway Access
    - Formalize access using striping / channelization methods at all significant driveways
    - Channelize access so driveway and parking egress is perpendicular to South River Road
    - Post "No Truck" sign north of new bridge and provide turn-around area for trucks
- Protect Fuel Tanks
    - No stopping signs posted adjacent to tanks
    - Installation of K-Rail on curves adjacent to tanks
- No Truck Stacking within Public ROW
    - Prohibit stopping in areas where truck stacking occurs
    - Modify operations at the Buckeye entrances, including change in gate access procedures
- Reduce Speeds on South River Road
    - Post speed at 30 mph and implement measures to achieve, and thus enforce, this speed limit
    - Install radar-activated speed signs

DKS

- (Optional) Use of active warning devices to detect and warn drivers of downstream left-turning tanker trucks

Summary of Plan

Our draft plan involves implementing the following recommended measures along South River Road between the new McGowan Bridge and 15th Street:

- Use of striping throughout this segment of South River Road to clearly define and channelize key access driveways
- Use of signage throughout this segment of South River Road to designate areas were stopping is prohibited within the public ROW and use striping to designate stalls with the public ROW where parking is allowed
- Post "No Truck" signs to prohibit trucks on new bridge and provide a turn-around area for trucks north of new bridge
- Radar-activated vehicle speed feedback signs both northbound and southbound near the beginning of the curves, which tell drivers their actual speed next to the posted speed limit. Rumble strips may also be considered near those locations.
- An optional part-time warning sign, cautioning northbound drivers of trucks turning ahead, with a device to detect the likely presence of tanker trucks turning ahead should be considered.

Pioneer Bluff Transition Plan

APPENDIX E: CONCEPTUAL ANALYSIS OF TRANSITION COSTS

November 12, 2014 DRAFT, Work in Progress

ASSUMPTIONS AND NOTATIONS

* conceptually estimates costs to transition Pioneer Bluff from current condition (2014) to condition that can support urban waterfront uses (i.e., comparable to Bridge District 2014).

* assume transition objective and scope as defined in existing City and regional plans and policies (i.e., General Plan, zoning, etc.).

* assumes continuation of Bridge District development patterns (urban waterfront) southward into Pioneer Bluff.

TERMS AND DEFINITIONS
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

"Cost"	Fully loaded expense (i.e., land+soft costs+hard costs) in current (2014) dollars to implement the entire line item scope.
"Transition Cost"	Total costs necessary to 1) de-industrialize Pioneer Bluff and 2) provide backbone infrastructure for urban waterfront reuse.
"De-industrialization"	The public and private process/expense of making current industrial lands available for reuse as urban waterfront.
"Backbone Infrastructure"	Minimum, critical public facilities necessary to develop urban waterfront uses.
"Cost Allocation"	Expense assigned to beneficiaries based on relative benefit of the improvement.
"Regional"	Benefit and cost that is citywide and/or regional.
"Pioneer Bluff"	Benefit and cost that is for Pioneer Bluff as a neighborhood
"PB Parcel"	Benefit and cost that is for a Pioneer Bluff parcel or parcels
"Other"	Benefit and cost that is not Regional, Pionner Bluff, or PB Parcel.

