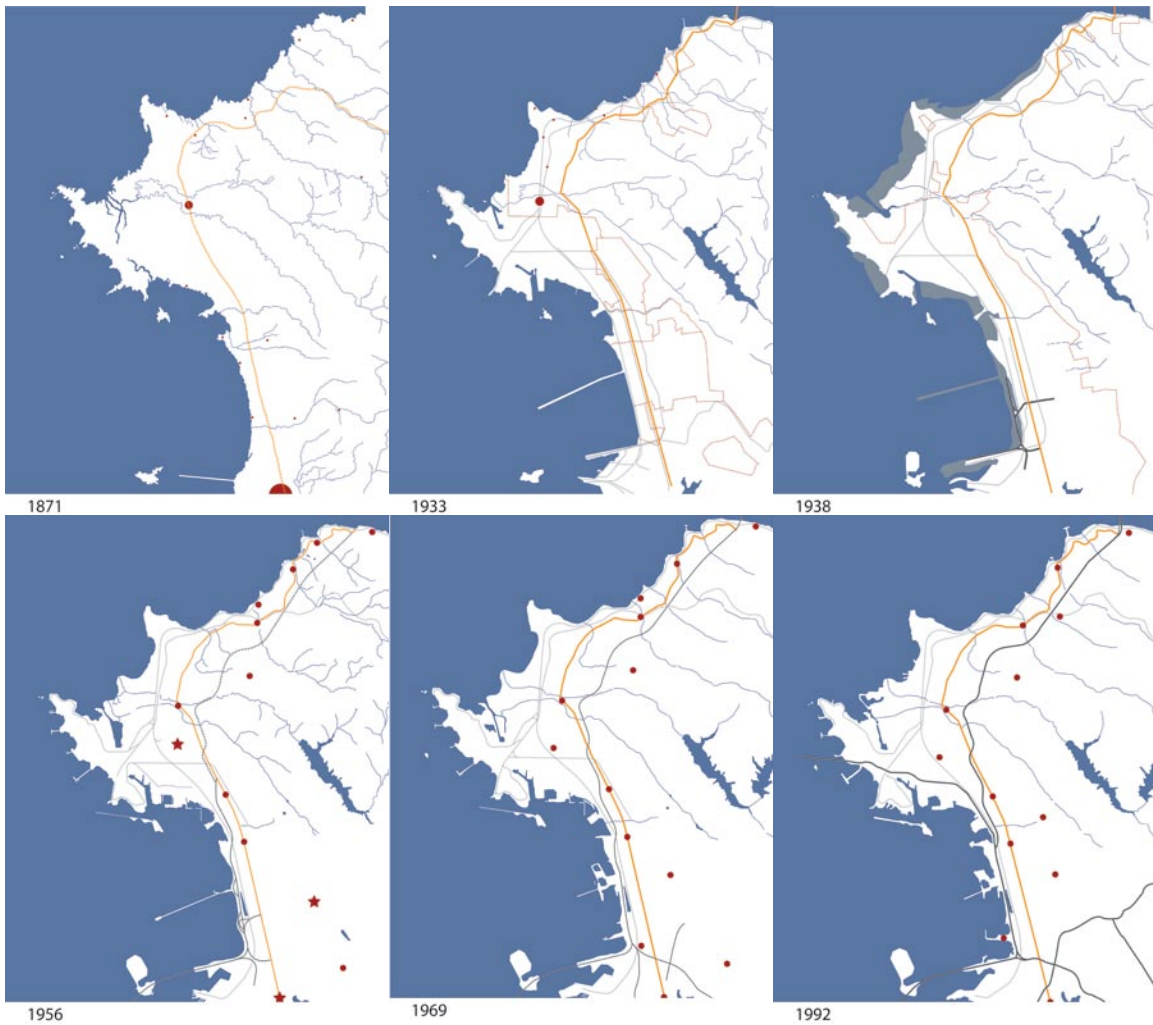


Analysis



San Pablo Avenue in the context of the East Bay: the three scales of study are shown.

To situate San Pablo Avenue in context, this chapter begins with a brief history of the development of San Pablo Avenue based on a paper written in 2004 by Gregory Newmark and Elizabeth Deakin. Their paper discusses the development of land use along the corridor between Oakland and San Pablo and its relationship to various forms of mobility. This thesis reframes this land use/mobility history to look at the issues of economy, equity and ecology over time, and expands the geographical scope to include the entire corridor north to Crockett. The method for presenting this analysis is a series of diagrams illustrating the development of roads, towns and cities, and the transformation of the hydrological systems as they encountered urbanization.



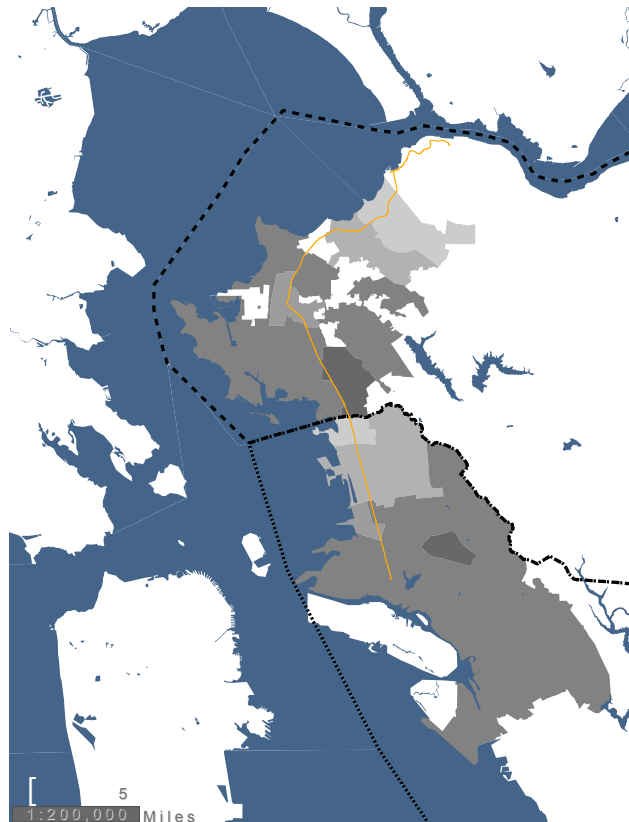
San Pablo Avenue in the East Bay: 1871, 1933, 1938, 1956, 1969, 1992

Below is a timeline, constructed from Newmark's history paper, of San Pablo Avenue's "investment and decay energy cycles." The stages of Grady Clay's evolution of the strip are noted in parenthesis with the relevant dates and events.

