

# Stronger Housing, Safer Communities

## Community Profile

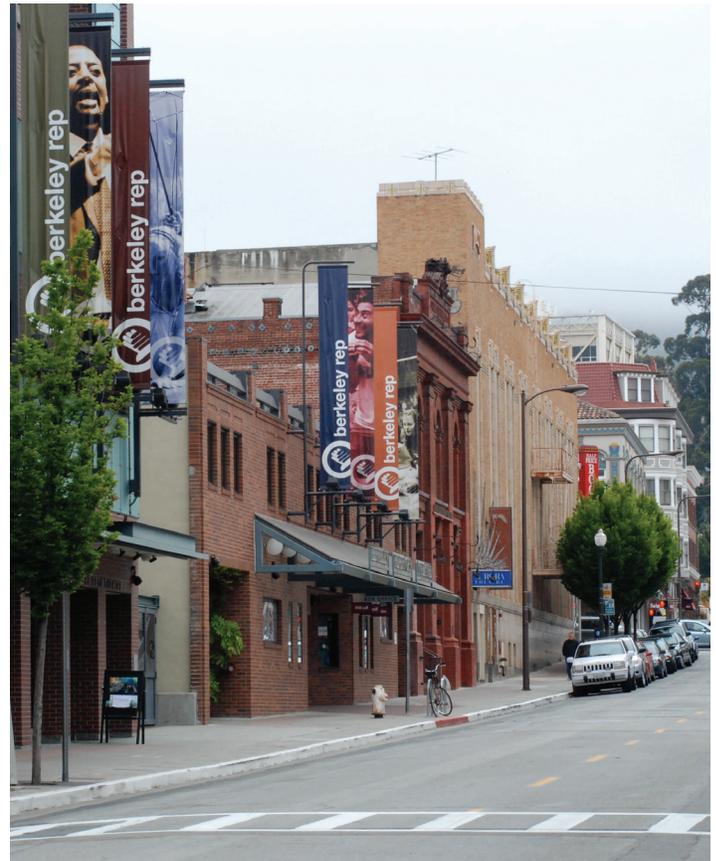
### Berkeley

#### Key Issues

The Berkeley Community Profile Area has a significant number of single and multi-family (1-4 unit) houses with cripple walls (short walls that raise the first floor of the building anywhere from 1-5 feet above ground level) that may collapse during an earthquake if there is very strong or violent ground shaking (Modified Mercalli Intensity measure of VIII or above). Additionally, there are a number of weak-story or open front houses (those with garages or other large openings on the first floor) in the profile area that may also experience significant damage during very strong or violent ground shaking. Most of the housing in the profile area is less than 10 stories and is therefore unlikely to have a foundation that can withstand liquefaction and are in a liquefaction hazard area, meaning the soils are susceptible to liquefaction and the area is likely to experience a degree of shaking that will trigger liquefaction. In general, those that live in the profile area are renters, have very low income, are cost burdened, and are transit dependent. This combination of characteristics suggests that the community in the profile area has limited ability or resources to invest in improving the housing they live in, and will either need to shelter in place or rely on public transportation in order to evacuate. These characteristics mean that residents are more likely to be displaced if their homes are damaged, and may struggle to find affordable housing elsewhere.

#### Description of the Profile Area

The Berkeley community profile area is located in the southern portion of the city, between Dwight Way and 62nd Street to the north and south, and Sacramento/Martin Luther King and Shattuck/Fulton to the west and east. Current land use in the profile area is retail and mixed use, e.g., along Shattuck and Adeline, or low to medium density residential. Community assets in the profile area include the Ashby BART station, AC Transit local bus (9, 15, 18, 88, 603) and Transbay



(F) lines, and three small city parks in the profile area (Greg Brown Mini-Park, Prince Street Mini-Park, and 63rd Street Mini-Park) and one large city parks nearby (Grove Park).

There are two areas of anticipated or planned future growth in the profile area, the South Shattuck and Adeline Street Priority Development Areas (PDAs). The South Shattuck PDA is planning for mixed-use residential and neighborhood-serving development, with an expected gain of 110 new housing units 300 new jobs by 2040. The Adeline Street PDA is planning for appropriately scaled commercial revitalization, with an expected gain of 250 new housing units and 680 new jobs by 2040.

#### Hazards

Due to its proximity to the Hayward Fault, the entire profile area is subject to ground shaking of MMI XIII or higher from either a Hayward or San Andreas event. Additionally, the southern portion of the profile area is composed of soils with moderate liquefaction susceptibility, and that, combined with the ground shaking hazard, makes it a liquefaction hazard zone. The profile area is not within the current 100-year designated flood zone and is not shown to be flooded in the future

as sea level rises. There is however a number of secondary hazards that could be triggered by a seismic event including fire or flooding due to pipe breakage. The profile area may also be subject to localized flooding during storm events if down-gradient stormwater and flood control infrastructure capacity is diminished due to higher than expected Bay water levels.

## Existing housing characteristics

Housing in the profile area is a diverse mix of older, primarily single-family residential housing (pre-1950), including some newer 1960's-style multifamily buildings and several larger single-family homes that may have been converted to multi-family. Most of the housing was likely built before current building codes. The project's regional analysis found that all eight block groups in the profile area have a triggering level (30% or more) of single-family cripple wall housing, which is fragile to ground shaking. In addition, it is likely that there are weak-story or open front housing within the profile area that are fragile to ground shaking at numbers below the triggering level (based on adjacent block group findings and a survey using online imagery). Lastly, approximately half of the block groups have a triggering level of housing likely to have a foundation insufficient to withstand liquefaction (e.g., <10 stories).

## Community characteristics

The project's regional analysis found that the majority of the profile area block groups have greater than the regional average number of renters, greater than 30% of households that are very low income (earning less than 50% of area median income), greater than 15% of all households are housing cost burdened (spending 50% or more of their income on housing), and are transit dependent (greater than 10% of households do not own a car). City-wide, renters are more likely to have extremely or very low household income are more likely to be housing cost burdened than homeowners. Owner occupied households has been on the rise between 2000 and 2007, but remains less than half of all households.

There were no block groups with a high percentage of children under 5 years old, and only two (in the northern portion of the profile area) with greater than 10% of the population over 75 years old. This age pattern is consistent with the City of Berkeley's overall

age distribution, with 15 to 24 year olds comprising the largest age cohort (30% of total population) largely due to the UC Berkeley student population. In comparison, for Alameda County and California as a whole, only 14%-15% of the population falls in this age range.

Only one block group greater than 70% or more non-white community members and none have 20% or more of the households without a member 15 years or older that speaks English well (e.g., non-English speaking or linguistically isolated). This finding is consistent with the city's overall racial composition, e.g., 58% white.

## Citywide characteristics

### 2013 City of Berkeley Health Status Report

- Berkeley's population increased by 10% from 2000-2010. African Americans were the only racial group to experience a decrease during this time (by approximately 3,000 individuals). The biggest increases were in youth 15-24 years of age, and those over 55.
- In more than one-quarter of Berkeley households, English is not the primary language spoken.
- Approximately 18% of Berkeley residents overall live in poverty (1 of every 3 African American children and 1 of every 5 Latino children lives in poverty). For every dollar earned by white residents, African Americans and Latinos earn 40 cents. Between 2009-2011, low-income households increased dramatically among African Americans and whites, while low-income Latino households decreased. High-income households increased in all racial/ethnic groups, but much more so among whites than other groups. (The low-income population near the University is comprised largely of students. Low income residents elsewhere in Berkeley are comprised of a greater range of ages and family structures, and more likely to experience the stresses of low income throughout their lives.)
- Berkeley residents are less likely to live in family households. 41% of Berkeley households are families, compared to 65% for the whole of Alameda County. Approximately 17% of households include children less than 18 years in age. Among family households in Berkeley, 15% are single parents with children under 18 years

of age. This rate is 37% among African American family households.

