

Stronger Housing, Safer Communities

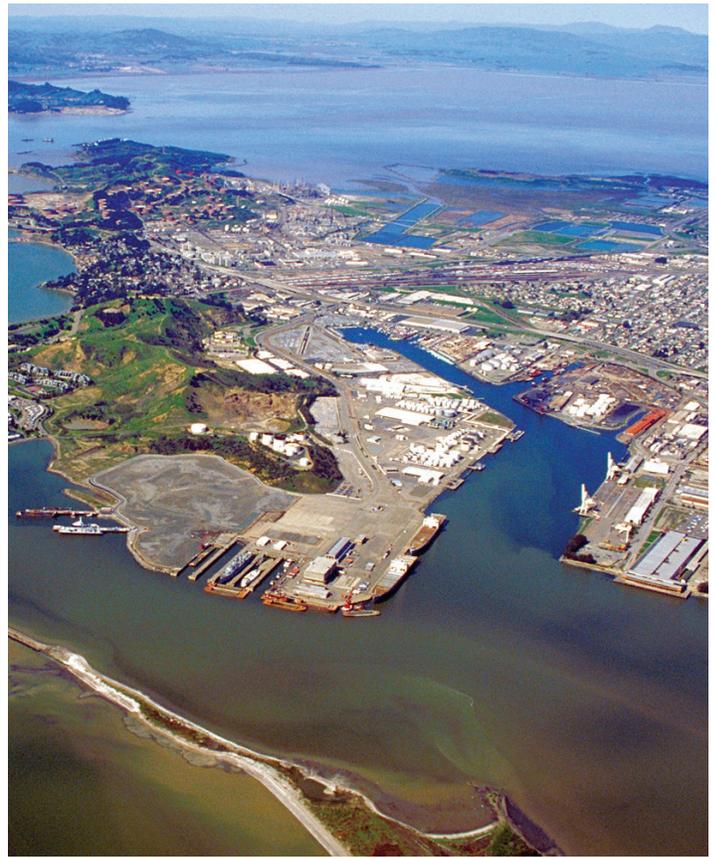
Community Profile Richmond

Key Issues

The Richmond Community Profile Area is a mixture of established single-family residential neighborhoods and areas of anticipated future mixed use development. Over half of the existing housing was built after 1980 to modern seismic codes, however most is less than 10 stories and is therefore unlikely to have a foundation that can withstand liquefaction. This poses a risk in the portion of the profile area located along the shoreline where there are pockets of Bay fill that are susceptible to liquefaction. Much of this same area is also within the current 100-year flood plain and is susceptible to future flooding as sea level rises. Development and re-development in these areas will need to consider how best to grow in a safe and smart manner that increases resilience and ensures recovery. In general, those that live in the profile area is very low income and are housing and transportation cost burdened. The established neighborhoods north of 1-580 have a high percentage of renters, many of which are transit dependent. These neighborhoods are ethnically diverse with many areas having a high percentage of non-English speaking households. These combination of characteristics suggests that the established 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 to evacuate. These characteristics also 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 Richmond Community Profile Area is located along the Richmond Inner Harbor in the southern portion of the City. The profile area includes two Census Tracts: 3790 and 3800 and all or part of eight-neighborhoods: Atchison Village, Iron Triangle, Santa Fe, City Center, Coronado, Cortez, Marina Bay and Southwest Annex. It also includes all of the City's South Shoreline Specific Plan area, the Ford Penin-



sula major activity center in Marina Bay, and two Districts, Regatta/Marina Bay and Southern Gateway (Richmond General Plan 2030). Transportation routes include I-580, Union Pacific Rail Road, and a network of streets and roadways including Cutting and Carlson Boulevards and Harbour Way. The northern portion of the profile area (north of 1-580) is comprised of existing residential neighborhoods, while the southern portion (south of 1-580) is an area of anticipated future growth and land use change. Current land uses in the profile area include residential, medium density/intensity mixed use, regional commercial mixed use, and business/light industrial, and open space

There are significant areas of tidal marsh, rivers, wetlands, parks, and open space in the SSSP area. In particular;

- Tidal marshes predominate along the shoreline between the Marina Bay neighborhood to the west and McLaughlin Eastshore State Park to the east, and in some areas extend up to ¼ mile inland.
- Four riparian corridors including Arlington Creek, Baxter Creek, Regatta Slough, and Meeker Slough which are both natural and channelized and have portions underground in their upstream segments.

- A significant area of coastal prairie on the UC Berkeley Field Station site just east of Regatta Slough.

The South Shoreline Specific Plan (SSSP) envisions the transformation of the currently underutilized industrial waterfront in the profile area into a revitalized, pedestrian-oriented district (South Shoreline Specific Plan Existing Conditions Report, September 2013). Planned future growth includes a mixture of high-intensity research and development, commercial uses, and new medium-density housing. Richmond is projected to have a 1.2% annual population growth between 2010 and 2030, with the SSSP area expected to see a 38% increase in households (approximately 1400 new households). Vehicular, bike and pedestrian connectivity into and out of the SSSP area is currently a challenge because the street and road network in the area is disconnected and discontinuous, and there are numerous rail lines, rail spurs and at-grade crossings that present mobility and safety challenges. The SSSP will incorporate detailed land use recommendations, a multi-modal transportation and circulation plan to help improve connectivity, design guidelines for catalyst sites, and a phasing and implementation plan that prioritizes infrastructure investments.

Hazards

Due to its proximity to the Hayward Fault, the entire profile area is subject to ground shaking of MMI XIII¹ or higher from either a Hayward or San Andreas event. The portion of the profile area located along the shoreline where there are pockets of Bay fill is a liquefaction hazard zone, meaning that the soil types are susceptible and the area is likely to be shaken long and hard enough to trigger liquefaction. The southeastern portion of the profile area is within the current 100-year flood plain, and much of this same area is also susceptible to future flooding as sea level rises. Beyond the profile area boundary, future flooding during storm events could affect regionally significant transportation routes such as I-580 as well as local streets and roads and other critical community infrastructure. There are also a number of secondary hazards that could be

1 The Modified Mercalli Intensity (MMI) scale depicts shaking severity. MMI VIII is very strong shaking that can cause extensive damage to unreinforced masonry buildings, including partial collapse; fall of some masonry walls; twisting, falling of chimneys and monuments; wood-frame houses move on foundations if not bolted; loose partition walls thrown out (<http://quake.abag.ca.gov/shaking/mmi/>).

triggered by a seismic event including fire or flooding due to pipe breakage. Contra Costa County has a gas shutoff ordinance for all new construction or major renovations initiated after November 2006, which may reduce the risk of fire following earthquake. 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

There are approximately 5,100 existing housing units within the profile area, the majority of which are located in the northern portion of the area north of I-580 and south of West Ohio Avenue, or in Marina Bay along the Richmond Inner Harbor Basin. Existing housing is mostly detached, single-family homes (38%), 3-4 unit buildings (20%), 5-9 unit buildings (13%), or attached single-family homes (12%). The existing housing stock does include a very small number of mobile homes and some multi-unit buildings (i.e., >10 units). The project's regional analysis found that none of the block groups in the profile area have a triggering level (30% or more) of housing units vulnerable to ground shaking. This is likely because over half of the existing housing was constructed after most modern seismic codes were adopted (i.e., after 1980). Of the half that was constructed before 1980, 25% were built between 1950 and 1969 meaning that some of the multi-family units could be non-ductile concrete and therefore highly vulnerable to ground shaking. No block groups were identified with a triggering level of housing vulnerable to flooding as there is minimal housing in the areas currently identified as 100-year flood plain. The majority of the profile area does, however, 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 is comprised of block groups with greater than 30% of households that are very low income (earning less than 50% of area median income), greater than 15% of all households that are housing and transportation cost burdened (spending 50% or more of their income on housing and 5% or more on transportation costs). The northernmost block groups, between W. Ohio Ave. and Cutting Blvd,

Richmond Parkway and I-580 to South 37th Street, in addition to having 30% of households that are very low income households, this area has a low high school graduation rate compared to the regional block group average, a high percentage of renters, and greater than 10% of the households without a vehicle.

