



## 3. CITY OF CUPERTINO

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### 3.1 HAZARD MITIGATION PLAN POINT OF CONTACT

#### **Primary Point of Contact**

Timm Borden, Director of Public Works  
10300 Torre Avenue  
Cupertino, CA 95014  
Telephone: 408-777-3354  
e-mail Address: timmb@cupertino.org

#### **Alternate Point of Contact**

Chad Mosley, Senior Civil Engineer  
10300 Torre Avenue  
Cupertino, CA 95014  
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### 3.2 JURISDICTION PROFILE

The following is a summary of key information about the jurisdiction and its history:

- **Date of Incorporation**—1955
- **Current Population**—58,185 as of January 1, 2016
- **Population Growth**—Based on the data tracked by the state Department of Finance, Cupertino has experienced a relatively flat rate of growth. The overall population increased only 0.3 percent in 2015.
- **Location and Description**—Cupertino, California is located in the heart of Silicon Valley against the foothills of the Santa Cruz Mountains. With a population of almost 60,000 residents within 13-square miles, Cupertino is 42 miles south of San Francisco and on the western edge of Santa Clara County. The city enjoys convenient access from Highways 280 and 85 and is situated along Stevens Creek Boulevard. The City shares borders with San José to the east and south, Sunnyvale to the north, Santa Clara to the northeast, and Los Altos to the northwest.
- **Brief History**—In 1776, Spanish explorer Captain Juan Bautista de Anza led a group up the coast of California. During the expedition, the group encamped in what is now Cupertino. Anza's cartographer christened the creek next to the encampment the Arroyo San Joseph Cupertino (known today as Stevens Creek) in honor of his patron, San Guiseppe (San Joseph) of Copertino, Italy. The village of Cupertino sprang up at the crossroads of Saratoga-Sunnyvale Road (now DeAnza Boulevard) and Stevens Creek Boulevard. The initial primary economic activity was fruit agriculture, including prune, plum, apricot, and cherry orchards, as well as wineries. Cupertino officially became the 13th city in Santa Clara County on October 10, 1955.
- **Climate**—Cupertino has mild weather, wet winters and mild, dry summers. Averages in January range from 38.7 °F (3.7 °C) to 58.2 °F (14.6 °C). Averages in July range from 54.1 °F (12.3 °C) to 82.0 °F (27.8 °C). The average rainfall is 14.9 inches.
- **Governing Body Format**—The City of Cupertino is governed by a five-member council. The City consists of five departments which are overseen by the City Manager: Administrative Services, Community Development, Information Services, Public Works, and Recreation and Community Services. The City has thirteen commissions and committees, which report to the City Council. The City Council appoints the City Manager. The City Council is responsible for adopting this plan. The City Manager is responsible for overseeing its implementation.

### 3.3 DEVELOPMENT TRENDS

Cupertino is considered one of the most prestigious cities in which to live and work within Silicon Valley and the San Francisco Bay Area. Because Cupertino is a mature, 90 percent built-out city, we focus on business retention and revitalization. Cupertino is world renowned as the home of high-tech giants, such as Apple, Inc. and Seagate Technologies, and as a community with stellar public schools. DeAnza College, one of the largest single-campus community colleges in the country, is another major employer and a magnet for attracting local and international students. The City's proactive economic development efforts have resulted in an innovative environment for start-ups and growing companies to thrive. The City strives to retain and attract local companies through active outreach and a responsive and customer-oriented entitlement process. Cupertino is excited to have a number of new mixed-use development projects in final construction phases and almost fully leased, which will provide more retail and dining options, as well as provide additional housing opportunities to meet the needs of the growing community. Apple Inc.'s planned new corporate campus is under construction and will include 2.8 million square feet of office and R&D space north of Highway 280 between Wolfe Road and Tantau Avenue. Table 3-1 summarizes development trends in the performance period since development of the previous hazard mitigation plan and expected future development trends.

**Table 3-1. Recent and Expected Future Development Trends**

| Criterion                                                                                                                                                                          | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |      |      |      |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|
| Has your jurisdiction annexed any land since the development of the previous hazard mitigation plan?                                                                               | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      |      |      |      |
| • If yes, give the estimated area annexed and estimated number of parcels or structures.                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |      |      |      |
| Is your jurisdiction expected to annex any areas during the performance period of this plan?                                                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |      |      |      |
| • If yes, please describe land areas and dominant uses.                                                                                                                            | Predominantly single family residential developed valley floor property to the east of the city, a portion of which may be located in liquefaction-inundation zones along the Saratoga Creek and could also be subject to Wetland Fee Zones under the Santa Clara County Habitat Conservation Plan.                                                                                                                                                                                                                                                  |      |      |      |      |      |
| • If yes, who currently has permitting authority over these areas?                                                                                                                 | Santa Clara County                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      |      |      |      |
| Are any areas targeted for development or major redevelopment in the next five years?                                                                                              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      |      |      |      |
| • If yes, please briefly describe, including whether any of the areas are in known hazard risk areas                                                                               | Certain properties in the city have entitlements for development in the long term. None are in known hazard risk areas; all are on the valley floor.                                                                                                                                                                                                                                                                                                                                                                                                 |      |      |      |      |      |
| How many building permits were issued in your jurisdiction since the development of the previous hazard mitigation plan?                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2011 | 2012 | 2013 | 2014 | 2015 |
|                                                                                                                                                                                    | Single Family                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 59   | 50   | 56   | 42   | 51   |
|                                                                                                                                                                                    | Multi-Family                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0    | 3    | 3    | 0    | 2    |
|                                                                                                                                                                                    | Other (commercial, mixed use, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4    | 3    | 7    | 6    | 7    |
| Please provide the number of permits for each hazard area or provide a qualitative description of where development has occurred.                                                  | The City has not historically had the ability to track development by hazard area. Development has occurred throughout the city during the performance period for this plan. For hazards with a clearly defined extent and location, the City cannot estimate development impacts. For hazards with impacts city-wide, it is safe to assume that this new development could be subject to impacts from those hazards. However, it is important to note that all new development was subject to the regulatory capabilities identified in this annex. |      |      |      |      |      |
| Please describe the level of buildout in the jurisdiction, based on your jurisdiction's buildable lands inventory. If no such inventory exists, provide a qualitative description. | The City is largely built out with some portions along the commercial corridors that are underdeveloped and could be redeveloped as infill development sites.                                                                                                                                                                                                                                                                                                                                                                                        |      |      |      |      |      |

## 3.4 CAPABILITY ASSESSMENT

### 3.4.1 Resources for the 2017 Planning Initiative

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for inclusion into the 2017 Multi-Jurisdiction Hazard Mitigation Plan for both Volume 1 and Volume 2 (Cupertino Annex). All of the below items were additionally reviewed as part of the full capability assessment for Cupertino.

- **Cupertino General Plan**—The General Plan, including the Land Use and Safety Elements, were reviewed for information regarding goals and policies consistent with hazard mitigation for carry over as goals and objectives.
- **Cupertino Municipal Code**—The Municipal Code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- **Flood Damage Prevention Ordinance**—The Flood Damage Prevention Ordinance was reviewed for compliance with the National Flood Insurance Program.
- **Capital Improvements Plan**—The Capital Improvements Plan was reviewed to identify cross-planning initiatives.
- **Technical Reports and Information**—Outside resources and references used to complete the Cupertino Annex are identified in Section 3.11 of this Annex.

### 3.4.2 Full Capability Assessment

An assessment of legal and regulatory capabilities is presented in Table 3-2. An assessment of fiscal capabilities is presented in Table 3-3. An assessment of administrative and technical capabilities is presented in Table 3-4. Information on National Flood Insurance Program (NFIP) compliance is presented in Table 3-5. An assessment of education and outreach capabilities is presented in Table 3-6. Classifications under various community mitigation programs are presented in Table 3-7. Development and permitting capabilities are presented in Table 3-8, and the community's adaptive capacity for the impacts of climate change is presented in Table 3-9.