TABLE 1: CONCEPTUAL SUMMARY OF PIONEER BLUFF TRANSITION COSTS
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

		COST ALLOCATION							
		Regional		Pioneer Bluff		PB Parcel		Other	
TRANSITION COST	TOTAL COST	Allocation	% of total	Allocation	% of total	Allocation	% of total	Allocation	% of total
De-Industrialization									
Business Relocation	**$6,600,000**	$600,000	9%	$0	0%	$6,000,000	91%	$0	0%
Parcel Demolition/Remediation	**$38,172,160**	$214,700	1%	$0	0%	$37,957,460	99%	$0	0%
Interim Improvements	**$625,000**	$475,000	76%	$0	0%	$150,000	24%	$0	0%
Reuse Planning	**$6,050,000**	$5,550,000	92%	$500,000	8%	$0	0%	$0	0%
Total De-industrializaton Costs	***$51,447,160***	***$6,839,700***	***13%***	***$500,000***	***1%***	***$44,107,460***	***86%***	***$0***	***0%***
Backbone Infrastructure									
Access and Circulation	**$225,508,928**	$190,928,928	85%	$34,580,000	15%	$0	0%	$0	0%
Municipal Utilities	**$20,700,000**	$0	0%	$19,100,000	92%	$0	0%	$1,600,000	8%
Riverfront Promenade	**$13,269,000**	$6,634,500	50%	$6,634,500	50%	$0	0%	$0	0%
Neighborhood Parks	**$14,265,000**	$0	0%	$14,265,000	100%	$0	0%	$0	0%
Total Backbone Costs	***$273,742,928***	***$197,563,428***	***72%***	***$74,579,500***	***27%***	***$0***	***0%***	***$1,600,000***	***1%***
TOTAL TRANSITION COST	**$325,190,088**	**$204,403,128**	**63%**	**$75,079,500**	**23%**	**$44,107,460**	**14%**	**$1,600,000**	**0%**
per sqft buildable land	**$87.20**	**$54.81**		**$20.13**		**$11.83**			

TABLE 2: CONCEPTUAL DE-INDUSTRIALIZATION COSTS

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

COST ITEM	TOTAL COST	COST ALLOCATION				NOTES
		Regional	Pioneer Bluff	PB Parcel	Other	
1 Business Relocation (impact to business operations)						net cost of relocation
a City Corporation Yard	**$500,000**	$0	$0	$500,000	$0	
b Remaining Business Relocations	**$5,500,000**	$0	$0	$5,500,000	$0	assume 5% of annual business operating revenue
c Extraordinary City Costs (technical support)	**$600,000**	$600,000	$0	$0	$0	assume 10% of above business relocation costs
Total Business Relocation	**$6,600,000**	***$600,000***	***$0***	***$6,000,000***	***$0***	
2 Demolition, Environmental Remediation, and Grading						parcel costs; infrastructure demolition costs assumed in backbone costs
a City Corporation Yard Parcels	**$8,470,000**	$0	$0	$8,470,000	$0	Psomas 2007 ($9.76 per square foot gross parcel area)
b Buckeye and Shell Tank Farm Parcels	**$13,000,000**	$0	$0	$13,000,000	$0	conceptual estimate based on SacPort DEIR and other valuation data
c Remaining Demolition and Remediation	**$16,487,460**	$0	$0	$16,487,460	$0	assume $5 per square foot for remaining gross parcel area
d Extraordinary City Costs (technical support)	**$214,700**	$214,700	$0	$0	$0	assume 1% of above demolition and remediation costs
Total Demolition and Remediation	**$38,172,160**	***$214,700***	***$0***	***$37,957,460***	***$0***	
3 Interim Improvements						Interim period is until existing backbone infrastructure is demolished
a Interim Public Improvements						
i SRR and 15th ROW control and safety	**$475,000**	$475,000	$0	$0	$0	estimate for 2014/5 CIP; part of street de-industrialization process
ii Other public improvements	**$0**	$0	$0	$0	$0	
b Interim Private Improvements						
i Fence-line and Driveway Improvements	**$100,000**	$0	$0	$100,000	$0	estimate for 2014/15 CIP; part of street de-industrialization process
ii Other Improvements	**$50,000**	$0	$0	$50,000	$0	estimate for 2014/15 CIP
Total Interim Infrastructure	**$625,000**	***$475,000***	***$0***	***$150,000***	***$0***	
4 Reuse Planning Costs						
a Transition Plan Implementation Costs						estimate for 2015-17 work efforts (pre-Specific Plan)
i Extraordinary City Costs	**$500,000**	$500,000	$0	$0	$0	City staff costs
ii Consultant Costs	**$1,250,000**	$1,250,000	$0	$0	$0	Phase 1 and 2 environmental, flood surveys, outreach, legal, etc.
b Land Use and Infrastructure Plan						assume 3 year process with EIR
i Extraordinary City Costs	**$800,000**	$800,000	$0	$0	$0	full time project manager with some administrative/technical support
ii Consultant Costs (public and private)	**$2,500,000**	$2,000,000	$500,000	$0	$0	planning, engineering, environmental, legal, economics, etc..
c Other Reuse Planning Costs						
i Broadway Bridge planning	**$0**	$0	$0	$0	$0	$3.5M in pre-development costs already funded (grants + local match)
ii West Side Rail Relocation	**$1,000,000**	$1,000,000	$0	$0	$0	from 2010 SACOG MTP
iii Streetcar Planning (5th Street, Broadway)	**$0**	$0	$0	$0	$0	assume pre-development costs already funded
Total Reuse Planning Costs	**$6,050,000**	***$5,550,000***	***$500,000***	***$0***	***$0***	

