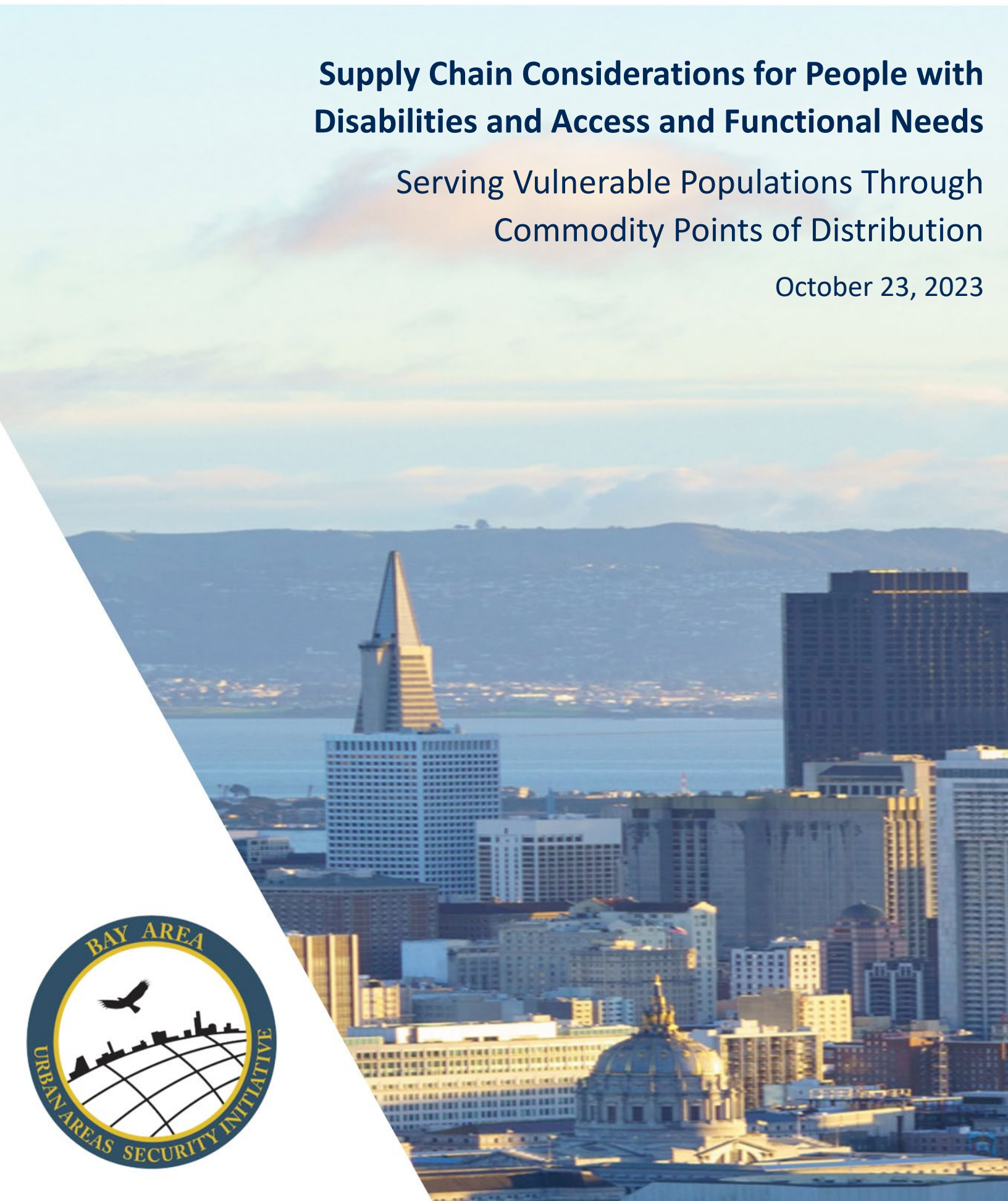
Bay Area Urban Areas Security Initiative

Supply Chain Considerations for People with Disabilities and Access and Functional Needs

Serving Vulnerable Populations Through Commodity Points of Distribution

October 23, 2023



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BACKGROUND

The Bay Area Urban Areas Security Initiative (UASI) has been awarded funds via the Department of Homeland Security's Fiscal Year 2021 Regional Catastrophic Preparedness Grant Program (RCPGP) to build capability by ensuring the whole community is engaged in strengthening Bay Area supply chain resilience. To prepare for future incidents, Bay Area jurisdictions are eager to coordinate with the whole community in planning to resolve supply chain issues to ensure impacted communities can access essential commodities. To improve supply chain resilience in the Bay Area, a project was designed with progressive and complementary components outlined in the introduction.

PURPOSE

The Supply Chain Considerations for People with Disabilities and Access and Functional Needs (AFN): Serving Vulnerable Populations Through Commodity Points of Distribution (C-POD) (herein referred to as the Report) is intended to support preparation for serving people with disabilities and AFN in response to incidents impacting food and water supply chains in the San Francisco Bay Area. Specifically, it documents strategies for serving people with disabilities and AFN via C-PODs during a disaster when actions to prompt the restoration of pre-existing flows or the establishment of new flows of food and water have not been effective, as these populations may be particularly vulnerable to disruptions in supply chains and should therefore be prioritized for government-supported distribution of food and water. As discussed in the section below, C-PODs are one of several possible solutions to meeting the needs of people with disabilities and AFN and should only be pursued after taking other actions. The strategies in this Report for using C-PODs to serve people with disabilities and AFN are based on an analysis of C-POD sites identified by the Bay Area UASI to determine those that are best suited to serving these populations, as well as requirements and guidance based on the Americans with Disabilities Act (ADA) and California jurisdictions on ensuring accessibility and reasonable accommodations at C-POD sites.

THE ROLE OF C-PODS IN SUPPLY CHAIN RESILIENCE AND SERVING VULNERABLE POPULATIONS

C-PODs are a tactic emergency managers may employ as part of a broader supply chain resilience strategy to meet the needs of people with disabilities and AFN during a disaster. As discussed in the Bay Area UASI Supply Chain Resilience Playbook [5], there are many actions a jurisdiction should take before deploying C-PODs, as the ultimate goal is to restore pre-existing flows or establish new flows of food and water, particularly to people and areas at greater risk after a disaster. These actions may include, but are not limited to:

- Prioritizing the restoration of the electric grid and critical transportation to enable the movement of food, water, fuel, and freight to areas with higher concentrations of people with pre-existing vulnerabilities, such as people with disabilities and AFN.

- Supplementing the abilities of at-risk populations to purchase food through disaster-Supplemental Nutrition Assistance Program (SNAP) or similar programs.
- Supporting community-based organizations (CBOs) already serving at-risk populations through food assistance programs.

When the timely restoration of pre-existing flows or the establishment of new flows of food and water to at-risk populations is not possible, jurisdictions may consider deploying C-PODs to "fill the gap" left by disrupted supply chains. This temporary strategy to replace pre-existing flows of food and water may be particularly effective in areas where pre-disaster access to food and water was limited. Another strategy jurisdictions may pursue simultaneous to C-PODs is direct delivery to people's homes. Ultimately, it is up to each jurisdiction to determine the appropriate strategies for meeting the food and water needs of people with disabilities and AFN in their community.

DEFINING PEOPLE WITH DISABILITES AND AFN

Defining people who have disabilities and AFN is essential to understanding where people with disabilities and AFN live and thus where to target C-POD operations. Taking definitions from the federal government and California jurisdictions into account, this Report defines individuals with disabilities and AFN as follows:

- Individuals who have developmental, intellectual, or physical disabilities;
- Individuals with chronic conditions or injuries;
- Individuals with limited English proficiency;
- Individuals who are older adults, children, or pregnant;
- Individuals living in institutionalized settings;
- Individuals who are low income and/or transportation disadvantaged; and
- Individuals experiencing housing cost burdens or homelessness.

AREAS OF PRE-EXISTING VULNERABILTIY IN THE BAY AREA

All individuals identified as having a disability or AFN can be understood as being more vulnerable day-to-day or possessing a pre-existing vulnerability. Like defining people with disabilities and AFN, measuring pre-existing vulnerabilities can be challenging. In view of the definition for people with disabilities and AFN above, we identified national-level, local, and business reference datasets to measure pre-existing social vulnerability, food insecurity, and transportation access across the Bay Area. Highlights from mapping these data are detailed below.

Social vulnerability, as measured by the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) and the U.S. Department of Housing and Urban Development (HUD) Continuum of Care data, can be characterized as follows:

- Socioeconomic vulnerability includes factors such as the percentage of people below 150% poverty, unemployed, housing cost-burdened (defined as occupied households earning less

than $75,000 and spending over 30% of their income on housing costs), without a high school diploma, and without health insurance [6]. This type of vulnerability is high in the more rural areas of the South Bay counties of Monterey and San Benito, and in the northeast counties of Napa and Solano (Figure A.1). There are also urban areas in the South Bay (Santa Clara County) and East Bay (Contra Costa and Alameda Counties) with high socioeconomic vulnerability.

- Areas that are housing cost-burdened as defined above affect both the urban core of the Bay Area as well as more rural, agricultural areas of the region (Figure A.2).
- Household characteristics vulnerability includes factors such as the percentage of people aged 65 or older, aged 17 or younger, civilians with a disability, single-parent households, and limited English language proficiency [6]. This vulnerability is present throughout the Bay Area but is more pronounced in urban areas relative to larger rural areas (Figure A.3). There are also census tracts in Monterey, Solano, and Napa Counties that show high household vulnerability.
- San Francisco, Alameda, and Santa Clara Counties have the largest populations of the homeless or unhoused in the Bay Area (Figure A.4).

Food insecurity, as measured by the percentage of households receiving NAP benefits, is highest in the urban areas of Alameda, Contra Costa, San Francisco, and Santa Clara counties (Figure A.5). Additionally, some semi-urban and rural areas across the Bay Area have high percentages of SNAP eligible households (e.g., Monterey, Santa Cruz, Solano counties).

Challenges regarding **transportation access,** as measured by the percentage of households without vehicle access, is highest in the urban corridors of the Bay Area (Figure A.6). San Francisco and the Oakland area of Alameda County have the highest levels of households without vehicle access, followed by areas in Santa Clara County.

PRIORITIZING C-POD SITES TO SERVE PEOPLE WITH DISABILITIES AND AFN

To evaluate the locations of C-POD sites best suited to serving people with disabilities and AFN, we created a composite index comprised of 13 metrics that gauge pre-existing social vulnerability, food insecurity, and transportation access. As a result, each C-POD site in the Bay Area was given a prioritization score that ranged from 0 to 100, allowing emergency managers and planners to identify the C-PODs that should be prioritized over other C-PODs, all else being equal.

The 10 highest priority C-PODs are found in six jurisdictions (Figure B.1): Four in San Jose, two in Oakland, and one each in Contra Costa, Napa, Santa Cruz, and Solano Counties. South Bay Area locations such as San Jose and Oakland have the highest priority C-PODs and are in areas that have high transportation dimension scores (e.g., nearby major roads, nearby public transportation stops, low percentage of households with vehicle access), populations with high socioeconomic and household vulnerabilities, and limited grocery store availability (e.g., percentage of households with SNAP benefits, low number of grocery stores nearby – more than one mile away in urban areas and more than 20 miles away in rural areas) (Figure B.2). See Appendix B for detailed information on prioritized C-POD sites in each jurisdiction.

ENSURING ACCESSBILITY AND REASONABLE ACCOMMODATIONS AT C-POD SITES

Beyond prioritizing C-PODs that are well suited to serve people with disabilities and AFN, jurisdictions must ensure that the C-POD sites themselves are accessible and can accommodate these populations. To do this, jurisdictions must closely review the ADA Title II Regulations, which require state and local governments to provide people with disabilities an equal opportunity to benefit from all of their programs, services, and activities. When possible, jurisdictions should work with their ADA Coordinator and any AFN support teams and partners to ensure selected C-POD sites heed requirements and best practices regarding physical accessibility, transportation access, and communications.

INTRODUCTION

The Bay Area Urban Areas Security Initiative (UASI) has been awarded funds via the Department of Homeland Security's Fiscal Year 2021 Regional Catastrophic Preparedness Grant Program (RCPGP) to build capability by ensuring the whole community is engaged in strengthening Bay Area supply chain resilience. The Bay Area, like much of the globe, suffered from supply chain interruptions during COVID-19. To prepare for future pandemics and other incidents, Bay Area jurisdictions are eager to coordinate with the whole community in planning to resolve supply chain issues to ensure impacted communities can access essential commodities. Lessons learned from COVID-19 indicate that to be most successful in future emergencies, the region needs to build capacity across the functional areas of supply chain restoration, private resources, resource delivery, and access to community staples. Challenges identified during the COVID-19 pandemic response, as well as findings from previous UASI- and RCPGP-funded projects, show that the key to closing gaps in these functional areas is building successful relationships between the private and the public sectors.

To improve supply chain resilience in the Bay Area, a project was designed with progressive and complimentary components including: 1) a series of nine seminars on supply chains, 2) analysis of Bay Area food and water supply chains, 3) a supply chain resilience playbook, 4) this report on supply chain considerations for people with disabilities and access and functional needs (AFN), 5) a report on the feasibility of and recommendations for developing a Regional Community Lifelines Council, 6) a series of six table-top exercises, and 7) a summary report with recommendations for the future. This Report was developed to document strategies for serving people with disabilities and AFN via Commodity Points of Distribution (C-PODs) during a disaster.