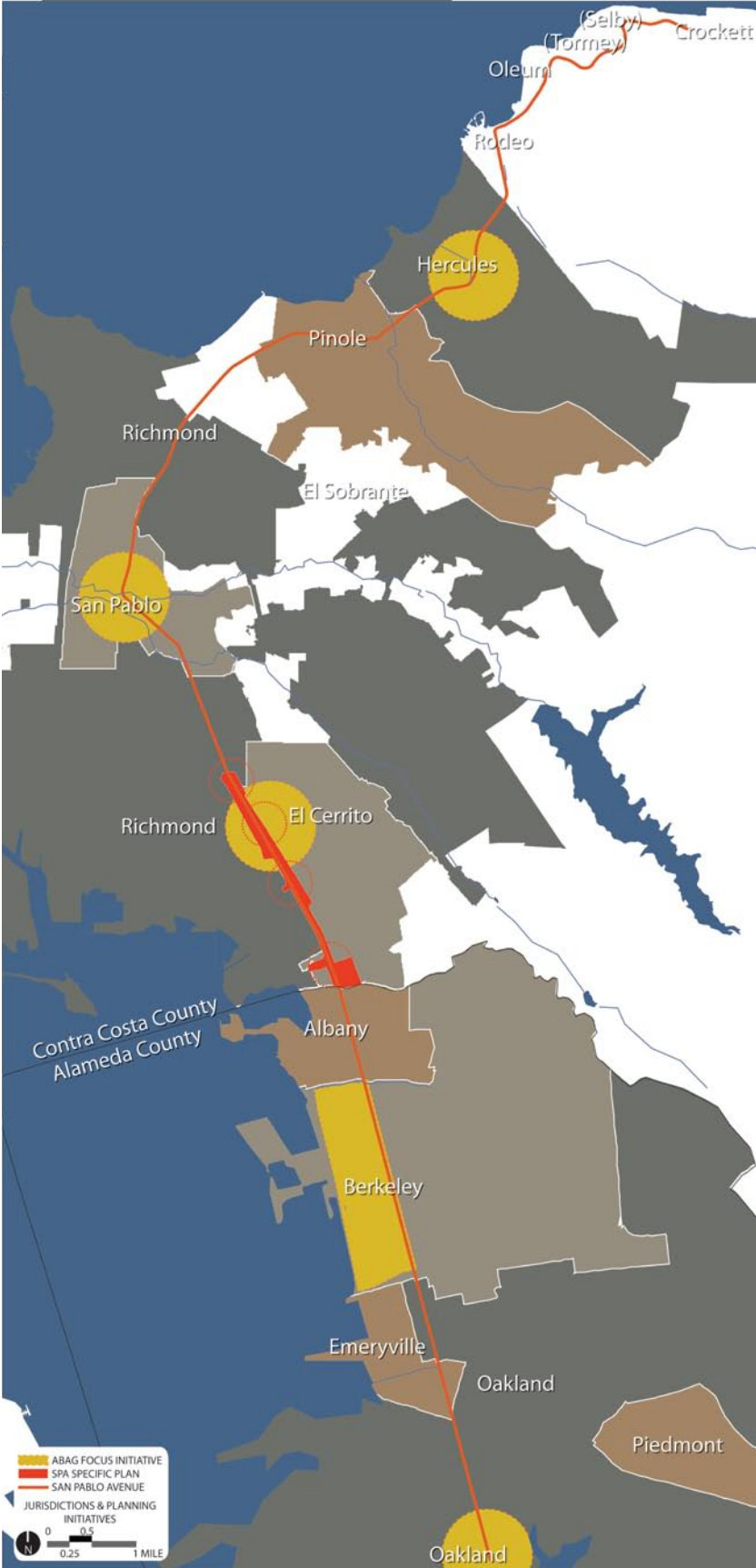
- Pre-1800 Ohlone trail along the coast. (*contra costa*) (STRIP I)
- 1823 Rancho San Pablo established
- 1853 Alameda County established, includes the area now in Contra Costa County
- 1852 San Pablo Avenue named first county highway as Contra Costa Avenue (STRIP II)
- 1872 Contra Costa Avenue renamed San Pablo Avenue by popular demand
- 1860s Stage coach lines on SPA (private development)
- 1870s Horse car lines on SPA (private development)
- 1900s Key route electric streetcar on SPA and adjacent steam train freight service
- 1910 Rapid introduction of the automobile (STRIP III)
- 1915 Auto services appear on SPA during this period
- 1927 Carquinez bridge built
- 1928 SPA designated US 40
- 1933 Streetcar removal to make way for the increasingly ubiquitous automobile
- 1939 Construction of Eastshore Highway 1/2 mile west of SPA for Bay Bridge approach. SPA designated Business 40. (STRIP IV)
- 1940s Shipyard streetcar line elevated in middle of street for wartime production transportation demand. Removed after war ended.
- 1962 Eastshore Highway becomes Interstate 80 (STRIP V)
- 1972 BART (STRIP VI) Richmond/El Cerrito Area redevelopment
- 1976 San Pablo Avenue Improvement Project in Berkeley (the trees were planted)
- 1976 All industrial uses still present along corridor.
- 2000s Emeryville – Bay Street (STRIP VII)

Recent Planning Efforts

As discussed in the literature review, there have been numerous planning efforts addressing portions of San Pablo Avenue. The full extent of the San Pablo Avenue corridor runs from Oakland to Crockett. None of the planning efforts or studies to-date, encompass the entire length of the corridor. The ABAG study comes the closest to this goal, but falls short because it does not include the areas of San Pablo Avenue north of Hercules—the unincorporated portions of the corridor in Contra Costa County. All of the other articles and studies written about the San Pablo Avenue environs fall even shorter in geographical scope, typically confined to the jurisdictional boundaries of a single municipality or county, with little mention of regional goals. The level of attention directed at San Pablo Avenue as a state highway urban arterial could be considered exemplary in terms of the efforts put forth by the regional agencies and the local governments, but it still falls short of what would be required for a holistic approach of addressing, on a corridor scale, the regional issues of “housing costs, mobility, the environment, and social equity” identified as key issues by the ABAG study.

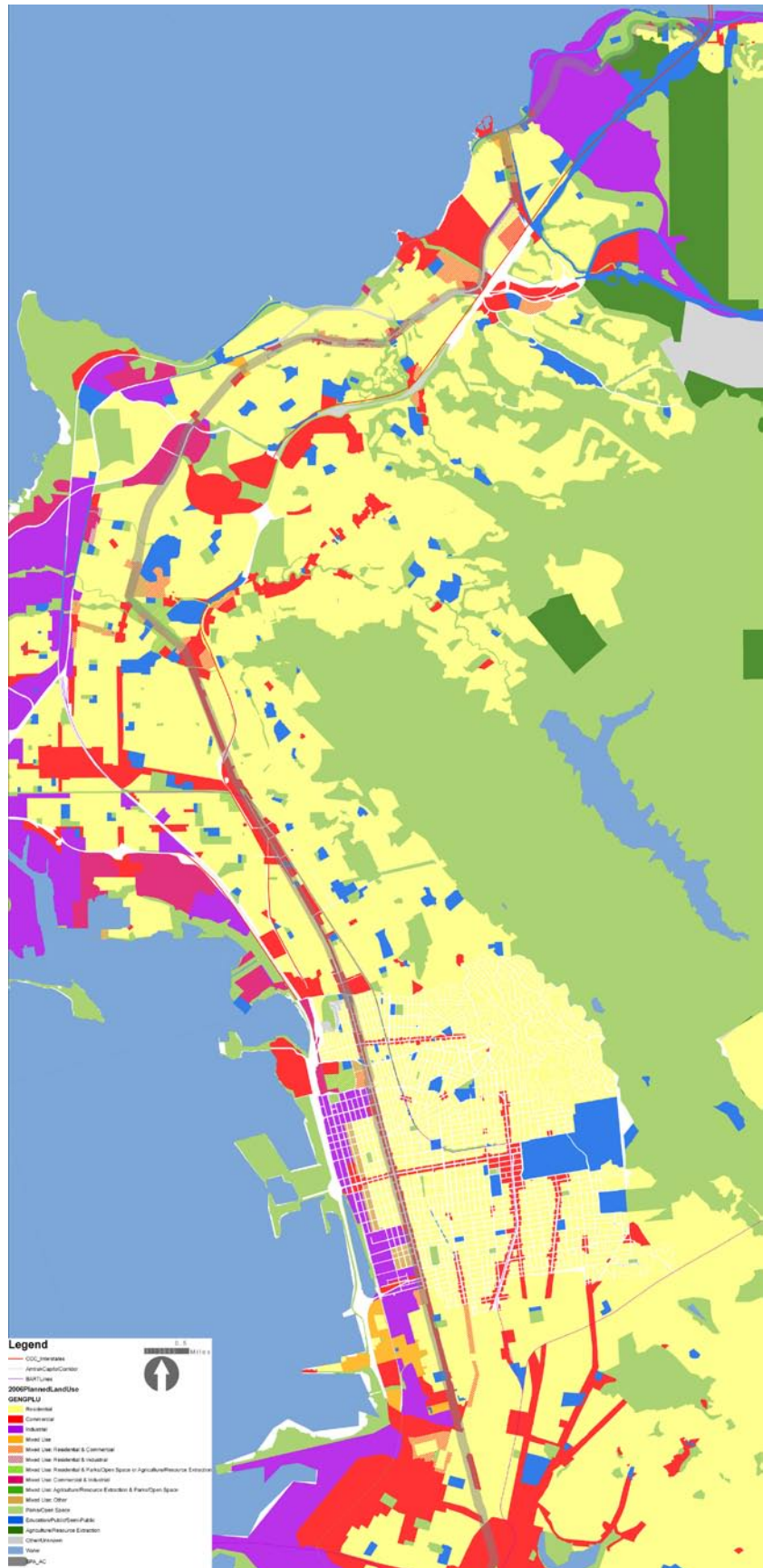


San Pablo Avenue and the municipalities within the context of the North San Francisco Bay.