TABLE 2: CONCEPTUAL DE-INDUSTRIALIZATION COSTS

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

COST ITEM	TOTAL COST	COST ALLOCATION				NOTES
		Regional	Pioneer Bluff	PB Parcel	Other	
TOTAL DE-INDUSTRIALIZATION COST	$51,447,160	$6,839,700	$500,000	$44,107,460	$0	

TABLE 3: CONCEPTUAL BACKBONE ACCESS AND CIRCULATION COSTS

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

			COST ALLOCATION				
	COST ITEM	TOTAL COST	Regional	Pioneer Bluff	PB Parcel	Other	NOTES
1	West Side Rail Relocation						
a	Rail Relocation Improvements	**$30,000,000**	$30,000,000	$0	$0	$0	2014 HDR estimate
b	Net Cost to Acquire ROW (PB Only)	**$4,700,000**	$0	$4,700,000	$0	$0	Estimated based on land residual analysis assuming $25/sqft acquisition cost
	Total West Side Rail Relocation	***$34,700,000***	***$30,000,000***	***$4,700,000***	***$0***	***$0***	
2	Broadway Bridge						
a	ROW Acquisition Within PB	**$160,000**	$160,000	$0	$0	$0	Assume 400' x 80' at $5 per square foot
b	Bridge Structure and Facilities	**$90,000,000**	$90,000,000	$0	$0	$0	based on I Street Bridge estimates
	Total Broadway Bridge	***$90,160,000***	***$90,160,000***	***$0***	***$0***	***$0***	
3	Highway 50 On-Ramps						
a	South River Road	**$22,625,000**	$22,625,000	$0	$0	$0	from 2010 SACOG MTP
b	Jefferson Boulevard	**$26,450,000**	$26,450,000	$0	$0	$0	from 2010 SACOG MTP
	Total Highway 50 Ramps	***$49,075,000***	***$49,075,000***	***$0***	***$0***	***$0***	
4	5th Street (Pioneer Bridge to 15th Street)						Except PB sidewalks, financed through the Bridge District Implementation Plan
a	ROW Acquisition	**$0**	$0	$0	$0	$0	all remaining ROW acquired as of 2014
b	Roadway and Sidewalks	**$230,000**	$230,000	$0	$0	$0	PB sidewalks only; funded as part of "regional" facility (traffic impact fee program)
c	Traffic Signal @ US 50 onramp	**$0**	$0	$0	$0	$0	financed through the Bridge District Implementation Plan
d	Traffic Signal @ 15th Street	**$0**	$0	$0	$0	$0	financed through the Bridge District Implementation Plan
	Total 5th Street	***$230,000***	***$230,000***	***$0***	***$0***	***$0***	
5	South River Road (15th Street to McGowan Bridge)						Guesstimates for *Pioneer Bluff Transition Plan*
a	ROW Acquisition	**$130,000**	$130,000	$0	$0	$0	Assume 80' wide ROW; purchase of 1,300' x 20' at $5 per square foot
b	Roadway and Sidewalks	**$6,800,000**	$6,800,000	$0	$0	$0	assume 0.8 miles at $8.5M per mile of roadway (80 foot wide roadway)
c	Traffic Signal @ E-W Watefront Access1	**$252,000**	$252,000	$0	$0	$0	800 feet south of 15th
d	Traffic Signal @ E-W Watefront Access2	**$252,000**	$252,000	$0	$0	$0	800 feet south of Waterfront Access 1
e	Traffic Signal @ E-W Watefront Access3	**$252,000**	$252,000	$0	$0	$0	800 feet south of Waterfront Access 2
f	Traffic Signal @ Stone Boulevard	**$252,000**	$252,000	$0	$0	$0	800 feet south of Waterfront Access 3
	Total South River Road	***$7,938,000***	***$7,938,000***	***$0***	***$0***	***$0***	
4	Additional North-South Streets						Guesstimates for *Pioneer Bluff Transition Plan*
a	ROW Acquisition	**$2,047,500**	$0	$2,047,500	$0	$0	Assume total 6,300' x 65' ROW at $5 per square foot
b	Roadway and Sidewalks	**$8,400,000**	$0	$8,400,000	$0	$0	Assume: 1.2 miles at $7M per mile (derived from Wood Rodgers 2014)