The entire profile area, except for the block group that includes Marina Bay area, has 70% or more non-white community members and only a couple of areas do not 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). The racial composition within the profile area is similar to the overall city racial composition, with approximately: 1/3 African American, 1/3 Hispanic or Latino, 1/10 Asian, and 1/5 Caucasian.

The age distribution in the profile area generally follows the city-wide distribution, and there were no block groups with a high percentage of children under 5 years old or with greater than 10% of the population over 75 years old.

Resident of the profile area are diversely employed, however two fields, health care and social assistance and manufacturing, each represent 11% of total employment by industry. Very few, approximately 3%, of the approximately 3,500 employed profile area residents work within the profile area (South Shoreline Specific Plan Existing Conditions Report, September 2013).

The average household size in the profile area is 2.7 persons person household, with 60% of the households having 1-2 person and 15 % with greater than 5 persons. Approximately half of the households in the profile area are renter-occupied and half are owner-occupied. There is a low vacancy rate (11%) in the profile area, and the majority of both renters and owners pay greater then 30% of income on housing (cost burdened). Almost a third (28%) of cost burdened renters and two-fifths (40%) of cost burdened owners are severely cost burdened, paying more than 50% of their income on housing.

Community Serving Facilities

Community services in the profile area include two fire stations, Richmond/El Cerrito Fire Station,

Primary and Secondary and eight neighborhood council groups: Iron Triangle, Atchison Village, City Center, Santa Fe, Coronado, Cortez/Stege, Marina Bay, and Southwest Annex. There are no police stations, hospitals, or medical facilities except for one skilled nursing facility (Shields-Richmond Nursing Center).

Community facilities or public spaces that could serve as gathering locations or sources of emergency information or assistance include two public high schools, eight public elementary schools, the MLK Community Center in the profile area and two other community centers just outside (Booker T. Anderson and Nevin Community Center), and two churches (Elisabeth Missionary and Harmony Missionary Baptist, and a number of parks including Marina park, Rosie the Riveter park and WWII Homefront National Historical Park, Lucretia Edwards park, Vincent Park, Shimada Friendship park, Regatta Blvd plaza and pedestrian main street.

Image credit: U.S. Army Corps of Engineers Digital Visual Library

BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

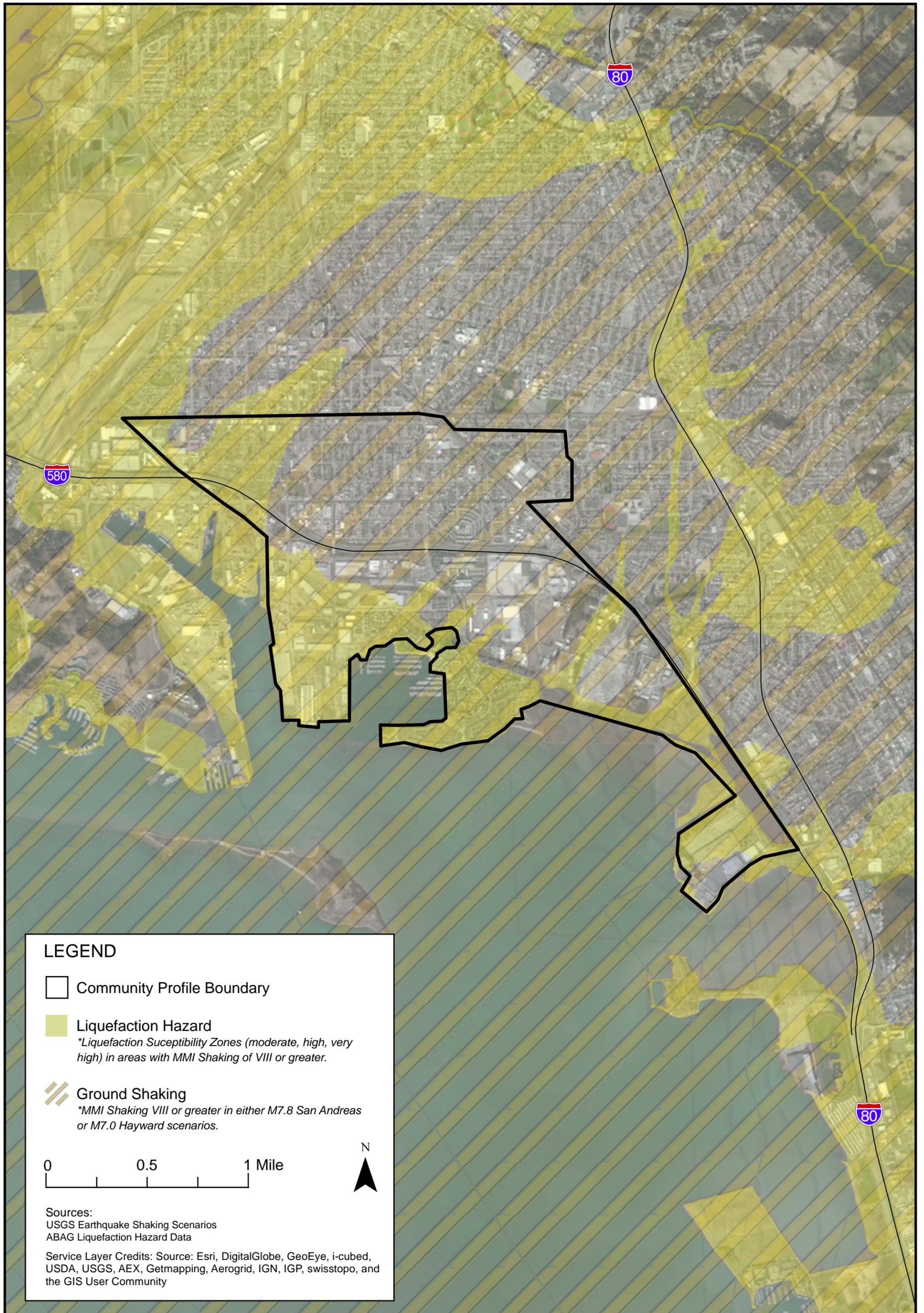
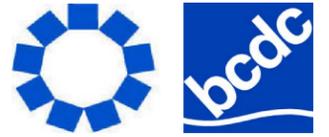
-  Community Profile Boundary
-  Open Space
-  Block Group Boundary
-  Specific Plan Boundary
South Shoreline Specific Plan
-  PDA Boundary
South Richmond PDA