- According to the U.S. Census Bureau, about 57% are renter-occupied housing units and 43% are owner-occupied housing. White residents account for 75% of the homeowners.
- 85% of adult Berkeley residents have attended at least some college. African Americans are the least likely to have a Bachelor's degree or higher. Latinos are the least likely to have graduated from high school.
- The major industries of the employed population are: education, health, social services, and professional, scientific, and arts and entertainment.
- Forty percent of Berkeley residents use active transportation methods to get to work (e.g., walking, bicycling, or using public transportation).
- Disability from physical, emotional or mental conditions affects 26% of Berkeley residents. The rate is the same as that reported for the State. Women, the elderly, African American and Latino residents are more likely to experience disability.

### ***City of Berkeley Draft General Plan EIR: 4B. Population, Employment and Housing***

The City's population of 102,724 in 1990 rose to 109,463 in 2000, and is expected to rise slightly to 110,900 by the year 2020.

The City of Berkeley faces constraints in its efforts to meet its housing goals. Existing residential zoning limits new housing development in existing neighborhoods and much of the remaining vacant land is environmentally constrained. ABAG's Regional Housing Needs Allocation requires that the City add approximately 167 housing units per year<sup>1</sup>. In 2000, there were 44,030 households in Berkeley. The City has determined that, with the regional allocation, the number of households will increase to 45,130 by the year 2020. Generally, household sizes have more or less stabilized in Berkeley after declining from a high of

<sup>1</sup> In June 2000, ABAG determined that from 1999 through 2006 the City of Berkeley should provide 354 units affordable to very low, 150 to low-income households, 310 units affordable to moderate-income households and 455 units affordable to above-moderate income households, for a total requirement of 721 units over the period (167 units per year).

3.32 in 1970. Projected household size for the City of Berkeley through 2020 is 2.19.

In 2000, single-family homes constituted 45 percent of all housing units, while another 21 percent are in small apartment buildings with two to four units and 35 percent are in larger apartment buildings. Just under half of all rental housing and most of the student housing is located within a few blocks of the University campus.

Berkeley's economy functions as a small part of the Bay Area economy, comprising only 2.1 percent of the Bay Area labor force. In 2000, the region had 6,930,600 people and 3,688,590 jobs. Regional economic performance is vital to Berkeley, since over 50 percent of employed residents of Berkeley work outside the City, and many Berkeley businesses depend on customers living outside the City limits. Citywide, in 1990 only 41.3 percent of Berkeley residents worked within Berkeley, while 28.9 percent worked in Oakland, Emeryville, or San Francisco, 13.6 percent had a variable work location and 16.1 percent worked in a city other than these four.

### **Community Serving Facilities**

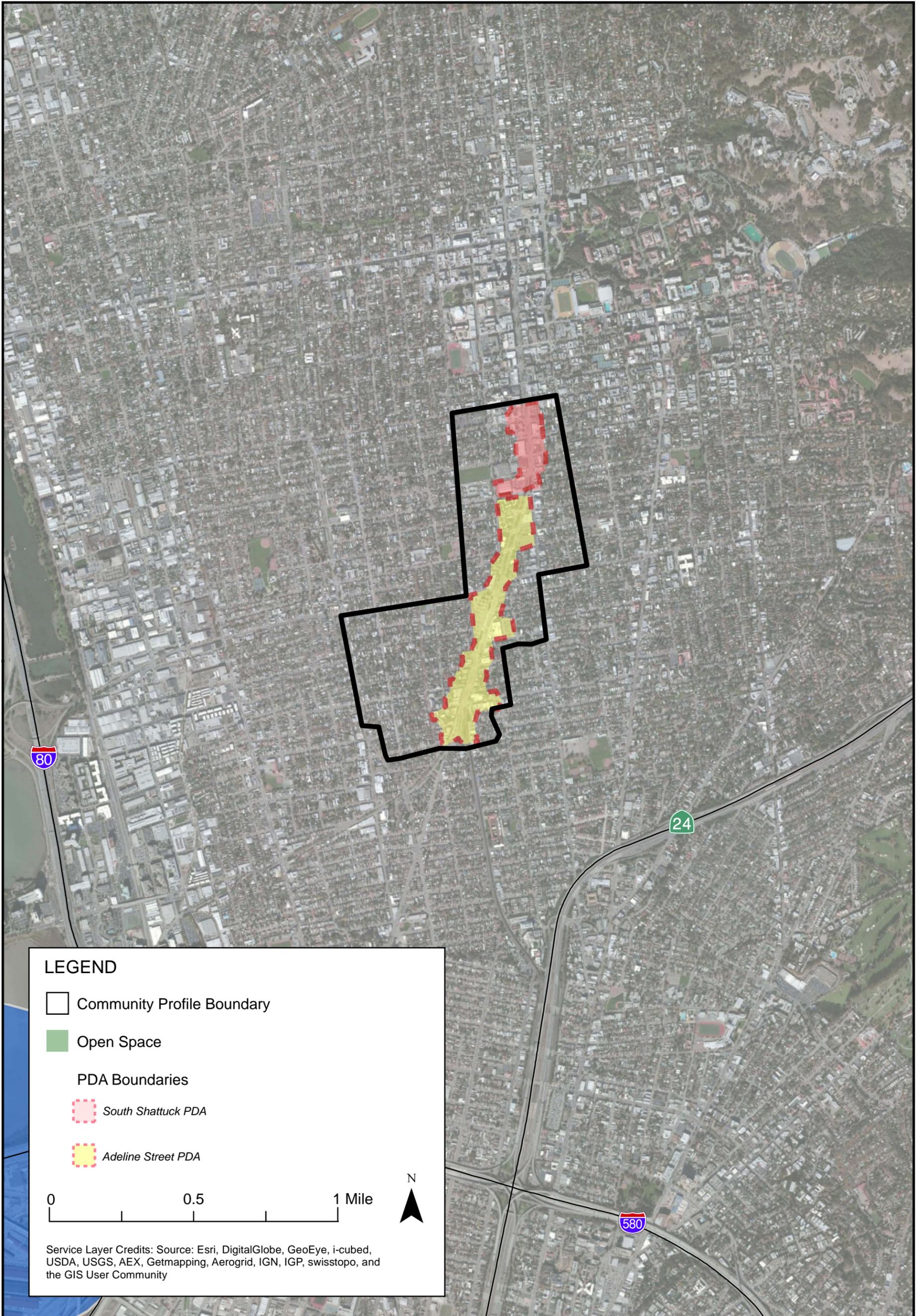
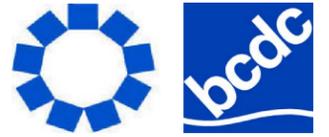
Community services for mobility and information challenged community members include two public and two private schools, one hospital, one medical clinic, two long term care facilities, one assisted living facility, and a senior center.

Community facilities or public spaces that could serve as gathering locations or sources of emergency information or assistance include two public schools, a senior center, a number and variety of a places of worship, three small city parks, and within a few blocks Grove Park in Berkeley and San Pablo Park and Bushrod Recreation Center in Oakland.

Organizations/city programs that improve community cohesion and capacity operating in or near to the profile area include the Black Infant Health (BIH) Program, which is housed in the South Berkeley neighborhood and focuses on improving health and birth outcomes for African American mothers and their babies. The Heart 2 Heart neighborhood program (targeted at a specific South Berkeley neighborhood selected for its assets and challenges) has introduced

initiatives ranging from monthly mobile health van events, blood-pressure screening and education in partnership with local businesses. The program seeks to empower residents and build community cohesion and capacity. Berkeley CERT and the Berkeley Disaster Preparedness Neighborhood Network also seek to support emergency preparedness efforts specifically in the South Berkeley neighborhood.

# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

Community Profile Boundary

Open Space

### PDA Boundaries

South Shattuck PDA

Adeline Street PDA

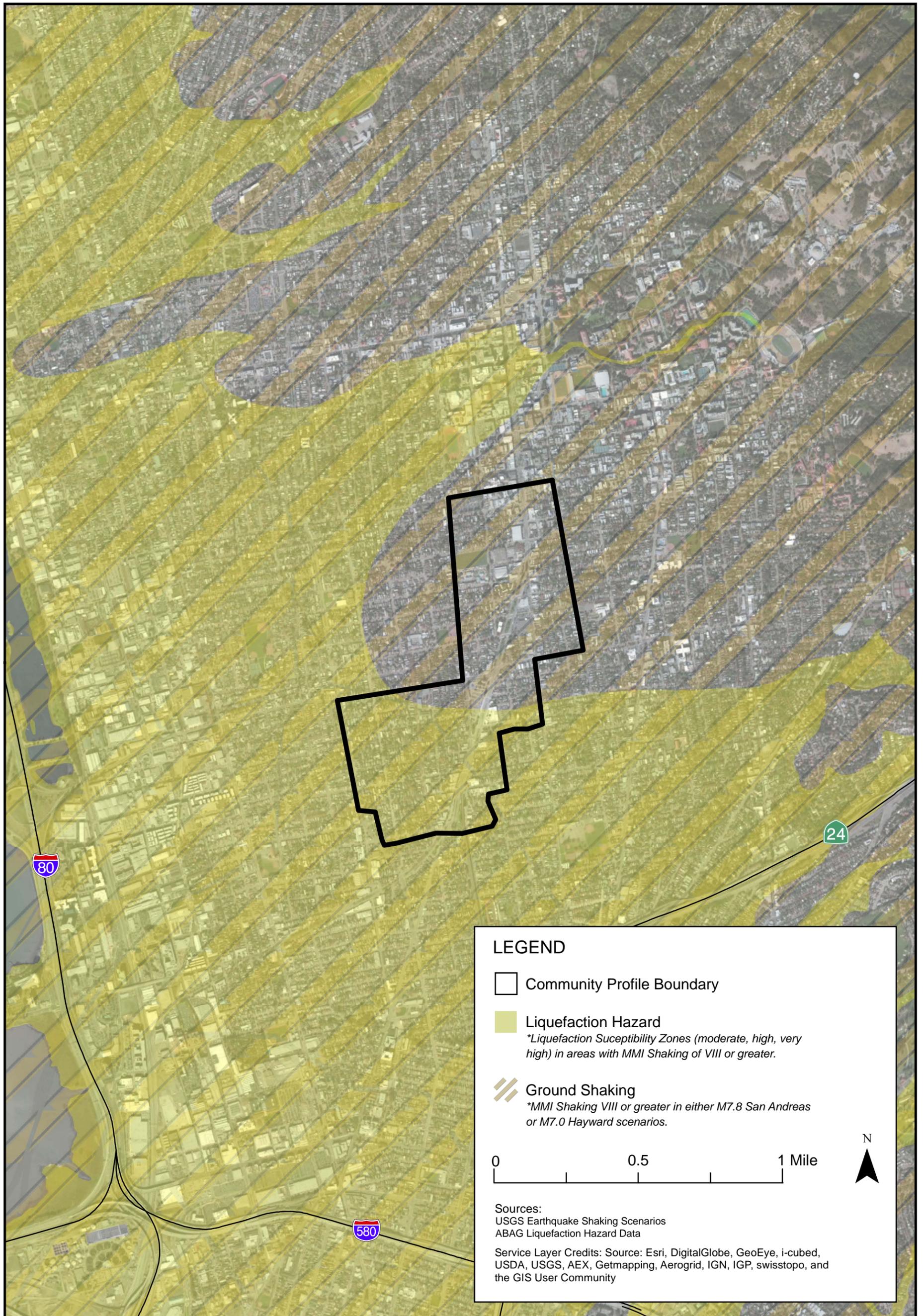
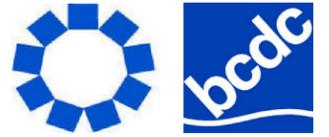
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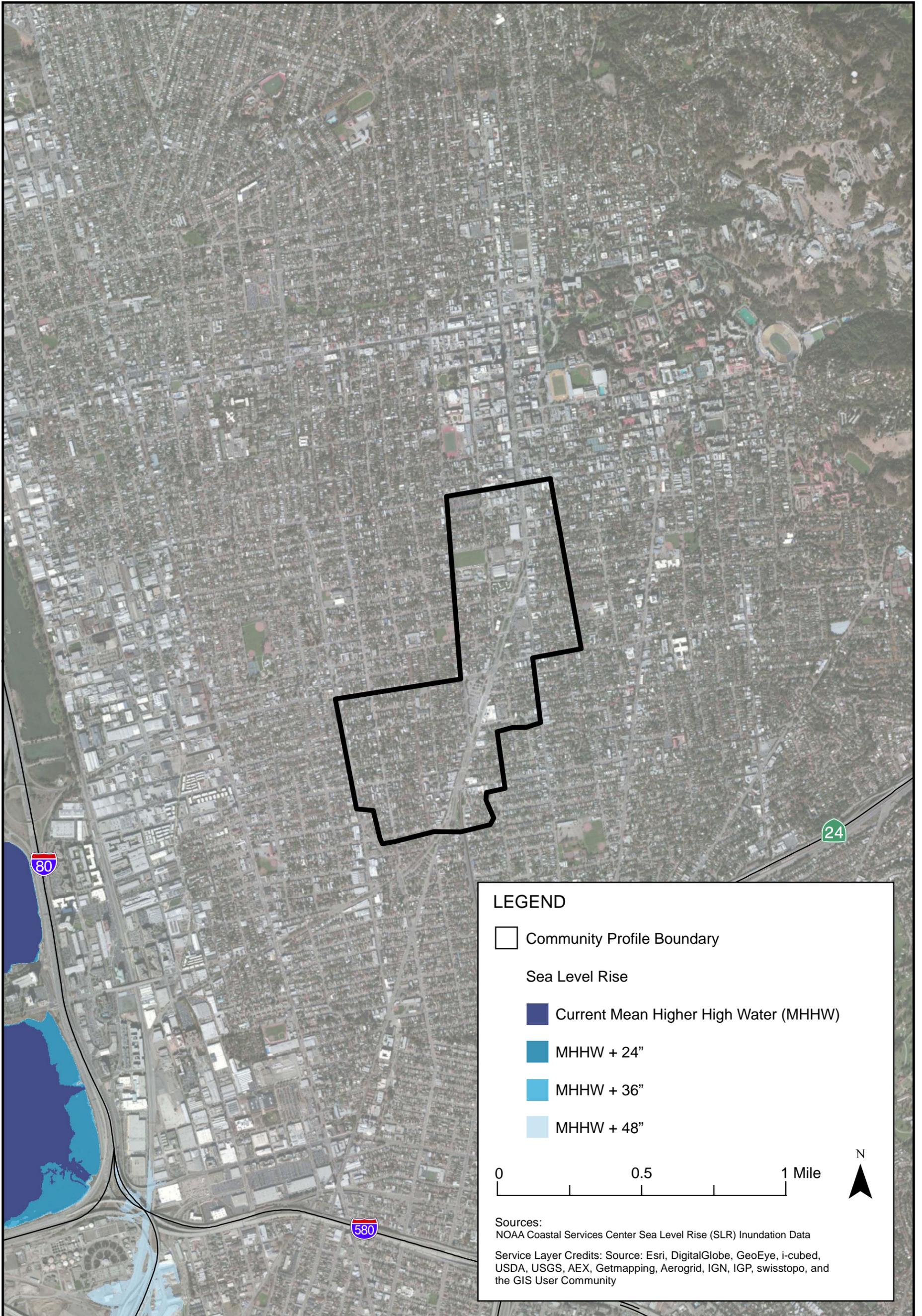
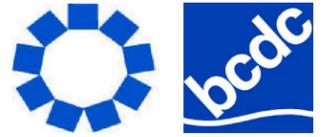
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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



