

Stronger Housing, Safer Communities

Community Profile

San Rafael

Key Issues

The San Rafael Community Profile Area is mostly residential with some of the highest density housing in Marin County. Much of this housing is less than 10 stories tall due to San Rafael's height restrictions (ranging from 30-36 feet depending on the area) and is therefore unlikely to have a foundation that can withstand liquefaction. The majority of the profile area lies within a liquefaction hazard zone, which, in conjunction with the presence of fragile housing types means that there is significant earthquake risk for the profile area. Additionally, there is significant risk to current and future flooding, as approximately half of the profile area lies within the current 100-year floodplain. As for the community risk attributes of the profile area, while there are block groups with high percentages of renter, low-income and housing cost burdened households; there are relatively low percentages of transit dependent and transit cost burdened households. Although this combination of characteristics suggests that owners and renters in portions of the profile area may be better equipped to evacuate in the event of a natural disaster, it also means that they may be more likely to be displaced if their homes are damaged, and may struggle to find affordable housing elsewhere.

Description of the Profile Area

The Santa Rosa Roseland Area Community Profile The San Rafael Community Profile Area includes the San Rafael General Plan 2020 subareas of downtown, East San Rafael and Canal in the City of San Rafael, Marin County. San Rafael is known as a "City of Neighborhoods" on account of its considerable diversity of land uses and community characteristics; as such, it has developed an approach to neighborhood planning that establishes specific policies for certain neighborhoods. Within the profile area, existing neighborhood plans include: Gerstle Park, Montecito/Happy Valley, West End, Our Vision of Downtown, and Canal Voice. In the downtown area there are six districts: the Fourth



Street Retail core, the Hetherton Office District, the Lindaro Office District, the Second/Third Mixed-Use District, West End Village and Fifth/Mission Residential/Office District.

The Gerstle Park neighborhood developed as the City of San Rafael's first residential neighborhood in 1800's. It is south and adjacent to the downtown districts, with a northern boundary that is characterized by a transition from commercial to residential land use. The Gerstle Park neighborhood is bounded on the west and south sides by Gerstle Park Ridge, which has been partially developed with low-density single-family homes on its ridge and slope areas. The flat area north of Gerstle Park has been developed with a mixture of residential land uses (single family, duplex and multiple units). This flat area is divided by "D" Street, a main thoroughfare that provides major access to San Rafael from Sir Francis Drake Blvd. and the communities of Ross and Greenbrae, which are south of San Rafael.

The Montecito/Happy Valley neighborhood is nestled in two valleys, located east of Irwin Creek and north of the Canal. It has a mixture of residential land uses, including low-density single-family historic homes as well as high-density apartment buildings. The neigh-

borhood is conveniently located within walking distance of transit, schools and jobs. It is also adjacent to Highway 101 and along Second, Third and Fourth Streets connecting to Downtown San Rafael.

The Canal Neighborhood is predominantly residential, comprised of large apartment buildings, condominiums, townhomes, duplexes and, to a lesser extent, single family homes. It is physically isolated from other parts of San Rafael by the Canal waterway and the Highway 101/Interstate 580 freeways. There are limited shopping, education or health services available within the neighborhood; travel to other locations is constrained by poor bicycle, pedestrian, and to some extent, motor vehicle connections.

Socioeconomic descriptions of the Gerstle Park, Montecito/Happy Valley and Canal neighborhoods are detailed below under “Community Characteristics.”

The 2,168-acre profile area is bounded to the west by D Street, extending north through Boyd Memorial Park and crossing Highway 101 along Paloma Avenue. It extends east through Palm Avenue, Eucalyptus Lane and Valencia Avenue and continues south through Woodland Avenue. The predominant land uses in the San Rafael profile area are residential, including hillside residential, high-density residential (15 to 32 units per acre), low-density residential (2 to 6.5 units per acre), mixed use residential/office, commercial core, general commercial, light industrial/office, industrial, marine-related, parks, public/quasi-public uses and several specific plan areas with a mix of uses.

The profile area has several key ground transportation corridors serving both regional and local movement. Highway 101 is the primary ground transportation corridor in Marin County. Other several key ground transportation corridors include 2nd Street, 3rd Street, 4th Street and Sir Francis Drake Boulevard. The area also contains the San Rafael Transit Center, where Marin’s bus lines converge. Transit providers serving the area include Golden Gate Transit, Marin Transit, Marin Airporth, County of Marin Shuttle, and Greyhound. Significant portions of the Bay Trail also lie within the area, and future plans include a Sonoma Marin Rail Transit (SMART) station, through which passengers will be able to access commuter rail service.

The profile area contains natural areas, open spaces

and parks that are very important to the character of San Rafael. The profile area is primarily urbanized and developed, but does contain riparian habitat, wetlands and Bay flat near the Bay and along the canal and Oak woodlands at the southeastern edge of the profile area. There are several watershed or drainage areas identified including the San Rafael Creek Watershed, South Pond and East San Rafael. There are several endangered species that have been identified within or near the profile area including the California Black Rail, the California Clapper Rail, the California Brown Pelican and the Tidewater Goby. The area contains several neighborhood parks, such as Bayside Mini Park, community parks such as Pickleweed Park and community centers such as Pickleweed Center.

Hazards

The profile area is adjacent to the Bay shoreline and is located approximately 8 miles from the Hayward Fault and approximately 10 miles from the San Andreas Fault, which means that the entire profile area is likely to experience shaking of MMI XIII¹ or higher from either a Hayward or a San Andreas event. The majority of the profile area is within a liquefaction hazard zone, meaning that it has soils that are susceptible to liquefaction and that the area is likely to be shaken long and hard enough to trigger liquefaction. The profile area may be vulnerable to other hazards triggered by a flood or seismic event, such as fire following an earthquake, dam or levee failure, or flooding due to pipe breakage. More information is needed to better understand the potential risk from these secondary hazards, including pipe location and condition, prevalence of gas shutoff valves, status of dams upstream, and the condition of levees or other shoreline protection in the area.

Approximately half of the profile area is located within a FEMA identified Special Flood Hazard Area (SFHA) and is at risk of flooding during a 100-year storm event. The same area is also susceptible to future flooding with 24 inches of sea level rise, while areas inland not currently at risk from a 100-year storm event may be flooded with a water level that is 48 inches above

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/>).

current high tide, which could occur with 24 inches of sea level rise in combination with a 5-year return period extreme tide, or 6 inches of sea level rise with a 100-year return period tide. Flooding will be a significant issue for this area.

Existing housing characteristics

Housing in the profile area includes one- and two-story homes, Victorians and historic homes, homes built in the earlier part of the 20th century, and homes built post-WWII and modern homes. Some of these single-family houses have in-law units. There are also 2-4 unit dwellings, and medium- and larger-sized apartment complexes. The project's regional analysis for fragile housing types found that approximately one quarter of the block groups have been flagged as containing 30% or more housing units that may be single-family homes with a cripple wall. A small portion of a block group that is located within the profile area (the rest of the block group is located outside of the profile area boundary) was flagged as having 30% or more housing units that may be single-family house over garage types. No other fragile housing types were flagged within the profile boundary, but house over garage, weak story or open front, and non-ductile concrete types were flagged adjacent or nearby to the profile area, indicating that these types may show up in small proportions within the profile area. A look with Google Maps Street View revealed a wide mix of housing types and ages, which may be one of the reasons why the 30% threshold was not triggered in many cases. Google maps street view did confirm the presence of isolated cripple wall homes, house over garage, weak story or open front, and non-ductile concrete housing types. Strategies should address these housing types even though they were not at threshold concentrations to be identified in the regional screening analysis.

Almost all of the block groups (all but one) have been flagged as having 30% or more housing units likely to have a foundation insufficient to withstand liquefaction (<10 stories). The majority of the block groups have been flagged as having 30% or more of the housing units vulnerable to flooding. The City of San Rafael requires buildings to be elevated an additional 1-foot above FEMA base flood elevations identified on Flood Insurance Rate Maps (FIRMs) which are expected to change when FEMA adopts new FIRM maps in 2014. The adoption of new FIRMs is expected to cause

increases in the number of properties requiring flood insurance in the city.

Community characteristics

The project's regional analysis found fewer than 10 percent of the population within the neighborhood's block groups are over the age of 75, although there are block groups adjacent to the community profile boundary where the population of those over the age of 75 is over 10 percent. The community profile area also does not include a high percentage of children under the age of five.