**Table 3-2. Legal and Regulatory Capability**

|                                                                                                                                                                                                                                          | Local Authority | Other Jurisdiction Authority | State Mandated | Integration Opportunity? |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|----------------|--------------------------|
| <b>Codes, Ordinances, &amp; Requirements</b>                                                                                                                                                                                             |                 |                              |                |                          |
| <b>2016 California Code of Regulations</b>                                                                                                                                                                                               | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: City of Cupertino and Santa Clara County Fire Dept. Jurisdiction; Cupertino Municipal Code Title 16: Buildings and Construction</i>                                                                                          |                 |                              |                |                          |
| <b>Zoning Code</b>                                                                                                                                                                                                                       | Yes             | No                           | No             | No                       |
| <i>Comment: Cupertino Municipal Code, Title 19: Zoning</i>                                                                                                                                                                               |                 |                              |                |                          |
| <b>Subdivisions</b>                                                                                                                                                                                                                      | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: Cupertino Municipal Code, Title 18: Subdivisions; California Subdivision Map Act</i>                                                                                                                                         |                 |                              |                |                          |
| <b>Stormwater Management</b>                                                                                                                                                                                                             | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: Cupertino Municipal Code Title 9.18: Stormwater Pollution Prevention and Watershed Protection; State Water Resources Control Board</i>                                                                                       |                 |                              |                |                          |
| <b>Post-Disaster Recovery</b>                                                                                                                                                                                                            | No              | No                           | No             | No                       |
| <i>Comment: None located.</i>                                                                                                                                                                                                            |                 |                              |                |                          |
| <b>Real Estate Disclosure</b>                                                                                                                                                                                                            | No              | No                           | Yes            | No                       |
| <i>Comment: California Civil Code §1102 et seq.</i>                                                                                                                                                                                      |                 |                              |                |                          |
| <b>Growth Management</b>                                                                                                                                                                                                                 | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: Local Agency Formation Commission; California Government Code §65300 et seq.</i>                                                                                                                                             |                 |                              |                |                          |
| <b>Site Plan Review</b>                                                                                                                                                                                                                  | Yes             | No                           | No             | No                       |
| <i>Comment: Cupertino Municipal Code Title 19: Zoning</i>                                                                                                                                                                                |                 |                              |                |                          |
| <b>Environmental Protection</b>                                                                                                                                                                                                          | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: Cupertino General Plan, Cupertino Municipal Code Title 9: Health and Sanitation; California Environmental Quality Act (Guideline: California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387)</i> |                 |                              |                |                          |
| <b>Flood Damage Prevention</b>                                                                                                                                                                                                           | Yes             | Yes                          | Yes            | Yes                      |
| <i>Comment: Cupertino Municipal Code Title 16.52: Prevention of Flood Damage; State Dept. of Water Resources, FEMA, Santa Clara Valley Water District</i>                                                                                |                 |                              |                |                          |
| <b>Emergency Management</b>                                                                                                                                                                                                              | Yes             | Yes                          | Yes            | No                       |
| <i>Comment: Santa Clara County Fire; Cupertino Municipal Code Title 2.40: Disaster Council</i>                                                                                                                                           |                 |                              |                |                          |
| <b>Climate Change</b>                                                                                                                                                                                                                    | Yes             | No                           | Yes            | Yes                      |
| <i>Comment: General Plan Environmental Resources and Sustainability Element &amp; Cupertino Climate Action Plan; California SB-379</i>                                                                                                   |                 |                              |                |                          |
| <b>Other:</b>                                                                                                                                                                                                                            | No              | No                           | No             | No                       |
| <i>Comment: None Located</i>                                                                                                                                                                                                             |                 |                              |                |                          |
| <b>Planning Documents</b>                                                                                                                                                                                                                |                 |                              |                |                          |
| <b>General Plan</b>                                                                                                                                                                                                                      | Yes             | No                           | No             | No                       |
| <i>Is the plan compliant with Assembly Bill 2140? Yes</i>                                                                                                                                                                                |                 |                              |                |                          |
| <i>Comment: General Plan: Community Vision 2015-2040; Last adopted October 2015</i>                                                                                                                                                      |                 |                              |                |                          |
| <b>Capital Improvement Plan</b>                                                                                                                                                                                                          | Yes             | No                           | No             | No                       |
| <i>How often is the plan updated? Annually</i>                                                                                                                                                                                           |                 |                              |                |                          |
| <i>Comment: Part of adopted budget</i>                                                                                                                                                                                                   |                 |                              |                |                          |
| <b>Floodplain or Watershed Plan</b>                                                                                                                                                                                                      | No              | Yes                          | No             | Yes                      |
| <i>Comment: No plan identified; Santa Clara Valley Water District – Flood Control</i>                                                                                                                                                    |                 |                              |                |                          |
| <b>Stormwater Plan</b>                                                                                                                                                                                                                   | Yes             | No                           | No             | No                       |
| <i>Comment: Storm Drain Master Plan</i>                                                                                                                                                                                                  |                 |                              |                |                          |
| <b>Urban Water Management Plan</b>                                                                                                                                                                                                       | No              | Yes                          | Yes            | No                       |
| <i>Comment: Municipal Regional Permit, State Water Resources Control Board</i>                                                                                                                                                           |                 |                              |                |                          |

|                                                                                                                                                                                                                                                                                                       | Local Authority | Other Jurisdiction Authority | State Mandated | Integration Opportunity? |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|----------------|--------------------------|
| <b>Habitat Conservation Plan</b><br><i>Comment: Cupertino is outside of the SCC Habitat Conservation Plan Permit Area</i>                                                                                                                                                                             | No              | No                           | No             | No                       |
| <b>Economic Development Plan</b><br><i>Comment: Economic Development Strategic Plan</i>                                                                                                                                                                                                               | Yes             | No                           | No             | No                       |
| <b>Shoreline Management Plan</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                      | No              | No                           | No             | No                       |
| <b>Wildland Urban Interface Area Plan</b><br><i>Comment: Santa Clara County Community Wildfire Protection Plan, June 2016</i>                                                                                                                                                                         | Yes             | Yes                          | Yes            | No                       |
| <b>Forest Management Plan</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                         | No              | No                           | No             | No                       |
| <b>Climate Action Plan</b><br><i>Comment: Cupertino Climate Action Plan</i>                                                                                                                                                                                                                           | Yes             | No                           | Yes            | Yes                      |
| <b>Comprehensive Emergency Management Plan</b><br><i>Comment: Santa Clara County Operational Area Emergency Management Plan</i>                                                                                                                                                                       | Yes             | No                           | No             | No                       |
| <b>Threat &amp; Hazard Identification &amp; Risk Assessment (THIRA)</b><br><i>Comment: Urban Area Security Initiative THIRA – 2016; UASI is required to develop a THIRA as a condition of grant funding. As a jurisdiction within the Santa Clara Operational Area, Cupertino is covered by UASI.</i> | No              | Yes                          | Yes (Partial)  | No                       |
| <b>Post-Disaster Recovery Plan</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                    | No              | No                           | No             | No                       |
| <b>Continuity of Operations Plan</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                  | No              | No                           | No             | No                       |
| <b>Public Health Plan</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                             | No              | No                           | No             | No                       |
| <b>Other:</b><br><i>Comment: None located</i>                                                                                                                                                                                                                                                         | No              | No                           | No             | No                       |

Table 3-3. Fiscal Capability

| Financial Resources                                  | Accessible or Eligible to Use?            |
|------------------------------------------------------|-------------------------------------------|
| Community Development Block Grants                   | Yes                                       |
| Capital Improvements Project Funding                 | Yes                                       |
| Authority to Levy Taxes for Specific Purposes        | Yes                                       |
| User Fees for Water, Sewer, Gas or Electric Service  | No (City does not manage these utilities) |
| Incur Debt through General Obligation Bonds          | Yes                                       |
| Incur Debt through Special Tax Bonds                 | Yes                                       |
| Incur Debt through Private Activity Bonds            | Yes                                       |
| Withhold Public Expenditures in Hazard-Prone Areas   | No                                        |
| State-Sponsored Grant Programs                       | Yes                                       |
| Development Impact Fees for Homebuyers or Developers | Yes                                       |
| Other                                                | No                                        |

**Table 3-4. Administrative and Technical Capability**

| Staff/Personnel Resources                                                               | Available? | Department/Agency/Position                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planners or engineers with knowledge of land development and land management practices  | Yes        | Community Development/Director, Assistant Director, Principal Planner, Senior Planner, Associate Planner, Assistant Planners<br><br>Public Works/Director, Senior Civil Engineer, Associate Civil Engineer, Senior Engineering Technician |
| Engineers or professionals trained in building or infrastructure construction practices | Yes        | Chief Building Official, Deputy Building Official, Permit Center Manager, Building Inspector<br><br>Public Works/Director, Senior Civil Engineer, Associate Civil Engineer, Construction Inspector                                        |
| Planners or engineers with an understanding of natural hazards                          | Yes        | Public Works/Director, Senior Civil Engineer                                                                                                                                                                                              |
| Staff with training in benefit/cost analysis                                            | Yes        | Contract                                                                                                                                                                                                                                  |
| Surveyors                                                                               | Yes        | Contract                                                                                                                                                                                                                                  |
| Personnel skilled or trained in GIS applications                                        | Yes        | GIS Coordinator, GIS Technician                                                                                                                                                                                                           |
| Scientist familiar with natural hazards in local area                                   | Yes        | Contract                                                                                                                                                                                                                                  |
| Emergency manager                                                                       | Yes        | County Fire                                                                                                                                                                                                                               |
| Grant writers                                                                           | Yes        | Contract                                                                                                                                                                                                                                  |