**LEGEND**

- Community Profile Boundary

Sea Level Rise

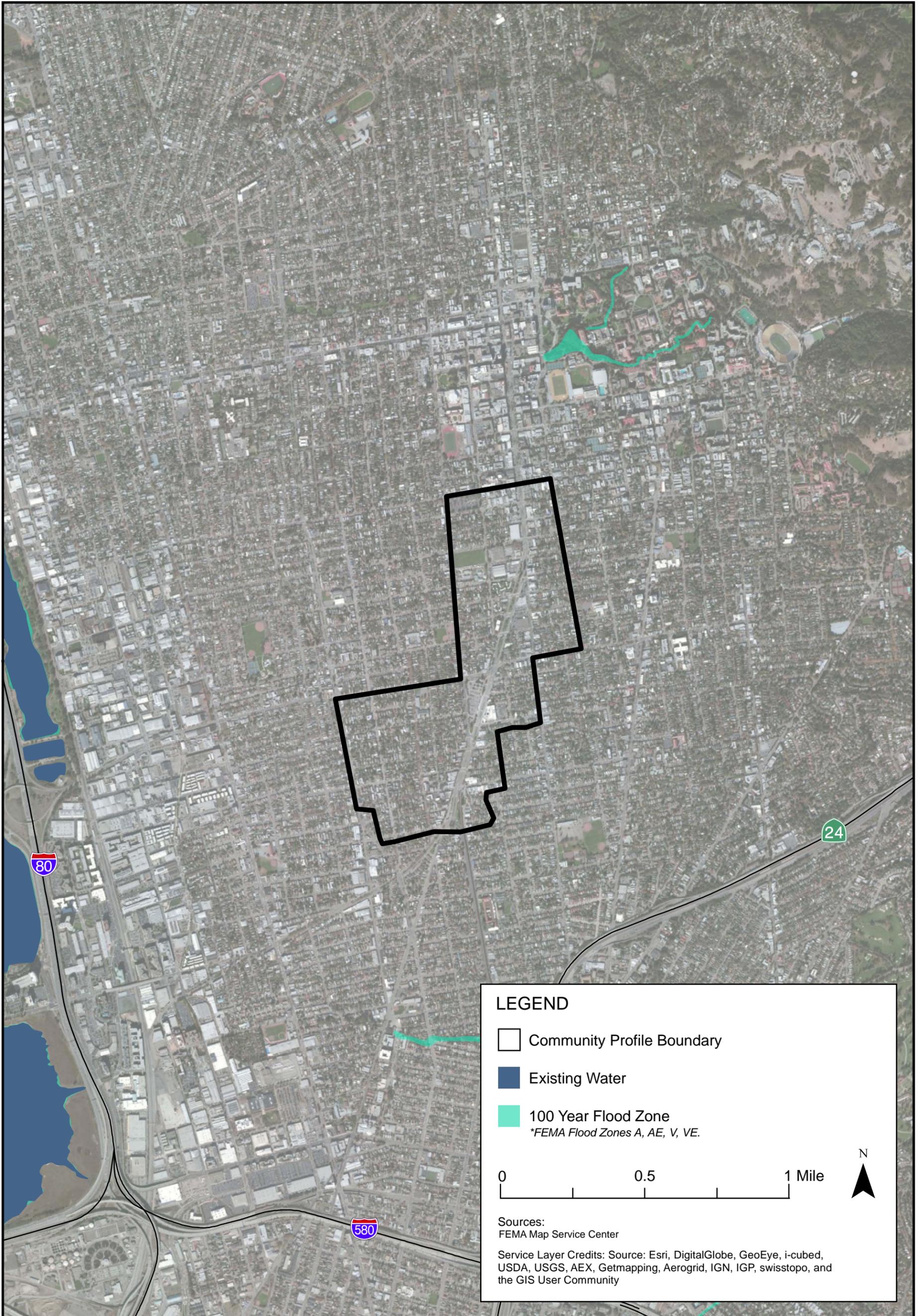
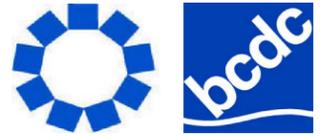
- Current Mean Higher High Water (MHHW)
- MHHW + 24"
- MHHW + 36"
- MHHW + 48"

0 0.5 1 Mile

Sources:  
NOAA Coastal Services Center Sea Level Rise (SLR) Inundation Data

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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

- Community Profile Boundary
- Existing Water
- 100 Year Flood Zone  
*\*FEMA Flood Zones A, AE, V, VE.*

0 0.5 1 Mile

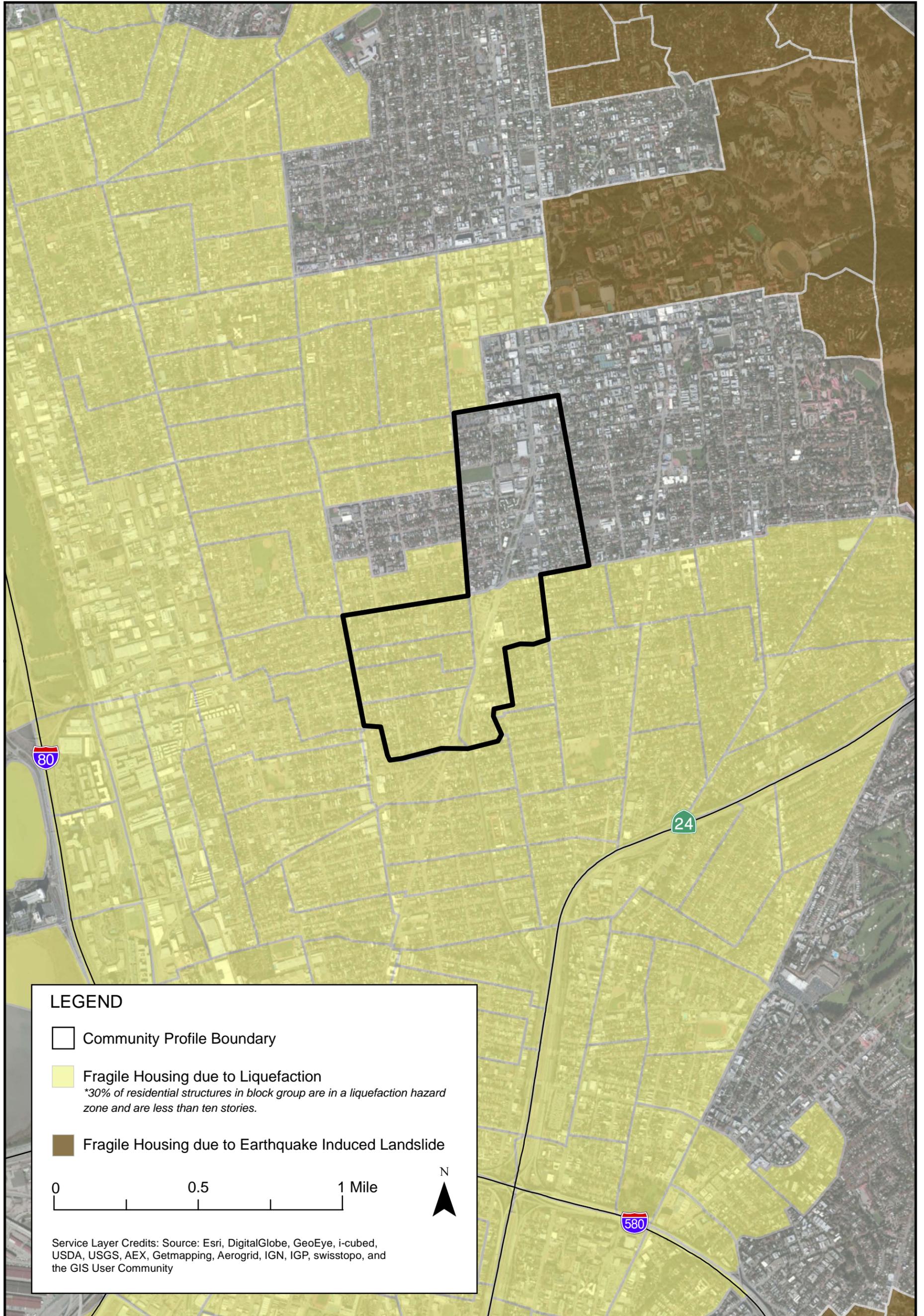
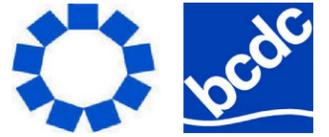