PURPOSE

The Supply Chain Considerations for People with Disabilities and Access and Functional Needs: Serving Vulnerable Populations Through Commodity Points of Distribution (herein referred to as the Report) is intended to support preparation for serving people with disabilities and AFN in response to incidents impacting food and water supply chains in the San Francisco Bay Area. Specifically, it documents strategies for serving people with disabilities and AFN via C-PODs during a disaster when actions to prompt the restoration of pre-existing flows or the establishment of new flows of food and water have not been effective, as these populations may be particularly vulnerable to disruptions in supply chains and should therefore be prioritized for government-supported distribution of food and water. As discussed in the section below, C-PODs are one of several possible solutions to meeting the needs of people with disabilities and AFN and should only be deployed after taking other actions. The strategies in this Report for using C-PODs to serve people with disabilities and AFN are based on an analysis of C-POD sites identified by the Bay Area UASI to determine those that are best suited to serving these populations, as well as requirements and guidance based on the Americans with Disabilities Act (ADA) and California jurisdictions on ensuring accessibility and reasonable accommodations at C-POD sites.

The Role of C-PODs in Supply Chain Resilience and Serving Vulnerable Populations

C-PODs are a tactic emergency managers may employ as part of a broader supply chain resilience strategy to serve people with disabilities and AFN during a disaster. As discussed in the Bay Area UASI Supply Chain Resilience Playbook [5], there are many actions a jurisdiction should take before deploying C-PODs, as the ultimate goal is to restore pre-existing flows or establish new flows of food and water, particularly to people and areas at greater risk after a disaster. These actions may include, but are not limited to:

- Prioritizing the restoration of the electric grid and critical transportation to enable the movement of food, water, fuel, and freight to areas with higher concentrations of people with pre-existing vulnerabilities, such as people with disabilities and AFN.
- Supplementing the abilities of at-risk populations to purchase food through disaster-Supplemental Nutrition Assistance Program (SNAP) or similar programs.
- Supporting community-based organizations (CBOs) already serving at-risk populations through food assistance programs.

When the timely restoration of pre-existing flows or the establishment of new flows of food and water to at-risk populations is not possible, jurisdictions may consider deploying C-PODs to "fill the gap" left by disrupted supply chains. This temporary strategy to replace pre-existing flows of food and water may be particularly effective in areas where pre-disaster access to food and water was limited. Another strategy jurisdictions may pursue simultaneous to C-PODs is direct delivery to people's homes. Ultimately, it is up to each jurisdiction to determine the appropriate strategies for meeting the food and water needs of people with disabilities and AFN in their community.

SCOPE

The geographic scope of this Report is composed of the following California jurisdictions (Figure 1):

- Alameda County
- Contra Costa County
- Marin County
- Monterey County
- Napa County
- Oakland, City of
- San Benito County
- San Francisco, City and County
- San Jose, City of
- San Mateo County
- Santa Clara County
- Santa Cruz County
- Solano County
- Sonoma County

Figure 1. Jurisdictions in California's Bay Area Urban Areas Security Initiative region.

ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations apply to this Report:

- This Report is not authoritative; no jurisdiction is bound by the guidelines contained herein.
- Each jurisdiction is responsible for making decisions and executing individual strategies to operate C-PODs to serve people with disabilities and AFN and retains control and authority over their C-POD operations even when the response is supported by regional, state, or federal assets/entities.
- Each jurisdiction is responsible for deciding if and when other modes of distribution, such as direct delivery, may be necessary to serve particular people with disabilities and AFN (e.g., individuals residing in institutionalized settings).
- This Report is not intended to replace other jurisdictional plans for C-POD operations, but rather to supplement jurisdictional plans by outlining key considerations for serving people with disabilities and AFN.
- Considerations for ensuring C-POD accessibility and reasonable accommodations highlighted in this Report do not represent an exhaustive list.

AUDIENCES AND INTENDED USES

This Report is written for emergency management and mass care planning and operations staff in the Bay Area UASI jurisdictions and the California Governor's Office of Emergency Services (Cal OES) to support the identification and operation of C-PODs to serve people with disabilities and AFN. It is applicable to any incident impacting the food and water supply chains of the region.

ORGANIZATION OF REPORT

The main body of this Report includes three substantive sections covering the following topics:

1. Overview of people with disabilities and AFN in the Bay Area
2. Prioritizing C-POD sites to serve people with disabilities and AFN
3. Ensuring accessibility and reasonable accommodations at C-POD sites

The first section defines people with disabilities and AFN for the purpose of this Report and discusses areas of pre-existing vulnerability in the Bay Area. The second section describes our analysis of C-POD sites to prioritize locations where there is a higher concentration of people with disabilities and AFN. The third section provides guidelines for ensuring access to and reasonable accommodations at C-POD sites.

In addition, the Report includes key reference materials in three appendices based on content in the main body alongside supplemental information:

A. Areas of pre-existing vulnerability in the Bay Area
B. Prioritized C-POD sites by Bay Area jurisdiction
C. Resources for accessibility and reasonable accommodations at C-POD sites

OVERVIEW OF PEOPLE WITH DISABILITIES AND AFN IN THE BAY AREA

DEFINING PEOPLE WITH DISABILITIES AND AFN

Defining people who have disabilities and AFN is essential to understanding where people with disabilities and AFN live and thus where to target C-POD operations. To do this, we can start by considering pre-existing definitions used by the federal government and California jurisdictions. Under the ADA, an individual with a disability is defined as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or a record of such an impairment, or a person who is perceived by others as having such an impairment [7]. The California Office of Access and Functional Needs within Cal OES provides a clear definition for individuals with AFN that is inclusive of individuals with disabilities as defined by the ADA; it defines AFN as individuals who are or have: 1) physical, developmental, or intellectual disabilities; 2) chronic conditions or injuries; 3) limited English proficiency; 4) older adults; 5) children; 6) low income, homeless and/or transportation disadvantaged (i.e., dependent on public transit); and 7) pregnant women [8]. Bay Area jurisdictions may include additional populations under the AFN umbrella; for example, in addition to the populations identified in the Cal OES AFN definition above, in the Bay Area Vaccine Point of Dispensing (V-POD) Operations Plan, individuals in institutionalized settings are included in the list of people with disabilities and AFN [9].

For this Report, which focuses on strategies for distributing food and water to people with disabilities and AFN throughout the Bay Area via C-PODs, one additional population to consider are individuals that are burdened by the high cost of housing, as this puts them at risk of experiencing homelessness—a characteristic included in the standing definition of AFN for Cal OES and the definition for AFN in the Bay Area V-POD Operations Plan.

This Report takes these definitions into account and defines individuals with disabilities and AFN as follows:

- Individuals who have developmental, intellectual, or physical disabilities;
- Individuals with chronic conditions or injuries;
- Individuals with limited English proficiency;
- Individuals who are older adults, children, or pregnant;
- Individuals living in institutionalized settings;
- Individuals who are low income and/or transportation disadvantaged; and
- Individuals experiencing housing cost burdens or homelessness.

All individuals identified as having a disability or AFN can be understood as being more vulnerable day-to-day or possessing a pre-existing vulnerability. During a disaster, when normal systems and supply chains for life-sustaining commodities such as food and water are disrupted, these pre-existing vulnerabilities can be exacerbated. The following section discusses how we can measure pre-existing vulnerabilities across the Bay Area to approximate where people with disabilities and AFN live and consider other factors that bear on C-POD suitability for serving people with disabilities and AFN.

MEASURING PRE-EXISTING VULNERABILITY

Like defining people with disabilities and AFN, measuring pre-existing vulnerabilities associated with disabilities and AFN can be challenging. This is especially true for pre-existing vulnerabilities associated with disabilities, as there is limited data on people with disabilities as defined above. When possible, it is prudent to leverage authoritative metrics defined by federal agencies that have national-level datasets that are used by relevant state and local partners. A quintessential metric of this type is the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI), which measures the vulnerability of communities at the Census tract level throughout the United States based on socioeconomic status, household composition (terminology changed to household characteristics after 2018), racial and ethnic minority status, housing type, and transportation factors [6]. The vulnerabilities measured by the SVI encompass many of the vulnerabilities experienced by people with AFN, which we can reasonably expect to be vulnerabilities experienced by people with disabilities. In some cases, local government datasets are appropriate and useful when measuring different aspects of pre-existing vulnerability, particularly when national-level datasets are not available (e.g., community food aid locations).

In 2021-22, CNA conducted a robust analysis of C-POD sites in the eight-county Puget Sound region to prioritize sites best suited to serving vulnerable populations. This analysis established and validated an analytic approach which served as a template for this work. For that analysis, CNA used a combination of national-level, local, and business reference data to establish a clear picture of areas of pre-existing vulnerability across the region. In addition to metrics on pre-existing vulnerabilities identified as characteristics of people with disabilities and AFN (e.g., socioeconomic status, population aged 65 and older, population without vehicle access), the analysis included metrics gauging food insecurity, as the availability of food is an important factor to consider when prioritizing locations for C-PODs that will distribute food. The analysis also included metrics on the C-PODs' proximity to public transportation and major highways since locations nearer to these transportation nodes are easier for people to access.

Leveraging the data-informed approach employed for the Puget Sound C-POD analysis and in view of the definition for people with disabilities and AFN above, Table 1 details relevant authoritative data sources for measuring pre-existing social vulnerability, food insecurity, and transportation access across the Bay Area. We can reasonably expect these data to help us understand where people with disabilities and AFN are located.

Table 1. Data sources for measuring pre-existing social vulnerability, food insecurity, and transportation access.

Dimension	Data Source	Relevant Data
Social Vulnerability	CDC SVI	Information on socioeconomic status, household composition, housing type, and housing cost burden
	U.S. Department of Housing and Urban Development (HUD) Continuum of Care Data	Information on homeless or unhoused populations
Food Insecurity	California Association of Food Banks	Food bank and pantry distribution locations
	Esri Living Atlas of the World	Households receiving SNAP benefits
	Data Axle Business Data	Grocery store locations
Transportation Access	Esri Living Atlas of the World	Critical transportation information (highways and public transportation)
	CDC SVI	Population without vehicle access

AREAS OF PRE-EXISTING VULNERABILTIY IN THE BAY AREA

The following sub-sections characterize pre-existing vulnerability across the Bay Area based on analyzing relevant data from the sources listed in Table 1.

AREAS OF PRE-EXISTING VULNERABILITY: SOCIAL VULNERABILITY

Socioeconomic vulnerability includes factors such as the percentage of people below 150% poverty, unemployed, housing cost-burdened (defined as occupied households earning less than $75,000 and spending over 30% of their income on housing costs), without a high school diploma, and without health insurance [6]. Measures of vulnerability range from 0-1, where 1 is the highest vulnerability. Vulnerability is often categorized so that low vulnerability ranges from 0 up to 0.25, low-medium vulnerability ranges from 0.25 up to 0.50, medium-high vulnerability ranges from 0.50 up to 0.75, and high vulnerability ranges from 0.75-1.00. This type of vulnerability is high in the more rural areas of the South Bay counties of Monterey and San Benito, and in the northeast counties of Napa and Solano (Figure A.1). There are also urban areas in the South Bay (Santa Clara County) and East Bay (Contra Costa and Alameda Counties) with high socioeconomic vulnerability.

If an occupied household earns under $75,000 and spends over 30% of their income on housing costs, it is considered to be housing cost-burdened [10]. Areas that have relatively higher rates of housing cost burden are found in both the urban core of the Bay Area as well as more rural, agricultural areas of the region (Figure A.2).

Household characteristics vulnerability includes factors such as the percentage of people aged 65 or older, aged 17 or younger, civilians with a disability, single-parent households, and limited English language proficiency [6]. This vulnerability is present throughout the Bay Area but is more pronounced in urban

areas relative to larger rural areas (Figure A.3). There are also census tracts in Monterey, Solano, and Napa Counties that show high household vulnerability.

The Homeless or Unhoused Population estimates are provided by HUD Continuum of Care data. Continuum of Care boundaries typically correspond to county jurisdictions and are a convenient way that federal, state, and local jurisdictions track and administer social services and track counts of homeless and unhoused populations in the United States. While this dataset has spatial resolution limitations with respect to prioritizing C-PODs for populations with disabilities and AFN, its counts of homeless and unhoused populations give us the best insight into the locations of these populations within the Bay Area. As these populations are more mobile than housed populations, the counts within a broader geographic area are informative when assessing prioritization of C-PODs. San Francisco, Alameda, and Santa Clara Counties have the largest populations of the homeless or unhoused in the Bay Area (Figure A.4).

Areas of Pre-existing Vulnerability: Food Insecurity

The SNAP provides food benefits to low-income families. The percentage of households with SNAP benefits is highest in the urban areas of Alameda, Contra Costa, San Francisco, and Santa Clara counties (Figure A.5). Additionally, some semi-urban and rural areas across the Bay Area have high percentages of SNAP eligible households (e.g., Monterey, Santa Cruz, Solano counties).

Areas of Pre-existing Vulnerability: Transportation Access

The percentage of households without vehicle access is highest in the urban corridors of the Bay Area (Figure A.6). San Francisco and the Oakland area of Alameda County have the highest levels of households without vehicle access, followed behind by areas in Santa Clara County.

PRIORITIZING C-POD SITES TO SERVE PEOPLE WITH DISABILITIES AND AFN

People with disabilities and AFN may be particularly vulnerable to disruptions in supply chains during a disaster. Before supply chains can be restored, C-PODs may fill a critical need for food in areas with a greater concentration of people with disabilities and AFN and/or a limited supply of food; therefore, C-PODs should be prioritized to serve these populations and areas. Emergency managers can accomplish this by evaluating the locations of C-POD sites using metrics on pre-existing social vulnerability, food insecurity, and transportation access. The following sections describe the methodology we employed to do this and the resulting list of prioritized C-POD sites across the Bay Area. The implications of the results for C-POD operations and serving people with disabilities and AFN are then considered.