ABAG FOCUS Initiative
 along San Pablo Avenue
 (yellow) and San Pablo
 Avenue Specific Plan in El
 Cerrito and the adjacent
 parts of Richmond (red)

Jurisdictions:
 municipalities and
 counties

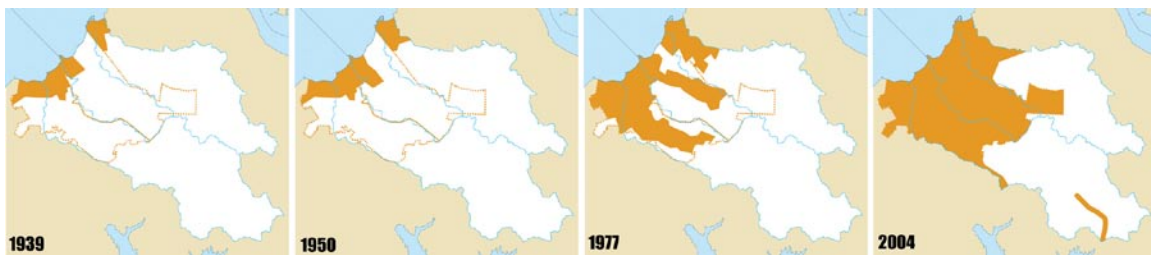


General land use for the entire East Bay 2006 (ABAG 2006).

With the establishment of the corridor's history and the relevant planning context, the next part of the analysis looks at existing conditions at the corridor, strip, and site scales.

25-MILE CORRIDOR

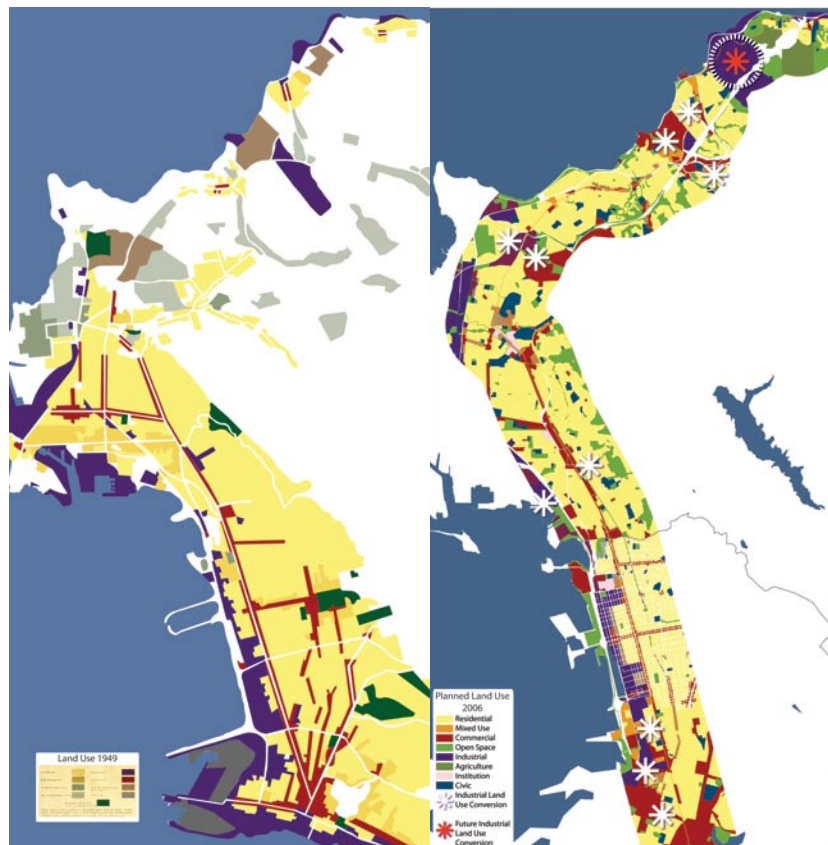
In 2006 Contra Costa County reduced its urban limit line to control the rampant growth that had been occurring over the past decade. Now, on the eve of the 2010 census, it is speculation and observation that indicates the tremendous growth that has settled in the city of Hercules, on the western side of Contra Costa County. The city has been working feverishly to develop a transit-oriented development that will attract BART and/or AMTRAK to build a station in their locale, inevitably further inducing growth. The unincorporated town of Rodeo nestled between Hercules and the Conoco-Philips refinery is also showing signs of growth through its streetscape improvements and façade renovation programs. These towns, along with Pinole and Crockett, are at the north end of San Pablo Avenue. In previous decades, they were towns far away from the “city.” Now, they are relatively affordable bedroom communities. The refinery's presence essentially keeps the town of Rodeo unincorporated so the town can rely on the county to control the refinery's behavior. But what happens when the refinery shuts down? It will happen someday, so why not plan for the land use conversion now?



Urbanization at the north end of San Pablo Avenue: Pinole, Refugio and Rodeo Watersheds.

Phytoremediation of soil is a time-consuming, yet inexpensive method for cleaning up toxic soil. There were company towns north of the refinery property before, so who's to say there won't be a town there in the future? This situation might sound absurd, but there is a trend that supports this hypothesis. Over the past 60 years, large-scale industrial land uses in the East Bay have been consistently converted into residential and commercial land uses. The town of Hercules originated as a company town for a gunpowder and dynamite company, which later manufactured fertilizer. Now, there is a new urbanist community sitting on top of the factory sites that uses some of the salvaged buildings as inspiration for pastiche. Down the road, a large parcel's grade was raised 5 to 10 feet for a new community of homes called Victoria Crescent as part of the soil remediation for an asphalt plant that used to be on the site. The grade change disturbed the views of bordering neighbors in Rodeo, not to mention the increased runoff from the steep, poorly planted slopes. The point is, there is time to plan for the conversion of the refinery site, which could not only be cost-saving, but also have less impacts on the surrounding landscape and people.