TABLE 3: CONCEPTUAL BACKBONE ACCESS AND CIRCULATION COSTS

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

			COST ALLOCATION				
	COST ITEM	TOTAL COST	Regional	Pioneer Bluff	PB Parcel	Other	NOTES
	c Traffic Signals (assume 2)	**$0**	$0	$0	$0	$0	
	d Waterfront Access Universal Streets	**$75,000**	$0	$75,000	$0	$0	Assume 3 universal street connections to canal (at $25,000 each)
	Total Additional North-South Streets	***$10,522,500***	***$0***	***$10,522,500***	***$0***	***$0***	
5	15th Street (15th Street to Jefferson Blvd)						
	a ROW Acquisition	**$52,587**	$52,587	$0	$0	$0	Assume $5 per square foot
	b Roadway and Sidewalks	**$1,188,341**	$1,188,341	$0	$0	$0	cost derived from Wood Rodgers 2014
	c Intersection Improvements @ Jefferson	**$500,000**	$500,000	$0	$0	$0	guess to improve traffic control, pedestrian/bicycle access, signage, etc.
	Total 15th Street	***$1,740,928***	***$1,740,928***	***$0***	***$0***	***$0***	
6	Stone Boulevard (Jefferson to South River Road)						Guesstimates for *Pioneer Bluff Transition Plan*
	a ROW Acquisition	**$480,000**	$480,000	$0	$0	$0	Assume $5 per square foot and 1,200' x 80' ROW
	b Roadway and Sidewalks	**$1,955,000**	$1,955,000	$0	$0	$0	Assume: 0.23 miles at $8.5M per mile (same assumption as SRR)
	c Intersection Improvement @ Jefferson	**$500,000**	$500,000	$0	$0	$0	Improve traffic control, pedestrian/bicycle access, signage, etc.
	Total Stone Boulevard	**$2,935,000**	***$2,935,000***	***$0***	***$0***	***$0***	
7	Additional Backbone East-West Streets						Guesstimates for *Pioneer Bluff Transition Plan*
	a ROW Acquisition	**$2,307,500**	$0	$2,307,500	$0	$0	Assume total 7,100' x 65' ROW at $5 per square foot
	b Roadway and Sidewalks	**$9,100,000**	$0	$9,100,000	$0	$0	Assume: 1.4 miles at $7M per mile (derived from Wood Rodgers 2014)
	c Traffic Signals (assume 0)	**$0**	$0	$0	$0	$0	Assume all signals included above
	e Waterfront Access Universal Streets	**$200,000**	$0	$200,000	$0	$0	Assume 8 universal street connections to river (at $25,000 each)
	Total Additional East-West Streets	***$11,607,500***	***$0***	***$11,607,500***	***$0***	***$0***	
8	East Side Jefferson Improvements						Guesstimates for *Pioneer Bluff Transition Plan*
	a Prior to West Side Rail Relocation	$1,000,000	$500,000	$500,000	$0	$0	street safety and beautification
	b After West-Side Rail Relocation	$3,000,000	$2,000,000	$1,000,000	$0	$0	street safety, beautification, improved access to PB
	Total East-Side Jefferson Beautification	**$4,000,000**	***$2,500,000***	***$1,500,000***	***$0***	***$0***	
	Subtotal Streets and Traffic Controls	**$212,908,928**	**$184,578,928**	**$28,330,000**	**$0**	**$0**	
9	Streetcar						same unit cost assumption as in Bridge District
	a 15th Street to McGowan Bridge	**$8,000,000**	$4,000,000	$4,000,000	$0	$0	Assume 0.8 miles at $10M per mile
	b Broadway Bridge streetcar	**$2,500,000**	$1,250,000	$1,250,000	$0	$0	Assume 0.25 miles at $10M per mile
	Total Streetcar	***$10,500,000***	***$5,250,000***	***$5,250,000***	***$0***	***$0***	