METHODOLOGY

As introduced in the previous section, a combination of national-level, local, and business reference data can help jurisdictions characterize levels of pre-existing vulnerability in their communities and approximate where people with disabilities and AFN live. This information can help emergency managers

understand where to target the distribution of critical commodities, like food and water, via C-PODs during a disaster. To evaluate C-PODs for this purpose by giving each one an overall score, we used the ArcPro (3.1) Calculate Composite Index tool. We created a composite index based on 13 metrics that gauge social vulnerability, food insecurity, and transportation access.

To create the composite index, we executed the following steps:

Step 1: Identify Metrics Suitable for Composite Index

We identified metrics for inclusion in the composite index by researching how federal, state, and local governments use and categorize different aspects of vulnerability. This included reviewing authoritative national-level, local, and business reference data to identify what metrics governments have incorporated operationally and in policy and referencing a similar C-POD prioritization analysis in the Puget Sound region. Finally, to yield a more holistic view of the homeless population (or those at risk of becoming homeless) and to consider the high cost of housing in the Bay Area, we included additional metrics related to the financial burden of housing and homelessness (Table 2).

After evaluating each of these metrics, we removed two (Table 2). We removed the SVI Race and Ethnic Minority Score because the 2020 version of the SVI had changed. In the 2018 version of the SVI, the Race and Ethnicity dimension was called the "Racial Minority and Language" dimension. In the 2020 version, the language aspect of the dimension was incorporated into Household Characteristics, leaving only percent minority in the Race and Ethnic Minority dimension. Since race and ethnicity are not inherently a vulnerability to food access, we removed it from the composite index.

We also removed the Total Social Vulnerability Score from the composite index. The reasoning for this was two-fold: 1) the Total Social Vulnerability Score was calculated using the newly created Race and Ethnic Minority Score (which we removed), and 2) the Total SVI Score metric was highly correlated with other metrics (see Step 4).

Table 2. Metrics included in the survey and development of the composite index. All metrics identified as a sub-dimension were calculated by taking the average of the individual metrics within that sub-dimension.

Dimension	Sub-dimension	Metric (unit)	Description	Source
Social Vulnerability	Socioeconomic Vulnerability	SVI Socioeconomic Score	2020 SVI Socioeconomic Score of the census tract in which the C-POD is located.	CDC
		Housing Cost Burden (%)	Percent of households earning less than $75,000 and spending at least 30% of income on housing in the census tract in which the C-POD is located.	CDC
	n/a	Homeless or Unhoused Population (count)	Number of homeless people in the Continuum of Care area in which the C-POD is located.	HUD

Dimension	Sub-dimension	Metric (unit)	Description	Source
	Household Characteristics	SVI Household Characteristics Score	2020 SVI Household Characteristics Score in the census tract in which the C-POD is located.	CDC
		Population Aged 65 or Older (%)	Percent of population aged 65 or older in the census tract in which the C-POD is located.	CDC
		Population with a Disability (%)	Percent of population with a disability in the census tract in which the C-POD is located.	CDC
Transportation Access	n/a	Major Road Accessibility (mi)	Distance (miles) from a C-POD to the nearest highway.	Esri Living Atlas of the World
	n/a	Public Transportation Accessibility (mi)	Walking distance (miles) from a C-POD to the nearest public transportation stop or station.	Esri Living Atlas of the World
	n/a	Vehicle Access (%)	Percent of population without vehicle access in the census tract in which the C-POD is located.	CDC
Food Insecurity	n/a	Community Food Aid (mi)	Distance (miles) from a C-POD to nearest community food aid location.	California Association of Food Banks
	n/a	SNAP Benefits (count)	Number of households receiving SNAP benefits in the census tract in which the C-POD is located.	Esri Living Atlas of the World
	Grocery Stores	Grocery Store Availability (count)	Number of grocery stores within 1 mile of an urban C-POD or 20 miles of a rural CPOD.	Data Axle
		Grocery Store Accessibility (mi)	Walking distance (miles) from a C-POD to the nearest grocery store for urban C-PODs and driving distance (miles) from a C-POD to the nearest grocery store for rural C-PODs.	Data Axle
***Not in the composite index**	n/a	Total Social Vulnerability Score	2020 Total Social Vulnerability Score of the census tract in which the C-POD is located.	CDC
	n/a	SVI Race and Ethnic Minority Score	2020 SVI Race and Ethnic Minority Score of the census tract in which the C-POD is located.	CDC

Step 2: Survey UASI Membership and Seminar Participants on Relative Importance of Metrics

With a list of metrics suitable for the composite index in hand (Table 2), we surveyed UASI membership and participants in the Bay Area UASI FY2021 RCPFP supply chain resilience seminars to determine the relative importance of metrics to pre-existing social vulnerability, food insecurity, and transportation access when prioritizing C-PODs to support people with disabilities and AFN in the Bay Area. Survey responses informed the weighting of metrics in Step 5.

We received 22 responses to our survey in which respondents identified the level of importance of each of the metrics when prioritizing C-PODs. Responses were scored from zero (Not Important At All) to four (Extremely Important) on a five-point scale (Table 3).

UASI members and seminar participants indicated that individual metrics were more important than standard SVI metrics when characterizing people with disabilities and AFN. Additionally, metrics pertaining to access to food scored highest, followed closely by transportation metrics. Importantly, no respondents indicated that any of the metrics were unimportant when assessing C-POD locations for serving people with disabilities and AFN. Across all metrics, there was minimal variability in the level of importance of metrics, as indicated by the number of standard deviations which were below or near 1 for all metrics.

Table 3. C-POD metrics to prioritize people with disabilities and AFN and the number of standard deviations from the mean. The standard deviation is 0.32.

Metric	Average Score (0-4)	No. Standard Deviations
SNAP Benefits	3.23	1.4
Community Food Aid	3.14	1.2
Grocery Store Accessibility	3.00	0.7
Major Road Accessibility	2.95	0.6
Vehicle Access	2.95	0.6
Public Transportation Accessibility	2.95	0.6
Homeless or Unhoused Population	2.81	0.1
Grocery Store Availability	2.68	0.3
Total Social Vulnerability Score	2.48	0.9
SVI Minority Status and Language	2.45	1.0
SVI Socioeconomic Score	2.35	1.3
SVI Household Characteristics Score	2.29	1.5

Step 3: Preprocess Metrics

We preprocessed each metric so that it was compatible when included in the composite index. First, we transformed the raw values of all metrics from non-normal to normal distributions using a Box-Cox transformation. Then, using the Calculate Composite Index tool (see Step 5), we aligned signs so that higher magnitude values equated to higher vulnerability. For instance, a higher count of homeless population represents greater vulnerability, but a smaller count of nearby grocery stores also represents greater vulnerability. Combining these conflicting metrics would create an index that would cancel itself

out. By multiplying nearby grocery store counts by -1, we create a metric where the largest number has the highest vulnerability. Finally, we standardized the metrics so that metrics with different units (e.g., counts, percentages, distances) could be combined in a single index. We standardized each metric via z-scores, which expresses scores at standard deviation units.

Step 4: Combine and Evaluate Weighting of Metrics

The Calculate Composite Index tool uses the mean of the values for each metric, thus resulting in a dimension that is the average of individual metric values. To prevent unintentional weighting, we first grouped the metrics thematically – Social Vulnerability, Transportation Access, and Food Insecurity – so that they focused on a particular dimension of food access and pre-existing vulnerability (Table 2). We then created sub-dimensions within thematic groupings of dimensions for metrics that were more similar to each other compared to other metrics within the dimension. We calculated the sub-dimension value by taking the average of all metrics within a given sub-dimension. If there are three or more metrics in a dimension and two metrics are closely related, the prioritization score would be more responsive to the metrics that are closely related relative to the unrelated third metric. For example, consider two metrics, the number of grocery stores near a C-POD and the distance to the nearest grocery store. The C-PODs will typically score high or low on both grocery metrics, overweighting the grocery-related aspects in the dimension relative to other metrics in the dimension. By creating a sub-dimension of closely related metrics, we correct for the relationship by averaging the grocery metrics into one grocery-related score before it is joined with other metrics.

We evaluated correlation matrices in ArcGIS Pro to assess the level of correlation between each metric and the sub-dimension. Using a correlation coefficient threshold of $r \geq 0.80$, we identified the need to make thematic sub-dimensions for the following:

- Socioeconomic Vulnerability, which included:
  - SVI Socioeconomic Score
  - Housing Cost Burden
- Household Characteristics, which included:
  - SVI Household Characteristics Score
  - Population aged 65 or older
  - Population with a disability
- Grocery Stores, which included:
  - Grocery Store Availability
  - Grocery Store Accessibility

The correlation matrix showed that the Total SVI metric was highly correlated ($r > 0.90$) with the Socioeconomic Vulnerability sub-dimension, the Household Characteristics sub-dimension, and the Social Vulnerability dimension. We determined that including the Total SVI metric was duplicative and led to overweighting of SVI metrics, and we removed the Total SVI metric from the composite index.

We used the results of the survey (Step 2) to determine if we needed to intentionally weight certain metrics. Since respondents considered all metrics important and there was limited variability in the level

of importance of distinct metrics, we weighted the metrics equally. The final composite index included three dimensions, three sub-dimensions, and 13 metrics (Table 2).

Step 5: Execute ArcPro Calculate Composite Index Tool

We used the Calculate Composite Index tool in ArcPro (3.1) to create index scores for Socioeconomic Vulnerability, Household Characteristics, Grocery Stores, Social Vulnerability, and Food Insecurity sub-dimensions. For each sub-dimension, we included input variables that were appropriate metrics for the sub-dimension and selected an option in the tool to reverse the direction of the variable, if necessary. We selected the z-score method to scale the variables and the mean method to combine the variables. The output of this tool included an option to set the minimum and maximum values, which we set at 0 and 100, respectively. This tool created a new layer in ArcPro that included additional data fields for each C-POD, such as the sub-dimension score from 0-100, the rank of each C-POD by score, and the percentile score.

After we repeated this process to obtain Transportation, Social Vulnerability, and Food Insecurity sub-domain index scores, we ran the Calculate Composite Index tool again using these sub-domain index scores to yield the composite index scores and ranks for each C-POD site. Additionally, we ranked each jurisdiction's C-PODs based on their scores.

Step 6: Validate Results

We validated the composite index results by following best practices found in Esri's technical documentation [11]. Comparing our results to other social vulnerability and equity analyses [12], we concluded that this composite index accurately reflected vulnerability (and C-POD prioritization) in the region.

Because this is a customized index and there is no empirical model to test against, we performed a Hot Spot Analysis and Outlier Detection tool to identify groups of C-PODs in the Bay Area that had statistically high or low prioritization scores or had anomalous prioritization scores relative to other C-PODs. While we did find three areas with C-PODs that had higher prioritization scores than the average C-POD scores (South San Francisco, Oakland, and San Jose), this was expected based on our exploratory analyses of pre-existing vulnerabilities in the area (e.g., relatively higher rates of homelessness, housing cost burden, and socioeconomic vulnerability).

ANALYTIC RESULTS

C-POD Prioritization Distribution

We gave C-PODs in the Bay Area prioritization scores that ranged from 0-100. These scores were normally distributed, meaning fewer C-PODs received a low prioritization or a high prioritization relative to the number of C-PODs receiving a moderate prioritization (Figure 2). This allows emergency managers and planners to identify the C-PODs that should be prioritized and other C-PODs, all else being equal.

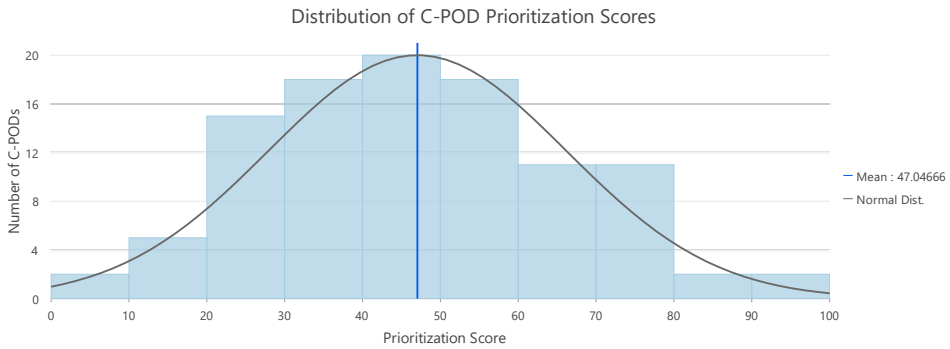


Figure 2. Distribution of C-POD prioritization scores in Bay Area jurisdictions.

C-POD Prioritization Score Components

The C-POD prioritization composite index incorporated each C-POD's dimension scores for transportation, food insecurity, and social vulnerability. Prioritized C-PODs need not have the highest scores in each of the dimensions to have a high overall prioritization. Similarly, C-PODs did not need to have the lowest dimension scores to have a low prioritization score.

C-PODs with the highest priority scores tended to score highly in two or three dimensions (Table 4). C-PODs with lower priority scores tended to score highly in one dimension. C-PODs with the lowest priority scores tended to have low scores on two or three dimensions. Through this methodology, a C-POD site could end up with a high priority score even though one dimension wasn't as favorable as the other two.

Table 4. Prioritization score components among highest and lowest priority C-PODs. Colors in each of the columns indicate the priority from red (0, least prioritized) to white (50) to blue (100, most prioritized).