0 0.5 1 Mile

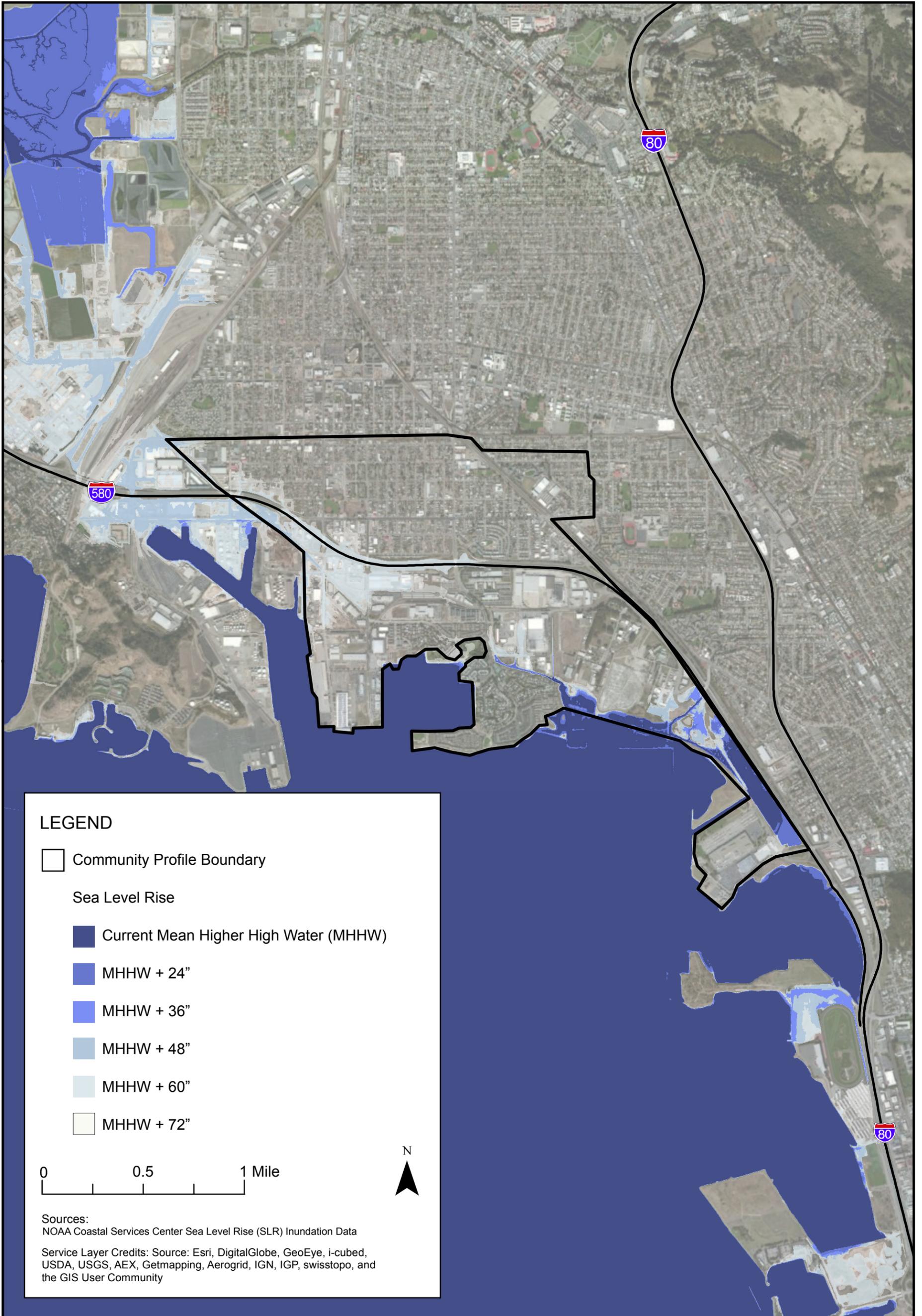
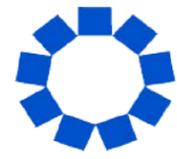


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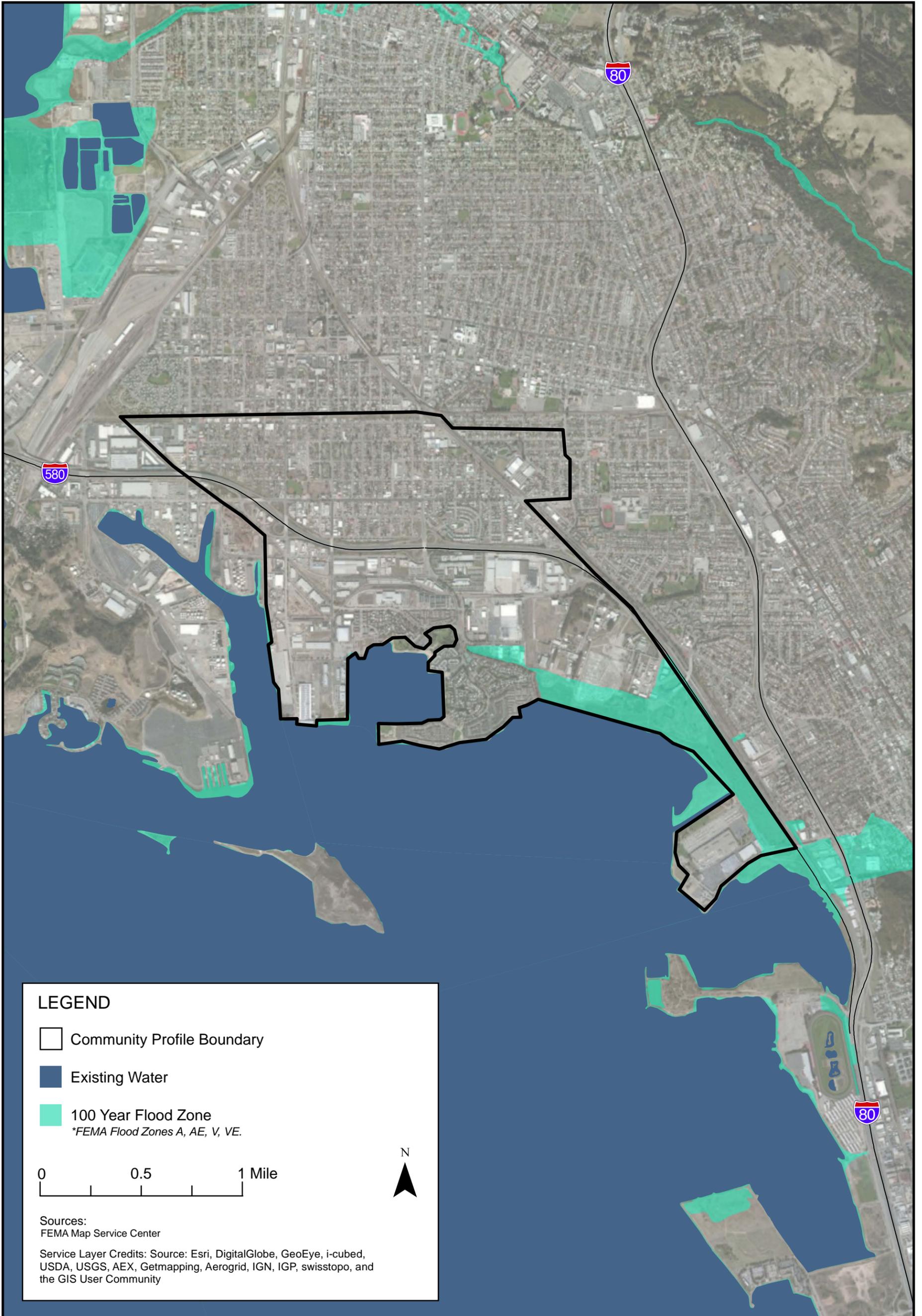
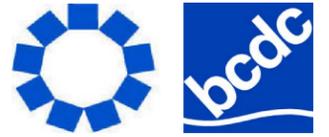
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LEGEND