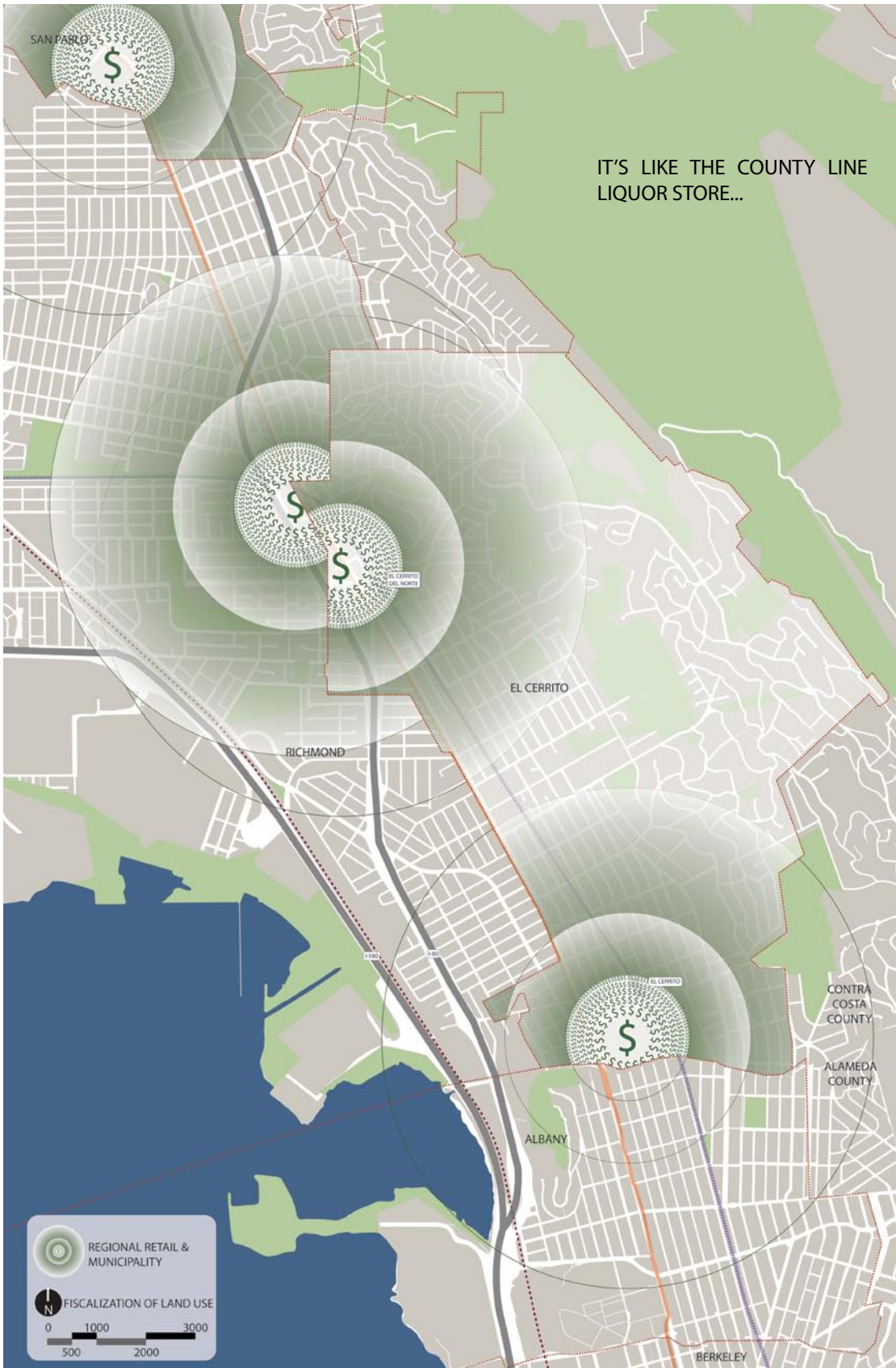
Land Use Map 1949 (left), and 1-mile-wide strip of land use around San Pablo Avenue 2006 (right). Asterisks indicate industrial land use conversion between 1949 and 2006.



Barriers to Corridor-scale Planning

Fiscalization of land use promotes big-box retail land uses along the edges of the city limits to maximize the regional consumer draw. This form of “county-line liquor store” land use does not reinforce the perception of a corridor; it reinforces the traditional edge-center paradigm. However, this paradigm becomes a paradox when located in a region, especially along a regional corridor. The edge-center turns into a Morse-code of development, passing through different municipalities.

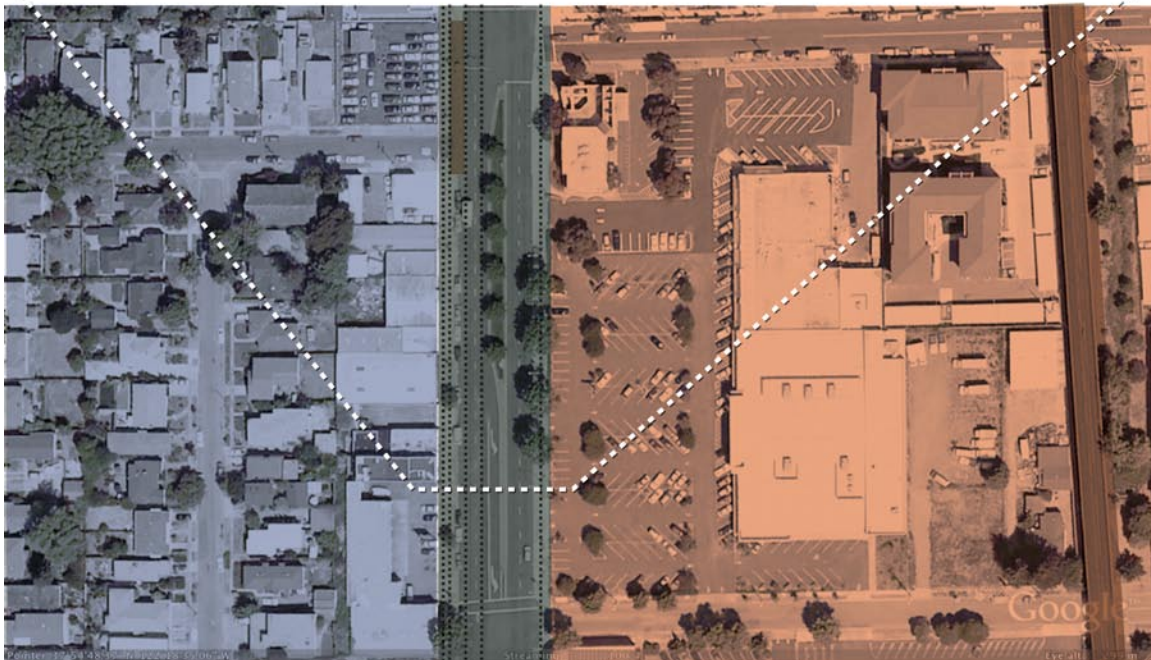
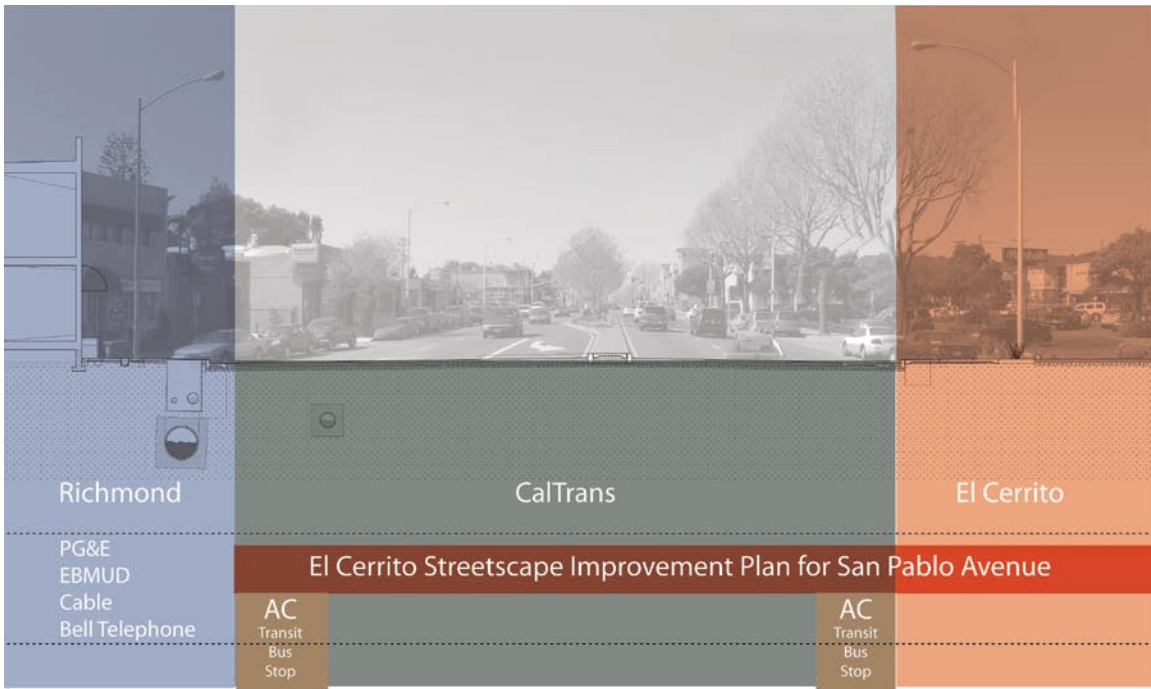
The four radiating circles on the map following represent the fiscalization of land use from four different regional revenue-generating sources: a casino in the north, Home Depot – a home improvement center in Richmond, a Honda car dealership, and a commercial retail center including a Trader Joes food market in El Cerrito. These four businesses represent major revenue potential for the municipalities in which they are located. The location of these businesses at the edge of the municipalities maximizes their regional consumer basin while minimizing the impacts of the large footprint businesses and traffic generation on their respective cities. This situation mirrors the classic county-line liquor store scenario, where consumers drive to the adjacent community to purchase the goods not available in their own community. A service is provided for those without, and revenues are generated for the community providing the service. As such, the revenues generated from the four “county-line” land uses on San Pablo Avenue have no direct relationship with their location on San Pablo Avenue and therefore don’t necessarily contribute to the maintenance of the space. El Cerrito did recently finish a streetscape improvement plan for San Pablo Avenue, but the improvements only reached the edge of the sidewalk on the Richmond side. A revenue sharing scheme for businesses along San Pablo Avenue would have significant impacts on the public realm of the corridor, but it would also be a difficult negotiation based on these types high-revenue-generating land uses that appear up and down the corridor in the classic “county-line” configuration.