Prioritization	Prioritization Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	**100**	100	94	79
2	**99**	87	100	82
3	**86**	75	67	100
4	**85**	71	71	96
5	**79**	58	81	84
6	**77**	79	53	89
7	**74**	60	78	74
8	**73**	65	74	70
9	**72**	72	67	67
10	**72**	69	66	71
95	**24**	7	30	56
96	**23**	30	31	28
97	**22**	16	51	18

Prioritization	Prioritization Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
98	**20**	23	14	46
99	**19**	23	33	24
100	**17**	0	45	28
101	**16**	36	29	8
102	**16**	15	27	31
103	**10**	13	26	18
104	**0**	27	2	5

Regional Distribution of C-POD Prioritization

As noted, the C-POD composite index prioritized C-PODs throughout the Bay Area. The 10 highest priority C-PODs are found in six jurisdictions (Figure B.1): Four in San Jose, two in Oakland, and one each in Contra Costa, Napa, Santa Cruz, and Solano Counties. South Bay Area locations such as San Jose and Oakland have the highest priority C-PODs and are in areas that have high transportation dimension scores (e.g., nearby major roads, nearby public transportation stops, low percentage of households with vehicle access), populations with high socioeconomic and household vulnerabilities, and limited grocery store availability (e.g., percentage of households with SNAP benefits, low number of grocery stores nearby, and a nearest grocery store that is not close (relative to other C-PODs)) (Figure B.2).

See Appendix B for detailed information on prioritized C-POD sites in each jurisdiction.

Homeless and Unhoused Populations

Due to the lack of an authoritative dataset that counts homeless and unhoused populations at a fine spatial scale, we were unable to count homeless and unhoused populations directly. Instead, we assessed vulnerabilities of this community through multiple proxy metrics, which included aspects of vulnerability that would be well-represented among these populations.

The most direct measurement of homelessness and unhoused populations was in the social vulnerability dimension. Within the socioeconomic vulnerability sub-dimension, there were two metrics that addressed this community. The first metric was the homeless and unhoused population metric, which was the number of homeless in the Continuum of Care area. While this is count data, the Continuum of Care areas were typically counties and might not be directly applicable to individual C-POD locations. It does, however, suggest that homelessness in some parts of the Bay Area is a larger issue than in other areas. The other metric we used is the SVI Socioeconomic Score. While this composite score includes several metrics, it notably includes housing cost burden, estimates of people below 150% poverty, and unemployment, all of which describe the homeless or unhoused population or those at risk of becoming homeless or unhoused. Since these data are available at the census tract level, they can provide a more detailed account of these characteristics within the region.

We also added Housing Cost Burden as its own metric, which is defined as the percent of households in a C-POD's census tract that earn less than $75,000 and spend at least 30% of that income on housing. This

data from the US Census Bureau's American Community Survey 2016-2020 (5-year) indicates areas where communities are at risk of falling into homelessness due to unaffordable housing.

The food insecurity metrics that we included in the composite index would prioritize the homeless and unhoused populations as well. The Community Food Aid metric prioritized C-POD locations that were near food pantries, an indication that there are individuals and families nearby that have an acute need for food assistance. Additionally, the SNAP Benefits metric also would prioritize areas where households are struggling to earn enough money to be food secure.

In summary, in the absence of current and geographically targeted data on the number of homeless and unhoused populations near C-POD sites, we used metrics gauging social vulnerability and aspects of food insecurity to provide a holistic view of the vulnerabilities of these populations. This approach also allowed us to focus on households that may be at risk of becoming homeless or unhoused.

IMPLICATIONS FOR C-POD OPERATIONS

The guiding principle of the C-POD prioritization framework is that C-POD sites with higher prioritization scores should be prioritized over C-POD sites with lower prioritization scores, all else being equal. However, the list of prioritized C-POD sites is a starting point for jurisdictions, as selecting sites that will best serve people with disabilities and AFN should be made in collaboration with CBOs and other partners who serve these populations day-to-day as part of an inclusive pre-disaster planning process [13].

Specific factors that partners may consider when planning C-POD site selection include the following:

- **Spacing**: A jurisdiction should consider the overall geographic distribution of C-POD sites when making selections. For example, if high-ranking C-POD sites are clustered together, a jurisdiction will want to consider selecting some lower-ranking C-POD sites in other parts of the jurisdiction so that sites are well distributed.
- **Capacity, population demand, and operational constraints**: A jurisdiction may prefer to operate a larger or smaller C-POD site depending on population demand and available staff and resources to operate sites. For example, if a jurisdiction prefers to open one larger C-POD site but all top-ranked sites are smaller, the jurisdiction may select a larger site that has a lower ranking.
- **Accessibility**: A jurisdiction should consider accessibility at the C-POD site itself when selecting sites. For example, if all top-ranked C-PODs are vehicle C-PODs, the jurisdiction may select some lower-ranking sites that can accommodate people arriving on foot or by other non-vehicular means.
- **Viability and evacuation**: A jurisdiction should consider a C-POD site's likely viability and the potential need for evacuation in the area due to nearby hazards or disaster impacts when selecting sites. For this reason, a jurisdiction may select a lower-ranking site if the higher-ranking site is not viable or may be impacted by nearby hazards or disaster impacts.

Further, the particular preferences and needs of jurisdictions, which may mean emphasizing one or more dimensions or aspects of vulnerability, may also influence the selection of C-POD sites.

OPPORTUNITIES FOR FURTHER ANALYSIS AND TOOL DEVELOPMENT

This prioritization analysis of C-POD sites for people with disabilities and AFN identified 13 metrics within three dimensions to assist decision-making within jurisdictions. We see additional opportunities for further analysis and tool development that could aid emergency managers.

DATA SOURCES

While we were able to develop proxy metrics to estimate the needs of the homeless and unhoused populations, we did not find any location-based estimate of this population for this region. Additionally, while the federal data source (HUD Continuum of Care) that we included in this analysis did provide homeless and unhoused counts, the data is usually at a county-level resolution, which results in C-POD sites within a county scoring equally. As a consequence, our team included multiple additional metrics to develop a more holistic view of this population that would allow for intra-county comparisons. We would recommend a coordinated analysis region-wide that would better represent numbers of homeless and unhoused populations at sub-jurisdictional scales.

We also understand that disabilities and AFN are an important but diverse set of characteristics that may influence C-POD operations. Our analysis did not differentiate disability types. Additional analyses into what disabilities or functional needs may necessitate greater prioritization may refine this C-POD prioritization framework even further.

TOOL DEVELOPMENT

This Report developed jurisdiction-level maps and prioritization outputs for each of the 104 C-PODs in the region. However, we believe that there are opportunities to develop applications or decision-support tools that will assist emergency managers before, during, and after disasters. For instance, outputs from this analysis could be incorporated into an interactive web-based mapping application that would allow emergency managers to view more information about each C-POD in their jurisdiction or C-PODs in other jurisdictions near their borders, which would facilitate regional coordination.

An interactive tool would enable emergency managers to work with the underlying data to make better decisions. For instance, filtering C-PODs by C-POD type or how they are accessed could quickly refine C-POD locations and show which remaining C-PODs are located where. Additionally, an interactive tool would allow users to import other data sources, such as hazard-related sources (e.g., wildfire boundaries, earthquake shake intensity, real-time weather forecasts) or underlying population characteristics (e.g., population density, daytime population, nighttime population, tourist counts).

Many of the implications for C-POD operations (see above) could be incorporated into a decision-support tool to help manage C-PODs after a disaster. For example, an interactive tool could dynamically reprioritize available C-PODs based on other C-PODs that have been set up nearby or were in locations too hazardous to set up.

While we see additional opportunities and avenues for improved decision-making, the C-POD prioritization for people with disabilities and AFN identified in this Report will greatly assist emergency managers in identifying and meeting the needs of their communities.

ENSURING ACCESSIBILITY AND REASONABLE ACCOMMODATIONS AT C-POD SITES

Beyond prioritizing C-PODs that are well suited to serve people with disabilities and AFN, jurisdictions must ensure that the C-POD sites themselves are accessible and can accommodate these populations. This section describes key requirements and best practices for doing this based on the ADA, the ADA National Network, and California state and local governments. See Appendix C for additional resources on accessibility and reasonable accommodations.

GENERAL GUIDELINES

Under ADA Title II Regulations, state and local governments must provide people with disabilities an equal opportunity to benefit from all of their programs, services, and activities. Further, the ADA contains specific requirements for state and local governments to ensure equal access for people with disabilities [14]. This means that during a disaster, goods distributed by the government via C-PODs must be available and accessible to people with disabilities.

Basic principles and guidelines for fulfilling ADA requirements and optimally serving people with disabilities and AFN at C-POD sites are as follows [15]:

- Do not treat people with disabilities and AFN who arrive at C-POD sites in a different or inferior manner.
- Make reasonable modifications to accommodate people who have disabilities (e.g., allow wheelchairs and other power-driven mobility devices, allow service animals).
- Ensure the availability of C-POD sites that are accessible to people with disabilities.
- Take the steps necessary to communicate effectively with people who have disabilities, using auxiliary aids and services as needed.
- Reasonable accommodations:
    - Notify all visitors that people with disabilities can request accessibility accommodations.
    - Allow people to move to the front of the line if they have difficulty standing or walking (suggested language: “If it would make this process more accessible to you, I can escort you to the front of the line”).
    - Make chairs available.
    - Consider identifying at least one person at the C-POD site to coordinate reasonable accommodation requests (e.g., interpreter services, mobility assistance).

Ensuring compliance with the ADA and meeting the needs of people with disabilities and AFN at C-POD sites requires a close review of the regulations and proactive planning and training of staff. Public

entities that have 50 or more employees are required to designate at least one employee to coordinate ADA compliance (commonly referred to as an "ADA Coordinator") [15]. When an ADA Coordinator exists, jurisdictions should work through them and any AFN support teams and partners when planning and operating C-PODs.

The following sections detail key requirements and best practices regarding physical accessibility, transportation access, and communications.

PHYSICAL ACCESSIBILITY

Planning for physical accessibility at C-PODs is essential to ensuring that people with disabilities and AFN can receive critical commodities made available by the government. The following sub-sections highlight key requirements and best practices for making C-POD sites physically accessible.

ACCESSIBLE ROUTES

The path a person with a disability uses to navigate through the C-POD site must include an accessible entrance and exit and be firm, stable, slip resistant, level (no slopes), relatively smooth, and free from obstructions [16]. Accessible routes, which begin at the street (and parking if provided) and go to the C-POD site, should be at least 36-48 inches wide and exclude stairs and grass [16]. If the accessible entrance is not the main entrance, there must be signage to direct people to the accessible entrance [16].

RESTROOMS AND PORTABLE TOILETS

If restrooms are available to the public at C-POD sites, they should have at least one toilet and lavatory fixture that is accessible to people with disabilities [17]. If portable toilets are available, at least five percent (10 percent is recommended) of portable toilets must be accessible [17].

Key requirements for accessible restrooms include [17]:

- Restrooms must have a 5-foot diameter clear floor area.
- Restroom doors must provide a 32-inch clear opening.
- Lavatories should have a 27-inch clearance between the bottom edge of the apron and the floor, with faucets that can be operated without grasping or twisting (e.g., lever handles) and towel and soap dispensers that are no higher than 48 inches if free standing and 44 inches if located over a counter or fixture.

TRANSPORTATION ACCESS

The prioritization analysis of C-POD sites accounted for access to public transportation and major highways, which should help to ensure that selected sites can be readily accessed. As resources allow, jurisdictions should consider providing free shuttle or van service from nearby public transportation nodes (e.g., bus stops, light rail stations) to C-POD sites to facilitate transportation access. The following sub-

sections describe requirements and additional best practices for making C-POD sites as transportation-friendly as possible for people with disabilities and AFN.

PASSENGER LOADING ZONES

C-POD sites should provide an accessible space or passenger loading zone for shuttles, vans, and private vehicles to drop off and pick up individuals safely [17]. An accessible loading zone should be 20 feet long, at least eight feet wide with a five-foot-wide access aisle that can accommodate wheelchairs and other mobility devices, and have a vertical clearance of at least 114 inches [17].

PARKING

C-POD sites that have parking must follow ADA guidance for the minimum number of accessible parking spaces, as shown in Table 5. Accessible parking spaces are defined as having an access aisle, which allows a person using a wheelchair or other mobility device to get in and out of the car or van [3]. They must be located on the shortest accessible route to the accessible entrance. In addition, one out of every six accessible spaces must be van-accessible [3]. For more detailed information on accessible parking, see ADA guidance on accessible parking spaces found here.

Table 5. Minimum number of required accessible parking spaces [3].

Total Number of Parking Spaces in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

COMMUNICATIONS

Once people access a C-POD site, effective communications is essential to ensuring that they are able to successfully navigate the site and receive the assistance they need. The following sub-section highlights key requirements and best practices for effective communications at C-POD sites.

Auxiliary Aids and Services

The ADA requires state and local governments to use auxiliary aids and services to communicate with people who have disabilities [15, 18]. Auxiliary aids and services include sign language interpreters, assistive listening systems and devices, open and closed captioning, text telephones (TTYs), and information provided in large print, Braille, audible, or electronic formats, among other technologies and tools [15, 18]. Jurisdictions must give primary consideration to the type of auxiliary aid or service requested by the person with the disability. However, they have flexibility in the exact communication solution they choose, so long as the solution is equally effective or they can demonstrate that the requested aid or service would result in an undue burden or a fundamental alteration of the service or activity [15, 18].

Figure 3. Disability access poster in English available through the San Francisco Mayor's Office on Disability.

Best practices for auxiliary aids and services include the following:

- **Make written materials available in large print (e.g., Arial 16-point font), Braille, and on a thumb drive.** An acceptable temporary alternative is to have someone read materials to the individual with a disability.
- **Make sign language interpreters available onsite or through remote video.** Acceptable temporary alternatives include passing written notes or a tablet back and forth and having sign language interpreters on-site during specific, well publicized blocks of time.
- **Make Wi-Fi available** since many people with disabilities use their own devices for communication.

Additional tips and resources for communicating effectively with people with disabilities available through the San Francisco Mayor's Office on Disability can be found here.

Whichever auxiliary aids and services a jurisdiction offers, it is imperative to train C-POD staff and volunteers on using the aid or service to assist people with communication disabilities [19]. Disability access posters showing available communication services in multiple languages that could be posted at C-POD sites available through the San Francisco Mayor's Office on Disability can be found here.