TABLE 3: CONCEPTUAL BACKBONE ACCESS AND CIRCULATION COSTS

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

COST ITEM	TOTAL COST	COST ALLOCATION				NOTES
		Regional	Pioneer Bluff	PB Parcel	Other	
10 Other Transit, Bike, and Pedestrian						not included above (tied to specific projects)
a Interim Transit, Bike, Ped. Improvements	**$100,000**	$100,000	$0	$0	$0	
b Transit/Bike/Pedestrian FF&E	**$2,000,000**	$1,000,000	$1,000,000	$0	$0	shelters, benches, bike racks, etc..
Total Other Transit	**$2,100,000**	***$1,100,000***	***$1,000,000***	***$0***	***$0***	
Subtotal Transit and Other	***$12,600,000***	***$6,350,000***	***$6,250,000***	***$0***	***$0***	
TOTAL ACCESS AND CIRCULATION	**$225,508,928**	**$190,928,928**	**$34,580,000**	**$0**	**$0**	

TABLE 4: CONCEPTUAL BACKBONE MUNICIPAL UTITLITY COSTS
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

COST ITEM	TOTAL COST	COST ALLOCATION				NOTES
		Regional	Pioneer Bluff	PB Parcel	Other	
1 Water Storage						Guesstimates for *Pioneer Bluff Transition Plan* (assume 75/25 split w/ Stone Lock)
a Land Acquisition	**$400,000**	$0	$300,000	$0	$100,000	Assumes 80,000 square feet land at $5 per square foot (assume off-site location)
b 3M Gallon Storage Tank & Pump Station	**$6,000,000**	$0	$4,500,000	$0	$1,500,000	Capacity shared with Stone Lock
c Storage Tank Beautification	**$0**	$0	$0	$0	$0	included in above cost
Total Water Storage	**$6,400,000**	***$0***	***$4,800,000***	***$0***	***$1,600,000***	
2 Water Distribution Improvements	**$1,700,000**	$0	$1,700,000	$0	$0	
Subtotal Water System	**$8,100,000**	***$0***	***$6,500,000***	***$0***	***$1,600,000***	
3 Sewer System Improvements	***$5,000,000***	***$0***	***$5,000,000***	***$0***	***$0***	Guesstimates for *Pioneer Bluff Transition Plan*
4 Drainage Detention Basin						assume all drainage impacts mitigated within Pioneer Bluff (no basin required)
a Land Acquisition	**$0**	$0	$0	$0	$0	
b Detention Basin Improvements	**$0**	$0	$0	$0	$0	
5 Drainage Collection Improvements	**$6,500,000**	$0	$6,500,000	$0	$0	Guesstimates for *Pioneer Bluff Transition Plan*
Subtotal Drainage System	***$6,500,000***	***$0***	***$6,500,000***	***$0***	***$0***	
6 Joint Trench Improvements	**$1,100,000**	**$0**	**$1,100,000**	**$0**	**$0**	Guesstimates for *Pioneer Bluff Transition Plan*
TOTAL MUNICIPAL UTILITIES	**$20,700,000**	**$0**	**$19,100,000**	**$0**	**$1,600,000**	