Community Profile Boundary

Existing Water

100 Year Flood Zone
**FEMA Flood Zones A, AE, V, VE.*

0 0.5 1 Mile

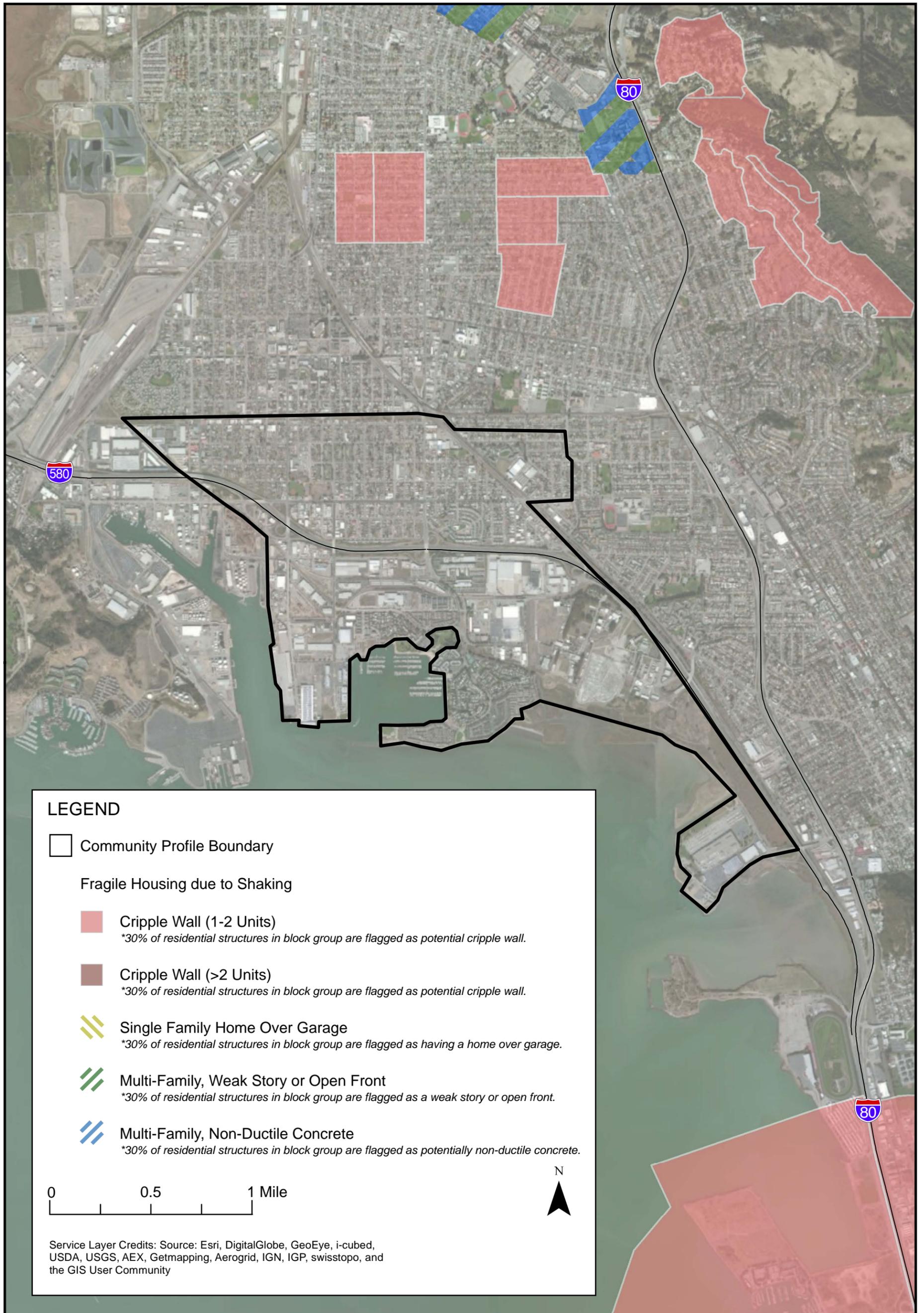
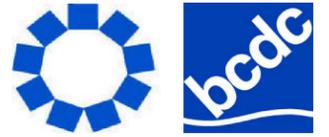


Sources:
FEMA Map Service Center

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Community Profile Boundary

Fragile Housing due to Shaking

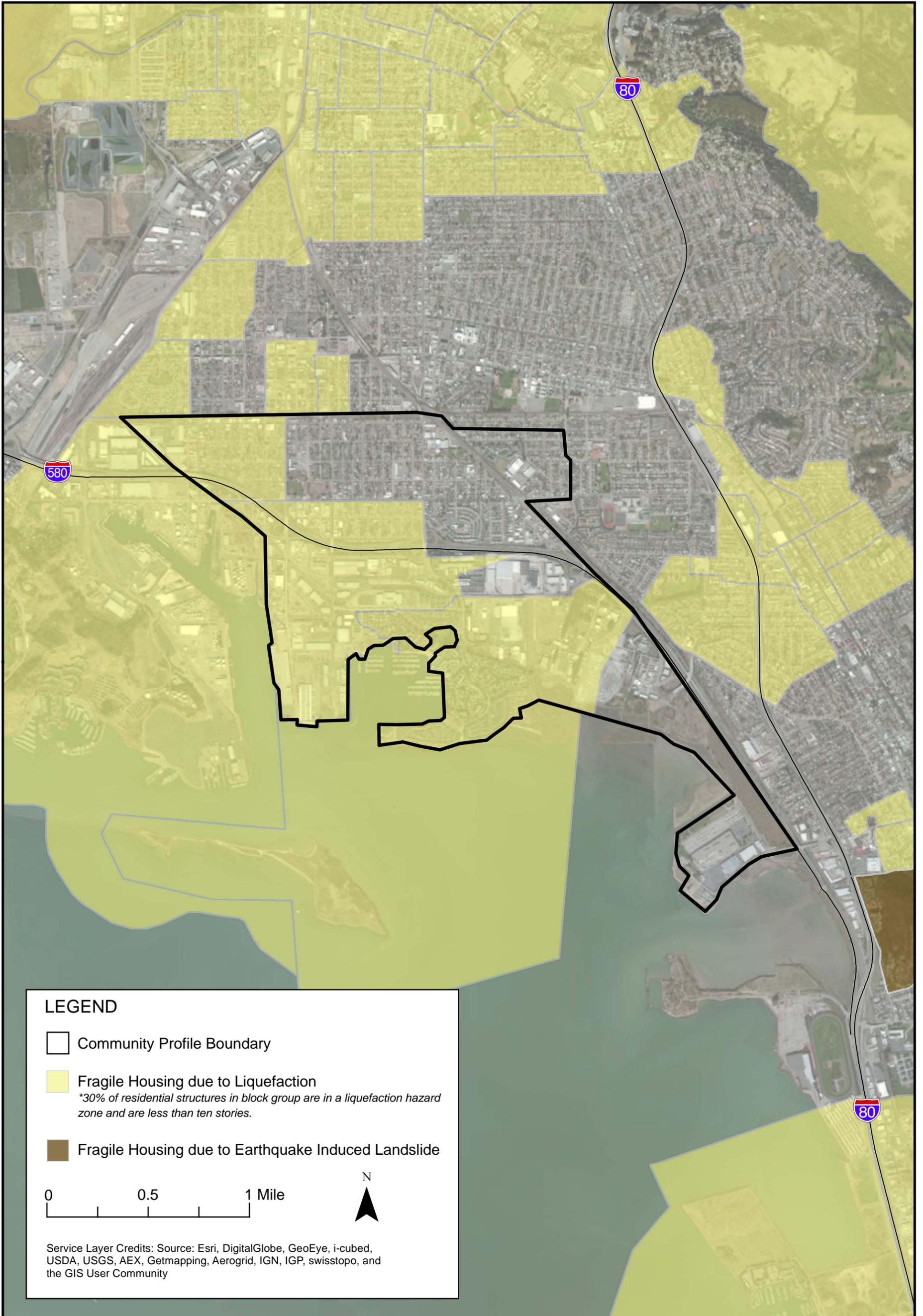
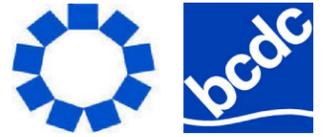
- Cripple Wall (1-2 Units)
**30% of residential structures in block group are flagged as potential cripple wall.*
- Cripple Wall (>2 Units)
**30% of residential structures in block group are flagged as potential cripple wall.*
- Single Family Home Over Garage
**30% of residential structures in block 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.*