On a practical note, in advance of a disaster, jurisdictions should work with AFN partners to identify commonly-spoken languages and assess the needs in their communities. This allows jurisdictions to understand how to request services and equipment during a disaster and whether there are local loaning closets, arrange contracts for translation and interpretation services, and develop on-site signage in the appropriate languages [9, 19].

REFERENCES

[1] *ArcGIS Living Atlas of the World*. https://livingatlas.arcgis.com/en/home/.
[2] *Continuum of Care GIS Tools*. https://www.hudexchange.info/programs/coc/gis-tools/.
[3] Americans with Disabilities Act (ADA). "Accessible Parking Spaces." https://www.ada.gov/topics/parking/#:~:text=Accessible%20parking%20spaces%20must%20have,disabilities%20to%20move%20about%20independently.
[4] *CDC/ATSDR SVI Data and Documentation Download*. https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html.
[5] *Bay Area UASI Supply Chain Resilience Playbook: Making Time and Space for Flow*.
[6] Centers for Disease Control and Prevention (CDC). 2022. "At A Glance: CDC/ATSDR Social Vulnerability Index." https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html.
[7] Americans with Disabilities Act (ADA). 2020. "Guide to Disability Rights Laws." https://www.ada.gov/resources/disability-rights-guide/#:~:text=An%20individual%20with%20a%20disability%20is%20defined%20by%20the%20ADA,as%20having%20such%20an%20impairment.
[8] California Governor's Office of Emergency Services (Cal OES). "Access & Functional Needs." https://www.caloes.ca.gov/office-of-the-director/policy-administration/access-functional-needs/.
[9] 2021. *Bay Area Vaccine Points of Dispensing (V-POD) Operations Plan*.
[10] 2019. *Worst Case Housing Needs: 2019 Report to Congress*. https://www.huduser.gov/portal/sites/default/files/pdf/worst-case-housing-needs-2020.pdf.
[11] Esri. 2023. "Creating Composite Indices Using ArcGIS: Best Practices." https://www.esri.com/content/dam/esrisites/en-us/media/technical-papers/creating-composite-indices-using-arcgis.pdf.
[12] National Equity Atlas." https://nationalequityatlas.org/.
[13] California Governor's Office of Emergency Services (Cal OES). 2020. *Integrating Access and Functional Needs within the Emergency Planning Process: Best Practices for Stakeholder Inclusion*.
[14] Americans with Disabilities Act (ADA). "Introduction to the Americans with Disabilities Act." https://www.ada.gov/topics/intro-to-ada/.
[15] Americans with Disabilities Act (ADA). 2020. "ADA Update: A Primer for State and Local Governments." https://www.ada.gov/resources/title-ii-primer/.
[16] City and County of San Francisco. 2023. "Plan your site for an accessible event." https://sf.gov/information/plan-your-site-accessible-event.
[17] 2015. *A Planning Guide for Making Temporary Events Accessible to People With Disabilities*. https://adata.org/guide/planning-guide-making-temporary-events-accessible-people-disabilities#TOILET%20FACILITIES.
[18] Americans with Disabilities Act (ADA). 2020. "ADA Requirements: Effective Communication." https://www.ada.gov/resources/effective-communication/.
[19] California Governor's Office of Emergency Services (Cal OES). 2021. *Inclusive Planning Blueprint for Addressing Access and Functional Needs at Mass Testing/Vaccination Sites*.

APPENDIX A: AREAS OF PRE-EXISTING VULNERABILITY IN THE BAY AREA

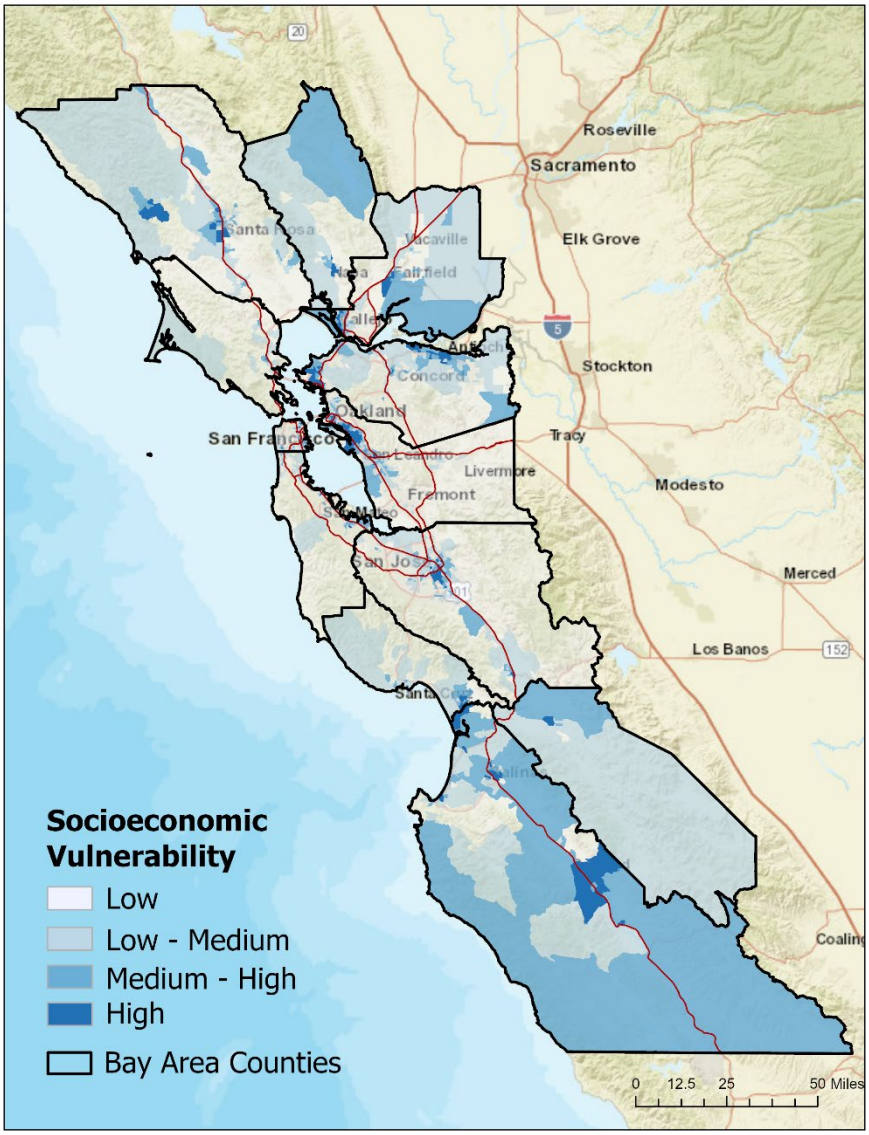


Figure A.1. Social Vulnerability Index – Socioeconomic Status Theme Scores for census tracts in the Bay Area. Socioeconomic vulnerability includes factors such as the percentage of people below 150% poverty, unemployed, housing cost burdened, without a high school diploma, and without health insurance. Measures of vulnerability range from 0-1, where 1 is the highest vulnerability. Vulnerability is often categorized so that low vulnerability ranges from 0 up to 0.25, low-medium vulnerability ranges from 0.25 up to 0.50, medium-high vulnerability ranges from 0.50 up to 0.75, and high vulnerability ranges from 0.75-1.00. [4].

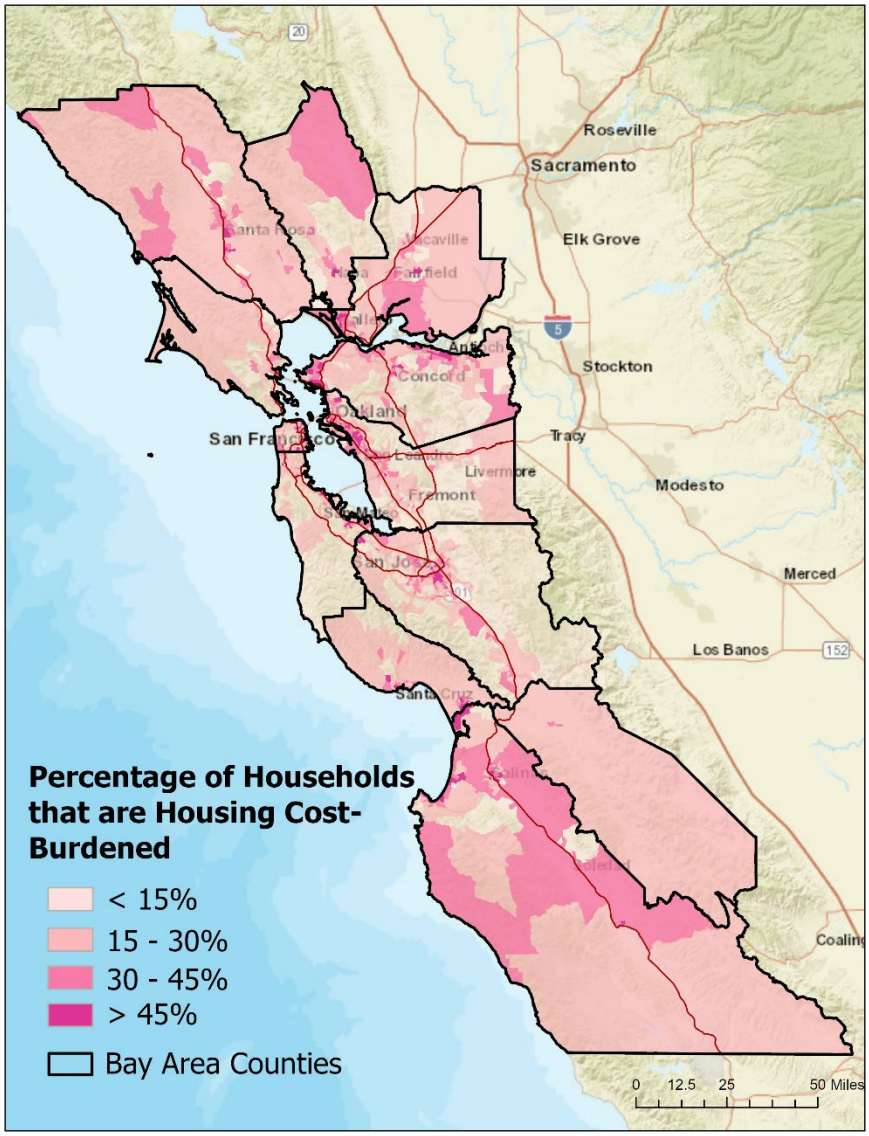


Figure A.2. Percentage of households in Bay Area census tracts that are housing cost-burdened. Being housing cost-burdened is defined as occupied households earning less than $75,000 and spending over 30% of their income on housing costs [4].

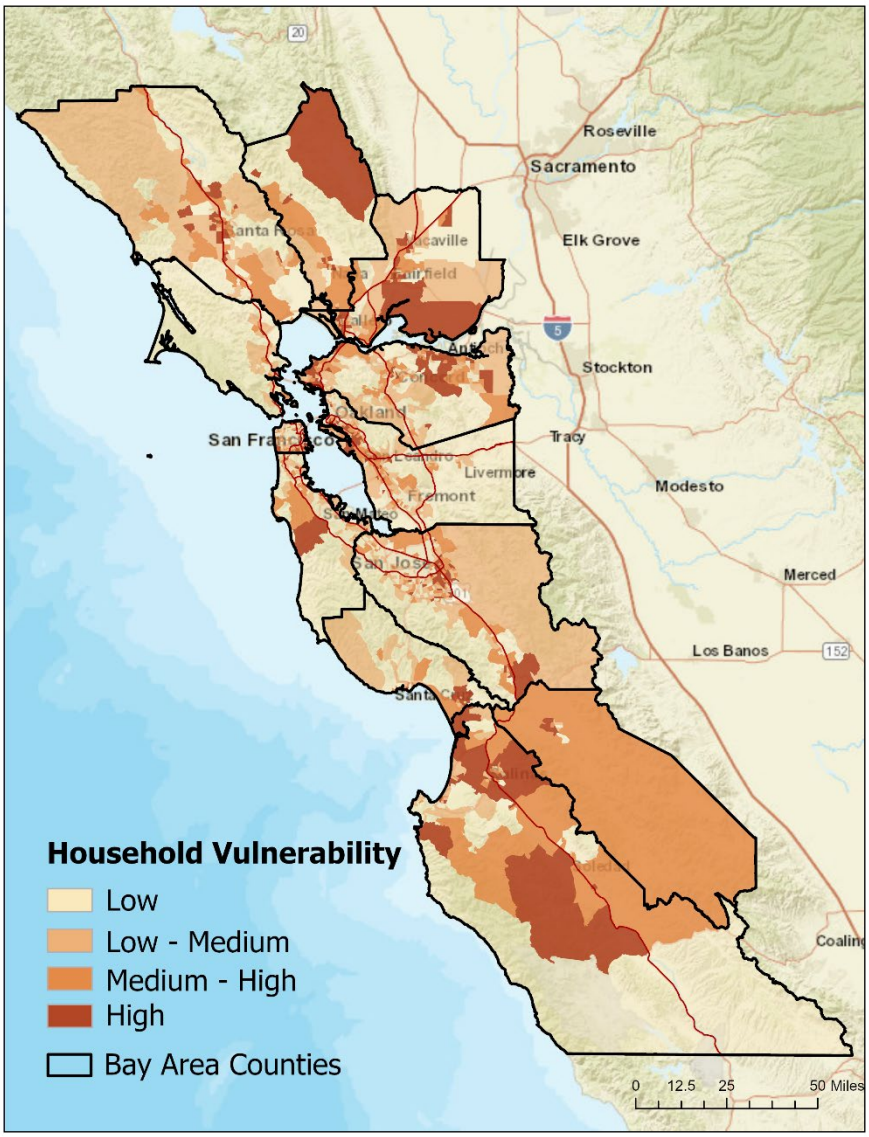


Figure A.3. Social Vulnerability Index – Household Characteristics Theme Scores for census tracts in the Bay Area. vulnerability includes factors such as the percentage of people aged 65 or older, aged 17 or younger, civilians with a disability, single-parent households, and English language proficiency. Vulnerability is often categorized so that low vulnerability ranges from 0 up to 0.25, low-medium vulnerability ranges from 0.25 up to 0.50, medium-high vulnerability ranges from 0.50 up to 0.75, and high vulnerability ranges from 0.75-1.00 [4].