The majority of the block groups within the community profile area have 30% or more households that are very low income and have a very low high school graduation rates.

The southeastern portion of the community profile area contains several block groups where the households contain 70% or more non-white and where the households contain 20% or more non-English speakers. Based on the 2010 census, the ethnic composition of the City of San Rafael was approximately 70% white, 2% African American, 1% Native American, 6% Asian, less than 1% Pacific Islander, 15% other ethnicities, 5% from two or more ethnicities. Approximately 30% reported being Hispanic or Latino.

The majority of the block groups within the community profile area contain a high percentage of renter households. There are portions of the profile area that contain 15% or more households that are housing cost burdened. There are fewer than 10% of households within the community profile area that are transit dependent. There are fewer than 15% of households within the community profile area that are transportation cost burdened.

In 2010, the City of San Rafael had approximately 52% of homes owner-occupied and 47% occupied by renters. According to the 2000 census, 1.4% of owner-occupied housing units were overcrowded and 21.3% of renter-occupied units were overcrowded. The US Census Bureau defines overcrowded housing as units with more than one inhabitant per room excluding bathrooms and kitchens. The Canal neighborhood is

identified as an area where over-occupation is an issue in San Rafael. Other than the Canal neighborhood, other parts of the profile area are highly diverse and include a wide range of housing, densities and income levels.

Based on the 2000 census, 18.5% of the population of the City of San Rafael reported a disability or 10,364 individuals over the age of 5. This included 1,469 with a sensory disability, 3,343 with a physical disability, 2,197 with a mental disability and 1,142 reported as self-care.

The population of the City of San Rafael in 2010 was 57,713 and the population density was approximately 2,574 people per square mile.

The Gerstle Park Neighborhood is mostly white (72%), with the largest minority population being Hispanic (21%). 14% of the neighborhood is over the age of 65, which is fairly consistent with the City overall (15%). Over half of the residents are renters (57%). The neighborhood is generally well educated, with 56% of residents having a Bachelor's degree or higher (as compared to 45% for the City overall, according to the American Community Survey 2008-2012).

The Montecito/Happy Valley neighborhood is mostly white, with a racial composition that is similar to San Rafael overall. From 1980 to 1995, the largest growing minority population was Hispanic, from 5% to 15%. Compared with the City overall, Montecito/Happy Valley has a relatively large number of older residents (as of 1995, the neighborhood is almost 20% residents of ages 65 and over as compared to about 15% citywide). The neighborhood also has a large percentage of rental housing (72% as of 1995). Six percent of neighborhood residents live in an "overcrowding" situation (defined as when residents live in a unit where there is more than one person per room) as compared to 6.1% for the entire City.

The Canal Neighborhood has a significant Hispanic population (70%) in comparison to the population of the rest of San Rafael and Marin County. Spanish is the most prevalent language spoken at home (67%), and more than half the population speaks English less than "very well." Compared with San Rafael and Marin County, Canal residents are younger, household and family sizes are larger and household incomes

are smaller. Three quarters of housing in the Canal Neighborhood is renter-occupied. Almost one-half of homeowners are housing cost burdened, paying more than 30% or more of their monthly income for housing, which is more when compared to the rest of San Rafael and Marin County, where approximately one-third of homeowners pay 30% or more of their income towards housing costs. Canal Neighborhood residents also own fewer cars and ride transit more frequently than other residents of San Rafael and Marin County. The Canal Neighborhood is also one of the City's most densely populated communities.

Community Serving Facilities

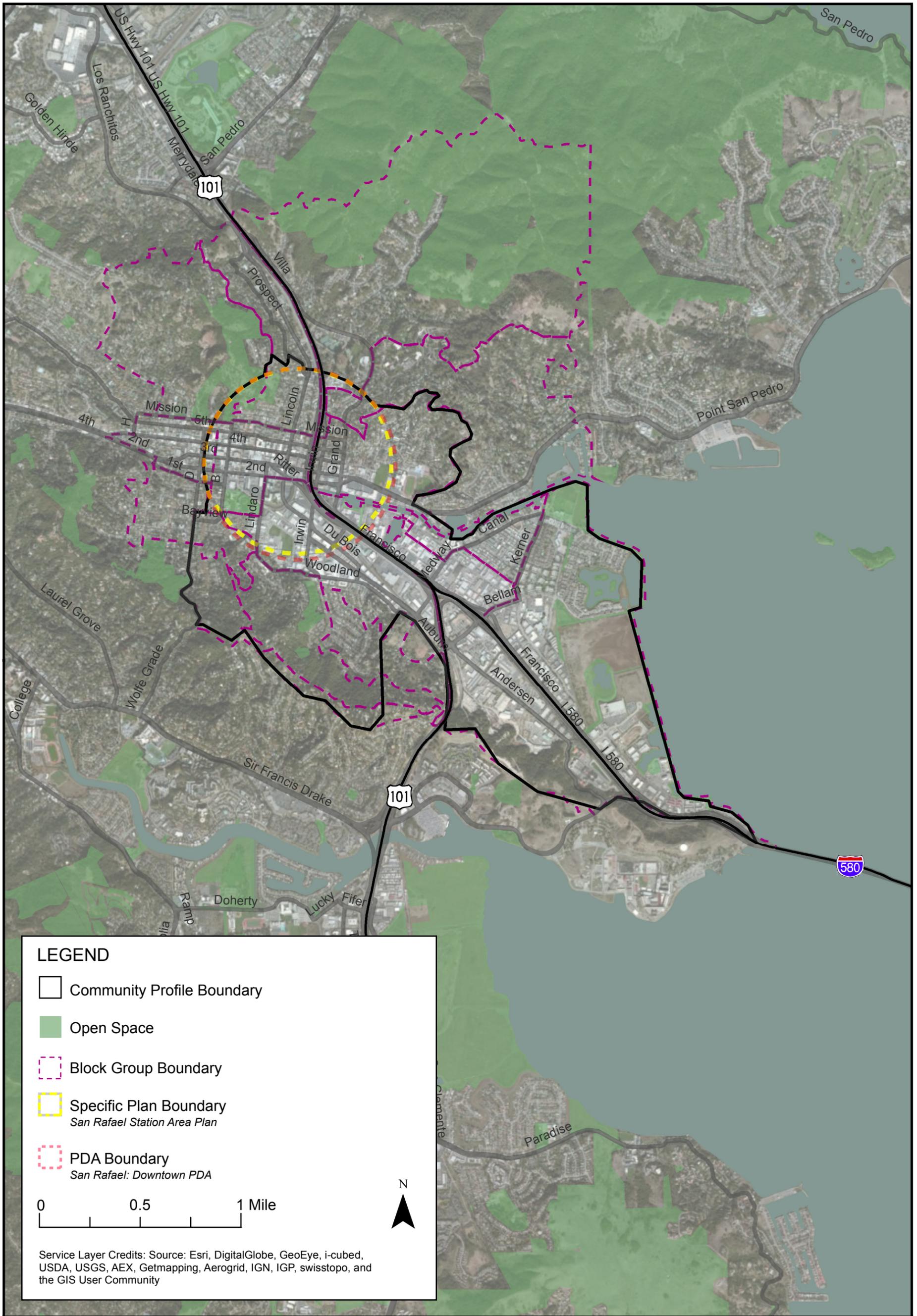
Community services in the community profile area include schools (in, or directly adjacent to the profile area: Short Elementary School, San Rafael High School, Laurel Dell School, Saint Rafael School, Marin Academy, Coleman Elementary, 10,000 Degrees, Trinity Preschool and Bahia Vista Elementary School), the San Rafael Police headquarters, Fire Stations 52 and 54 and the main office for the San Rafael Fire Department, and the San Rafael Private Heliport is located adjacent to Interstate 580. Aside from a Kaiser Medical Center, which is not a hospital but has offices, there are a number of medical centers (Marin Community Clinics and Huckleberry Teen Health Program are located within the profile area, Marin General is south of the profile area and Kaiser is north). There are several senior care facilities (Aldersly Garden Retirement Community and Harmony House) and community and ecumenical groups (Marin Organizing Committee, Community Action Marin, Marin Integrated Disaster Council).