0 0.5 1 Mile



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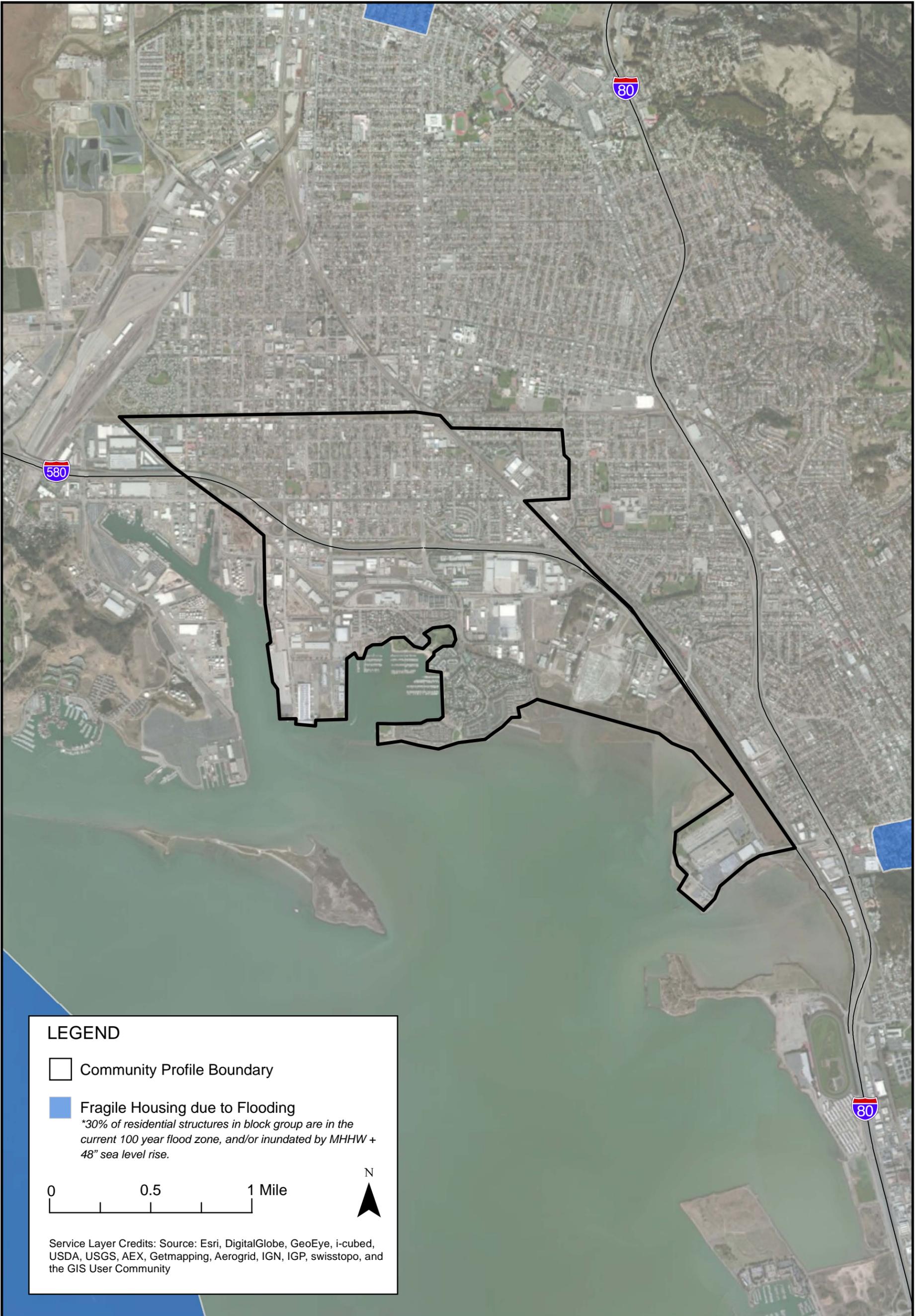
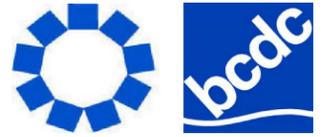
-  Community Profile Boundary
-  Fragile Housing due to Liquefaction
**30% of residential structures in block group are in a liquefaction hazard zone and are less than ten stories.*
-  Fragile Housing due to Earthquake Induced Landslide



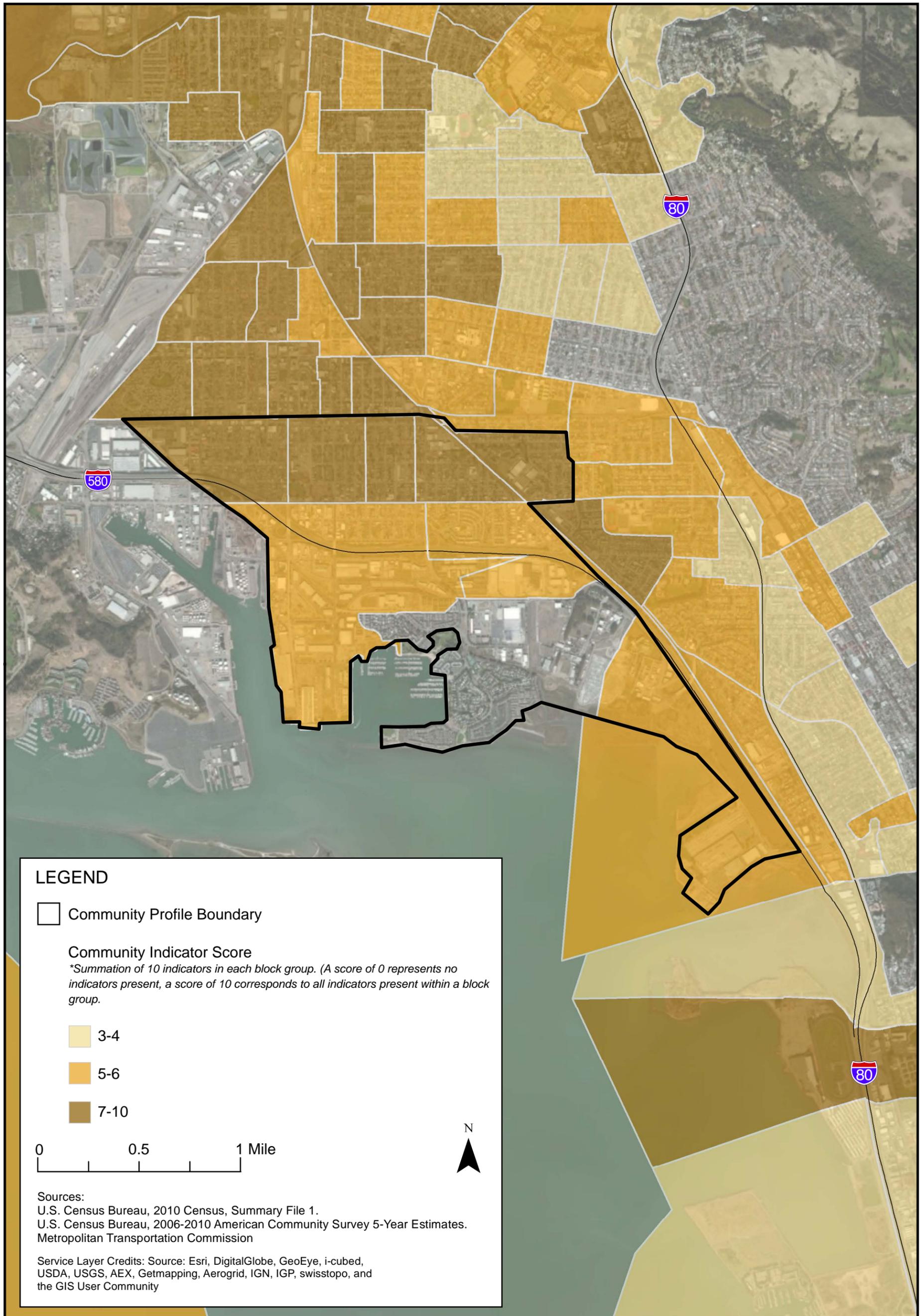
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LEGEND