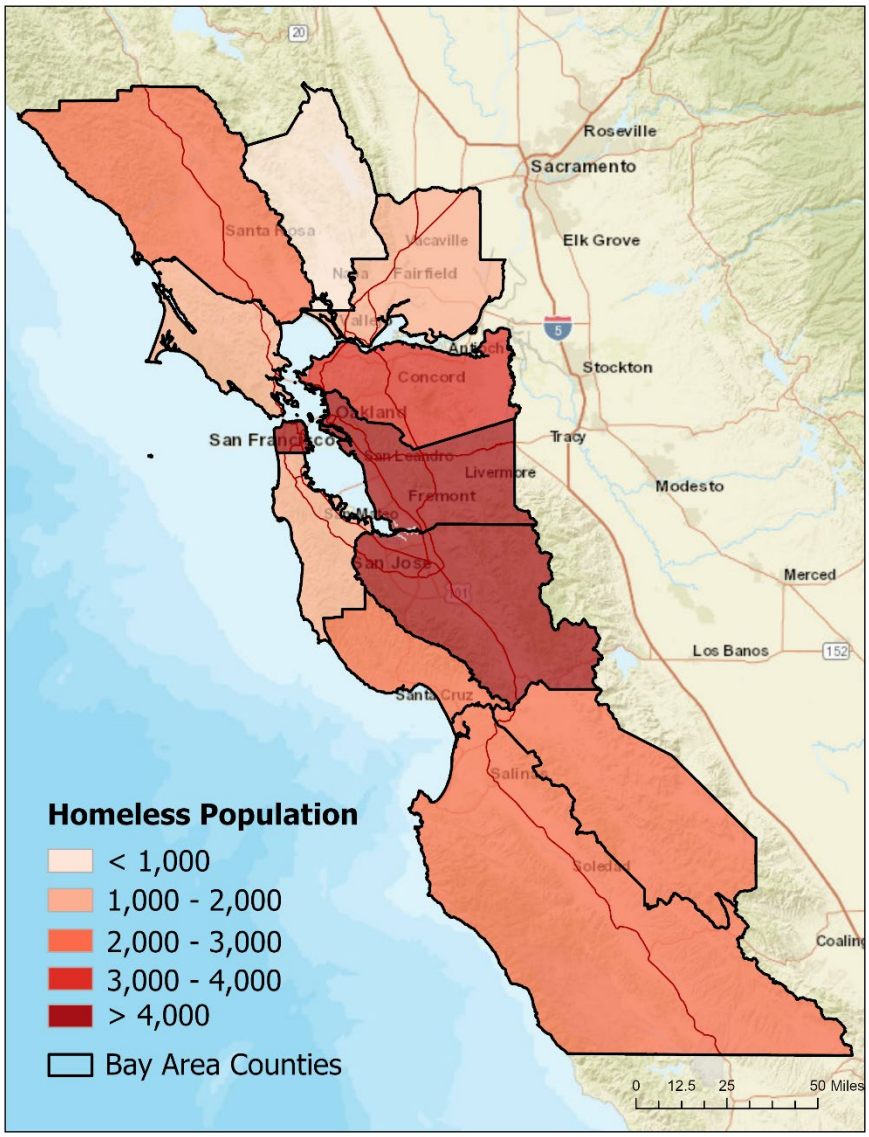


Figure A.4. Homeless or Unhoused Population (count) in Continuum of Care boundaries in the Bay Area [2].

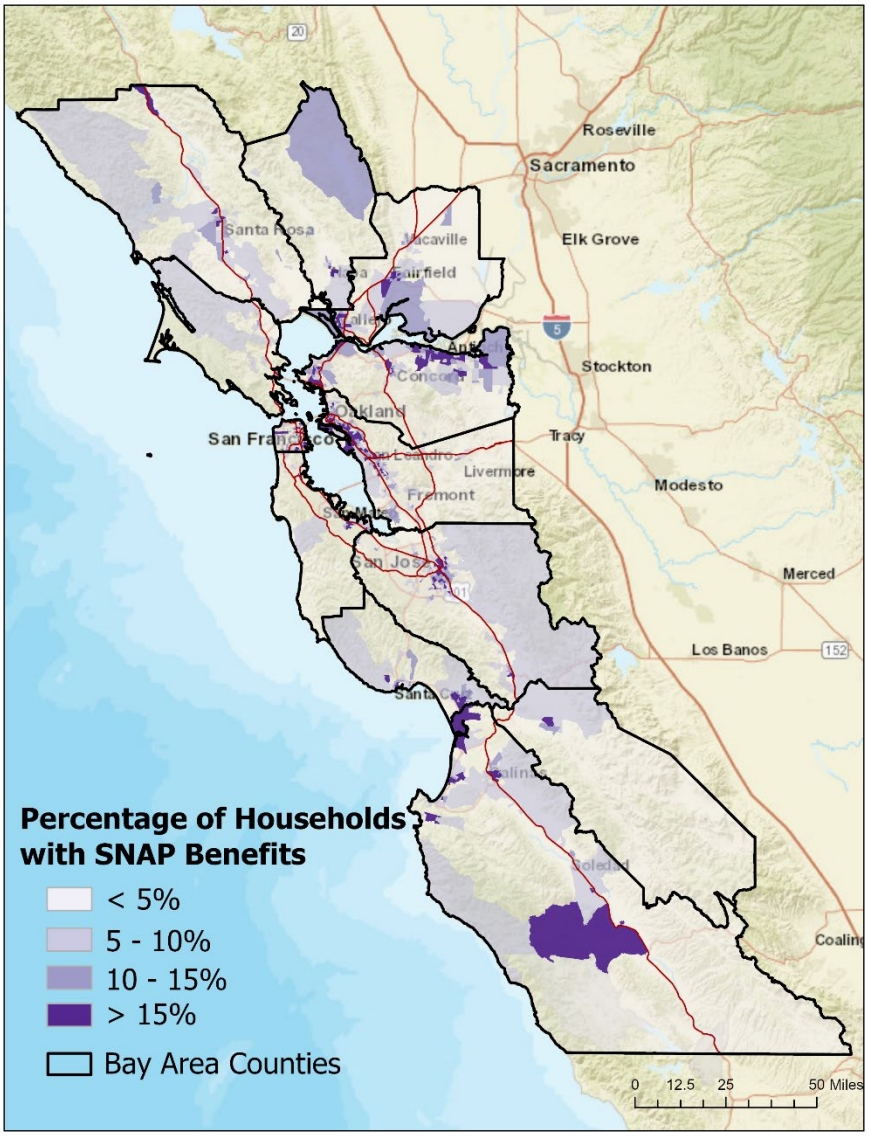


Figure A.5. Percentage of Households in Bay Area census tracts with SNAP benefits [1].

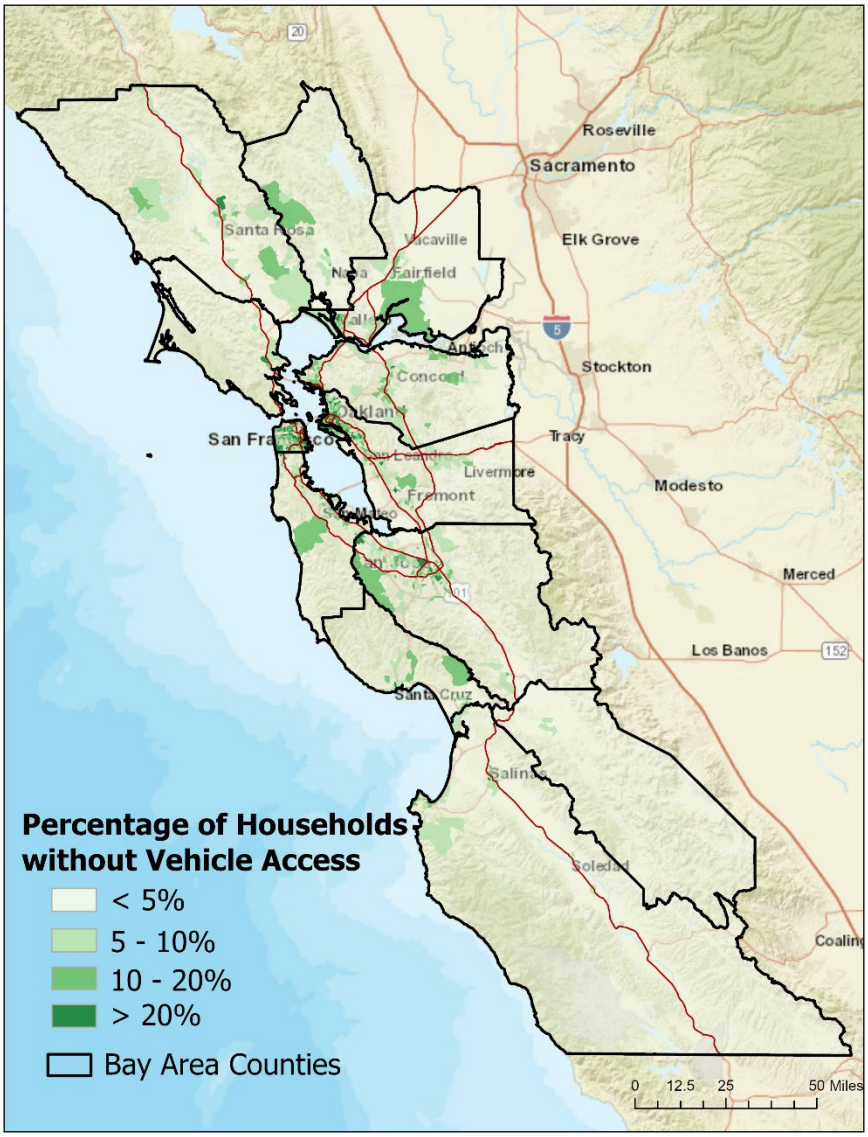


Figure A.6. Percentage of households in Bay Area census tracts without vehicle access [4].

APPENDIX B: PRIORITIZED C-POD SITES BY BAY AREA JURISDICTION

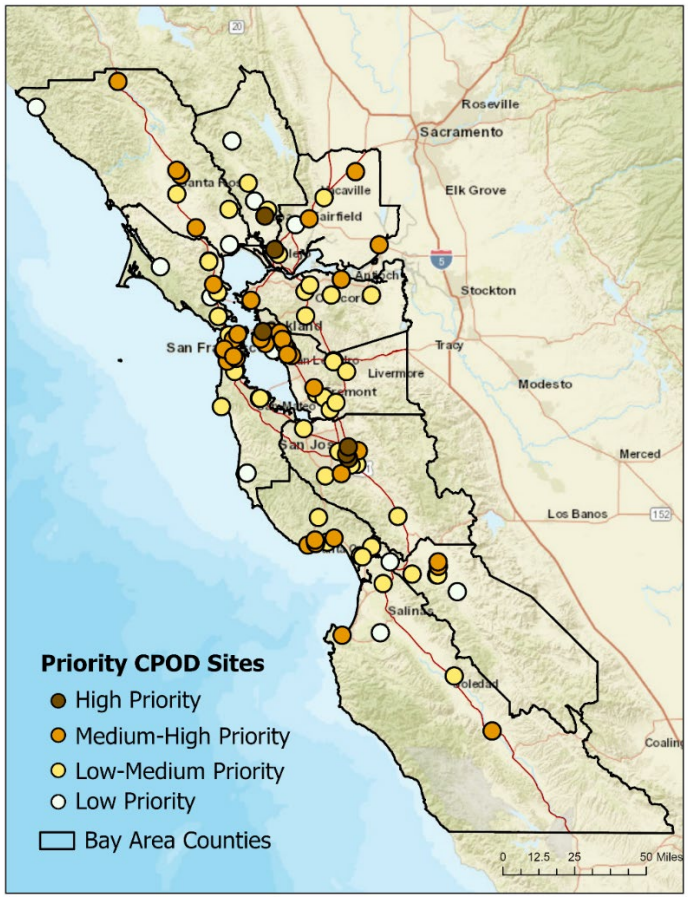


Figure B.1. Prioritized C-POD sites in Bay Area jurisdictions.