Sources:  
FEMA Map Service Center

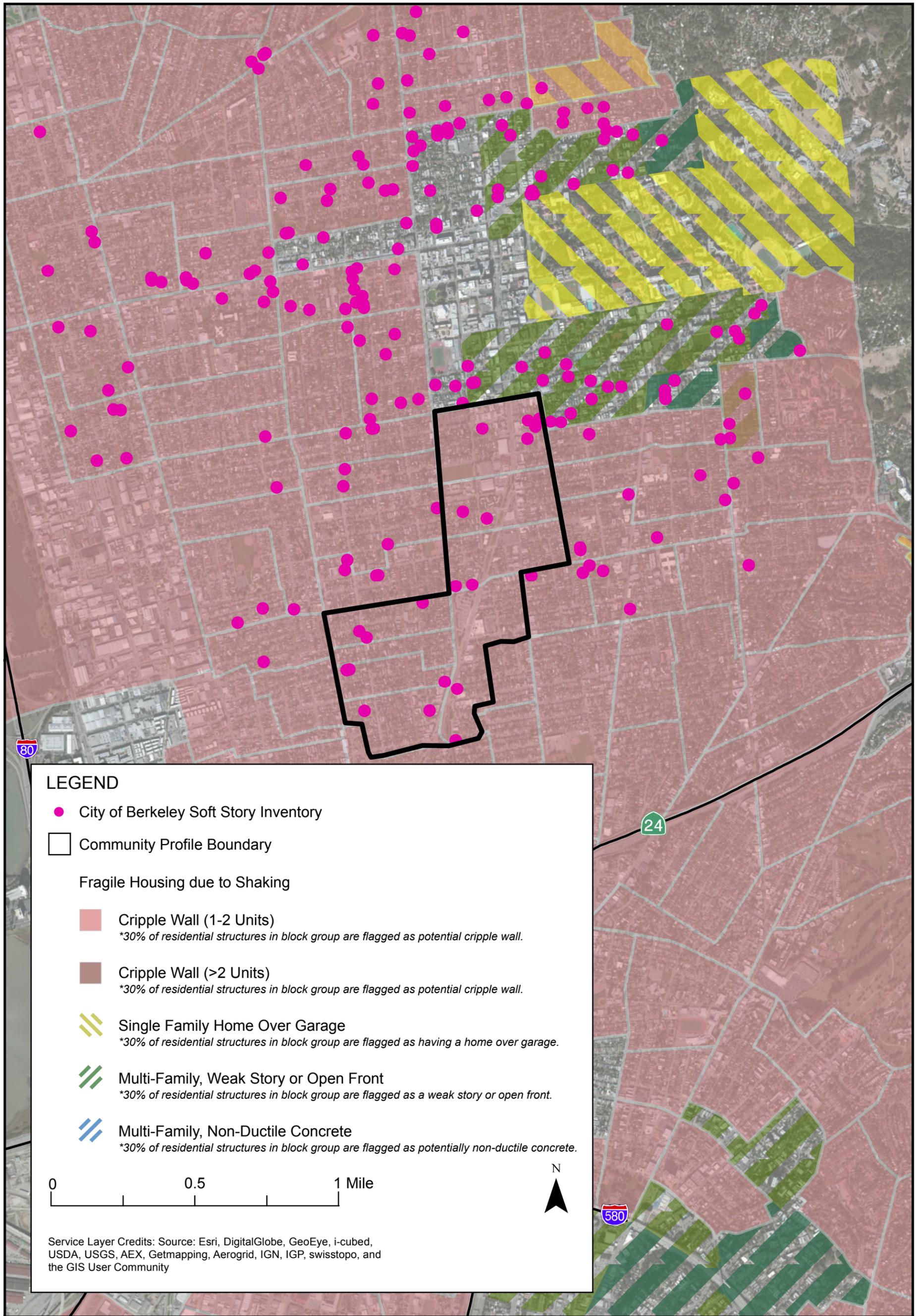
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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



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## LEGEND

● City of Berkeley Soft Story Inventory

□ Community Profile Boundary

### Fragile Housing due to Shaking

■ Cripple Wall (1-2 Units)  
\*30% of residential structures in block group are flagged as potential cripple wall.

■ Cripple Wall (>2 Units)  
\*30% of residential structures in block group are flagged as potential cripple wall.

▨ Single Family Home Over Garage  
\*30% of residential structures in block group are flagged as having a home over garage.

▨ Multi-Family, Weak Story or Open Front  
\*30% of residential structures in block group are flagged as a weak story or open front.

▨ Multi-Family, Non-Ductile Concrete  
\*30% of residential structures in block group are flagged as potentially non-ductile concrete.