Fiscalization of land use and edge condition consumption patterns

A Target store used to be located in El Cerrito next to the El Cerrito del Norte BART station, but relocated to a larger site in Richmond near I-580, and another Target just opened on the other side of I-80 in Richmond, less than a quarter-mile from the original El Cerrito site. What did Richmond offer the Target Corporation to move them away from the El Cerrito site and double the number of stores in Richmond? All in the name of sales tax revenue generation...

The multi-jurisdictional space along San Pablo Avenue complicates coordinated planning to the point of complacency for most areas. Oakland and Emeryville did coordinate streetscape planning on their portion of San Pablo Avenue, but the plantings are problematic, suggesting a compromised negotiation over the design. Pedestrian-driver visibility is reduced because of tall plantings on bermed medians. Between El Cerrito and Richmond, the differences are subtle, but evident when scrutinized: The tree plantings, sidewalk maintenance, and parking lane designations are well maintained on the El Cerrito side, while the Richmond side varies from poor to average maintenance. These conditions exist despite El Cerrito's commitment to redesigning the streetscape for the entire right-of-way adjacent to their jurisdiction, which would include the Richmond side of the street. Caltrans controls the right-of-way between Richmond and El Cerrito, so the space is regulated like a state highway: the driving area is clearly delineated with wide lanes and minimal curb cuts. Trees, if present at all, are relegated to medians and sidewalks; they do not intersect with parking lanes, as is common in current parking design. The adjacent auto-oriented land uses contribute to the perception of San Pablo Avenue as a space for steady-flow driving as the buildings pull back from the property line and locate the parking in front of the buildings.

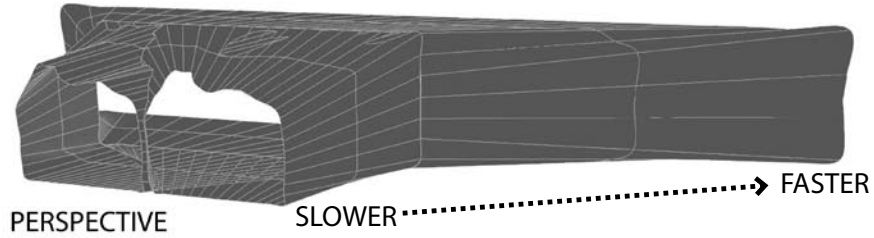


Multi-jurisdictional geographies in plan and cross section

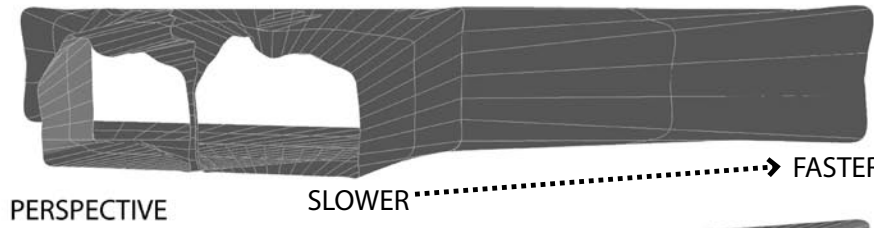
A comparison of two typical cross sections found along San Pablo Avenue explain how the highway design regulations and the forms of adjacent land uses contribute to the driver's perception of how fast she can safely navigate her car.



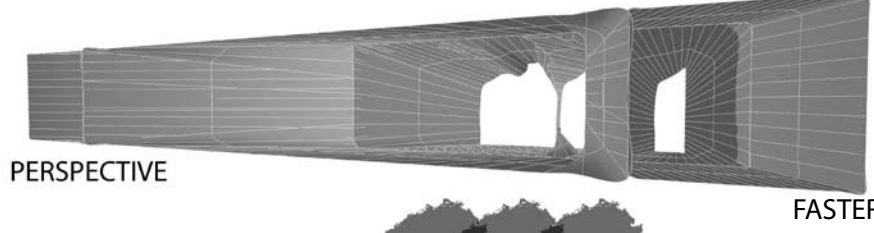
PLAN SHOWING SPACE BETWEEN TWO SECTIONS



PERSPECTIVE



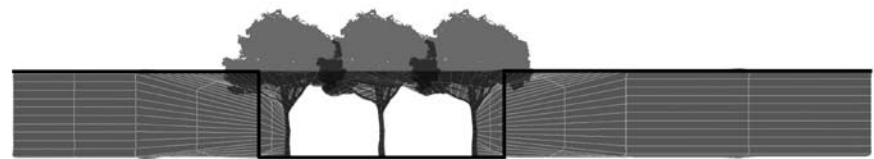
PERSPECTIVE



PERSPECTIVE



SECTION WITHOUT TREES OR BUILDINGS AT PROPERTY LINES FASTER



SECTION WITH TREES & BUILDINGS AT PROPERTY LINES SLOWER
AUTO SPACE

State highway steadyflow, driver speeds of space: moving between different cross-sections

The same type of analysis can be applied to a pedestrian's perception of safety within the right-of-way. In this analysis, pedestrian safety is perceived through layers of space. In the ideal right-of-way, many layers would exist, buffering the different modes of mobility from one another while allowing for visibility and function. On San Pablo Avenue, few of these layers exist, therefore reducing the perception of pedestrian safety.



AUTO-DOMINANT STREET (EXISTING CONDITION)