**Table 3-5. National Flood Insurance Program Compliance**

| Criteria                                                                                                                                                                        | Response                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| What local department is responsible for floodplain management?                                                                                                                 | Public Works                                                            |
| Who is your floodplain administrator? (department/position)                                                                                                                     | Public Works/Senior Civil Engineer                                      |
| Are any certified floodplain managers on staff in your jurisdiction?                                                                                                            | Yes                                                                     |
| What is the date of adoption of your flood damage prevention ordinance?                                                                                                         | May 5, 1980; Last updated 2016                                          |
| Does your floodplain management program meet or exceed minimum requirements?<br>• If exceeds, in what ways?                                                                     | Exceed<br>Increased Freeboard (1'),<br>Cumulative Substantial Damage    |
| When was the most recent Community Assistance Visit or Community Assistance Contact?                                                                                            | 2015                                                                    |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?                                                                               | No                                                                      |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction?                                                                                           | Yes                                                                     |
| Does your floodplain management staff need any assistance or training to support its floodplain management program?<br>• If so, what type of assistance/training is needed?     | No                                                                      |
| Does your jurisdiction participate in the Community Rating System (CRS)?<br>• If yes, is your jurisdiction interested in improving CRS Classification?                          | Yes (currently Class 7)<br>No                                           |
| How many flood insurance policies are in force in your jurisdiction?<br>• What is the insurance in force?<br>• What is the premium in force?                                    | 145 <sup>a</sup><br>\$44,365,900 <sup>a</sup><br>\$103,099 <sup>a</sup> |
| How many total loss claims have been filed in your jurisdiction?<br>• How many claims were closed without payment/are still open?<br>• What were the total payments for losses? | 20 <sup>a</sup><br>10/0 <sup>a</sup><br>\$812,170.73 <sup>a</sup>       |

a. According to FEMA statistics as of October 31, 2016

**Table 3-6. Education and Outreach**

| Criteria                                                                                                                                            | Response                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Do you have a Public Information Officer or Communications Office?                                                                                  | Yes                                                                                                                                                                                                                                                                                                                                   |
| Do you have personnel skilled or trained in website development?                                                                                    | Yes                                                                                                                                                                                                                                                                                                                                   |
| Do you have hazard mitigation information available on your website?<br>• If yes, please briefly describe.                                          | Yes<br>Interactive GIS maps and Open Data Portal                                                                                                                                                                                                                                                                                      |
| Do you utilize social media for hazard mitigation education and outreach?<br>• If yes, please briefly describe.                                     | Yes<br>Ready 95014                                                                                                                                                                                                                                                                                                                    |
| Do you have any citizen boards or commissions that address issues related to hazard mitigation?                                                     | Yes, CERT and Public Safety Commission                                                                                                                                                                                                                                                                                                |
| Do you have any other programs already in place that could be used to communicate hazard-related information?<br>• If yes, please briefly describe. | Yes<br>Cupertino Alert System (CAS) allows the City to rapidly notify residents and businesses by phone, email, SMS and fax in the event of an emergency. Information made available on the City Channel, Ch. 26 on Comcast Cable or Ch. 99 on AT&T, Radio Cupertino 1670 AM, Facebook, Twitter, Nextdoor, and the Cupertino website. |
| Do you have any established warning systems for hazard events?<br>• If yes, please briefly describe.                                                | Yes<br>CAS                                                                                                                                                                                                                                                                                                                            |

**Table 3-7. Community Classifications**

|                                              | Participating? | Classification | Date Classified     |
|----------------------------------------------|----------------|----------------|---------------------|
| Community Rating System                      | Yes            | 7              | 5/1/2015            |
| Building Code Effectiveness Grading Schedule | Yes            | 2              | 10/18/2014          |
| Public Protection                            | Yes            | Unknown        | Since Incorporation |
| Storm Ready                                  | No             | N/A            | N/A                 |
| Firewise                                     | No             | N/A            | N/A                 |

**Table 3-8. Development and Permit Capabilities**

| Criterion                                                                                         | Response                                                                                 |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Does your jurisdiction issue development permits?<br>• If no, who does? If yes, which department? | Yes<br>City of Cupertino Community Development Department                                |
| Does your jurisdiction have the ability to track permits by hazard area?                          | No - Not historically but we now have the ability moving forward with new permit system. |
| Does your jurisdiction have a buildable lands inventory?                                          | No                                                                                       |

**Table 3-9. Adaptive Capacity for Climate Change**

| Adaptive Capacity Assessment                                                                                                                                                                                                                                                                                                                                                                        | Jurisdiction Rating |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Technical Capacity</b>                                                                                                                                                                                                                                                                                                                                                                           |                     |
| <b>Jurisdiction-level understanding of potential climate change impacts</b>                                                                                                                                                                                                                                                                                                                         | Medium              |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Jurisdiction-level monitoring of climate change impacts</b>                                                                                                                                                                                                                                                                                                                                      | Medium              |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Technical resources to assess proposed strategies for feasibility and externalities</b>                                                                                                                                                                                                                                                                                                          | Medium              |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Jurisdiction-level capacity for development of greenhouse gas emissions inventory</b>                                                                                                                                                                                                                                                                                                            | High                |
| <i>Comment: Completed initial GHG inventory with adoption of Climate Action Plan in 2015. Will conduct an update to be released in 2017.</i>                                                                                                                                                                                                                                                        |                     |
| <b>Capital planning and land use decisions informed by potential climate impacts</b>                                                                                                                                                                                                                                                                                                                | Medium              |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Participation in regional groups addressing climate risks</b>                                                                                                                                                                                                                                                                                                                                    | High                |
| <i>Comment: Joint Venture Silicon Valley Public Climate Task Force; Santa Clara County's Silicon Valley 2.0; Joint Policy Committee Bay Area Climate &amp; Resiliency Project</i>                                                                                                                                                                                                                   |                     |
| <b>Implementation Capacity</b>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Clear authority/mandate to consider climate change impacts during public decision-making processes</b>                                                                                                                                                                                                                                                                                           | Low                 |
| <i>Comment: General Plan Environmental Resources &amp; Sustainability Element Goal ES-1.1 provides the vision to incorporate principles of sustainability into Cupertino's planning, infrastructure and development processes.</i>                                                                                                                                                                  |                     |
| <b>Identified strategies for greenhouse gas mitigation efforts</b>                                                                                                                                                                                                                                                                                                                                  | High                |
| <i>Comment: City's Climate Action Plan outlines over 200 strategies to reduce GHG communitywide and for municipal operations</i>                                                                                                                                                                                                                                                                    |                     |
| <b>Identified strategies for adaptation to impacts</b>                                                                                                                                                                                                                                                                                                                                              | Low                 |
| <i>Comment: Two important documents are a start for addressing adaptation impacts</i>                                                                                                                                                                                                                                                                                                               |                     |
| 1. General Plan Environmental Resources & Sustainability Element Strategy ES-1.1.3: Climate Adaptation & Resiliency                                                                                                                                                                                                                                                                                 |                     |
| 2. Cupertino's Climate Action Plan Chapter 6 Climate Adaptation & Resiliency.                                                                                                                                                                                                                                                                                                                       |                     |
| <b>Champions for climate action in local government departments</b>                                                                                                                                                                                                                                                                                                                                 | High                |
| <i>Comment: Champions for climate action starts in the City Manager's office and can be found within all levels of the organization and within each department. Departments report on their progress towards Climate Action Plan strategies yearly. Additionally, every staff report that goes to City Council has a section where staff need to explain the sustainability impact of the item.</i> |                     |
| <b>Political support for implementing climate change adaptation strategies</b>                                                                                                                                                                                                                                                                                                                      | High                |
| <i>Comment: A sustainability commission created by the City in 2015 to oversee implementation of the Climate Action Plan meets quarterly</i>                                                                                                                                                                                                                                                        |                     |
| <b>Financial resources devoted to climate change adaptation</b>                                                                                                                                                                                                                                                                                                                                     | Low                 |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Local authority over sectors likely to be negative impacted</b>                                                                                                                                                                                                                                                                                                                                  | Medium              |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Public Capacity</b>                                                                                                                                                                                                                                                                                                                                                                              |                     |
| <b>Local residents knowledge of and understanding of climate risk</b>                                                                                                                                                                                                                                                                                                                               | Unknown             |
| <i>Comment: Unknown. This information can be updated after implementation of GP Strategy ES-1.1.3 Climate Vulnerability Assessment,</i>                                                                                                                                                                                                                                                             |                     |
| <b>Local residents support of adaptation efforts</b>                                                                                                                                                                                                                                                                                                                                                | Unknown             |
| <i>Comment: Unknown. This information can be updated after implementation of GP Strategy ES-1.1.3 Climate Vulnerability Assessment,</i>                                                                                                                                                                                                                                                             |                     |
| <b>Local residents' capacity to adapt to climate impacts</b>                                                                                                                                                                                                                                                                                                                                        | Unknown             |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Local economy current capacity to adapt to climate impacts</b>                                                                                                                                                                                                                                                                                                                                   | Unknown             |
| <i>Comment: None provided.</i>                                                                                                                                                                                                                                                                                                                                                                      |                     |
| <b>Local ecosystems capacity to adapt to climate impacts</b>                                                                                                                                                                                                                                                                                                                                        | Unknown             |
| <i>Comment: Unknown. This information can be updated after implementation of GP Strategy ES-1.1.3 Climate Vulnerability Assessment,</i>                                                                                                                                                                                                                                                             |                     |