 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

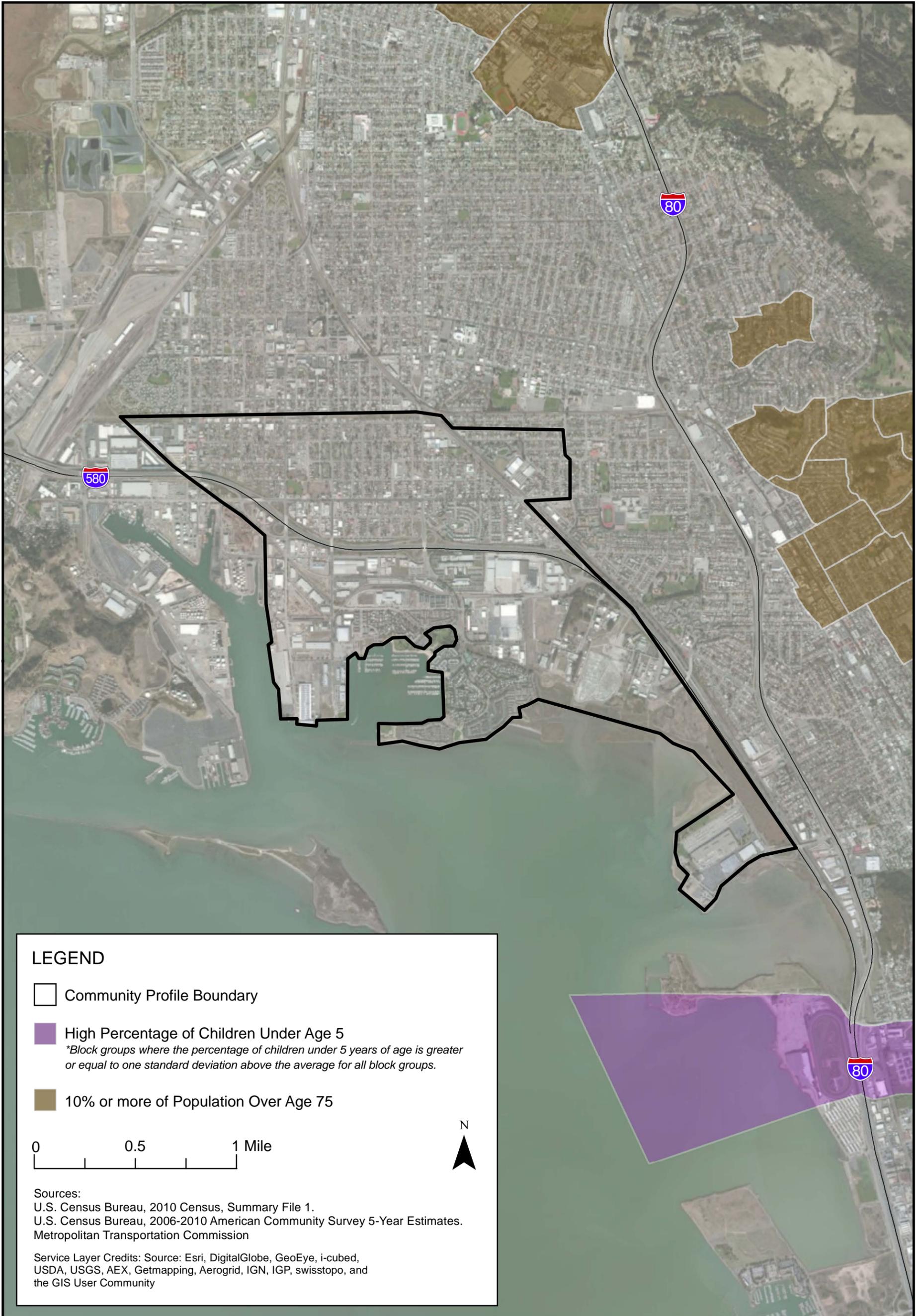
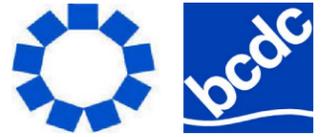


Sources:
 U.S. Census Bureau, 2010 Census, Summary File 1.
 U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.
 Metropolitan Transportation Commission

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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