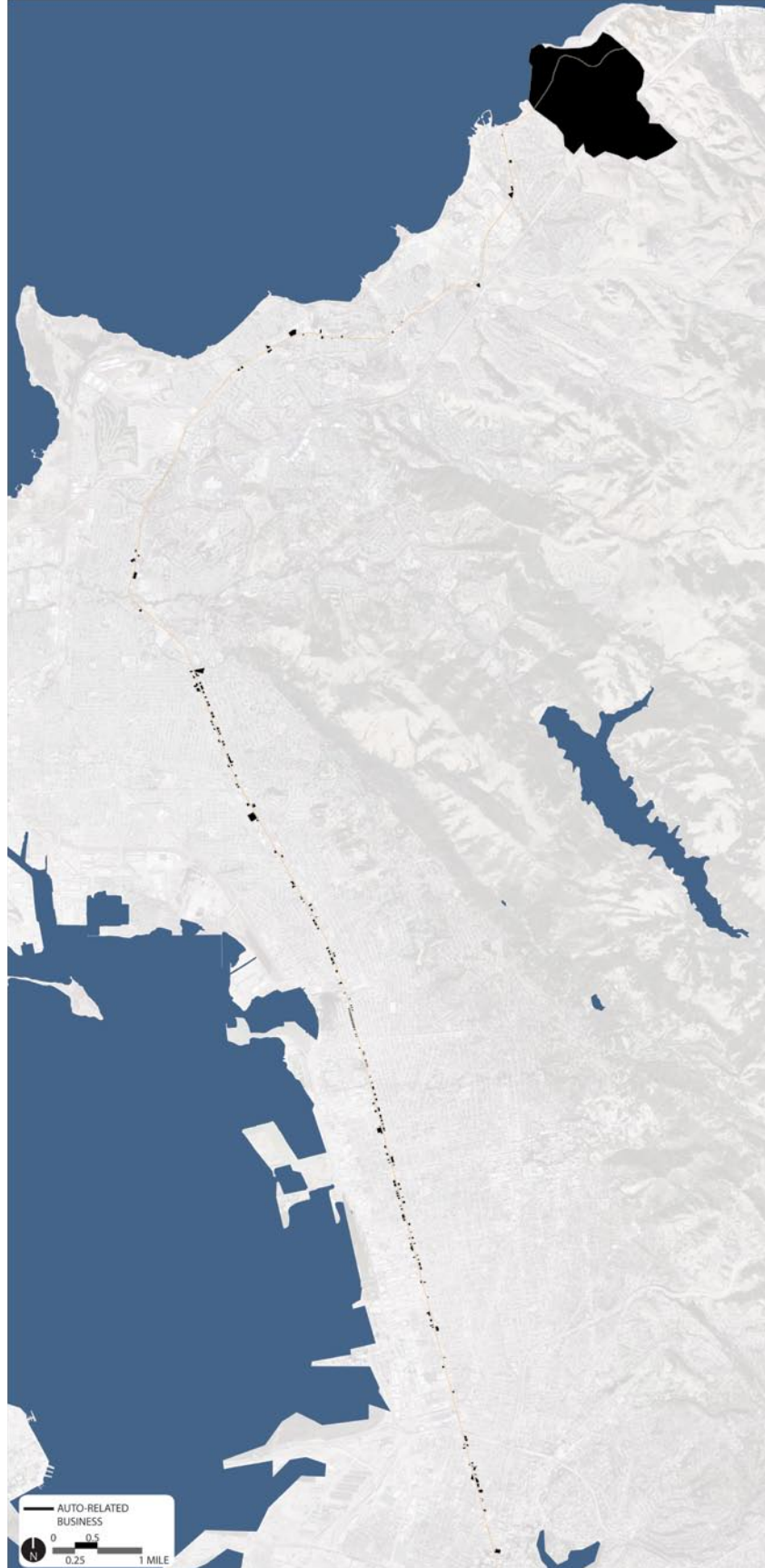


MULTI-MODAL STREET (PROPOSED CONDITION)



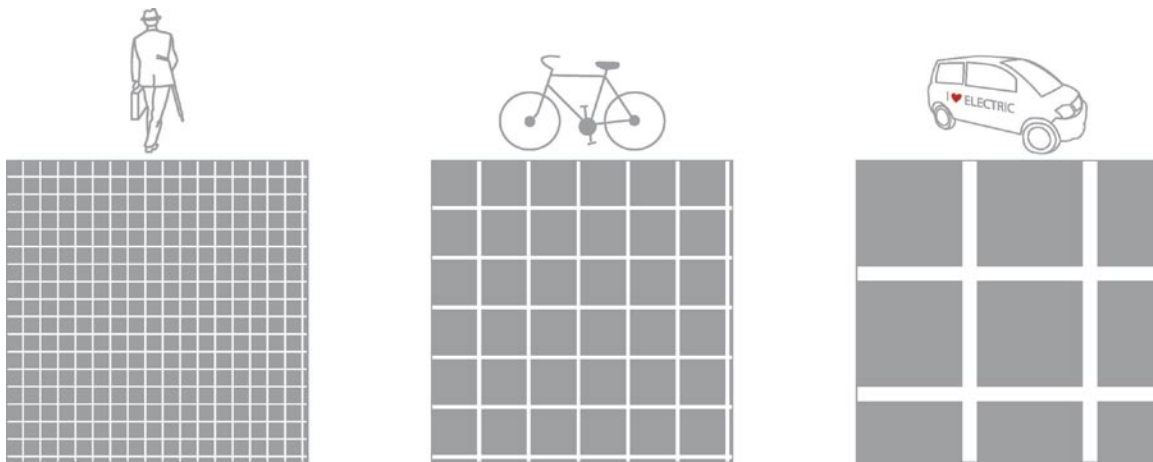
Pedestrian layers of space

The big box retail promoted by fiscalization of land use and its suburban parking requirements, the highway arterial design prioritizing traffic flow, and the lack of coordination along the multi-jurisdictional geography of San Pablo Avenue all contribute to a degraded sense of place that is required for a vibrant multi-modal right of way.

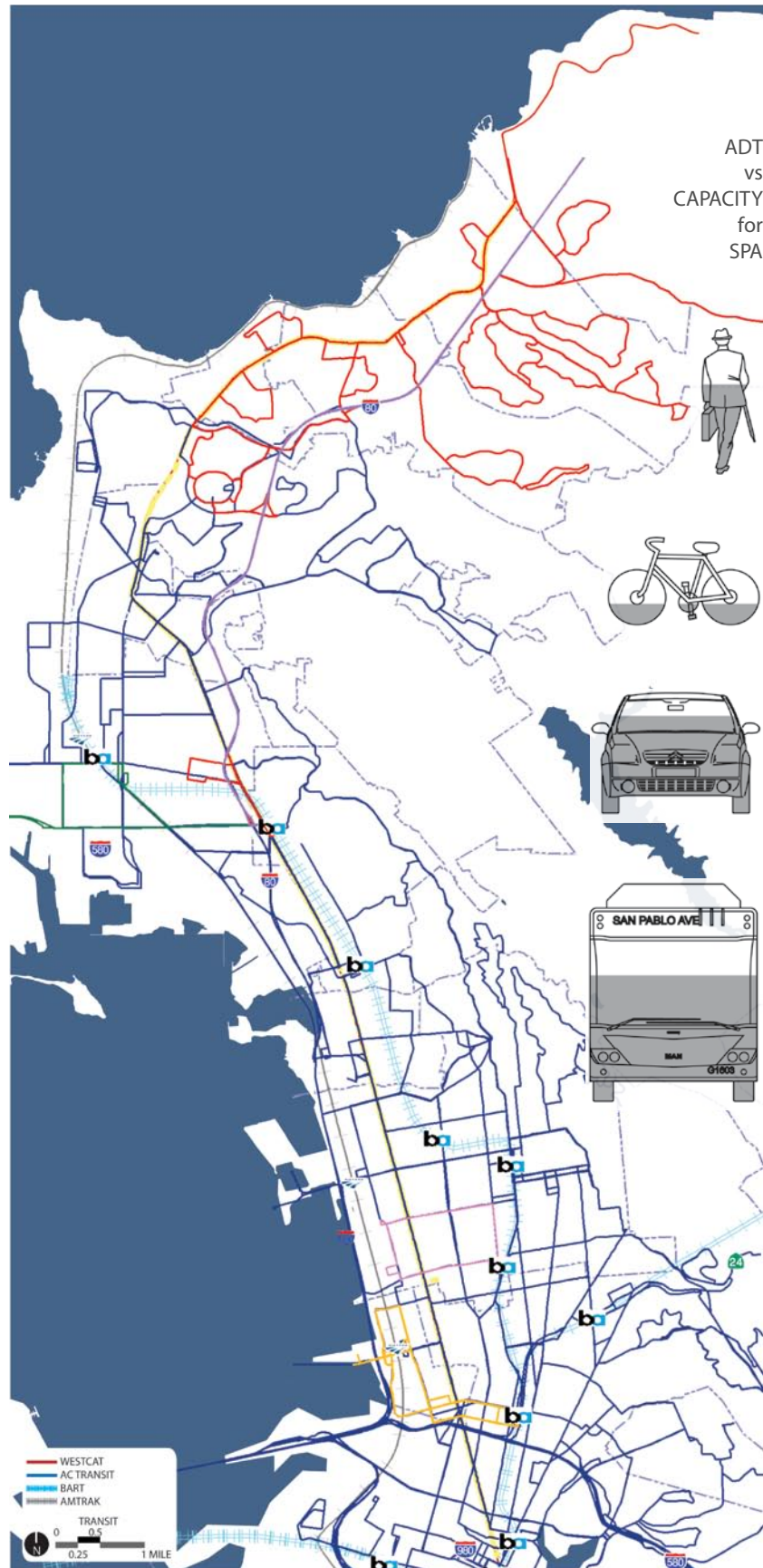


Auto-oriented businesses and auto-mobility along San Pablo Avenue 2008.