TABLE 5: CONCEPTUAL BACKBONE PARKS AND OTHER PUBLIC SPACES

Pioneer Bluff Transition Plan

November 12, 2014 DRAFT, Work in Progress

			COST ALLOCATION				
	COST ITEM	**TOTAL COST**	**Regional**	**Pioneer Bluff**	**PB Parcel**	**Other**	**NOTES**
1	Riverwalk Promenade (from Cemex/Shell boundary to canal to Jefferson Boulevard)						backbone requirement
a	Land Acquisition (not already City owned)	**$819,000**	$409,500	$409,500	$0	$0	assume 1,800' x 130' at $3.50 per square foot land
b	Basic Riverwalk Improvements	**$7,150,000**	$3,575,000	$3,575,000	$0	$0	1.1 miles @ $6.5M per mile
c	Related Public Space Improvements	**$5,300,000**	$2,650,000	$2,650,000	$0	$0	assume 50% of Bridge District Plaza backbone costs
	Total Riverwalk Promenade	**$13,269,000**	***$6,634,500***	***$6,634,500***	***$0***	***$0***	
2	Neighborhood Parks and Recreational Elements						backbone requirement; sames total unit cost assumptions as in Bridge District
a	Land Acquisition	**$310,000**	$0	$310,000	$0	$0	assume 60,000 square feet at $3.50 per square foot land + 20,000 sqft @ $5/sqft
b	Neighborhood Park Improvements	**$9,200,000**	$0	$9,200,000	$0	$0	assume 80,000 square feet at $115 per square foot land
c	Distributed Neighborhood Rec. Elements	**$4,755,000**	$0	$4,755,000	$0	$0	assume 50 percent of neighborhood park costs
	Total Neighborhood Parks	**$14,265,000**	***$0***	***$14,265,000***	***$0***	***$0***	
TOTAL BACKBONE PARKS AND OTHER PUBL		**$27,534,000**	**$6,634,500**	**$20,899,500**	**$0**	**$0**	

TABLE 6: MAXIMUM DENSITY ASSUMPTIONS
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

2014 Parcel Inventory (land area only)				Max. Development Assumptions[1]		
Assessor Parcel Number	Owner	Parcel Area in acres	Parcel Area in Sqft (2014)	Land Use	Gross FAR	Max Dev. (in sqft)
058-280-005	Equilon Enterprises (Shell)	8.89	387,248	Urban Waterfront	2.00	774,497
058-270-011	City of West Sacramento	0.29	12,632	Urban Waterfront	2.00	25,265
058-270-014	Ramos	3.50	152,460	Urban Waterfront	2.00	304,920
058-270-006	Kent Ramos	3.78	164,657	Urban Waterfront	2.00	329,314
058-270-007	Ramos	0.27	11,761	Urban Waterfront	2.00	23,522
058-270-008	Buckeye Terminals	3.45	150,282	Urban Waterfront	2.00	300,564
058-270-009	Kent Ramos	0.19	8,276	Urban Waterfront	2.00	16,553
058-270-007	Kent Ramos	0.27	11,761	Urban Waterfront	2.00	23,522
058-270-012	Buckeye Terminals	3.28	142,877	Urban Waterfront	2.00	285,754
058-260-020	City of West Sacramento	0.29	12,632	Urban Waterfront	2.00	25,265
058-260-015	Ramos Family Trust	2.18	94,961	Urban Waterfront	2.00	189,922
058-260-016	City of West Sacramento	4.19	182,516	Urban Waterfront	2.00	365,033
058-260-017	City of West Sacramento	3.57	155,509	Urban Waterfront	2.00	311,018
058-260-018	City of West Sacramento	1.71	74,488	Urban Waterfront	2.00	148,975
058-260-019	City of West Sacramento	4.97	216,493	Urban Waterfront	2.00	432,986
067-180-001	RDA Successor Agency	1.60	69,696	Urban Waterfront	2.00	139,392
067-180-004	RDA Successor Agency	7.60	331,056	Urban Waterfront	2.00	662,112
058-260-001	Clark Trucking	0.24	10,454	Urban Waterfront	2.00	20,909
058-260-002	Clark Trucking	9.56	416,434	Urban Waterfront	2.00	832,867
058-260-003	Tecon Pacific	9.61	418,612	Urban Waterfront	2.00	837,223
058-260-021	Tecon Pacific	3.89	169,448	Urban Waterfront	2.00	338,897
058-260-025	Clark Enterprises	3.53	153,767	Urban Waterfront	2.00	307,534
058-260-026	Clark Properties	2.19	95,396	Urban Waterfront	2.00	190,793
058-260-010	Tecon Pacific	2.03	88,427	Urban Waterfront	2.00	176,854
058-260-028	Ramos Family Trust	1.50	65,340	Urban Waterfront	2.00	130,680
058-260-027	Frank Ramos	0.74	32,234	Urban Waterfront	2.00	64,469