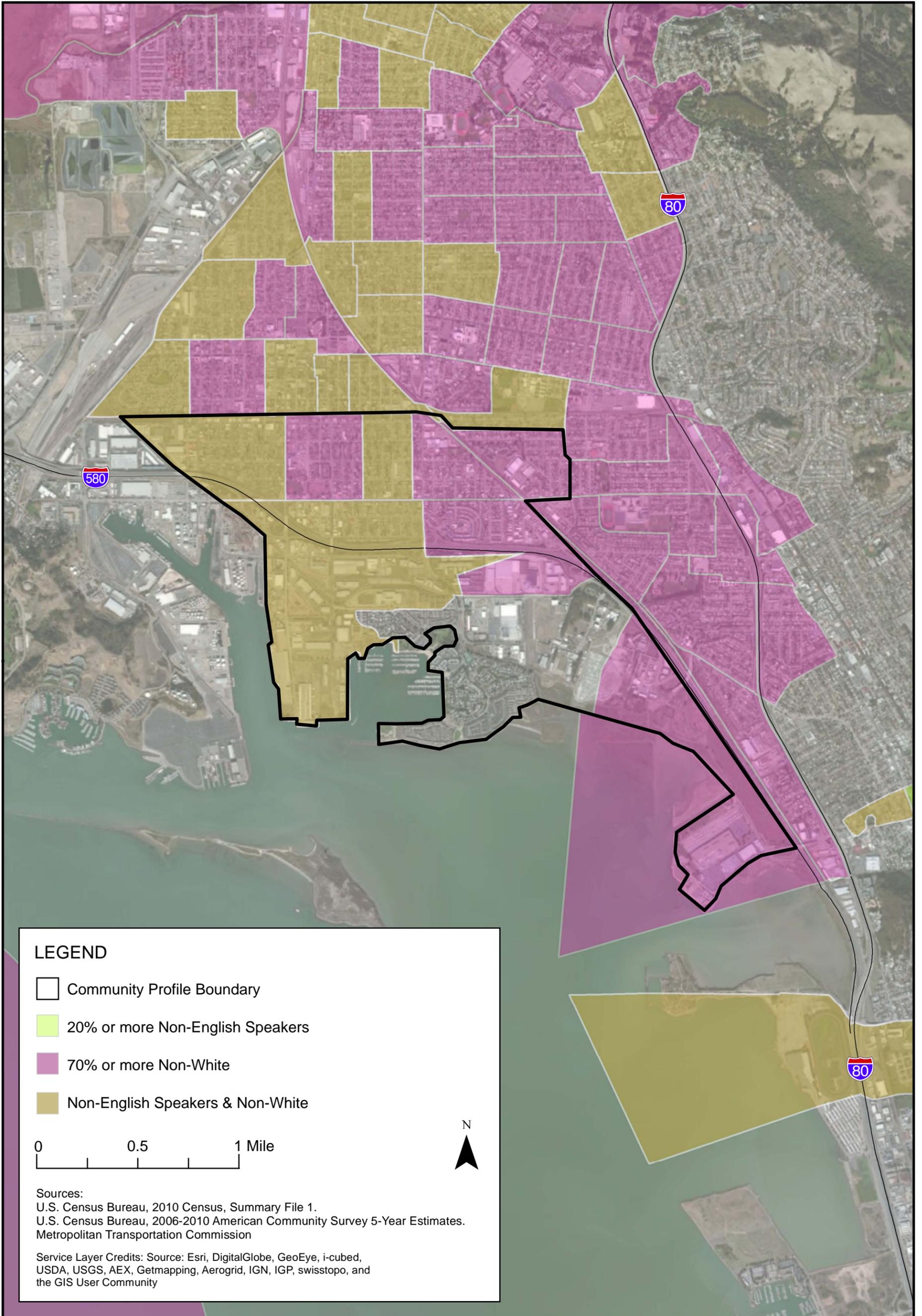
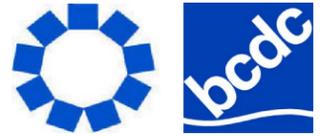
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LEGEND

- Community Profile Boundary
- 20% or more Non-English Speakers
- 70% or more Non-White
- Non-English Speakers & Non-White

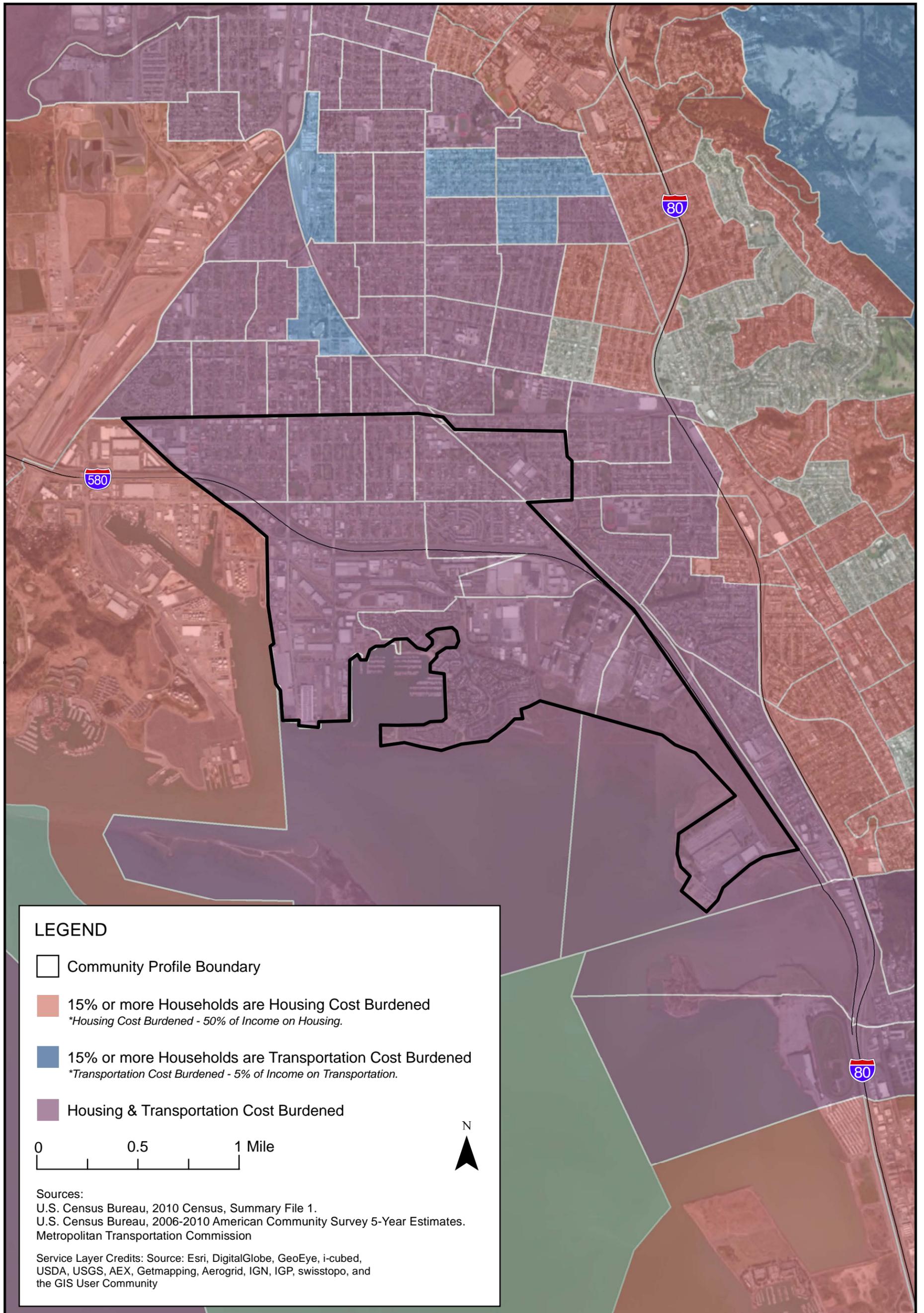
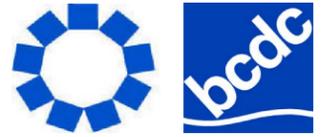
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-  Community Profile Boundary
-  15% or more Households are Housing Cost Burdened
**Housing Cost Burdened - 50% of Income on Housing.*
-  15% or more Households are Transportation Cost Burdened
**Transportation Cost Burdened - 5% of Income on Transportation.*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