## 3.5 INTEGRATION WITH OTHER PLANNING INITIATIVES

The following describe the jurisdiction's process for integrating the hazard mitigation plan into local planning mechanisms.

### 3.5.1 Existing Integration

The following plans and programs currently integrate the goals, risk assessment and/or recommendations of the hazard mitigation plan:

- **Cupertino General Plan**—Currently incorporates information on hazard risks and strategies for hazard risk reduction through its development plans and strategies. At the time of the next update, information obtained in the update of the hazard mitigation plan will be integrated into the General Plan as appropriate.
- **Flood Damage Prevention Ordinance**—The flood damage prevention ordinance identifies areas at risk from the flood hazard and includes specific standards and regulations designed to reduce risk to structures within those areas.

### 3.5.2 Opportunities for Future Integration

The following plans and programs do not currently integrate the goals, risk assessment and/or recommendations of the hazard mitigation plan, but provide an opportunity for future integration:

- **Legal and Regulatory Capabilities**—Those capabilities identified as providing an integration opportunity in Table 3-1 will be reviewed and updated to include information on hazard risk reduction as feasible and appropriate.

## 3.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 3-10 lists all past occurrences of natural hazards within the jurisdiction.

**Table 3-10. Natural Hazard Events**

| Type of Event | FEMA Disaster # (if applicable) | Date               | Preliminary Damage Assessment |
|---------------|---------------------------------|--------------------|-------------------------------|
| Heavy Rain    | —                               | January 3-13, 2017 | Unknown                       |
| Flood         | —                               | January 20, 2010   | Unknown                       |
| Heavy Rain    | —                               | December 15, 2002  | Unknown                       |
| Severe Storm  | 1203                            | February 9, 1998   | \$25,537,087.33               |
| Severe Storm  | 1115                            | January 4, 1997    | \$21,792,068.12               |
| Severe Storm  | 1046                            | March 12, 1995     | \$9,331,377.98                |
| Severe Storm  | 1044                            | January 10, 1995   | \$17,482,926.56               |
| Freeze        | 894                             | February 11, 1991  | Unknown                       |
| Earthquake    | 845                             | October 17, 1989   | \$1,409,677,726.18            |
| Flood         | 758                             | February 21, 1986  | \$10,812,819.38               |
| Storm         | 677                             | February 9, 1983   | \$20,746,004.58               |
| Flood         | 651                             | January 7, 1982    | \$17,543,819.07               |

### 3.7 JURISDICTION-SPECIFIC VULNERABILITIES

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 0
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 0
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 0

Other noted vulnerabilities include:

- Urban street flood—particular areas are prone to street flooding during flash rain events.

### 3.8 HAZARD RISK RANKING

Table 3-11 presents the ranking of the hazards of concern.

| Table 3-11. Hazard Risk Ranking |                       |                                          |                  |
|---------------------------------|-----------------------|------------------------------------------|------------------|
| Rank                            | Hazard Type           | Risk Rating Score (Probability x Impact) | Category         |
| 1                               | Earthquake            | 48                                       | High             |
| 2                               | Severe Weather        | 33                                       | Medium           |
| 3                               | Flood                 | 25                                       | Medium           |
| 4                               | Landslide             | 15                                       | Medium           |
| 4                               | Wildfire              | 15                                       | Medium           |
| 5                               | Drought               | 9                                        | Low              |
| 6                               | Dam and Levee Failure | 0                                        | Low <sup>a</sup> |

a. A dam plan exists for Stevens Creek Reservoir

### 3.9 STATUS OF PREVIOUS PLAN ACTIONS

The status of previous actions from the 2011 ABAG LHMP for Cupertino can be found in Appendix D of this volume.

### 3.10 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 3-12 lists the actions that make up the City of Cupertino hazard mitigation action plan. Table 3-13 identifies the priority for each action. Table 3-14 summarizes the mitigation actions by hazard of concern and the six mitigation types.

### 3.11 ADDITIONAL RESOURCES

The hazard mitigation plan annex development tool-kit was used in the development of this annex to the Santa Clara Operational Area Hazard Mitigation Plan.

**Table 3-12. Hazard Mitigation Action Plan Matrix**

| Applies to new or existing assets                                                                                                                                                                                                                                                                                                                                                                                                     | Hazards Mitigated           | Objectives Met   | Lead Agency                          | Estimated Cost | Sources of Funding                     | Timeline   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------|--------------------------------------|----------------|----------------------------------------|------------|
| <b>CPT-1</b> —Require all new construction, including public facilities, to be built in accordance with the most recent Building and Fire Code standards.                                                                                                                                                                                                                                                                             |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | All hazards                 | 3                | Building Division<br>Fire Department | Low            | General Fund                           | Ongoing    |
| <b>CPT-2</b> —Continue to enforce and/or comply with State-mandated requirements, such as the California Environmental Quality Act and environmental regulations to ensure that urban development is conducted in a way to minimize air pollution. Specifically, develop a Sustainable Land Use and Green Building Policy to expand on the work that was done to achieve these goals in the 2005 General Plan Sustainability Section. |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | All hazards                 | 1, 2, 3, 4       | Planning Division<br>Public Works    | Low            | General Fund                           | Ongoing    |
| <b>CPT-3</b> —Increase the use of clean, alternative energy, by subscribing to and supporting Community Choice Energy.                                                                                                                                                                                                                                                                                                                |                             |                  |                                      |                |                                        |            |
| New                                                                                                                                                                                                                                                                                                                                                                                                                                   | Severe Weather              | 1, 2, 6          | Building Division                    | Medium         | General Fund                           | Ongoing    |
| <b>CPT-4</b> —Increase recycling rates in local government operations and in the community.                                                                                                                                                                                                                                                                                                                                           |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | Wildfire                    | 4, 6             | Public Works<br>Sustainability       | Medium         | General Fund<br>Resource Recovery Fund | Ongoing    |
| <b>CPT-5</b> —Promote or increase the resiliency of critical and essential facilities/infrastructure following a major natural disaster through various means.                                                                                                                                                                                                                                                                        |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | All hazards                 | 3, 8, 9          | Building Division<br>Public Works    | Medium         | General Fund                           | Ongoing    |
| <b>CPT-6</b> —Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.                                                                                                                                                                                                                                                                        |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | Severe Weather              | 2, 4, 6          | Sustainability                       | Medium         | General Fund                           | Ongoing    |
| <b>CPT-7</b> —Maintain and update a GIS layer of localized flooding “hot spots” throughout the City.                                                                                                                                                                                                                                                                                                                                  |                             |                  |                                      |                |                                        |            |
| New                                                                                                                                                                                                                                                                                                                                                                                                                                   | Flood and<br>Severe Weather | 1, 2, 4, 8, 9    | Public Works<br>Information Services | Medium         | General Fund                           | Ongoing    |
| <b>CPT-8</b> —Develop a storm drain master plan in order to develop and prioritize capital projects.                                                                                                                                                                                                                                                                                                                                  |                             |                  |                                      |                |                                        |            |
| New                                                                                                                                                                                                                                                                                                                                                                                                                                   | Flood and<br>Severe Weather | 1, 2, 4, 8, 9    | Public Works                         | Medium         | General Fund<br>Storm Fee              | Short-term |
| <b>CPT-9</b> —Continue to maintain good standing and compliance under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that will, at a minimum, meet the requirements of the NFIP:                                                                                                                                                                        |                             |                  |                                      |                |                                        |            |
| <ul style="list-style-type: none"> <li>Enforcement of the flood damage prevention ordinance</li> <li>Participate in floodplain identification and mapping updates</li> <li>Provide public assistance/information on floodplain requirements and impacts.</li> </ul>                                                                                                                                                                   |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | Flood                       | 1, 2, 3, 4, 7, 8 | Public Works                         | Low            | Staff Time, General Funds              | Ongoing    |
| <b>CPT-10</b> —Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas and prioritize those structures that have experienced repetitive losses.                                                                                                                                                                                                                                   |                             |                  |                                      |                |                                        |            |
| Existing                                                                                                                                                                                                                                                                                                                                                                                                                              | All Hazards                 | 4, 5, 6, 7, 8    | Planning Division<br>Public Works    | High           | HMGP, PDM, FMA,<br>CDBG-DR             | Short-term |
| <b>CPT-11</b> —Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.                                                                                                                                                                                                                                                                                   |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | All Hazards                 | 2, 4             | Planning Division                    | Low            | Staff Time, General Funds              | Ongoing    |
| <b>CPT-12</b> —Actively participate in the plan maintenance protocols outlined in Volume 1 of the hazard mitigation plan.                                                                                                                                                                                                                                                                                                             |                             |                  |                                      |                |                                        |            |
| New and Existing                                                                                                                                                                                                                                                                                                                                                                                                                      | All Hazards                 | 1, 5             | Public Works                         | Low            | Staff Time, General Funds              | Short-term |