San Pablo Avenue does contain a multi-modal urban form: the different grids that intersect the avenue create a variety of scales that facilitate walking, biking and auto travel. The mixing of the different scales of grids divides the avenue into three zones. In the urban zone, the mix of the grid scales is greatest. The liminal zone transitions from a high mix of scales to a low mix of scales, where auto-oriented urban forms dominate. The exurban zone is primarily an auto-oriented fabric with pockets of the other scales. A multi-modal urban form will accommodate all forms of travel. Large blocks are possible with pedestrian and bicycle access throughout.



Multi-modal urban form

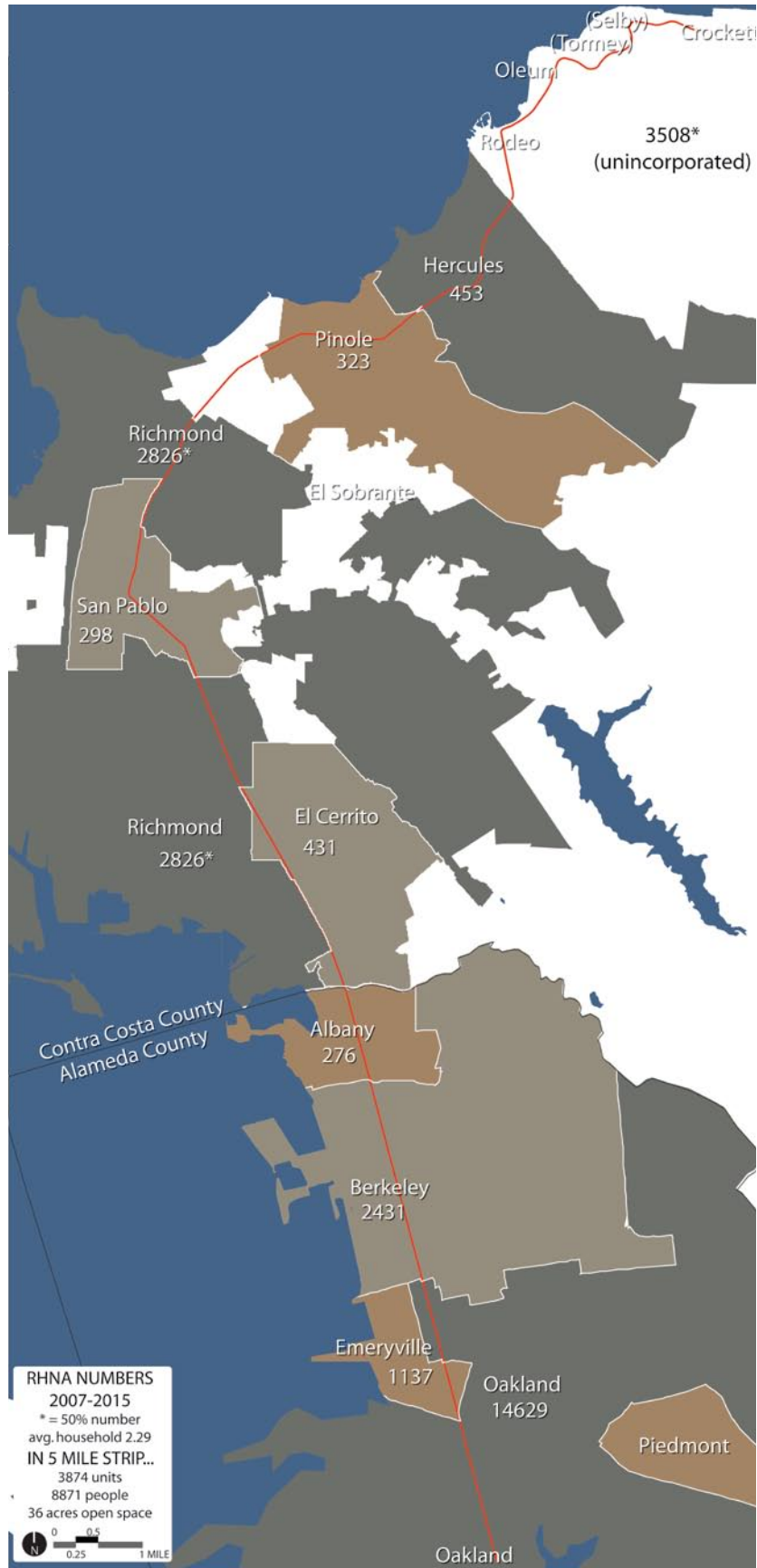


Corridor Transit Map with capacity vs. actual ADT (ABAG and Deakin 2006).

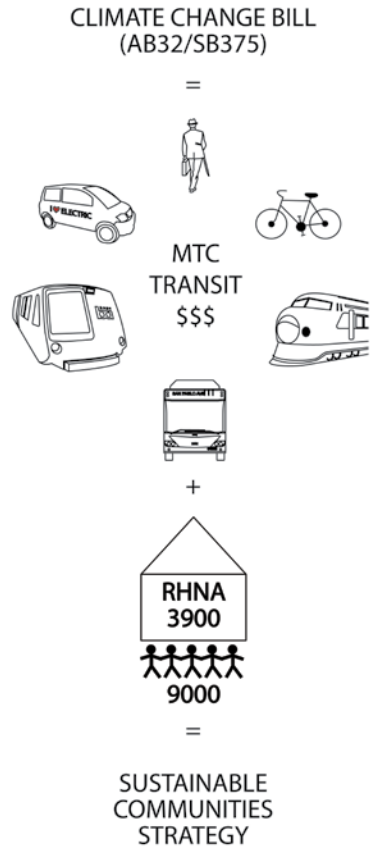


Three Sections of SPA:
 URBAN | LIMINAL | EXURBAN

Currently with the highest vacancy rates and greatest concentration of auto-oriented parcels, the liminal space stands to gain the most from transformation. This section also exhibits characteristics of both of the other spaces, so it can provide lessons for the entire corridor.



Regional Housing Needs Assessment unit numbers by municipality and county along San Pablo Avenue.



SPA →

ABAG FOCUS INITIATIVE

+

SPA SPECIFIC PLAN

+

GREEN CORRIDOR INITIATIVE?



The factors driving the future climate of transformation on San Pablo Avenue.

Table 4. The housing needs for these cities could be easily accommodated along San Pablo Avenue.

Affordable Housing Category	<50% AMI	<80% AMI	<120% AMI	>120% AMI	Total
Albany	64	43	52	117	276
El Cerrito	93	59	80	199	431
Richmond (50% total number)	391	339	540	1556	2826
San Pablo	22	38	60	178	298
Total number of Housing Units	570	479	732	2050	3831
Total Population	1305.3	1096.91	1676.28	4694.5	8772.99
AVG household size used to calculate population	2.29				
Area Mean Income (AMI)	\$54,119				

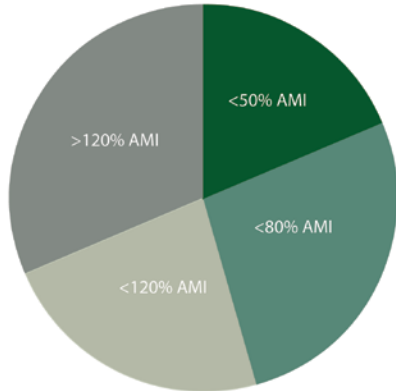
SOURCE: 2007-2014 RHNA Numbers
<http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf> accessed 12 May 2009

Conditions of a 5-mile Urban Arterial Strip

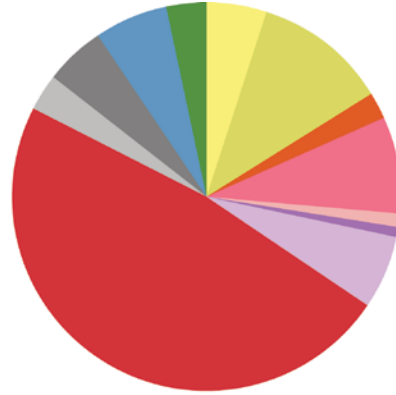
The five-mile strip selected for further study exhibits the myriad conditions that exist along the corridor. Given the scale of this study, it also seemed prudent to study an area where significant documentation already exists. The Deakin articles and survey results include this area, and the scope of the San Pablo Avenue Specific Plan also falls within this five miles. (Refer to map at beginning of chapter to locate the strip within the corridor.) The specific limits of the five miles might not be obvious: they are the watershed borders. I chose these limits specifically to subvert the dominating multi-jurisdictional geographies of the corridor.