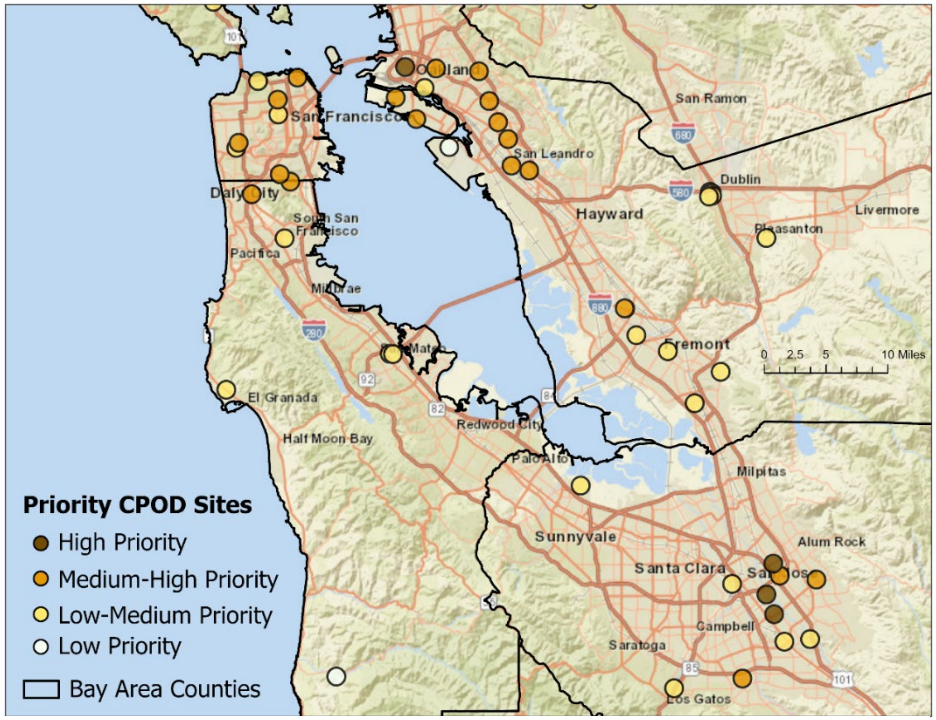
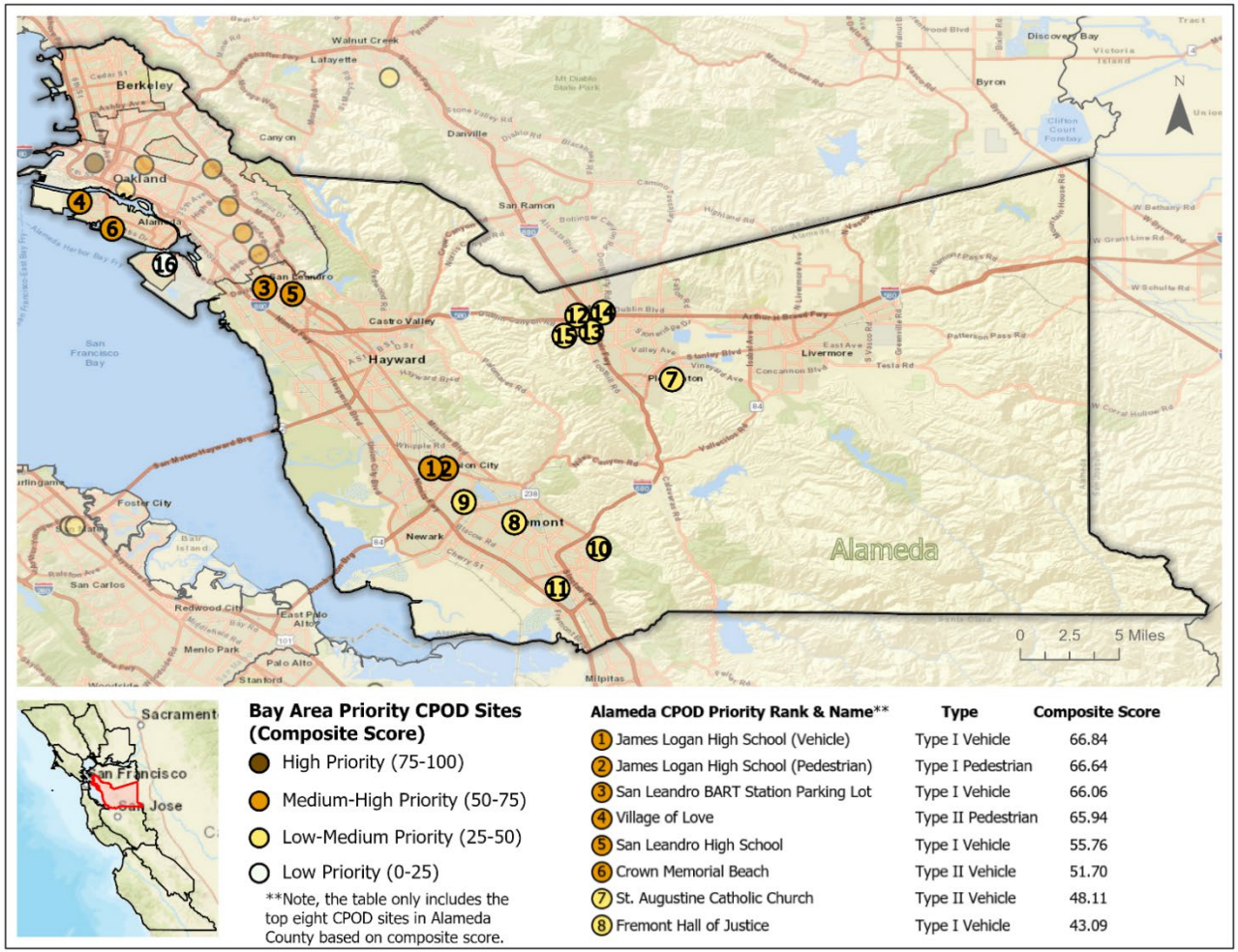


Figure B.2. South Bay Area Priority C-POD sites in Oakland and San Jose.

Jurisdictional C-POD Prioritization for People with Disabilities and AFN

A map and table of prioritized C-PODs are available for each jurisdiction. The maps contain the jurisdiction boundary with C-POD locations numbered by their prioritization score (1 is the highest priority). C-PODs are colored to identify high priority sites with scores from 75-100 (brown), medium-high priority sites with scores from 50-75 (orange), low-medium priority sites with scores from 25-50 (yellow), and low priority sites with scores from 0-25 (white). The top eight prioritized C-PODs are included in the legend along with their name, type, and composite score. The accompanying tables include the C-POD's prioritization rank within the jurisdiction along with the prioritization rank overall, the jurisdiction, C-POD priority level, name, type, composite score, and scores of the transportation access, food insecurity, and social vulnerability dimensions. Note: Jurisdiction C-POD prioritization maps include the highest priority C-PODs. Complete lists of C-PODs in the jurisdictions follow each map.

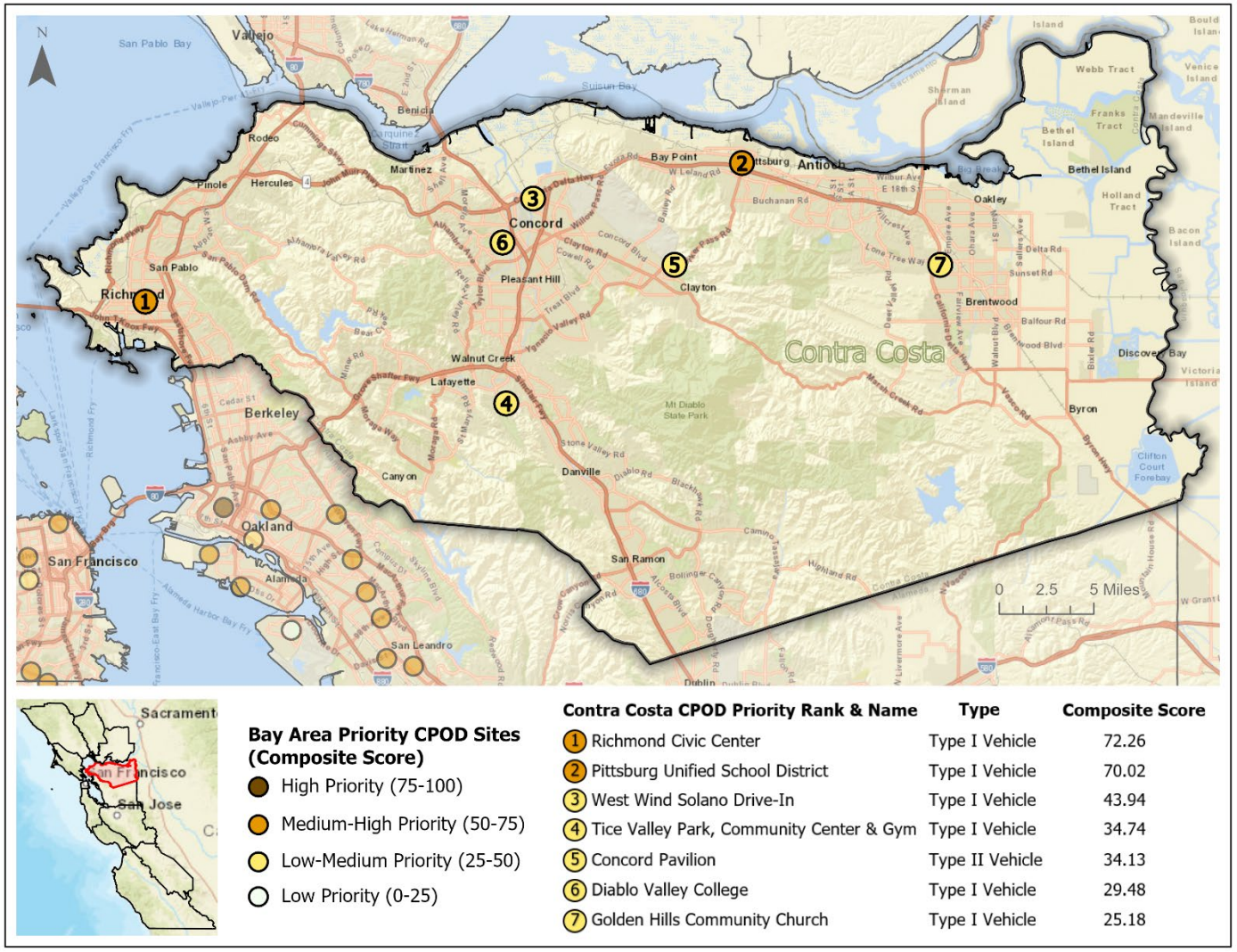
ALAMEDA COUNTY



Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score

1	18	Alameda County	Medium-High	James Logan High School	Type I Vehicle	66.84	91.56	44.96	58.46
2	19	Alameda County	Medium-High	James Logan High School	Type I Pedestrian	66.64	91.39	44.67	58.46
3	20	Alameda County	Medium-High	San Leandro BART Station Parking Lot	Type I Vehicle	66.06	77.14	50.15	65.75
4	21	Alameda County	Medium-High	Village of Love	Type II Pedestrian	65.94	64.93	68.14	58.37
5	33	Alameda County	Medium-High	San Leandro High School	Type I Vehicle	55.76	49.39	51.67	67.13
6	43	Alameda County	Medium-High	Crown Memorial Beach	Type II Vehicle	51.70	63.52	37.32	58.11
7	48	Alameda County	Low-Medium	St. Augustine Catholic Church	Type II Vehicle	48.11	48.24	41.53	60.37
8	59	Alameda County	Low-Medium	Fremont Hall of Justice	Type I Vehicle	43.09	67.75	33.55	36.39
9	66	Alameda County	Low-Medium	American High School	Type I Vehicle	39.08	49.83	44.26	33.16
10	67	Alameda County	Low-Medium	Ohlone College	Type II Vehicle	38.66	44.81	44.66	36.86
11	77	Alameda County	Low-Medium	Lila Bringhurst Elementary School	Type II Pedestrian	33.11	48.91	50.10	12.82
12	80	Alameda County	Low-Medium	Stoneridge Mall - Parking Lot A	Type I Vehicle	30.81	62.32	12.40	34.55
13	86	Alameda County	Low-Medium	Stoneridge Mall - Parking Lot C	Type I Pedestrian	29.42	45.77	24.86	34.55
14	89	Alameda County	Low-Medium	Stoneridge Mall - Parking Lot B	Type I Vehicle	28.09	55.15	13.00	34.55
15	90	Alameda County	Low-Medium	Stoneridge Mall - Parking Lot D	Type I Vehicle	27.57	41.25	24.92	34.55
16	94	Alameda County	Low	Corica Park Golf Course	Type I Vehicle	23.91	37.27	25.55	28.86

CONTRA COSTA COUNTY



Contra Costa CPOD Priority Rank & Name	Type	Composite Score
1 Richmond Civic Center	Type I Vehicle	72.26
2 Pittsburg Unified School District	Type I Vehicle	70.02
3 West Wind Solano Drive-In	Type I Vehicle	43.94
4 Tice Valley Park, Community Center & Gym	Type I Vehicle	34.74
5 Concord Pavilion	Type II Vehicle	34.13
6 Diablo Valley College	Type I Vehicle	29.48
7 Golden Hills Community Church	Type I Vehicle	25.18