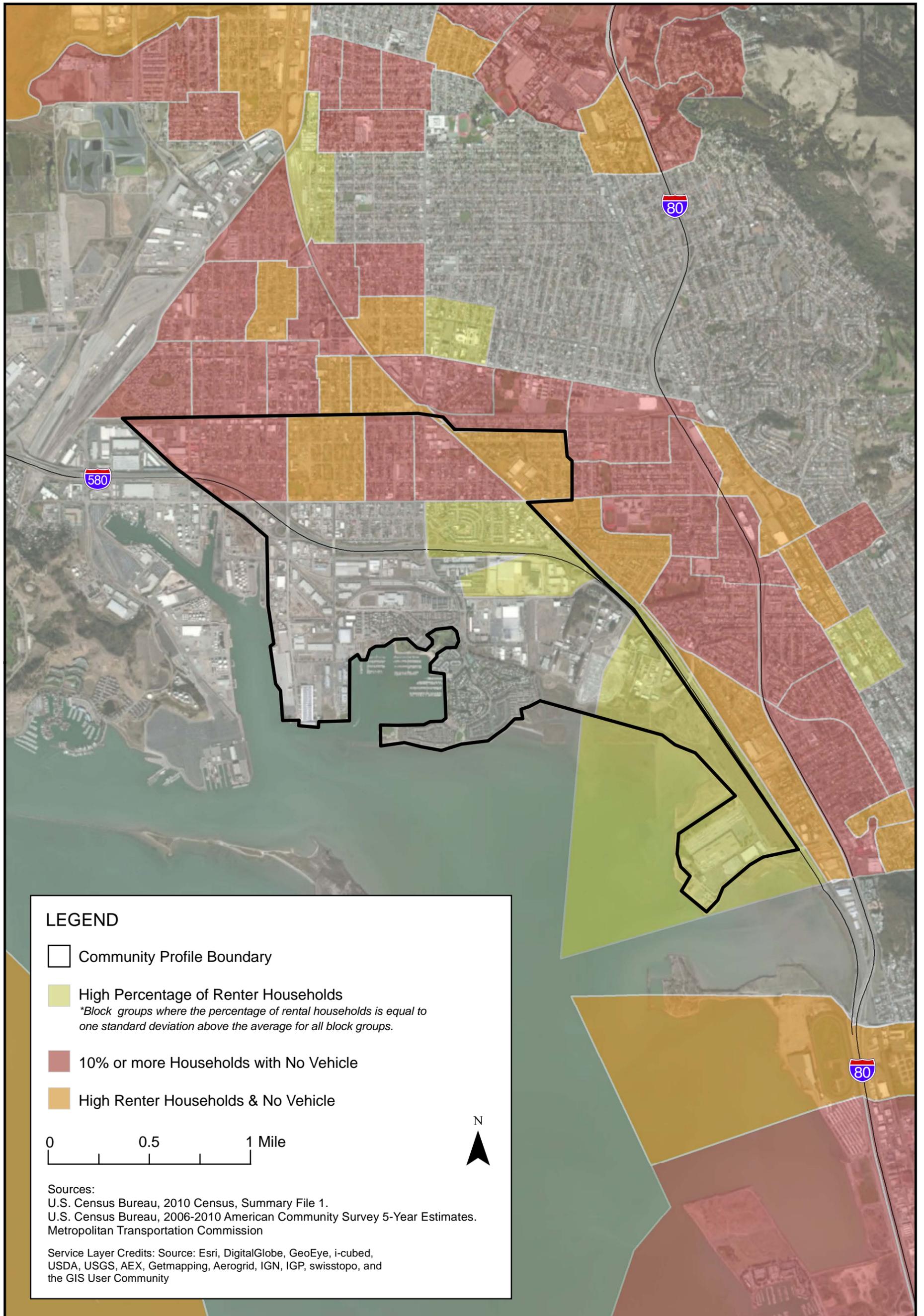
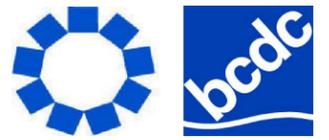
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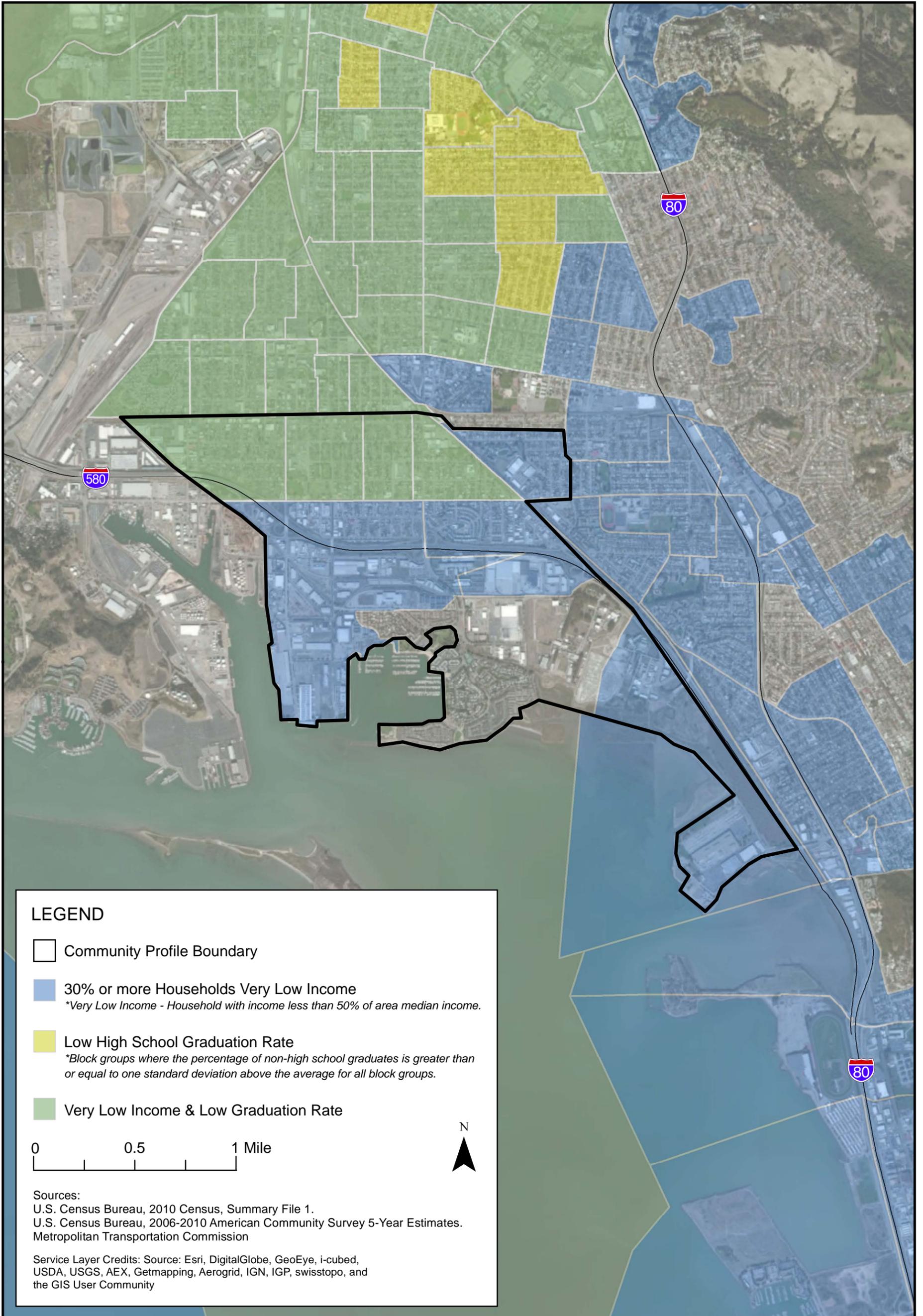
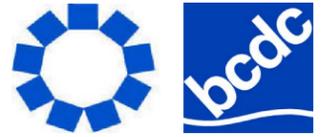
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LEGEND

-  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

0 0.5 1 Mile



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