Diversity

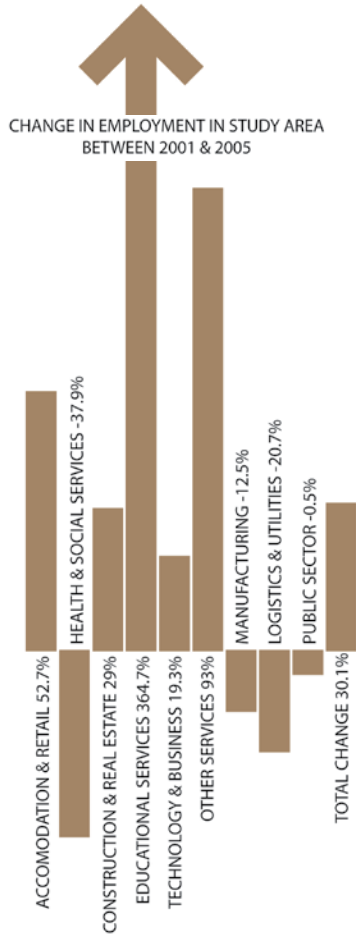
Emily Talen's book *Design for Diversity: exploring socially mixed neighborhoods* applies the following demographics to evaluate the diversity of a community: Income, Race, Year Built (residence), Age, Family Type, Housing Unit Type, Housing Tenure, Unit Size, Housing Value, Monthly Rent (Talen 2008). These statistics, when combined with specific land uses found on San Pablo Avenue demonstrate the high level of diversity of the area (SPASP 2008).



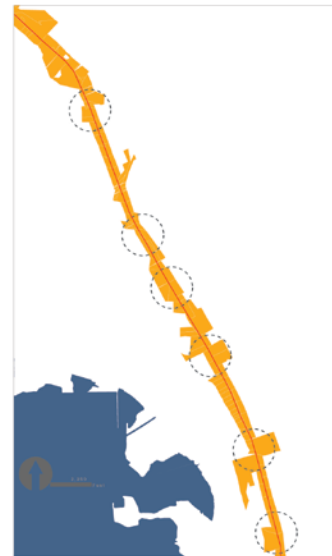
AREA MEAN INCOME (AMI) FOR STUDY AREA CENSUS BLOCKS
 AMI = \$54 119
 POPULATION = 16 261
 HOUSEHOLDS = 7419
 HOUSEHOLD SIZE = 2.17
 (classified in terms of affordable housing categories established by the State)



DISTRIBUTION OF EXISTING LAND USES ALONG SPA
 (clockwise from top)
 SINGLE FAMILY RESIDENTIAL
 MULTI-FAMILY RESIDENTIAL
 MIXED USE
 AUTO-RELATED BUSINESS
 MOTEL
 INDUSTRIAL/PDR
 OFFICE
 RETAIL/COMMERCIAL
 VACANT
 PARKING
 PUBLIC/INSTITUTIONAL
 PARKS/OPEN SPACE



STUDY AREA CENSUS TRACTS USED FOR COMPILING DEMOGRAPHIC INFORMATION



CENSUS BLOCKS ADJACENT TO SAN PABLO AVENUE

By comparing the census information to the existing land use map and distribution, it is evident that there are very few residences located on San Pablo Avenue in most of this five mile strip, so most of the residential population exists in the adjacent neighborhoods, leaving lots of room for more housing to be added along the avenue.



North of Oakland, all creeks drain across San Pablo Avenue to the Bay.



Retail is the dominant land use on San Pablo Avenue, with a mix of everything else.



There is a dearth of open space near San Pablo Avenue.



The trees are ready for climate change, but where are they?



People who live near this part of San Pablo Avenue drive more than 5 times a week on it (Deakin 2004).



Connected auto space also links space hydrologically.



Top 3 Reasons for living near San Pablo Avenue: Affordable, Nearby Transit & Shopping (Deakin 2004).



Top 4 Activities on San Pablo Avenue: Shopping, Eating, Commuting & Auto Repair (Deakin 2004).



2/3 of people who live in this area drive to the grocery store, the other 1/3 walk (Deakin 2004).

SPECIAL USE DISTRICT

What is possible with a Special Use District:

The Special Use District creates an official body to govern over the development and transformation of the corridor. This designation for San Pablo Avenue would require upfront investment of time and money from all involved agencies. In return, the district could provide expedited development services through dedicated staff and ensure coordinated inter-agency planning. If revenue sharing could be negotiated as a condition of the special use district, then significant transformation would be feasible across jurisdictions. The special use district coordinates local concerns and planning documents with regional goals at a sub-regional level. Another reason for dedicating staff to a special use district is made evident when comparing the numbers of planning staff employed in each city.

Table 5. Data about the state of planning in each jurisdiction along San Pablo Avenue.

Jurisdiction	County	No. of Planners	General Plan Element Year of Last Update				
			Population	Land Use	Circulation	Housing	Open Space
Oakland	Alameda	31	415,492	1998	1998	1996	1996
Emeryville	Alameda	3	9163	1993	1993	2001	1993
Berkeley	Alameda	23	106,347	2001	2001	2003	2002
Albany	Alameda	5	16,764	1992	1992	1992	1992
El Cerrito	Contra Costa	1.2	23,194	1999	1999	2003	1999
San Pablo	Contra Costa	2	30,965	1996	1996	2002	1996
Richmond	Contra Costa	9	103,828	1998	1994	2006	1996
Pinole	Contra Costa	1	19,234	1995	1995	2003	1995
Hercules	Contra Costa	2	23,975	1998	1998	2003	1998
Unincorporated	Contra Costa	39	1,029,377	2005	2005	2001	2005

The California Planners' Book of Lists 2008

<http://www.opr.ca.gov/planning/publications/2008bol.pdf> accessed 12 November 2008

What is possible without a Special Use District:

Without a special use district, a model ordinance becomes the primary mechanism of coordination. The model ordinance fits well into municipal codes, but it relies on individual municipalities to prioritize funding and planning projects, which doesn't always happen. This scenario dilutes the ability to coordinate planning efforts between the public and private realms, and relies primarily on the market for development location decisions. The model ordinance typology can work well, if mandated by the state, and requires multi-agency coordination. A revenue sharing policy could also be negotiated in conjunction with the model ordinance, but would require more upfront negotiation of terms, as compared to a policy linked to a special use district.

The regional planning agencies formed a committee in 2006 to direct state and federal funding to municipalities along the smart growth corridors before SB375 was passed in the senate.

The FOCUS Initiative is led by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), with support from the Bay Area Air Quality Management District (BAAQMD) and the Bay Conservation and Development Commission (BCDC)—in partnership with congestion management agencies, transit providers, and local governments throughout the Bay Area. It is partially funded by a Blueprint Grant from the State of California Business, Transportation, and Housing Agency (<http://www.bayareavision.org/initiatives/> accessed 18 May 2009).

Their designation of priority development areas along the corridors serves as a surrogate for a special use district, but it still relies on the cities to apply for the designation. Has California NIMBY'ed itself out of regional responsibility? Hopefully actions derived from SB375 will provide enough incentives and penalties to motivate municipalities to respond to regional issues.