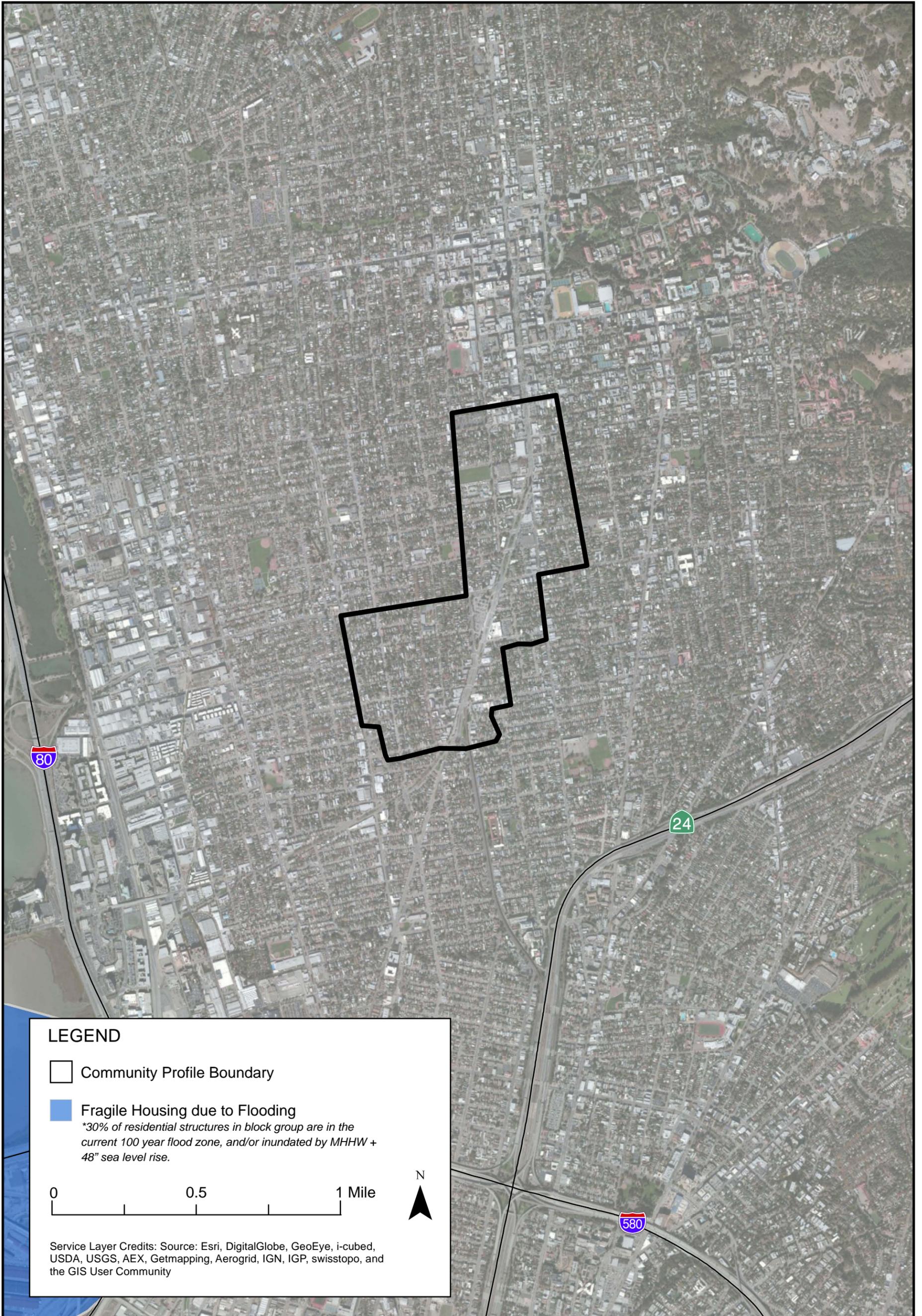
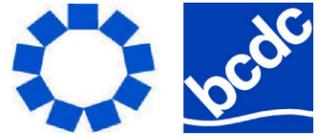
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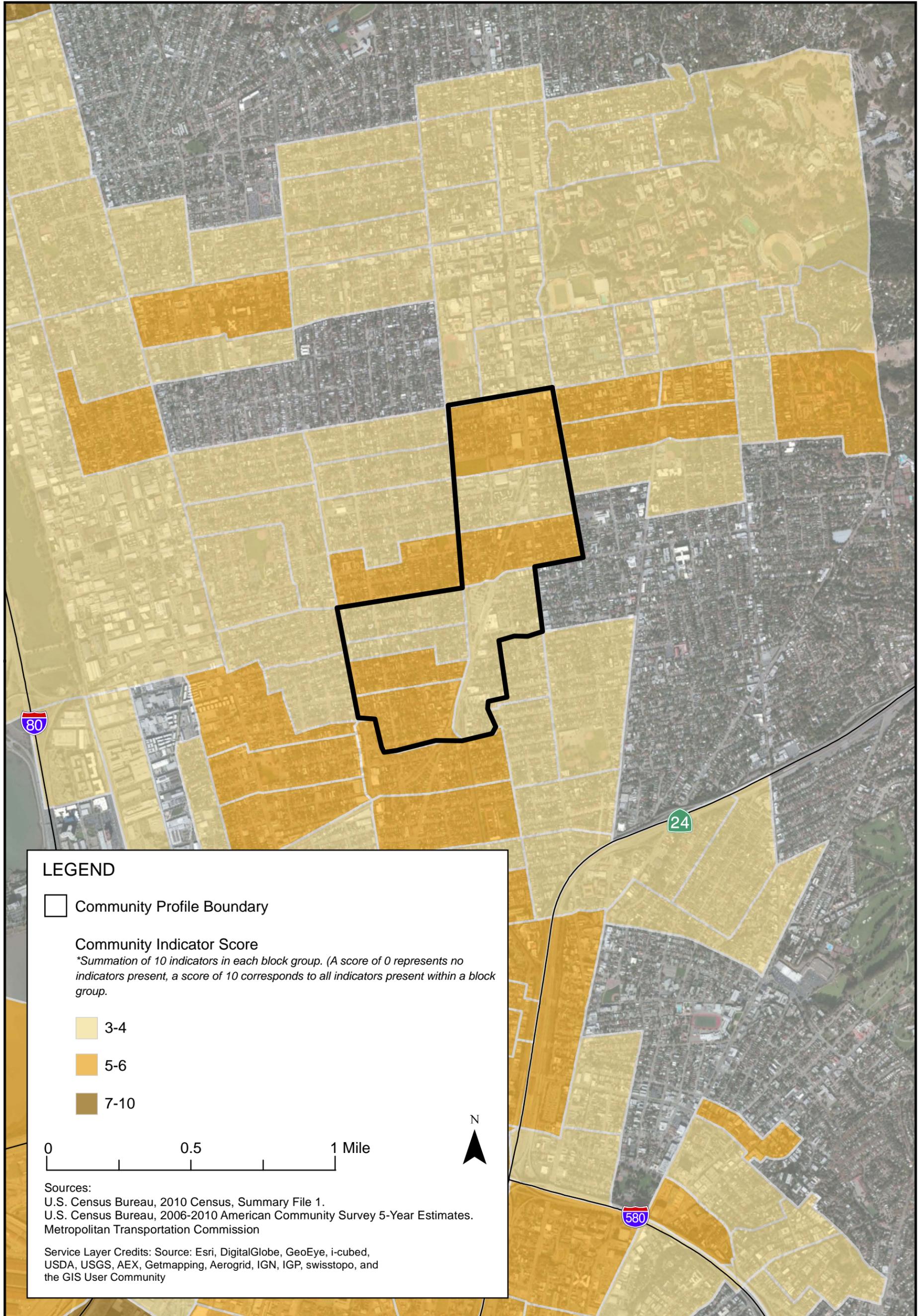
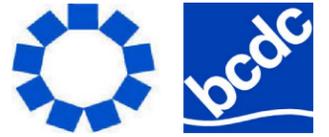
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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

 Community Profile Boundary

### Community Indicator Score

*\*Summation of 10 indicators in each block group. (A score of 0 represents no indicators present, a score of 10 corresponds to all indicators present within a block group.)*