Community facilities or public spaces that could serve as gathering locations or sources of emergency information or assistance include several community centers (The San Rafael Community Center, Pickleweed Park Community Center, Canal Alliance, Salvation Army Services, St. Vincent de Paul Center, the Family Emergency Center and Fourth Street Center, Sustainable San Rafael, Marin Family Action, Autodesk Foundation), children's centers (Pickleweed Children's Center and the Parkside Children's Center), a seniors program (the San Rafael Goldenaires), churches (Trinity Lutheran, Church of the Open Door, Saint Raphael Parish, Mission Evangelical Penial, Golden Gate House Church Network, MCC of

the Redwoods, First Presbyterian Church, Christian Science Reading Room, San Rafael Community Task Force, Sukhasiddhi Buddhist Foundation, San Rafael Methodist), a community garden (Canal Community Garden is located in the profile area and was a project done in partnership with the Trust for Public Land) and several grocery stores (Safeway, Smart and Final, a local market called Marin Market, Mi Pueblo Food Center, Quezada Market, Malabar Indian Store and a 7 Eleven). Other facilities serving the community include the Marin Humane Society and Wildcare Solutions.

Lastly, the city sponsors the CERT program through the Fire Department.

BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



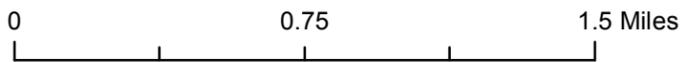
LEGEND

-  Community Profile Boundary
-  Open Space
-  Block Group Boundary
-  Specific Plan Boundary
San Rafael Station Area Plan
-  PDA Boundary
San Rafael: Downtown PDA

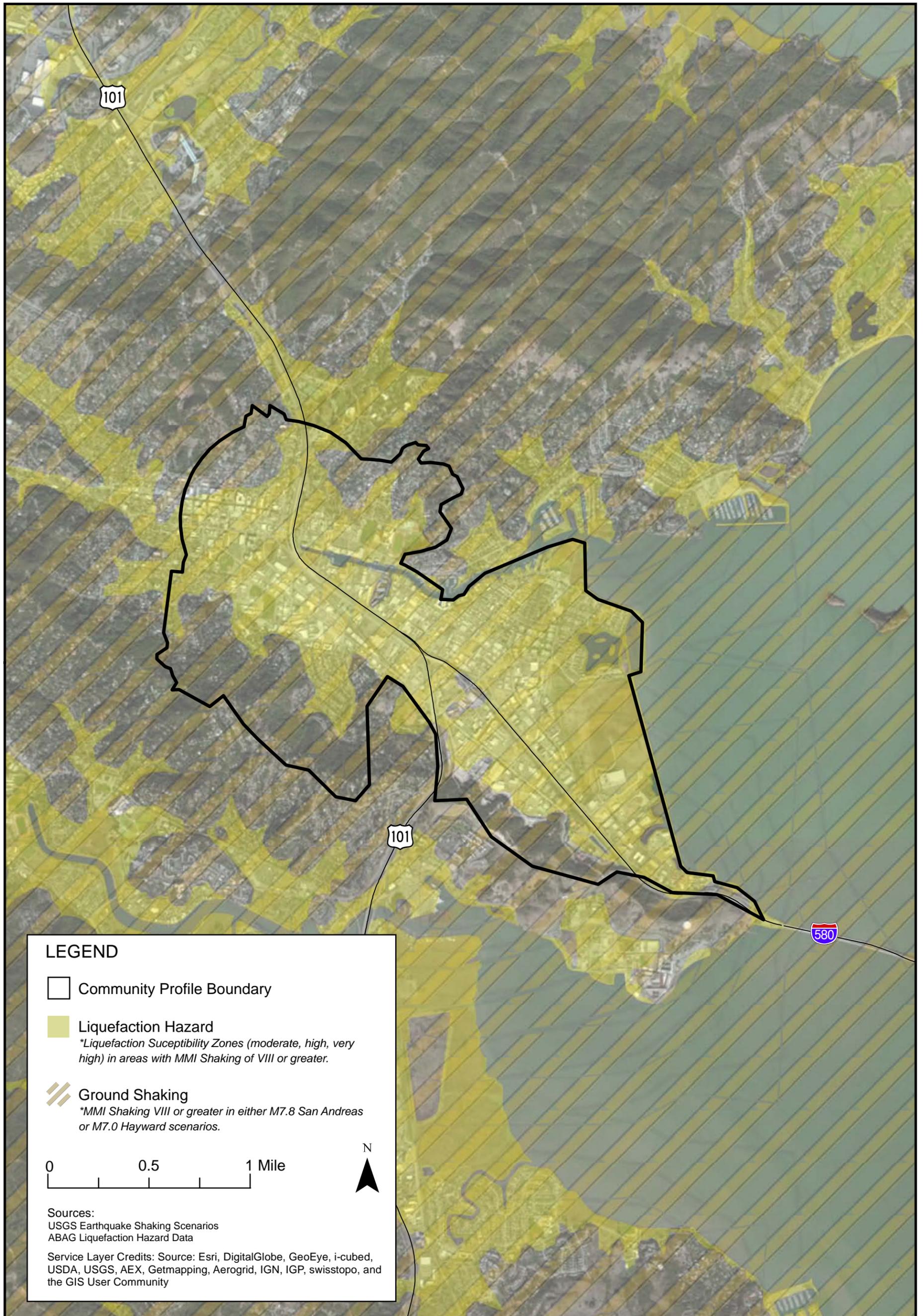
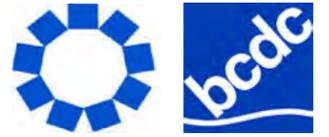
0 0.5 1 Mile

N

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

Community Profile Boundary

Liquefaction Hazard
**Liquefaction Susceptibility Zones (moderate, high, very high) in areas with MMI Shaking of VIII or greater.*

Ground Shaking
**MMI Shaking VIII or greater in either M7.8 San Andreas or M7.0 Hayward scenarios.*

0 0.5 1 Mile

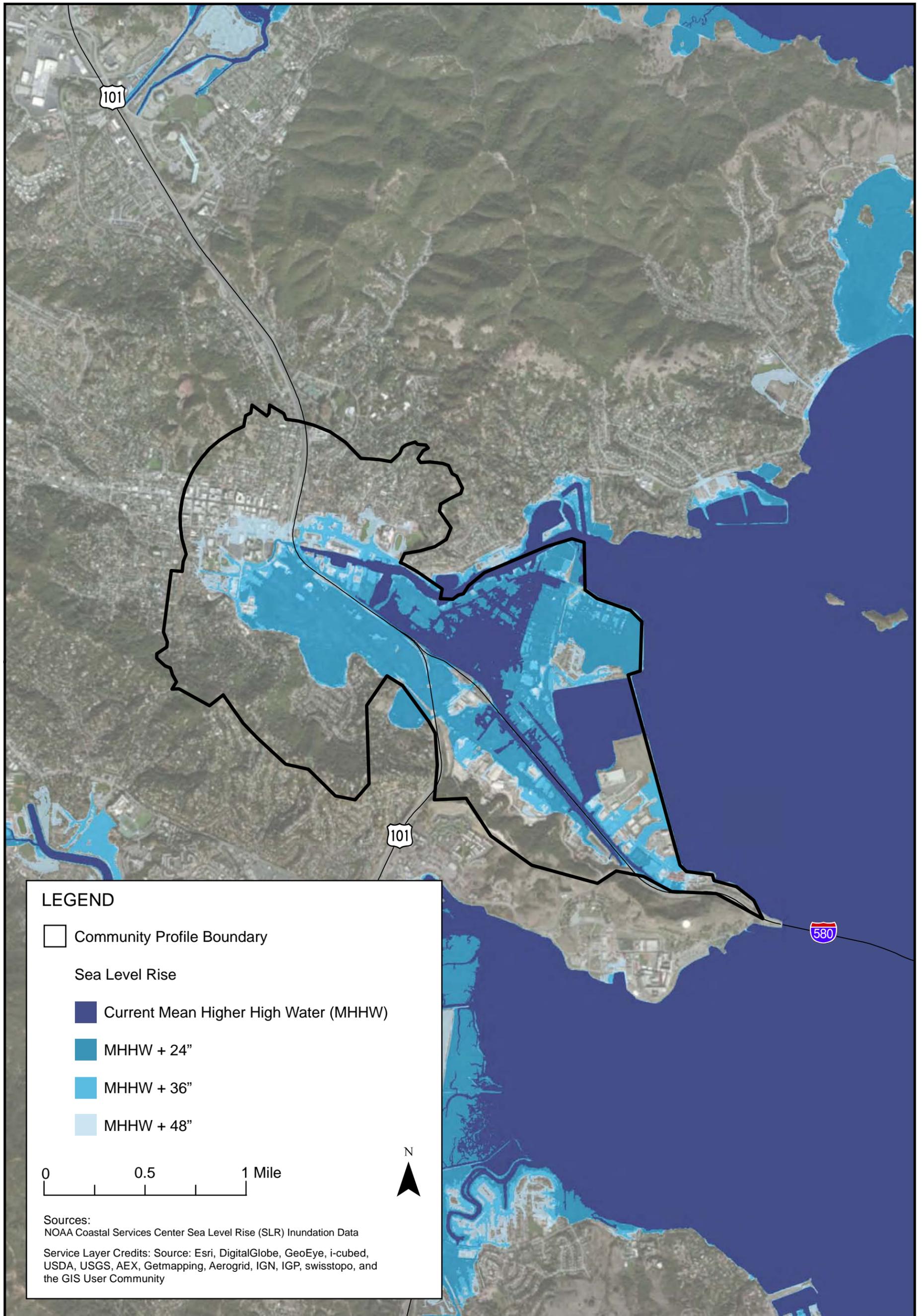
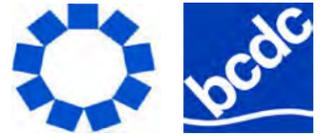