**Table 3-13. Mitigation Strategy Priority Schedule**

| Action # | # of Objectives Met | Benefits | Costs  | Do Benefits Equal or Exceed Costs? | Is Project Grant-Eligible? | Can Project Be Funded Under Existing Programs/Budgets? | Implementation Priority <sup>a</sup> | Grant Pursuit Priority <sup>a</sup> |
|----------|---------------------|----------|--------|------------------------------------|----------------------------|--------------------------------------------------------|--------------------------------------|-------------------------------------|
| CPT-1    | 1                   | High     | Low    | Yes                                | No                         | Yes                                                    | Medium                               | Low                                 |
| CPT-2    | 4                   | High     | Low    | Yes                                | No                         | Yes                                                    | High                                 | Low                                 |
| CPT-3    | 3                   | Medium   | Medium | Yes                                | Yes                        | Yes                                                    | Medium                               | Medium                              |
| CPT-4    | 2                   | Medium   | Medium | Yes                                | No                         | Yes                                                    | Medium                               | Low                                 |
| CPT-5    | 3                   | High     | High   | Yes                                | Yes                        | No                                                     | Medium                               | High                                |
| CPT-6    | 3                   | Medium   | Medium | Yes                                | Yes                        | Yes                                                    | Medium                               | Medium                              |
| CPT-7    | 5                   | Medium   | Medium | Yes                                | Yes                        | Yes                                                    | Medium                               | Medium                              |
| CPT-8    | 5                   | High     | High   | Yes                                | Yes                        | Yes                                                    | High                                 | High                                |
| CPT-9    | 5                   | Medium   | Medium | Yes                                | No                         | Yes                                                    | Medium                               | Low                                 |
| CPT-10   | 5                   | High     | High   | Yes                                | Yes                        | No                                                     | Medium                               | High                                |
| CPT-11   | 2                   | Medium   | Low    | Yes                                | No                         | Yes                                                    | High                                 | Low                                 |
| CPT-12   | 2                   | Low      | Low    | Yes                                | No                         | Yes                                                    | High                                 | Low                                 |

a. See the introduction to this volume for explanation of priorities.

**Table 3-14. Analysis of Mitigation Actions**

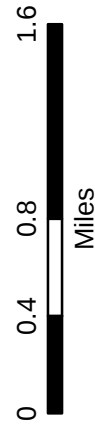
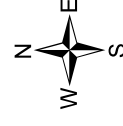
| Hazard Type           | Action Addressing Hazard, by Mitigation Type <sup>a</sup> |                             |                                   |                                |                       |                        |                      |
|-----------------------|-----------------------------------------------------------|-----------------------------|-----------------------------------|--------------------------------|-----------------------|------------------------|----------------------|
|                       | 1. Prevention                                             | 2. Property Protection      | 3. Public Education and Awareness | 4. Natural Resource Protection | 5. Emergency Services | 6. Structural Projects | 7. Climate Resilient |
| Earthquake            | CPT-11, CPT-12                                            | CPT-1, CPT-2, CPT-5, CPT-10 | CPT-1, CPT-2, CPT-5               |                                | CPT-1, CPT-2, CPT-5   | CPT-1, CPT-2, CPT-5    |                      |
| Severe Weather        | CPT-3, CPT-6, CPT-11, CPT-12                              | CPT-2, CPT-5, CPT-10        | CPT-2, CPT-5                      |                                |                       |                        |                      |
| Flood                 | CPT-7, CPT-8, CPT-9, CPT-11, CPT-12                       | CPT-7, CPT-8, CPT-9, CPT-10 | CPT-7, CPT-8, CPT-9               |                                | CPT-7, CPT-8, CPT-9   |                        |                      |
| Landslide             | CPT-11, CPT-12                                            | CPT-2, CPT-5, CPT-10        | CPT-2, CPT-5                      |                                |                       |                        |                      |
| Wildfire              | CPT-11, CPT-12                                            | CPT-2, CPT-10               | CPT-2                             | CPT-2                          |                       |                        |                      |
| Drought               | CPT-3, CPT-6, CPT-11, CPT-12                              | CPT-10                      | CPT-3, CPT-6                      |                                |                       |                        |                      |
| Dam and Levee Failure | CPT-11, CPT-12                                            | CPT-7, CPT-8, CPT-9, CPT-10 | CPT-9                             |                                | CPT-7, CPT-8, CPT-9   |                        |                      |

a. See the introduction to this volume for explanation of mitigation types.