 3-4

 5-6

 7-10

0 0.5 1 Mile



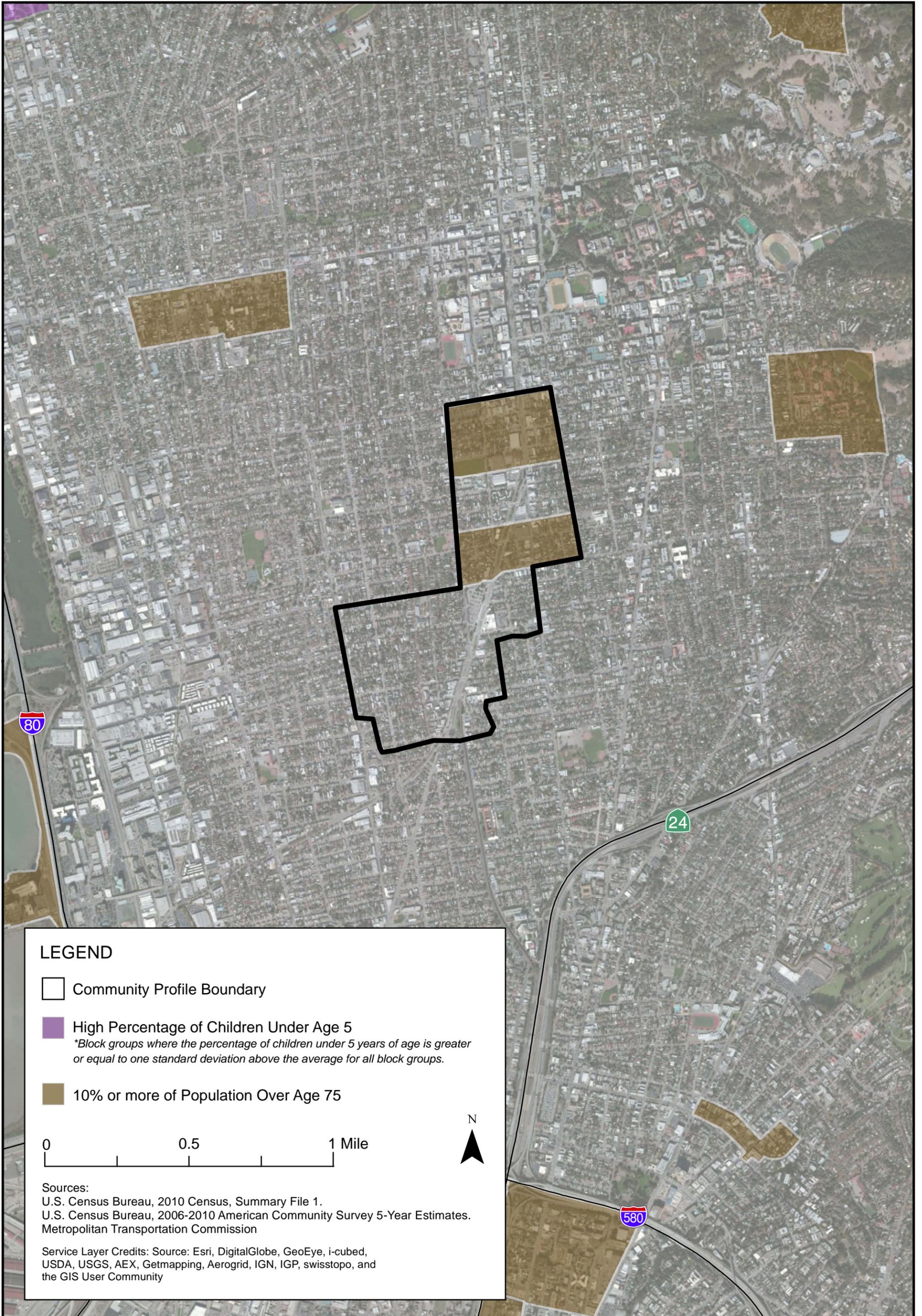
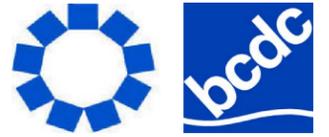
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Metropolitan Transportation Commission

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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

Community Profile Boundary

High Percentage of Children Under Age 5  
*\*Block groups where the percentage of children under 5 years of age is greater or equal to one standard deviation above the average for all block groups.*

10% or more of Population Over Age 75

0 0.5 1 Mile

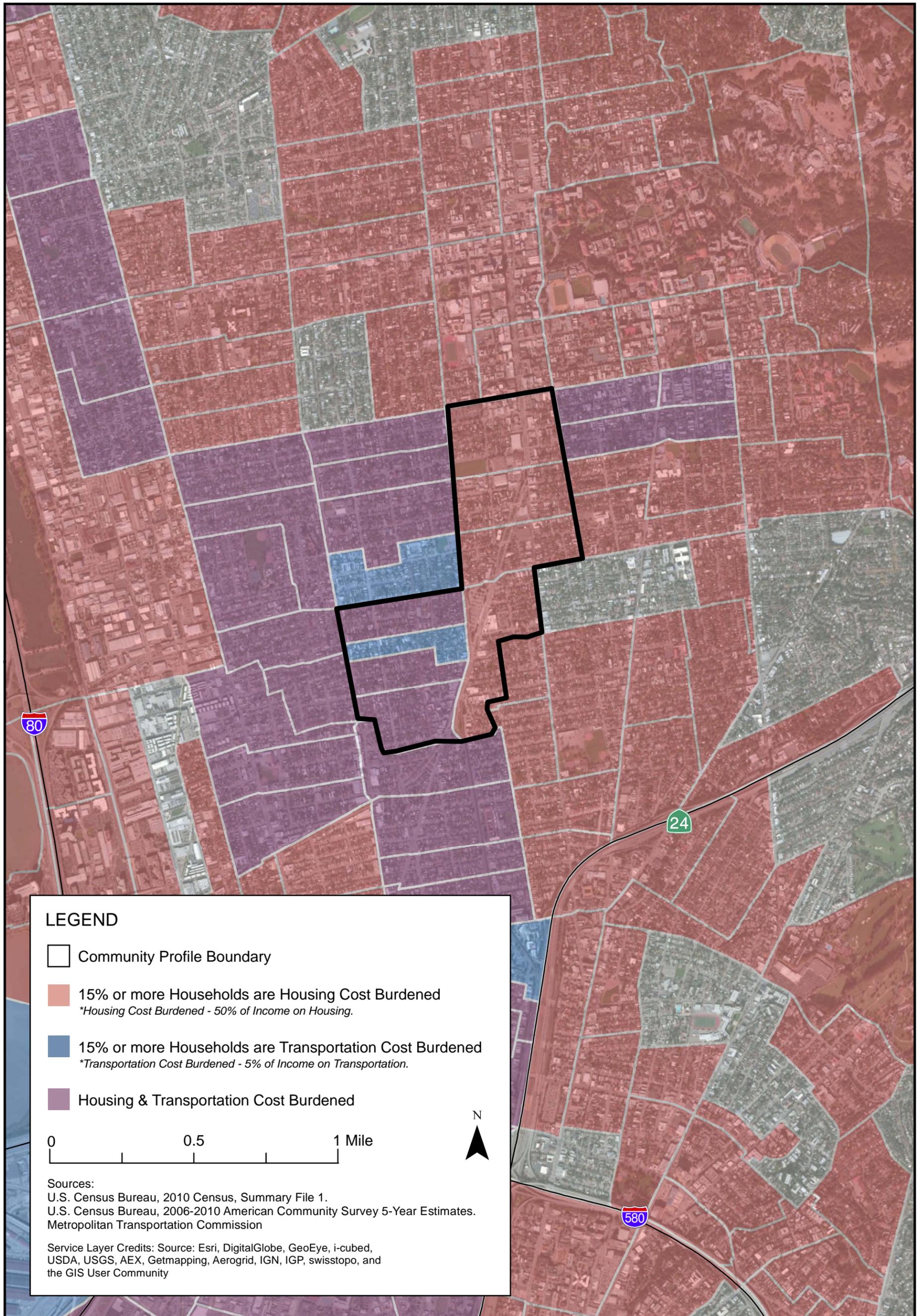
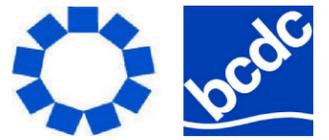


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

- Community Profile Boundary
- 15% or more Households are Housing Cost Burdened  
*\*Housing Cost Burdened - 50% of Income on Housing.*
- 15% or more Households are Transportation Cost Burdened  
*\*Transportation Cost Burdened - 5% of Income on Transportation.*
- Housing & Transportation Cost Burdened