Sources:
 USGS Earthquake Shaking Scenarios
 ABAG Liquefaction Hazard Data

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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



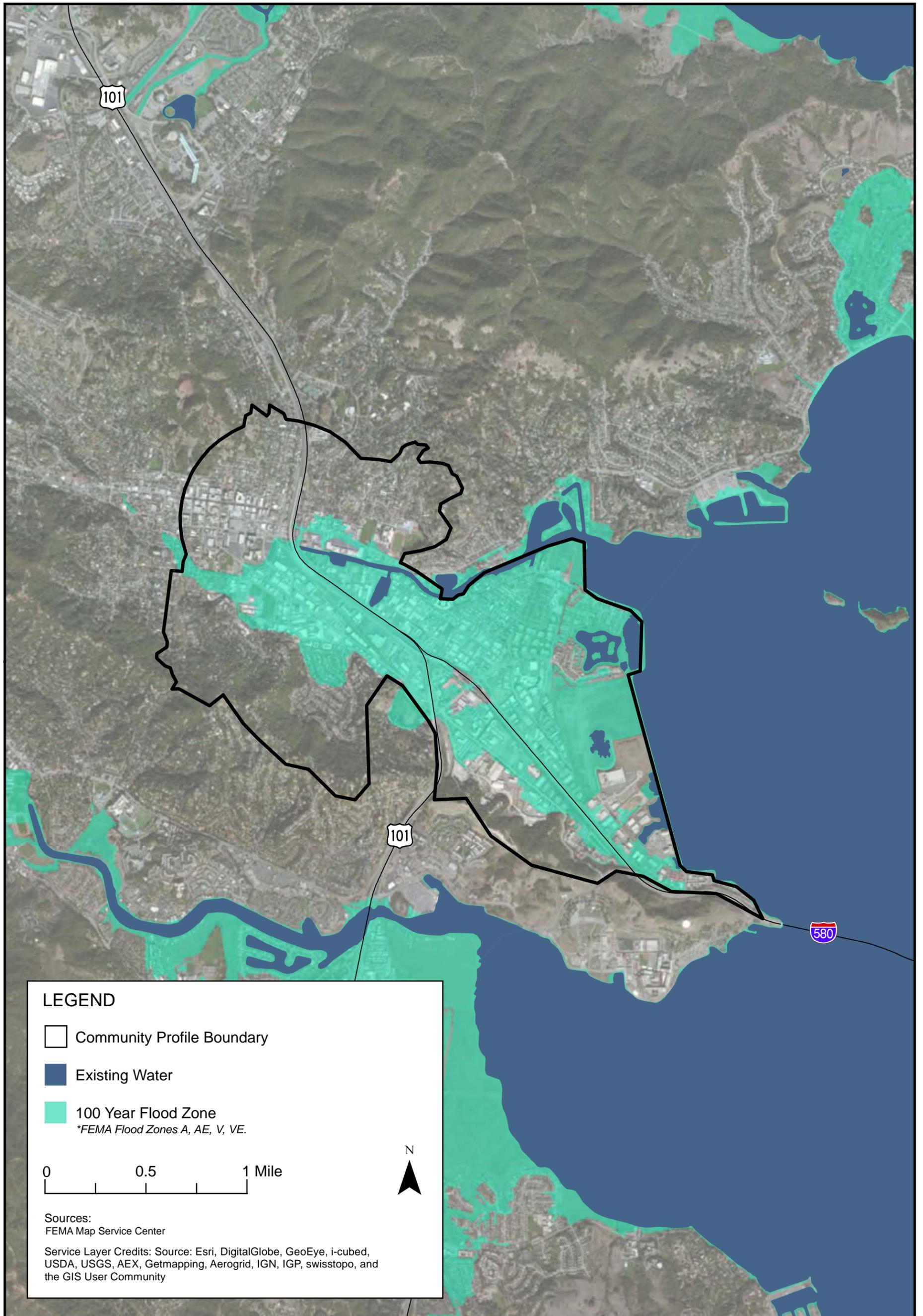
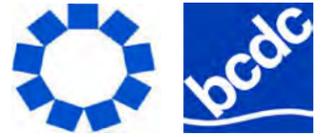
Sources:

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

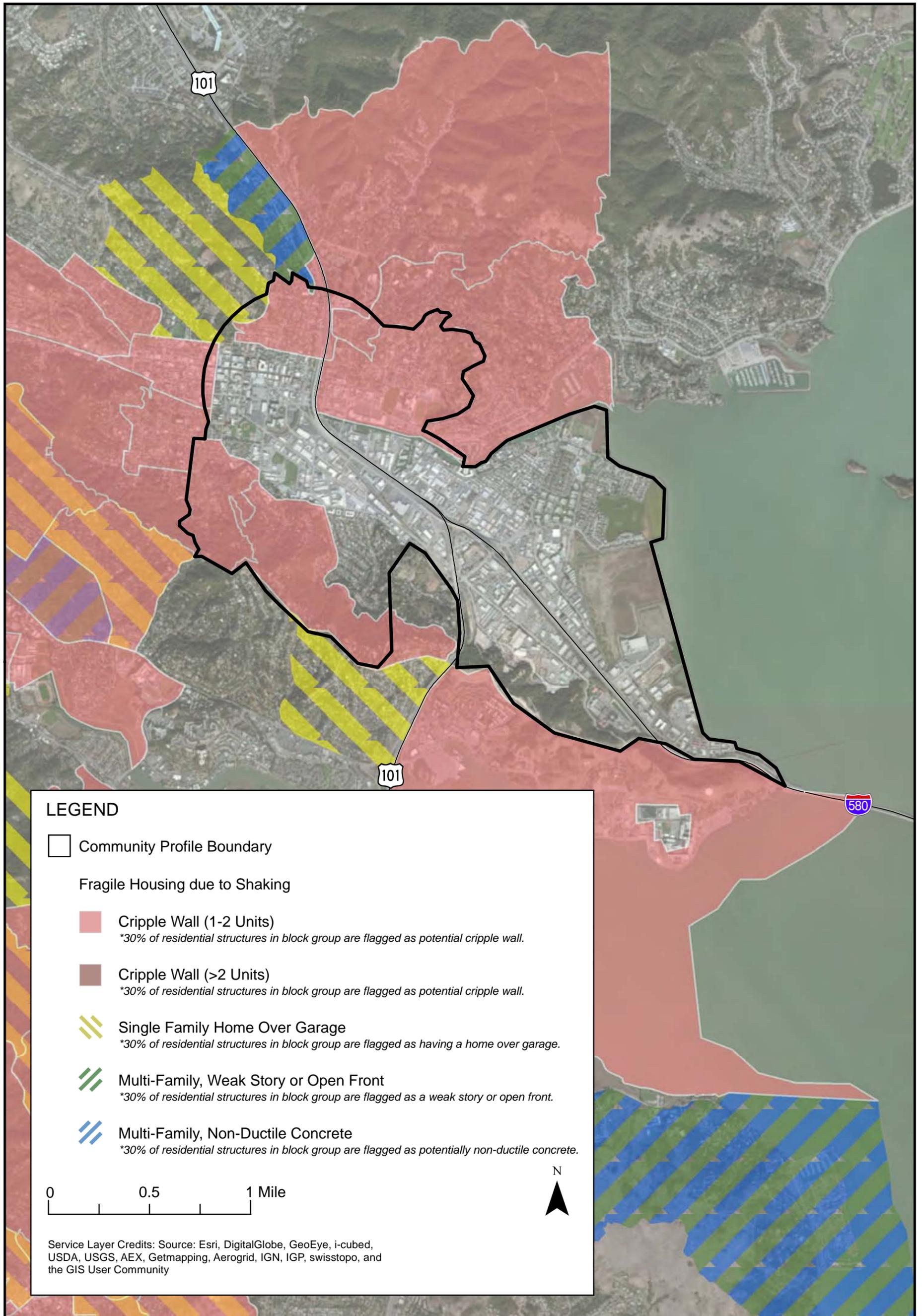
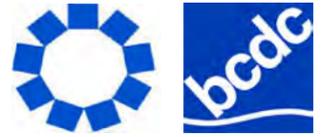
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

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.