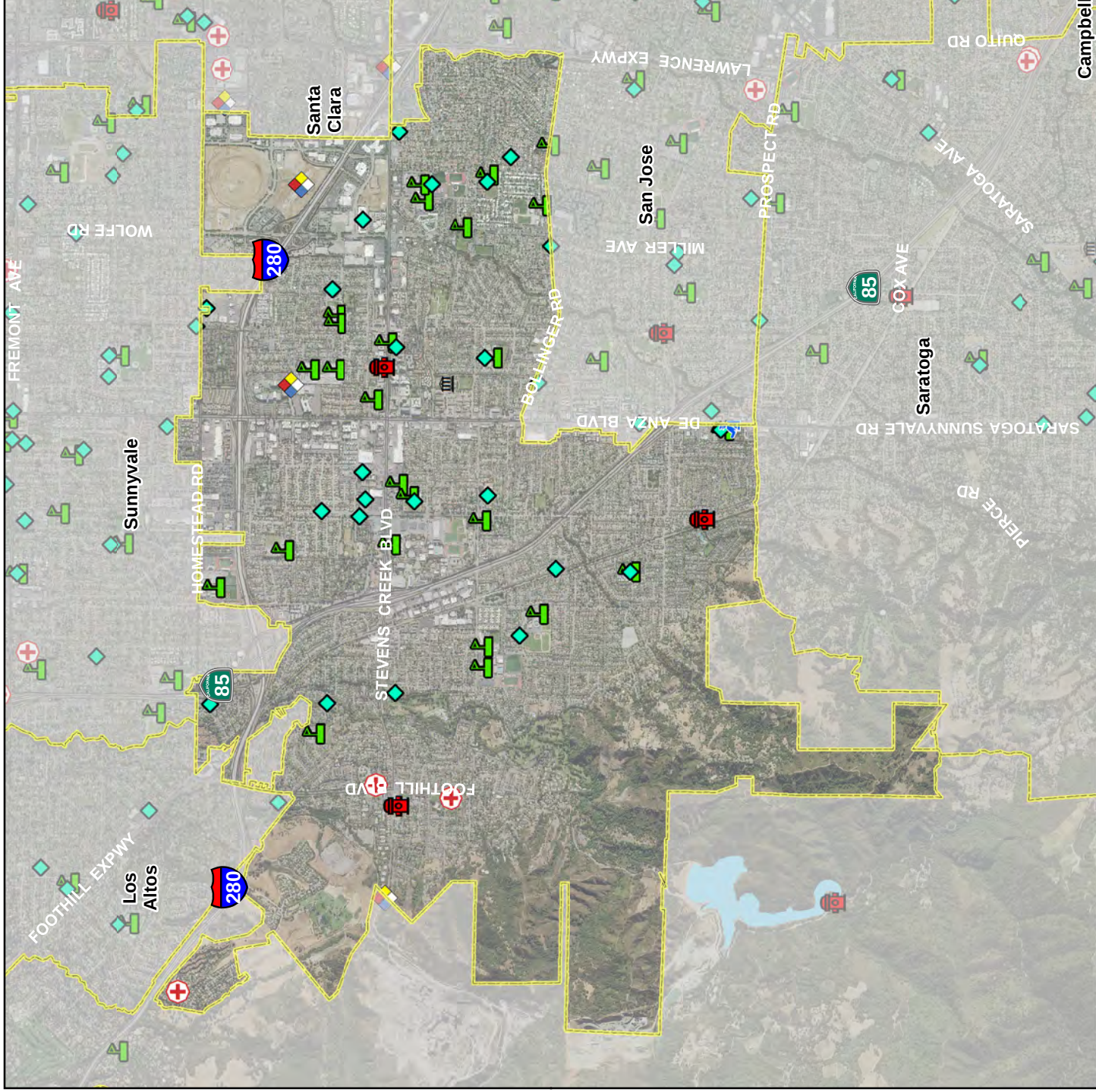
# The City of Cupertino

## Critical Facilities

- Emergency Response (Operation Centers)
- Emergency Response (Fire)
- Emergency Response (Police)
- Military Facilities
- Public Health & Safety (Medical Care)
- Public Health & Safety (Government)
- Hazardous Materials
- Recovery Facilities
- Socioeconomic Facilities (Childcare)
- Socioeconomic Facilities (Schools)
- Santa Clara County Boundary
- Jurisdictional Boundaries
- Water Bodies & Channels



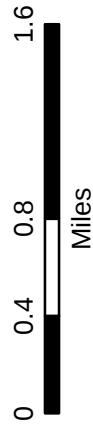
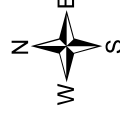
Map Data Sources: Santa Clara County, CalTrans, Hazus 3.1, EPA, SCVWD, USDA



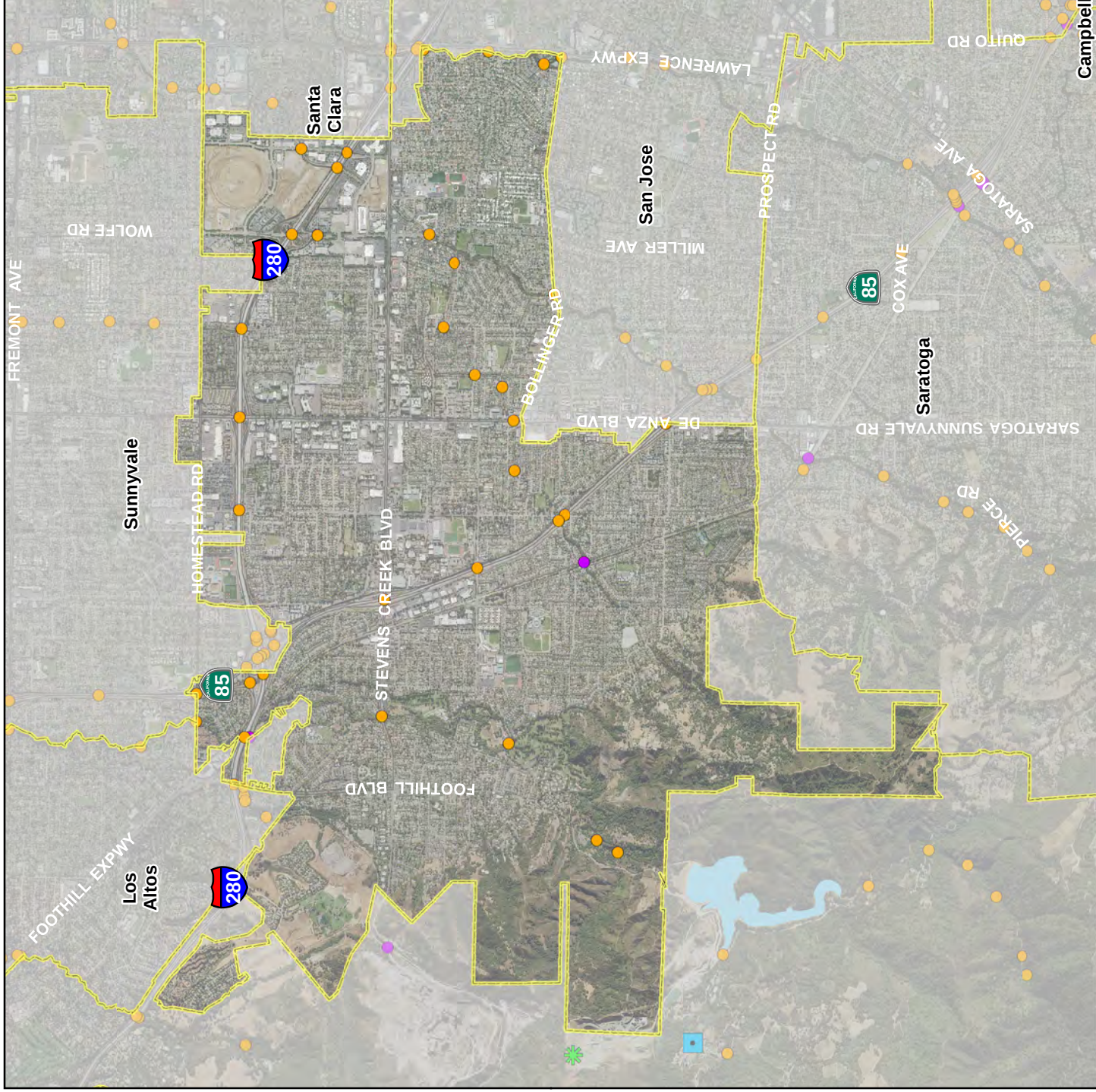
# The City of Cupertino

## Critical Infrastructure

-  Airport Facilities
-  Bus Facilities
-  Communication Facilities
-  Dams
-  Electric Power Facilities
-  Highway Bridges
-  Rail / Light Rail Facilities
-  Rail / Light Rail Bridges
-  Petroleum Facilities
-  Potable Water Facilities
-  Wastewater Facilities
-  Santa Clara County Boundary
-  Jurisdictional Boundaries
-  Water Bodies & Channels



Map Data Sources: Santa Clara County, CalTrans, Hazus 3.1, EPA, SCVWD, USDA

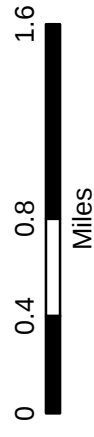
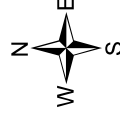