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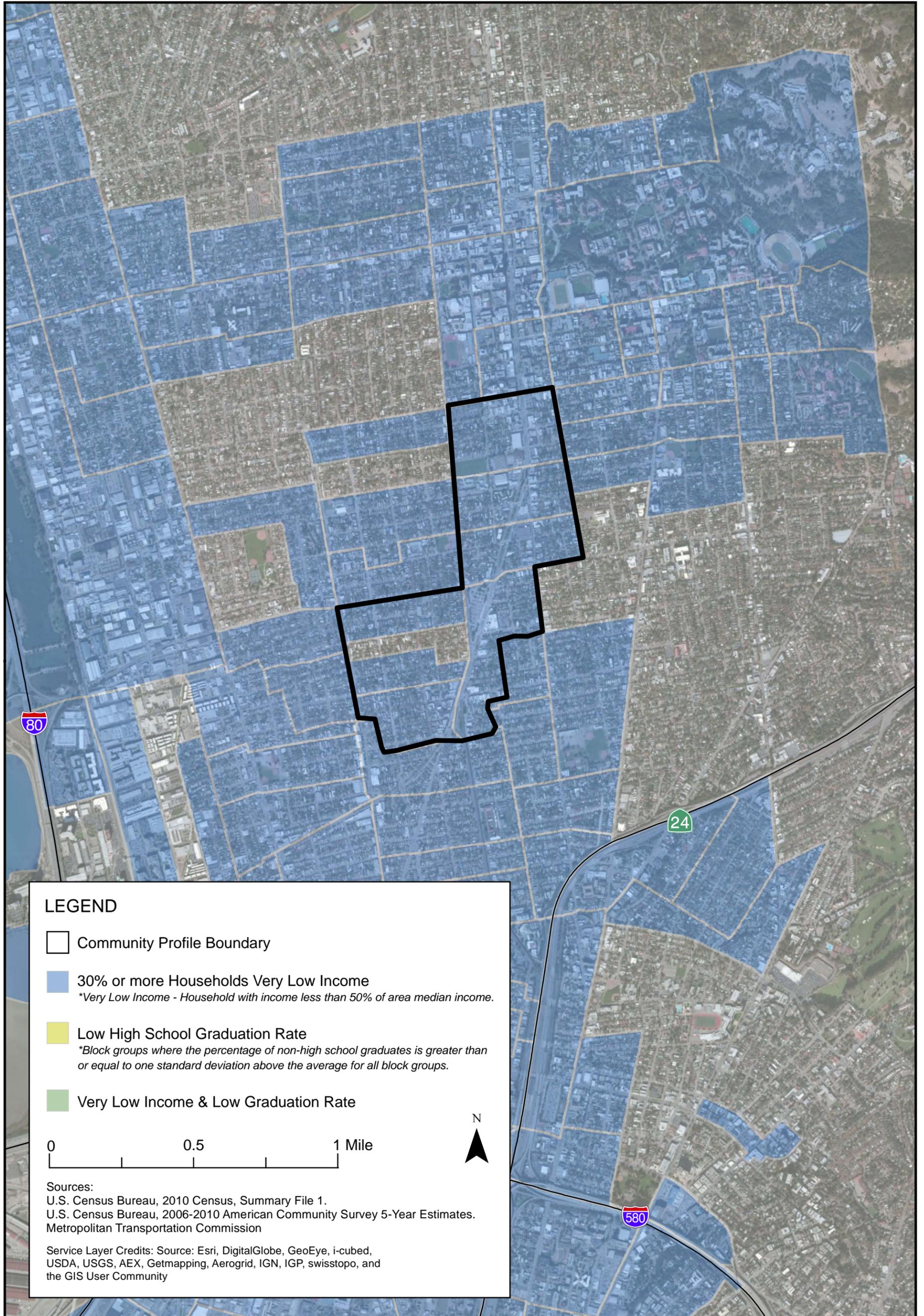
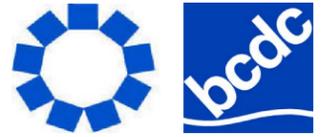


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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

-  Community Profile Boundary
-  30% or more Households Very Low Income  
*\*Very Low Income - Household with income less than 50% of area median income.*
-  Low High School Graduation Rate  
*\*Block groups where the percentage of non-high school graduates is greater than or equal to one standard deviation above the average for all block groups.*
-  Very Low Income & Low Graduation Rate

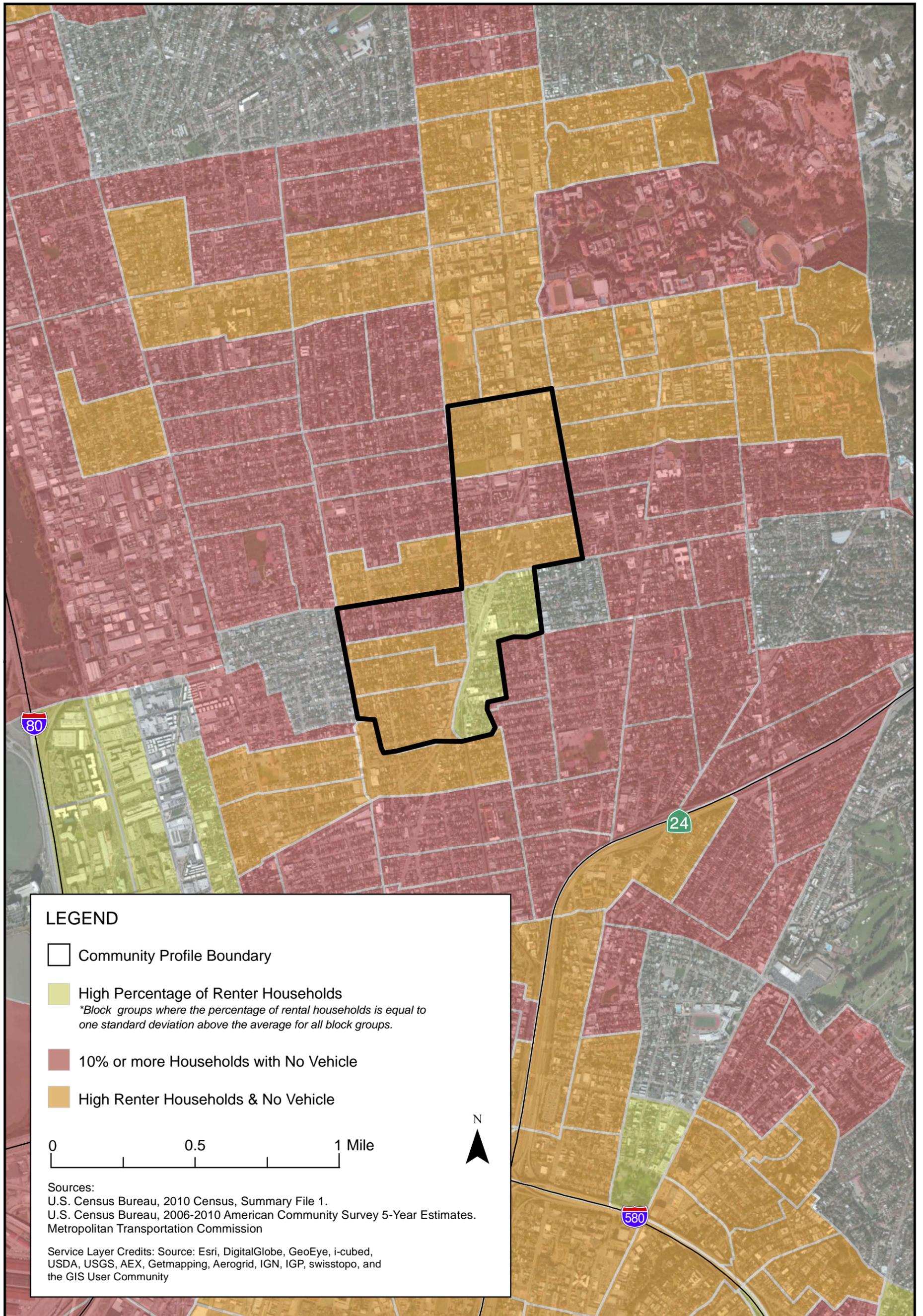
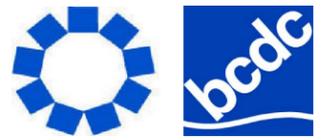
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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



## LEGEND

-  Community Profile Boundary
-  High Percentage of Renter Households  
*\*Block groups where the percentage of rental households is equal to one standard deviation above the average for all block groups.*
-  10% or more Households with No Vehicle
-  High Renter Households & No Vehicle

0 0.5 1 Mile



Sources:  
 U.S. Census Bureau, 2010 Census, Summary File 1.  
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# BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT