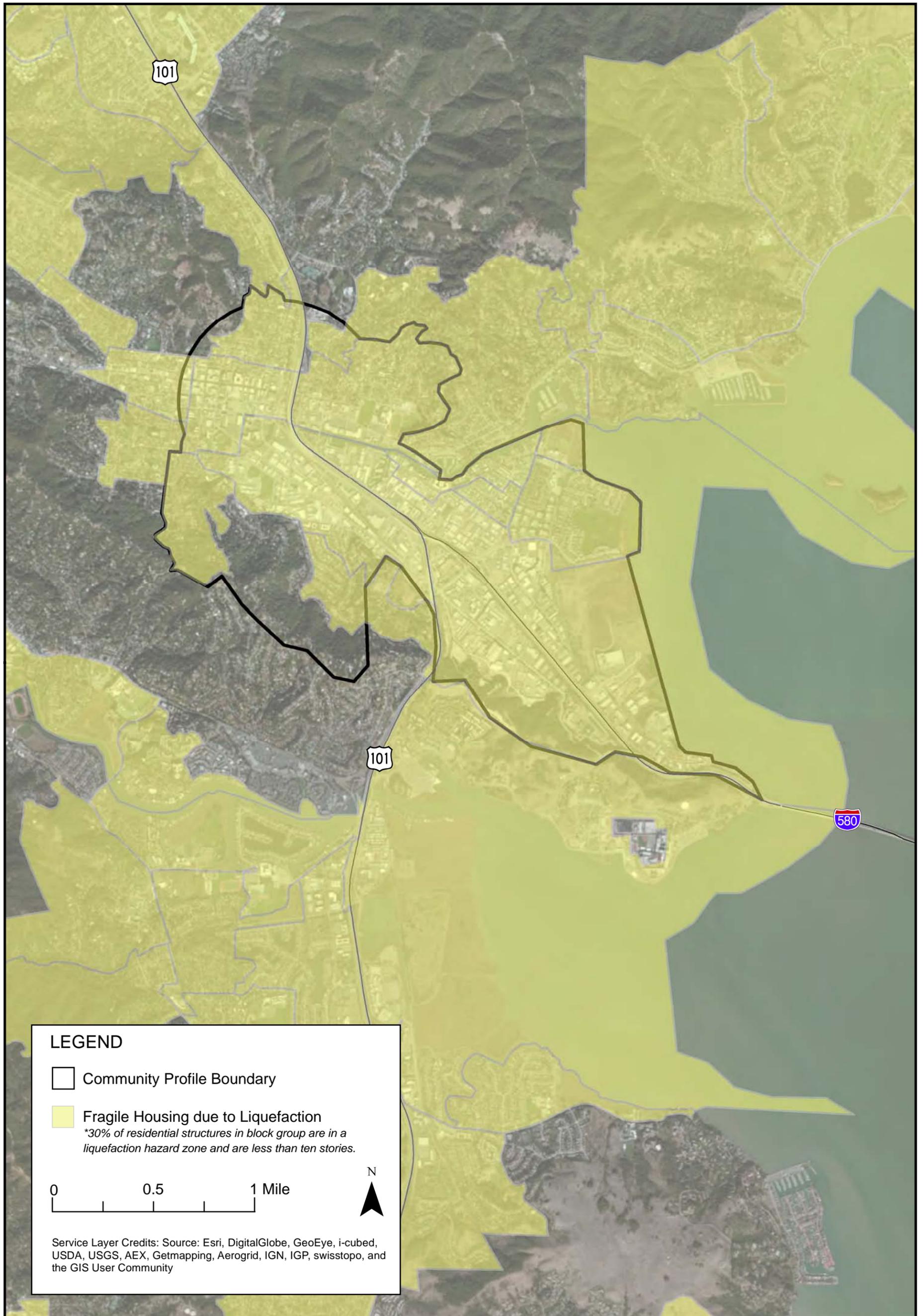
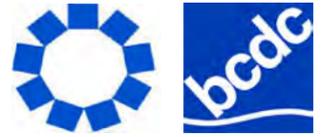
Multi-Family, Non-Ductile Concrete
*30% of residential structures in block group are flagged as potentially non-ductile concrete.

0 0.5 1 Mile

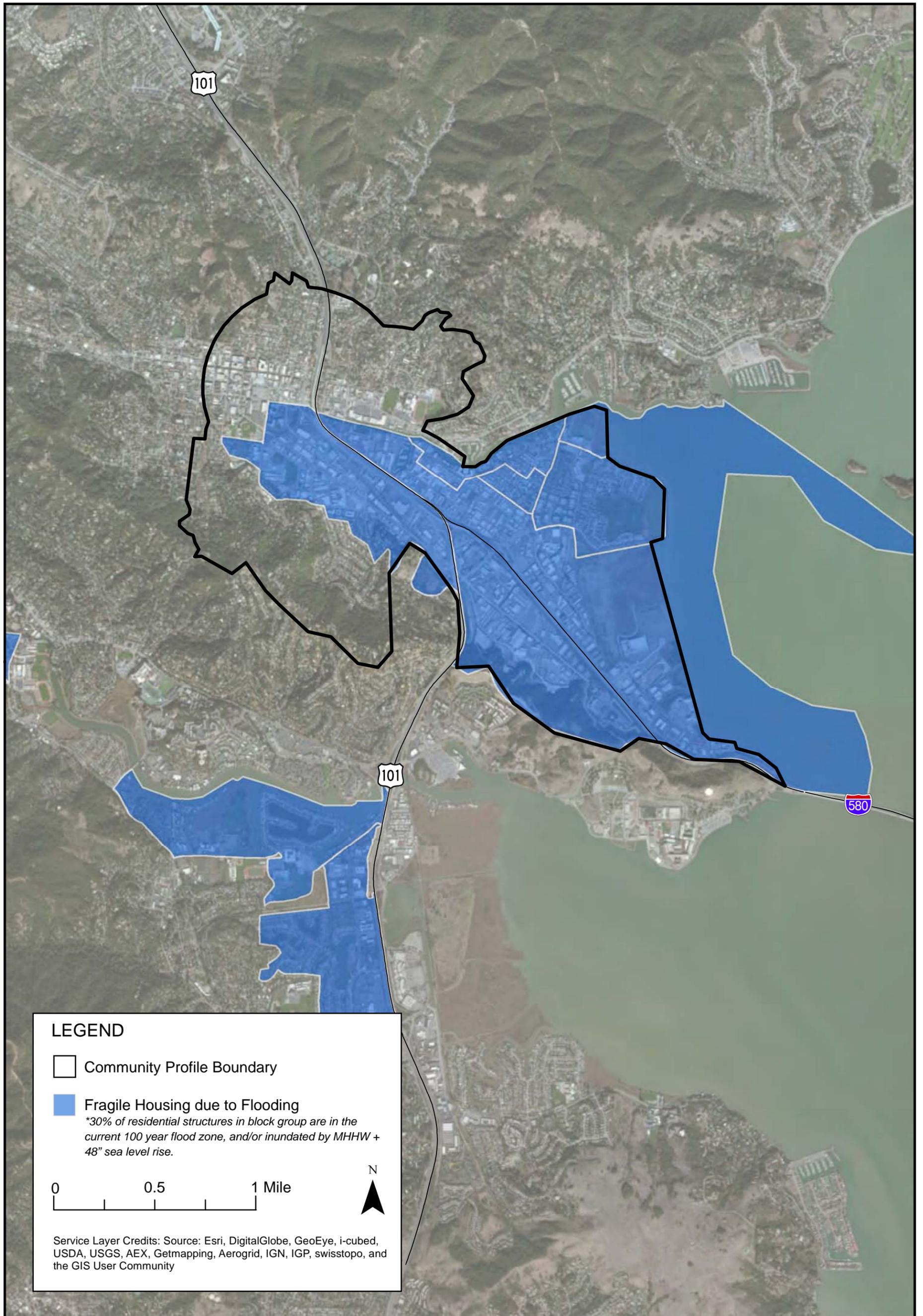
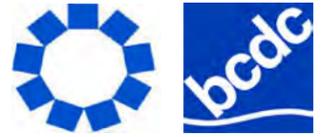


Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

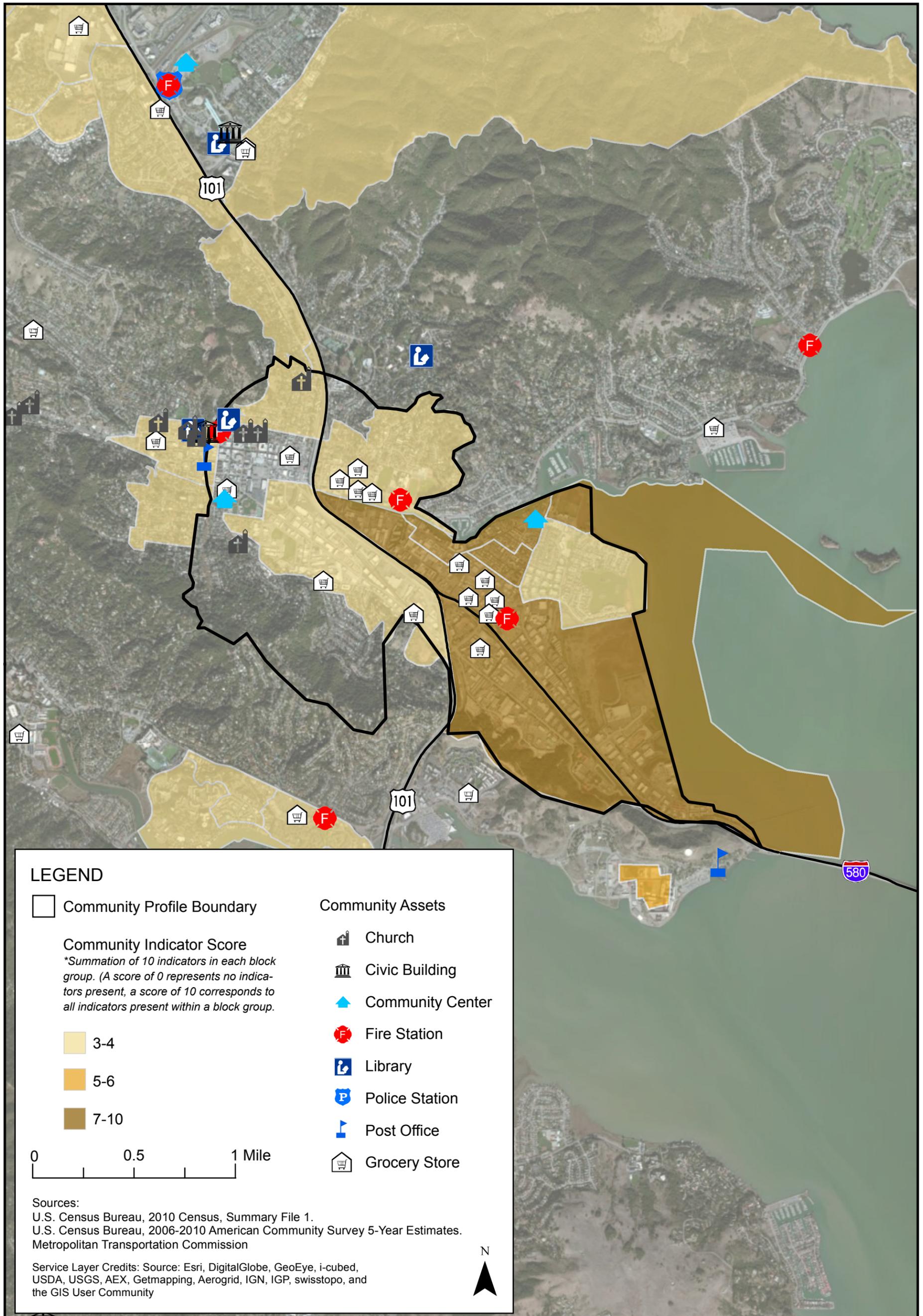
BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



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

Community Assets

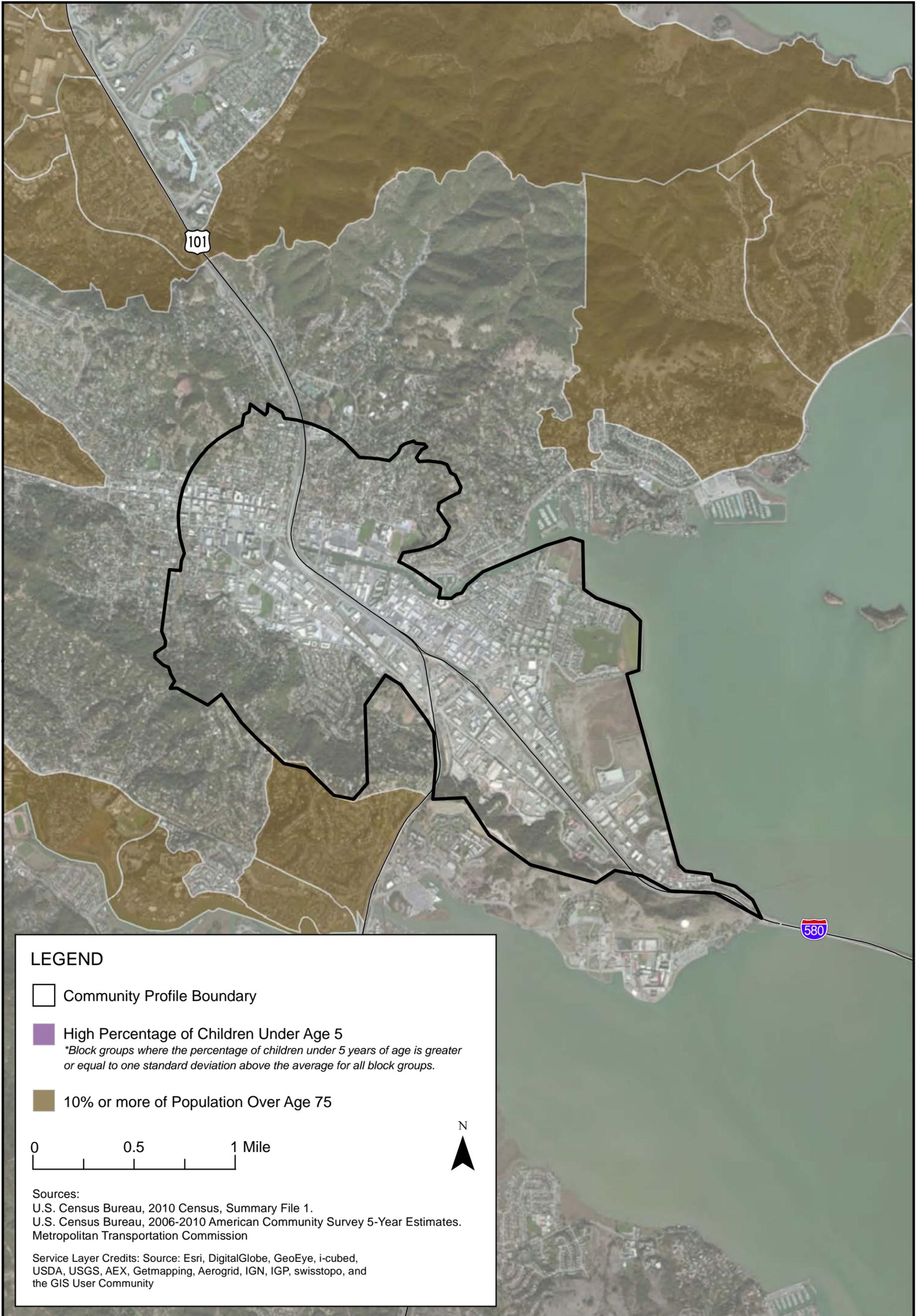
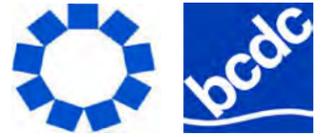
- Church
- Civic Building
- Community Center
- Fire Station
- Library
- Police Station
- Post Office
- Grocery Store