Campbell

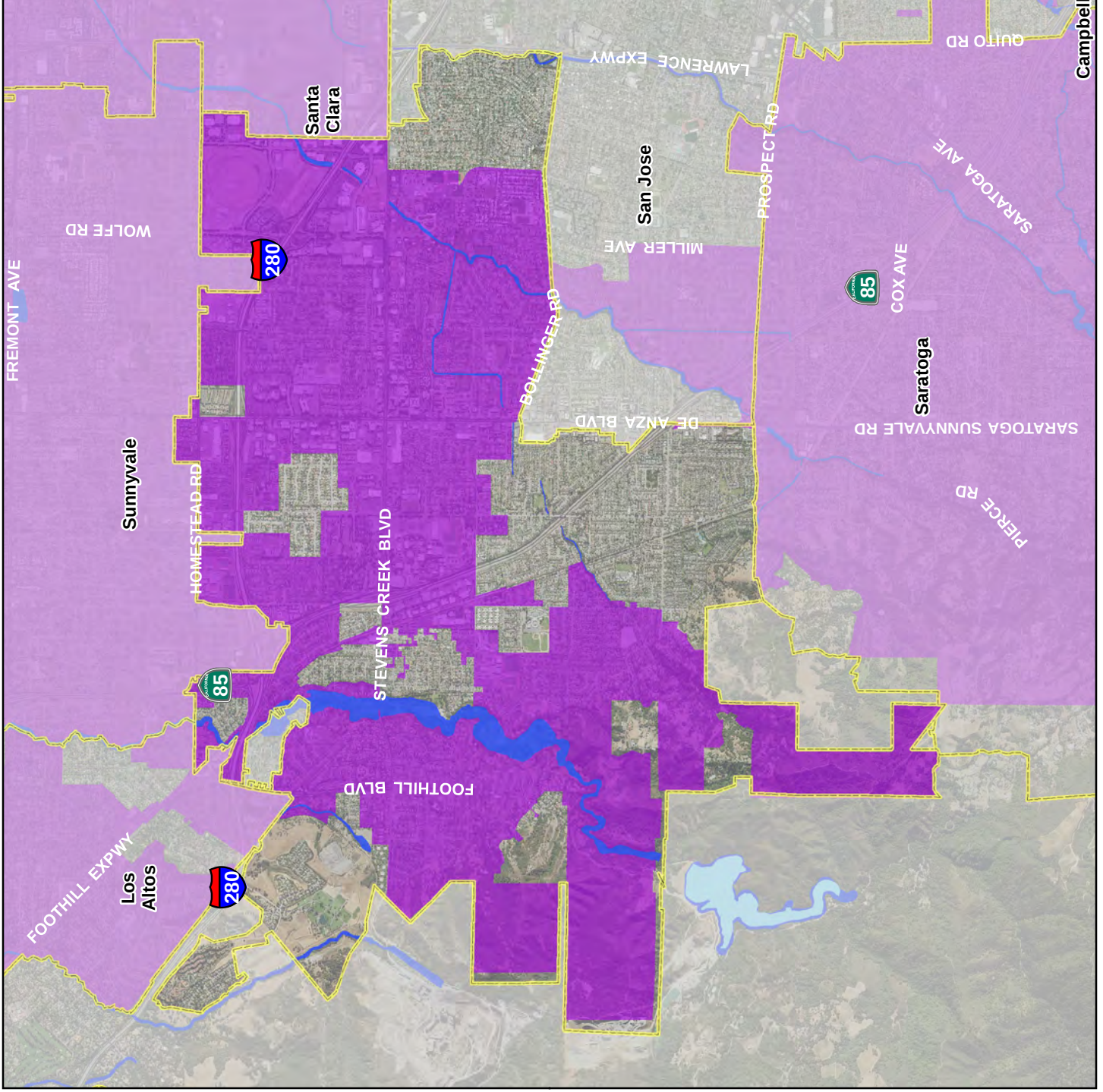
# The City of Cupertino

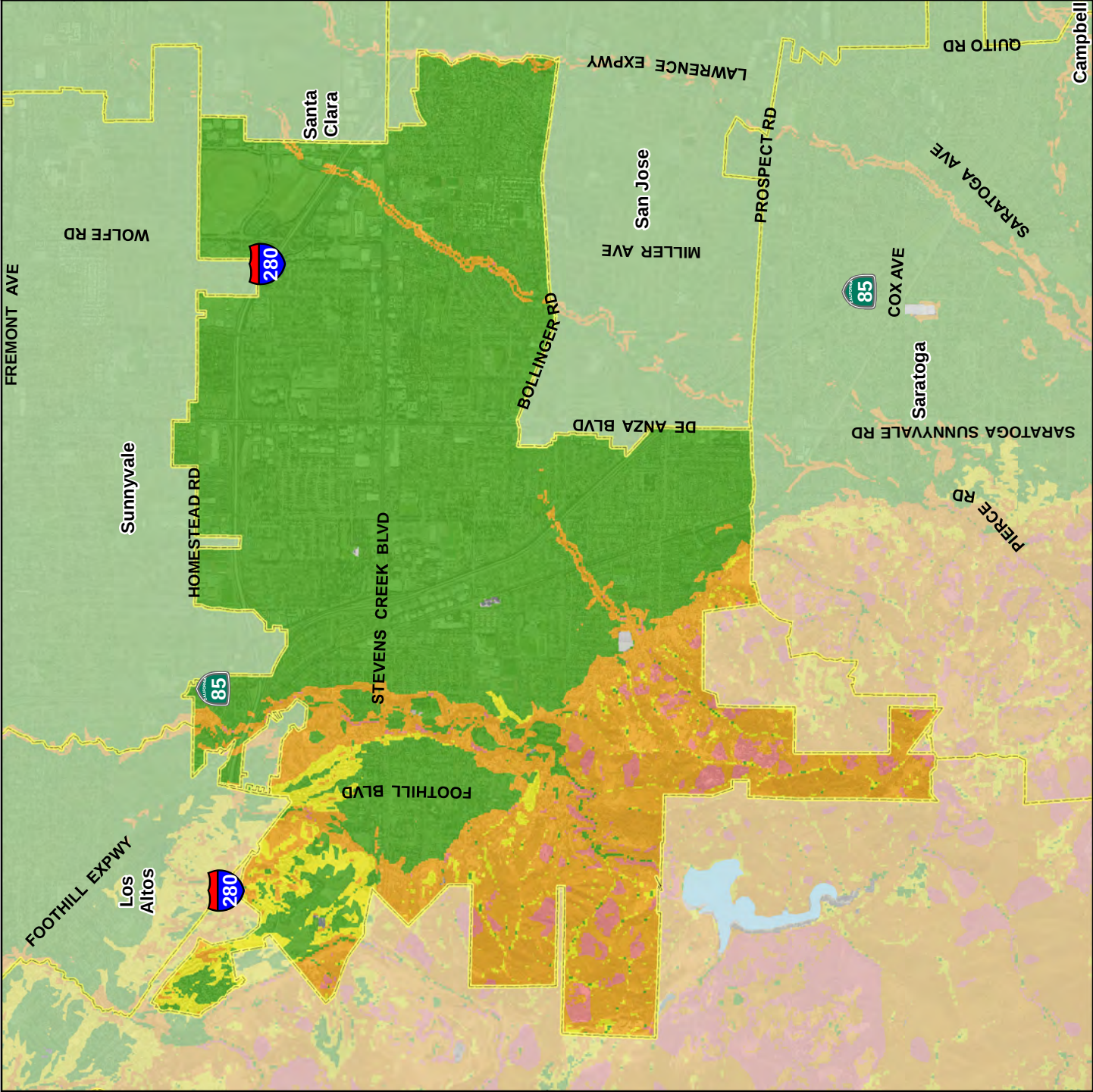
## FEMA Effective DFIRM Flood Hazard Boundaries

-  1% Annual Chance (100-Year) Flood Zone
  -  0.2% Annual Chance (500-Year) Flood Zone
  -  Santa Clara County Boundary
  -  Jurisdictional Boundaries
  -  Water Bodies & Channels
- Flood hazard areas as depicted on  
Effective FEMA Digital Insurance Rate  
Maps (DFIRM)



Map Data Sources: Santa Clara County,  
CalTrans, FEMA, USDA





## The City of Cupertino

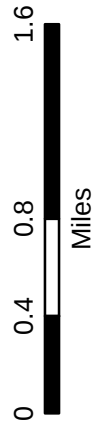
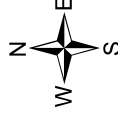
### Landslide Susceptibility Zones

-  Santa Clara County Boundary
-  Jurisdictional Boundaries
-  Water Bodies & Channels

#### Type

-  Low
-  Moderate
-  High
-  Very High / Existing

Source dataset created by Wills C.J., Perez, F., Gutierrez, C., 2011, Susceptibility to deep-seated landslides in California: California Geological Survey Map Sheet 58



Map Data Sources: Santa Clara County, CalTrans, California Geological Survey, USDA, USGS

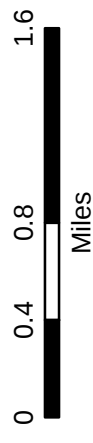
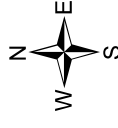
# The City of Cupertino