TABLE 6: MAXIMUM DENSITY ASSUMPTIONS
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

2014 Parcel Inventory (land area only)				Max. Development Assumptions[1]		
Assessor Parcel Number	**Owner**	**Parcel Area in acres**	**Parcel Area in Sqft (2014)**	**Land Use**	**Gross FAR**	**Max Dev. (in sqft)**
058-260-012	Chen	0.25	10,890	Urban Waterfront	2.00	21,780
058-260-013	Barker	0.69	30,056	Urban Waterfront	2.00	60,113
058-270-001	Buckeye Terminals	4.47	194,713	Urban Waterfront	2.00	389,426
058-270-017	Santa Fe Pipeline	3.92	170,755	Urban Waterfront	2.00	341,510
058-270-016	Kent Ramos	1.43	62,291	Urban Waterfront	2.00	124,582
058-280-003	River Road Partners	4.73	206,039	Urban Waterfront	2.00	412,078
058-280-007	Conrad	1.12	48,787	Urban Waterfront	2.00	97,574
058-280-006	Roberts	0.47	20,473	Urban Waterfront	2.00	40,946
058-290-004	Ramos Family Trust	7.58	330,185	Urban Waterfront	2.00	660,370
058-290-002	Jarrett Properties	3.62	157,687	Urban Waterfront	2.00	315,374
058-290-005	State of California	0.85	37,026	Urban Waterfront	2.00	74,052
058-290-001	Lane	0.82	35,719	Urban Waterfront	2.00	71,438
058-300-012	State of California	2.66	115,870	Urban Waterfront	2.00	231,739
ROW	Union Pacific	8.78	382,500	Urban Waterfront	2.00	765,000
TOTAL		**124.7**	**5,432,411**		**2.00**	**10,864,822**

[1] Land Use and FAR assumptions based on the *City of West Sacramento General Plan*

TABLE 7: CONCEPTUAL RESIDUAL LAND VALUE AND FINANCING GAP CALCULATION
Pioneer Bluff Transition Plan
November 12, 2014 DRAFT, Work in Progress

	COST			NOTES
	Quantity	Unit Cost	Total Cost	
1 Urban Waterfront Land Value				exclusive of existing ROWs
a Net Buildable Land	85.6 acres	$1,700,000 per buildable acre	$145,538,686	estimated based on recent sales in the Bridge District
b New Backbone Streets ROW	20.3 acres	$220,000 per acre	$4,466,000	assumes land acquired at current values
c Backbone Riverfront and Parks Land	17.8 acres	$180,000 per acre	$3,204,000	assumes land acquired at current values
d Other Non-Buildable Land	1.0 acres	$220,000 per acre	$220,000	assumes land acquired at current values
Total Urban Waterfront Land Value	**124.7 acres**	**$1,230,274 per acre**	**$153,428,686**	**total 2014 parcel area**
2 (Less Transition Costs)				not including Regional and Other costs
a (De-industrialization costs)	**124.7** acres	($359,531) per acre	($44,837,460)	from Table 1
b (Backbone infrastructure costs)	**124.7** acres	($598,019) per acre	($74,579,500)	from Table 1
Total Transition Costs	**124.7 acres**	**($957,550) per acre**	**($119,416,960)**	
3 Net Land Value After Transition Costs	**124.7 acres**	**$272,724 per acre**	**$34,011,726**	
4 (Less Land Carrying Costs and Profit)	**$153,428,686 land value**	**$0 of land value**	**($7,671,434)**	incl. vacant land costs (property taxes, insurance, etc.)
5 Residual Land Value	**124.7 acres**	**$211,211 per acre**	**$26,340,292**	
6 (Less Current Land Value)	**124.7 acres**	**($220,000) per acre**	**($27,436,418)**	current land basis
7 Net Incremental Land Value (Deficit)	**124.7 acres**	**($8,789) per acre**	**($1,096,127)**	
per net buildable land	**85.6 acres**	**($12,804) per buildable acre**	**($1,096,127)**	