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

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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

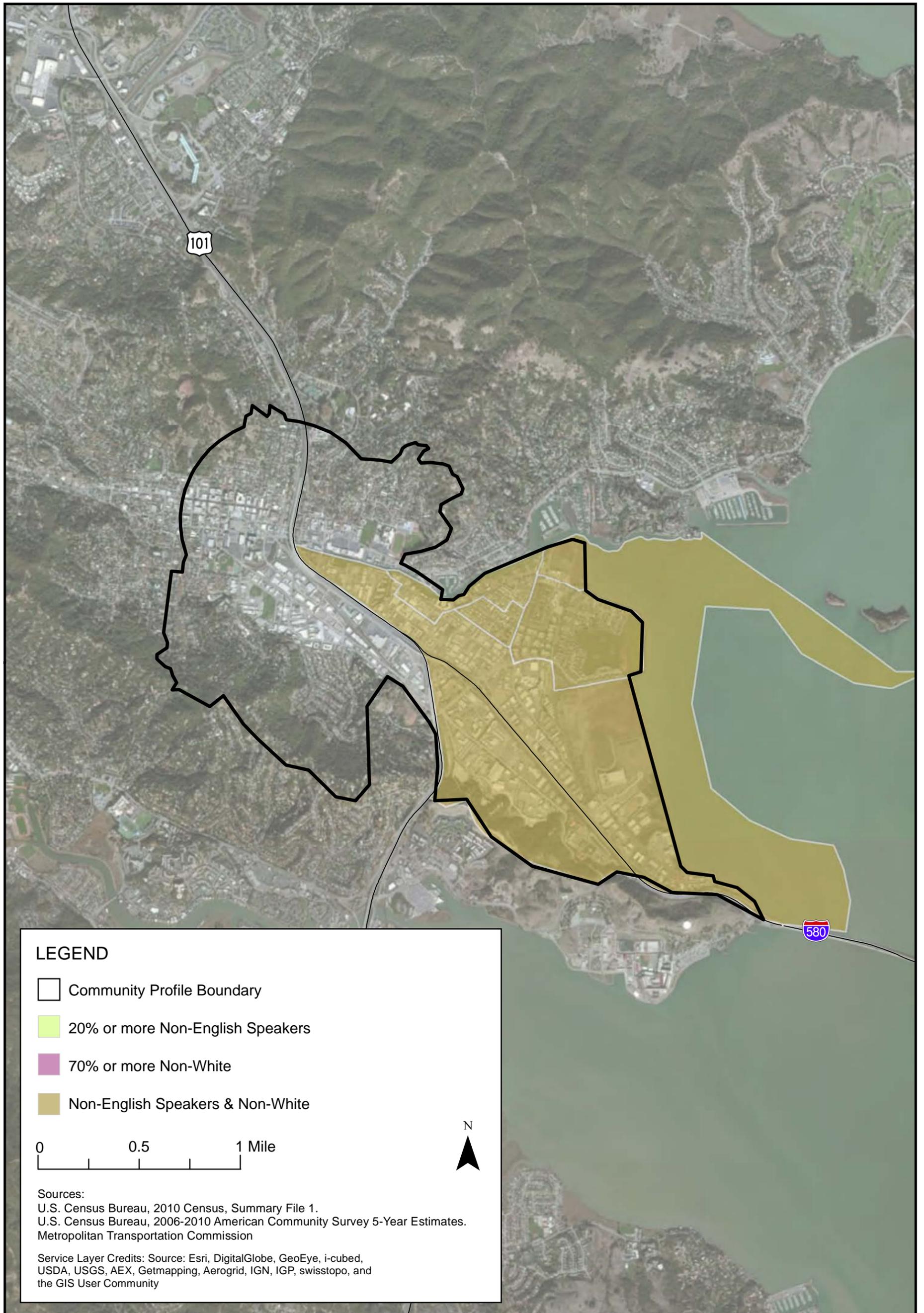
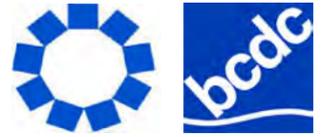
0 0.5 1 Mile



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

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT



LEGEND

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

0 0.5 1 Mile

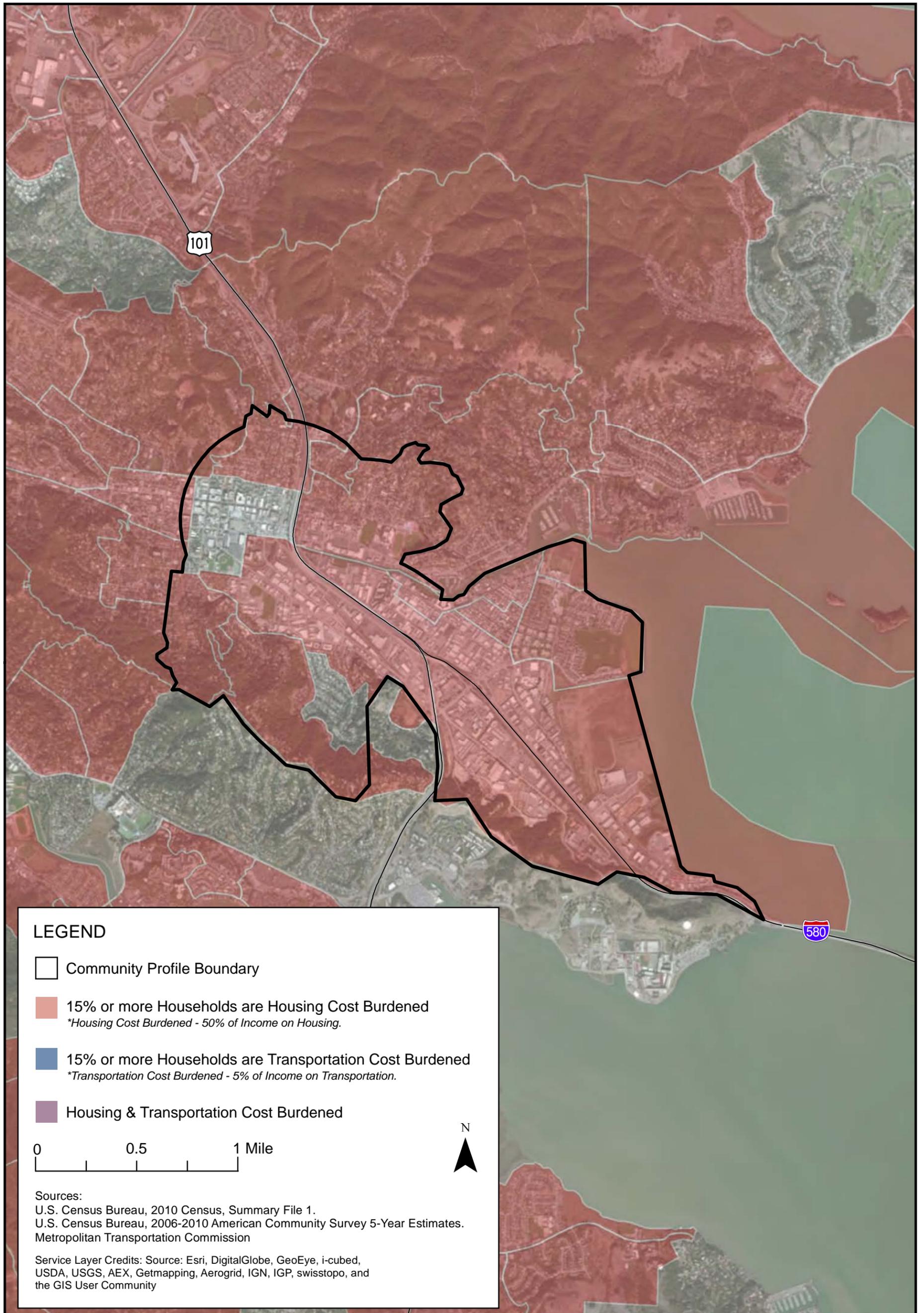
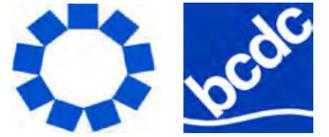