## Liquefaction Susceptibility

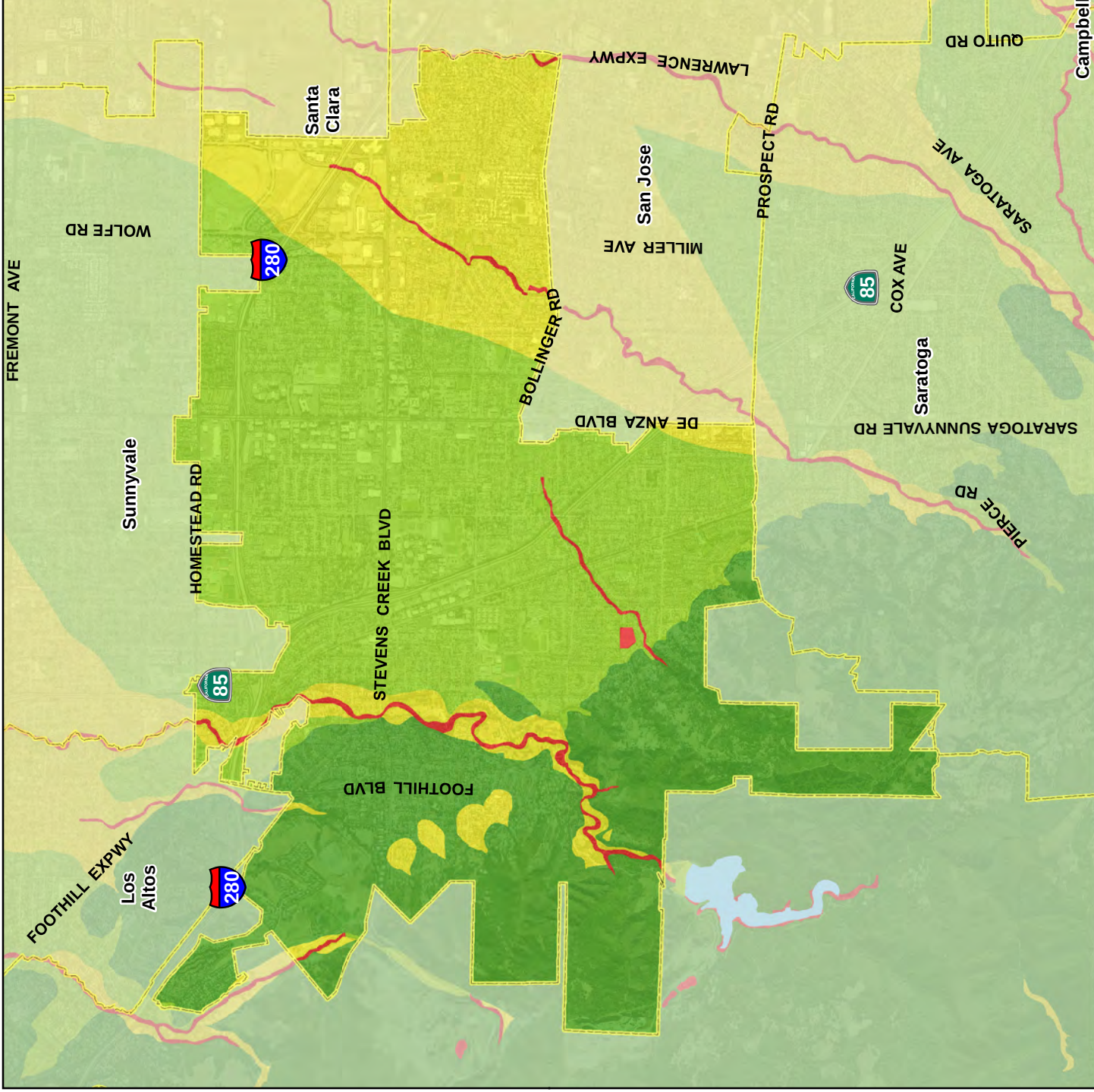
-  Santa Clara County Boundary
-  Jurisdictional Boundaries
-  Water Bodies & Channels
-  No Liquefaction Data Available

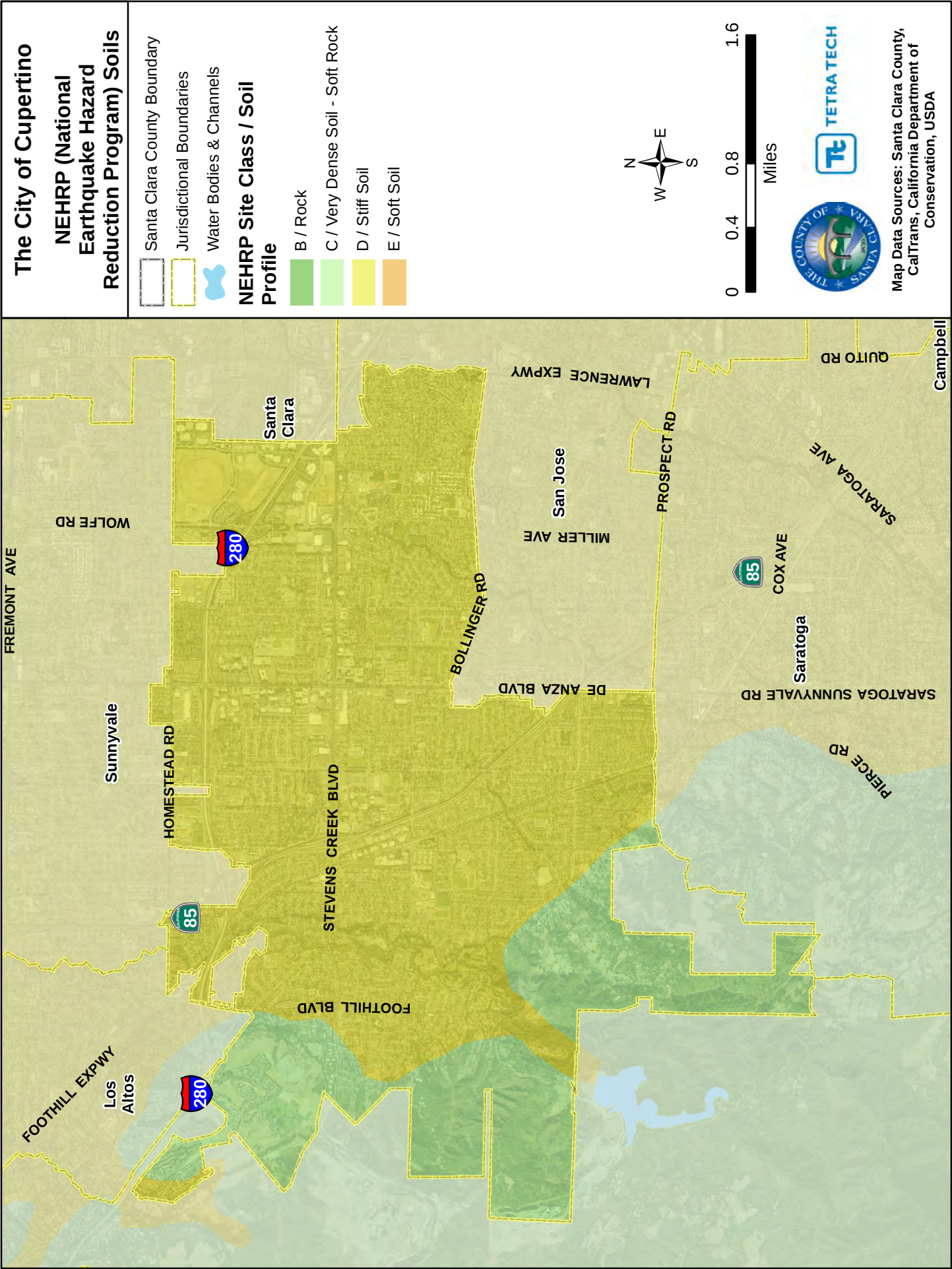
## Susceptibility to Liquefaction

-  Very Low
-  Low
-  Medium
-  High
-  Very High



Map Data Sources: Santa Clara County,  
CalTrans, California Geologic Survey,  
USDA, USGS



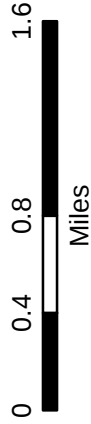
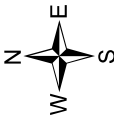


**The City of Cupertino**  
**NEHRP (National Earthquake Hazard Reduction Program) Soils**

- Santa Clara County Boundary
- Jurisdictional Boundaries
- Water Bodies & Channels

**NEHRP Site Class / Soil Profile**

- B / Rock
- C / Very Dense Soil - Soft Rock
- D / Stiff Soil
- E / Soft Soil



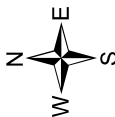
# The City of Cupertino

## Wildfire Severity Zones

-  Santa Clara County Boundary
-  Jurisdictional Boundaries
-  Water Bodies & Channels

### Wildfire Severity Zone

-  Moderate
-  High
-  Very High



TETRA TECH

Map Data Sources: Santa Clara County,  
CalTrans, CalFIRE, USDA