Sources:
U.S. Census Bureau, 2010 Census, Summary File 1.
U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates.
Metropolitan Transportation Commission

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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

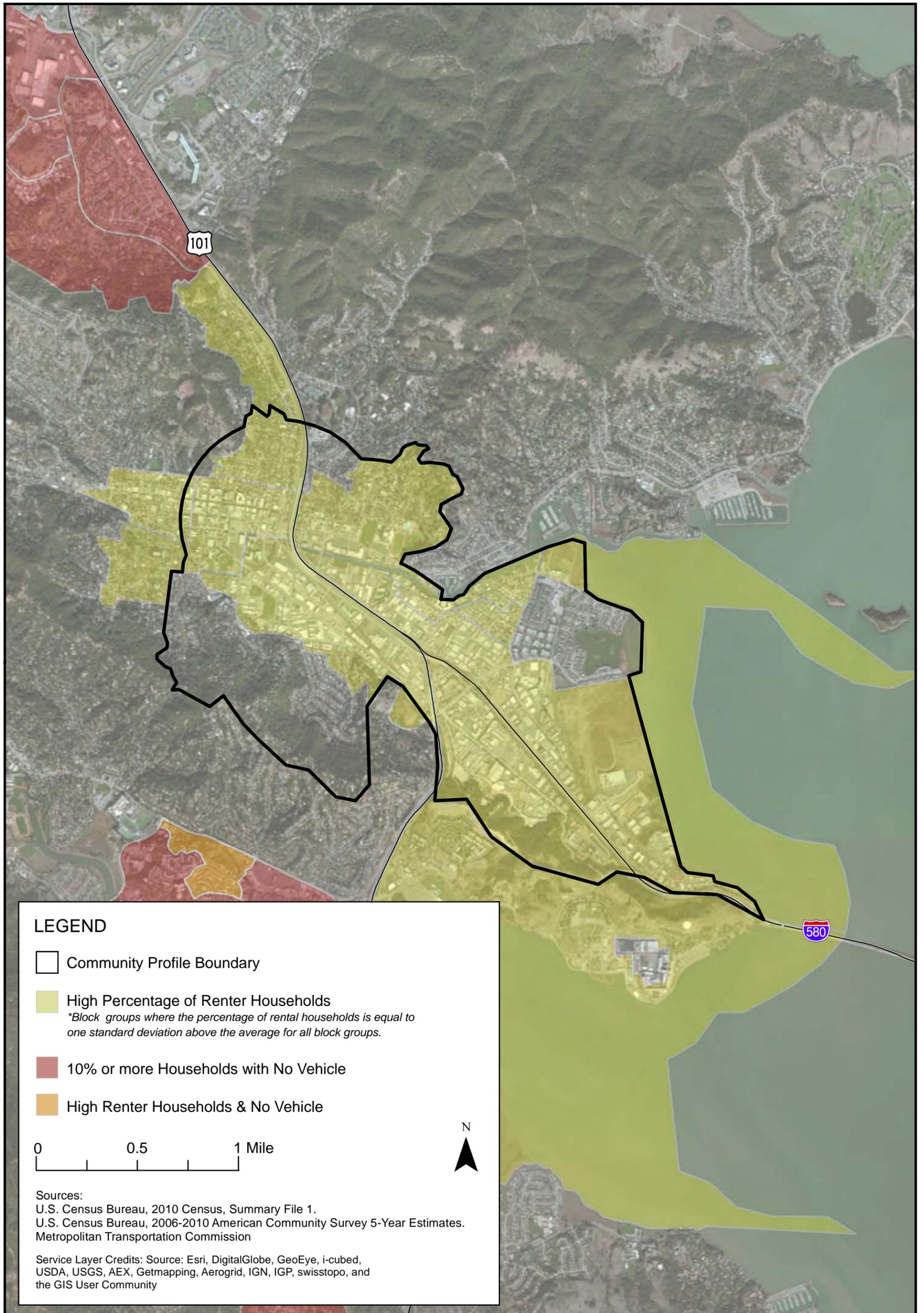
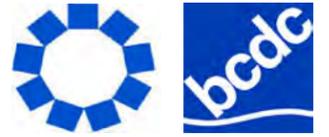
0 0.5 1 Mile



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

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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

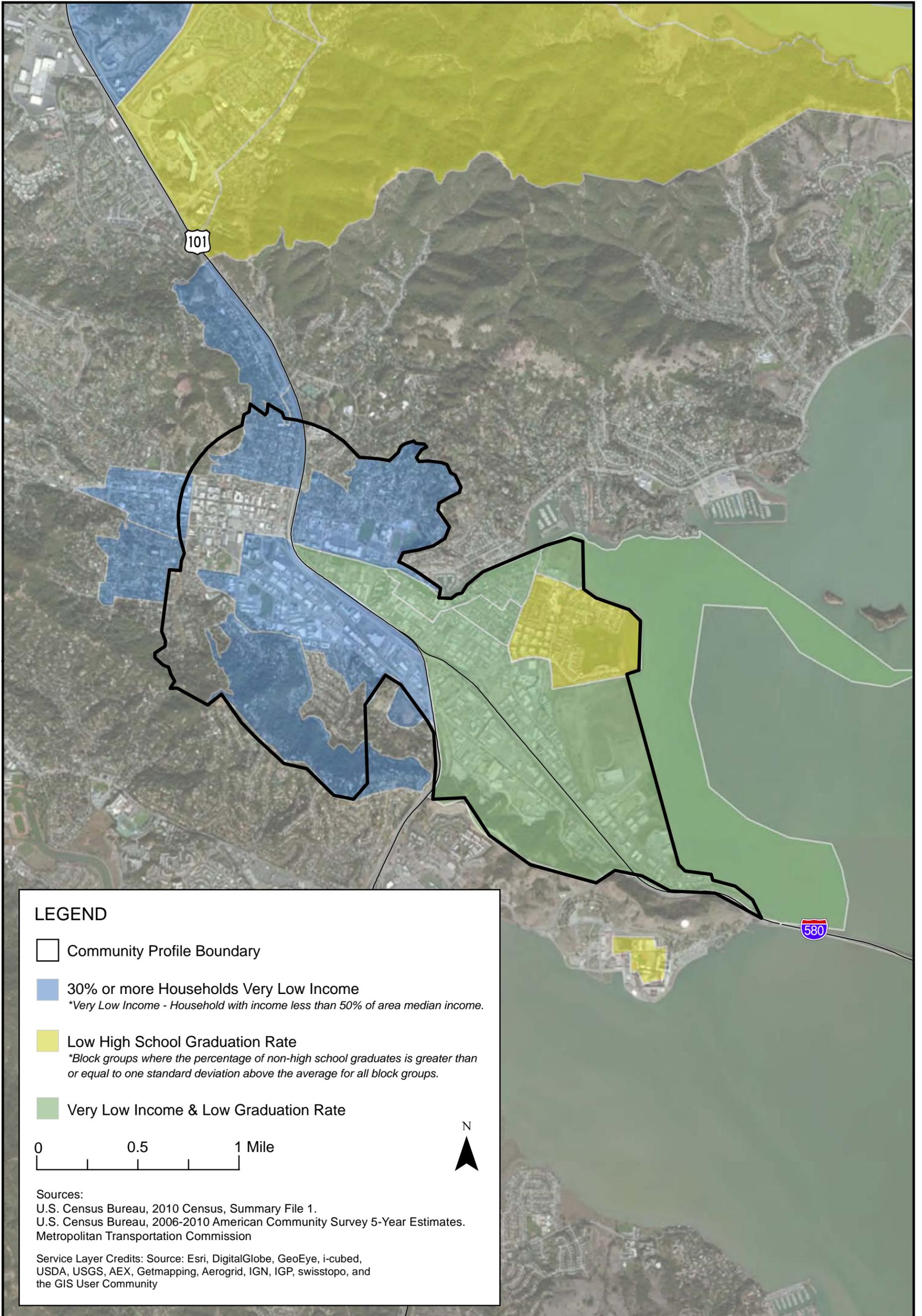
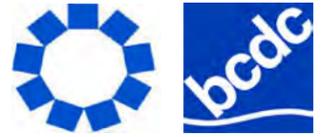
0 0.5 1 Mile



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

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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

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

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community