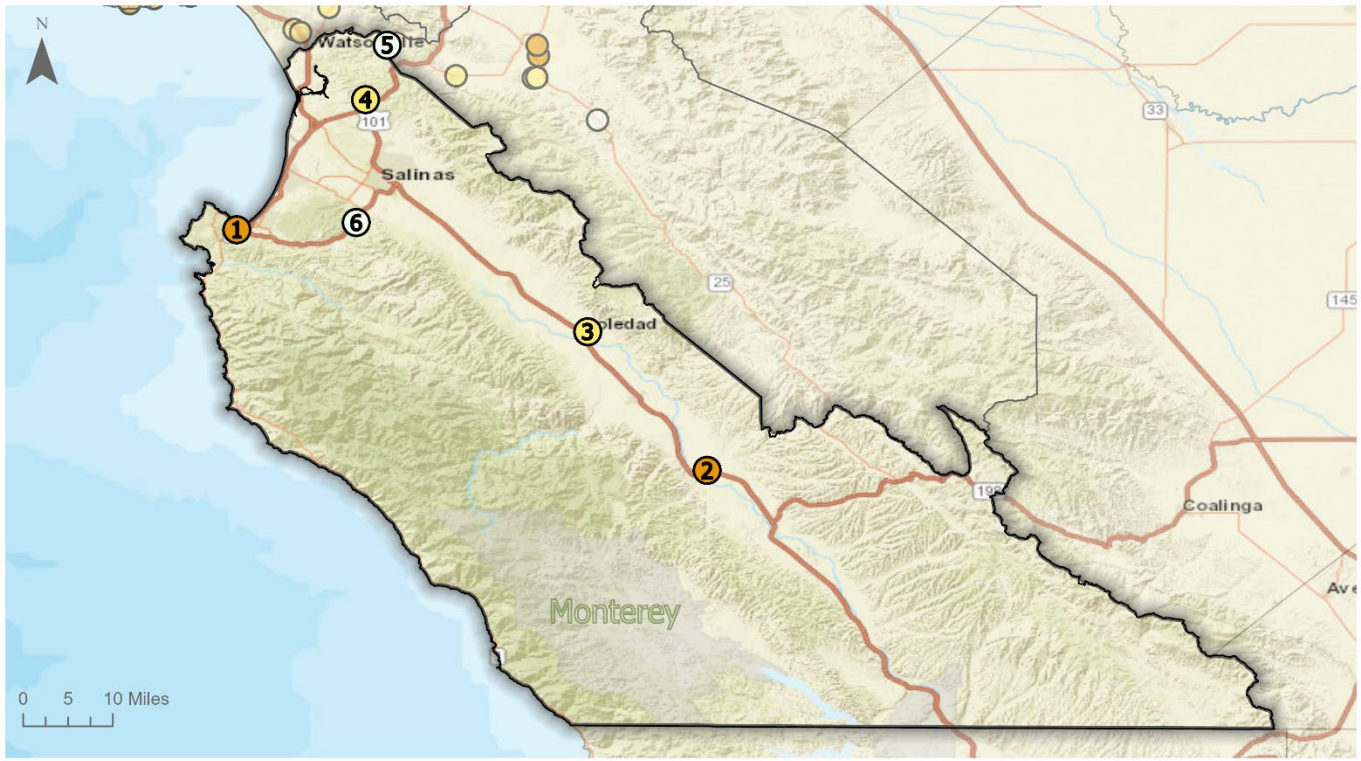
Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	9	Contra Costa County	Medium-High	Richmond Civic Center	Type I Vehicle	72.26	72.29	67.45	67.27
2	15	Contra Costa County	Medium-High	Pittsburg Unified School District	Type I Vehicle	70.02	46.29	76.11	79.10
3	56	Contra Costa County	Low-Medium	West Wind Solano Drive-In	Type I Vehicle	43.94	41.26	56.04	41.25
4	73	Contra Costa County	Low-Medium	Tice Valley Park, Community Center & Gym	Type I Vehicle	34.74	28.28	13.62	78.29
5	74	Contra Costa County	Low-Medium	Concord Pavilion	Type II Vehicle	34.13	33.87	52.04	28.80
6	85	Contra Costa County	Low-Medium	Diablo Valley College	Type I Vehicle	29.48	38.17	28.99	38.06
7	92	Contra Costa County	Low-Medium	Golden Hills Community Church	Type I Vehicle	25.18	35.38	41.38	16.61

MARIN COUNTY

Marin CPOD Priority Rank & Name	Type	Composite Score
1 Marines Veterans Memorial Auditorium	Type II Vehicle	54.25
2 Rowland Blvd. Park & Ride	Type III Vehicle	44.25
3 Staples	Type II Pedestrian	38.23
4 San Rafael High School	Type III Vehicle	37.61
5 Target-Gateway Shopping Center	Type I Pedestrian	33.11
6 West Marin School	Type III Vehicle	19.28
7 College of Marin, Kentfield Pool	Type III Vehicle	16.44

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	35	Marin County	Medium-High	Marines Veterans Memorial Auditorium	Type II Vehicle	54.25	55.10	57.67	50.85
2	55	Marin County	Low-Medium	Rowland Blvd. Park & Ride	Type III Vehicle	44.25	72.79	27.24	40.98
3	68	Marin County	Low-Medium	Staples	Type II Pedestrian	38.23	54.99	30.35	40.98
4	71	Marin County	Low-Medium	San Rafael High School	Type III Vehicle	37.61	45.06	35.17	44.42
5	78	Marin County	Low-Medium	Target-Gateway Shopping Center	Type I Pedestrian	33.11	52.10	39.59	21.03
6	99	Marin County	Low	West Marin School	Type III Vehicle	19.28	22.98	33.25	23.64
7	101	Marin County	Low	College of Marin, Kentfield Pool	Type III Vehicle	16.44	35.64	29.11	8.00

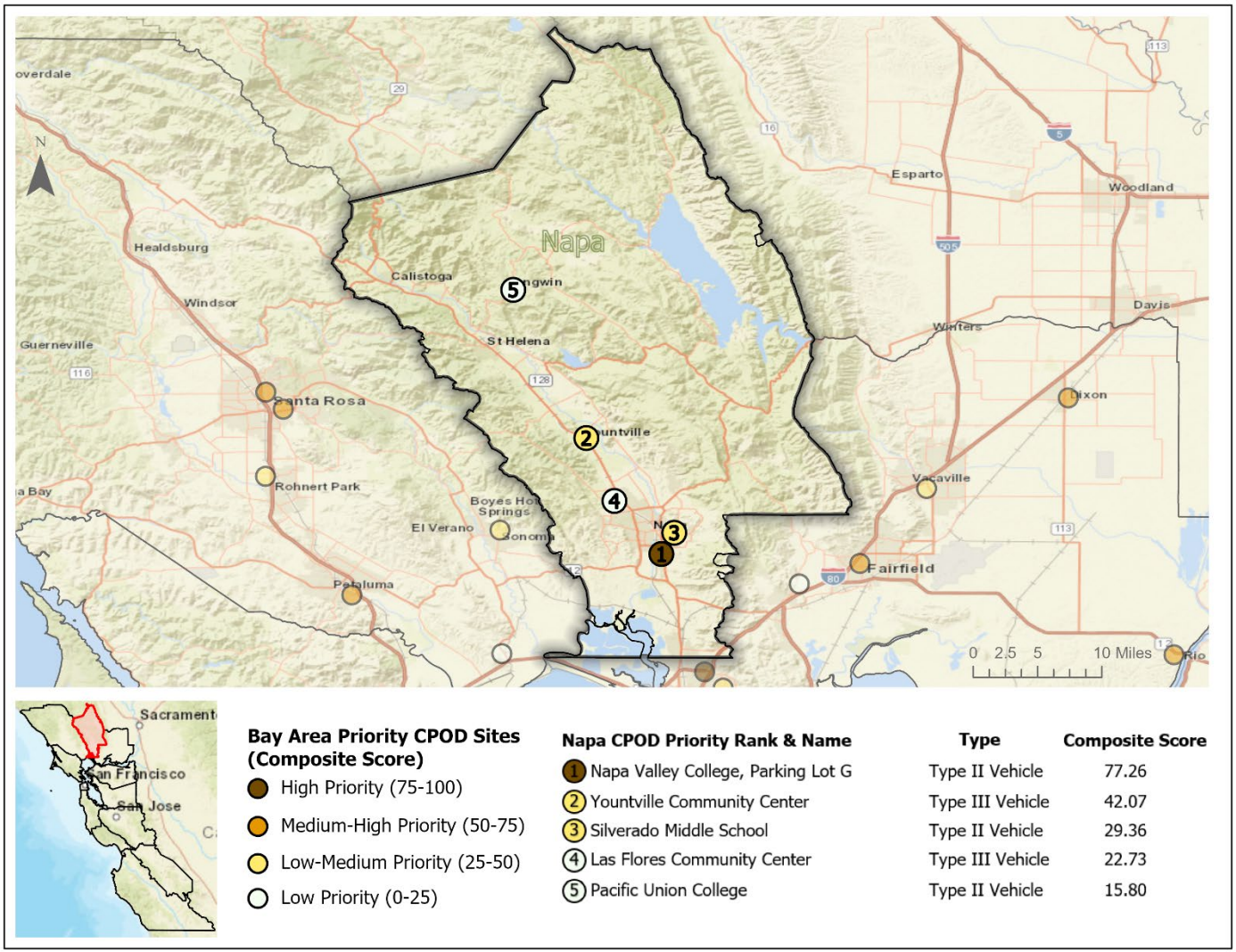
Monterey County



Monterey CPOD Priority Rank & Name	Type	Composite Score
1 Monterey Peninsula College	Type II Vehicle	58.85
2 Salinas Valley Fairgrounds	Type II Vehicle	52.32
3 Soledad Community Center	Type III Vehicle	48.53
4 Manzanita Regional Park	Type III Vehicle	30.37
5 Aromas School	Type III Vehicle	16.53
6 Toro Park	Type III Vehicle	0

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	28	Monterey County	Medium-High	Monterey Peninsula College	Type II Vehicle	58.85	81.15	39.31	55.50
2	40	Monterey County	Medium-High	Salinas Valley Fairgrounds	Type II Vehicle	52.32	51.37	66.24	40.50
3	47	Monterey County	Low-Medium	Soledad Community Center	Type III Vehicle	48.53	38.65	57.74	53.54
4	82	Monterey County	Low-Medium	Manzanita Regional Park	Type III Vehicle	30.37	24.83	33.71	48.92
5	100	Monterey County	Low	Aromas School	Type III Vehicle	16.53	0.00	44.59	28.14
6	104	Monterey County	Low	Toro Park	Type III Vehicle	0.00	27.41	2.02	5.22

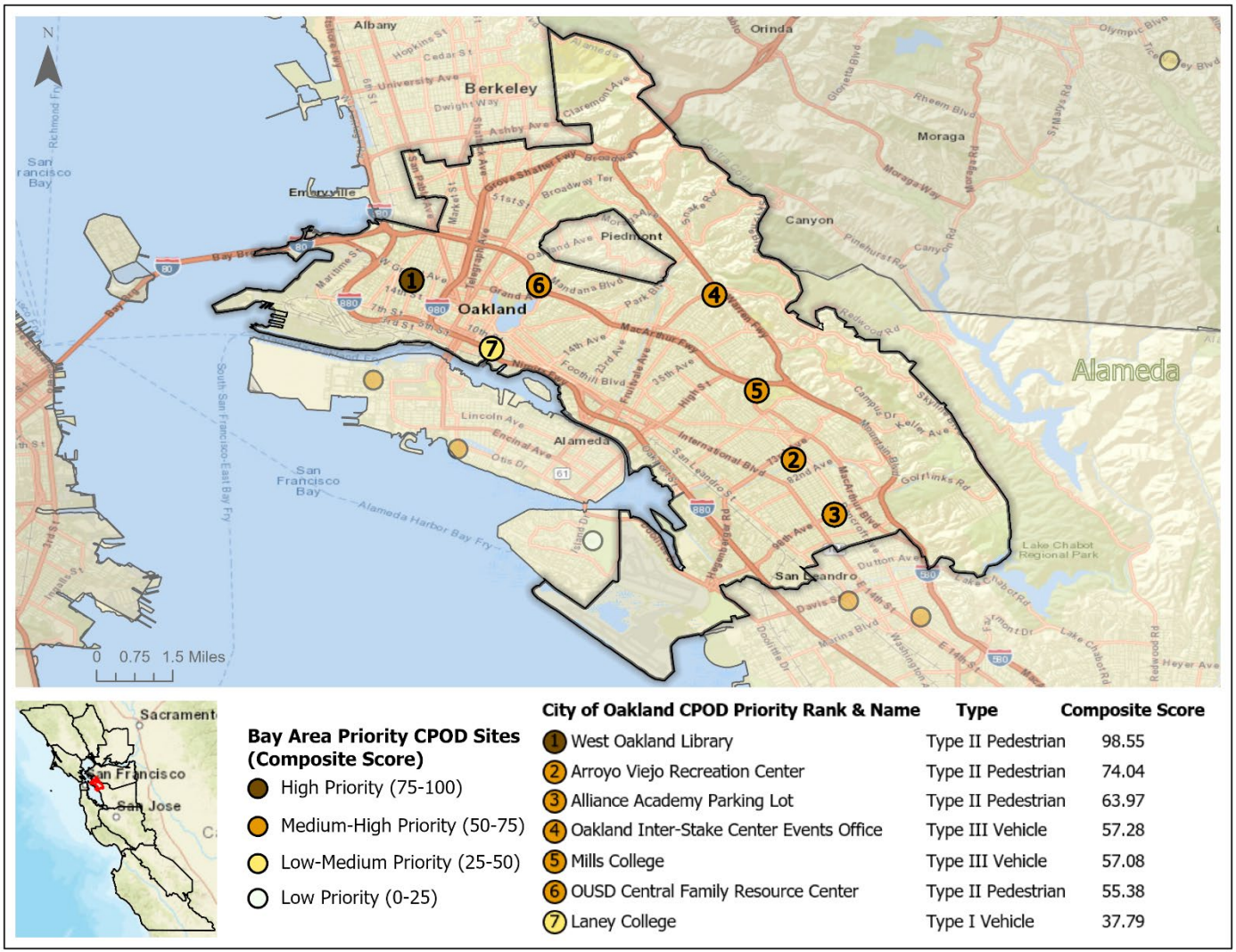
NAPA COUNTY



Napa CPOD Priority Rank & Name	Type	Composite Score
1 Napa Valley College, Parking Lot G	Type II Vehicle	77.26
2 Yountville Community Center	Type III Vehicle	42.07
3 Silverado Middle School	Type II Vehicle	29.36
4 Las Flores Community Center	Type III Vehicle	22.73
5 Pacific Union College	Type II Vehicle	15.80

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	6	Napa County	High	Napa Valley College, Parking Lot G	Type II Vehicle	77.26	78.77	52.73	89.19
2	61	Napa County	Low-Medium	Yountville Community Center	Type III Vehicle	42.07	66.51	0.00	71.93
3	87	Napa County	Low-Medium	Silverado Middle School	Type II Vehicle	29.36	25.46	46.08	32.16
4	96	Napa County	Low	Las Flores Community Center	Type III Vehicle	22.73	30.28	30.69	27.50
5	102	Napa County	Low	Pacific Union College	Type II Vehicle	15.80	14.65	26.56	30.93

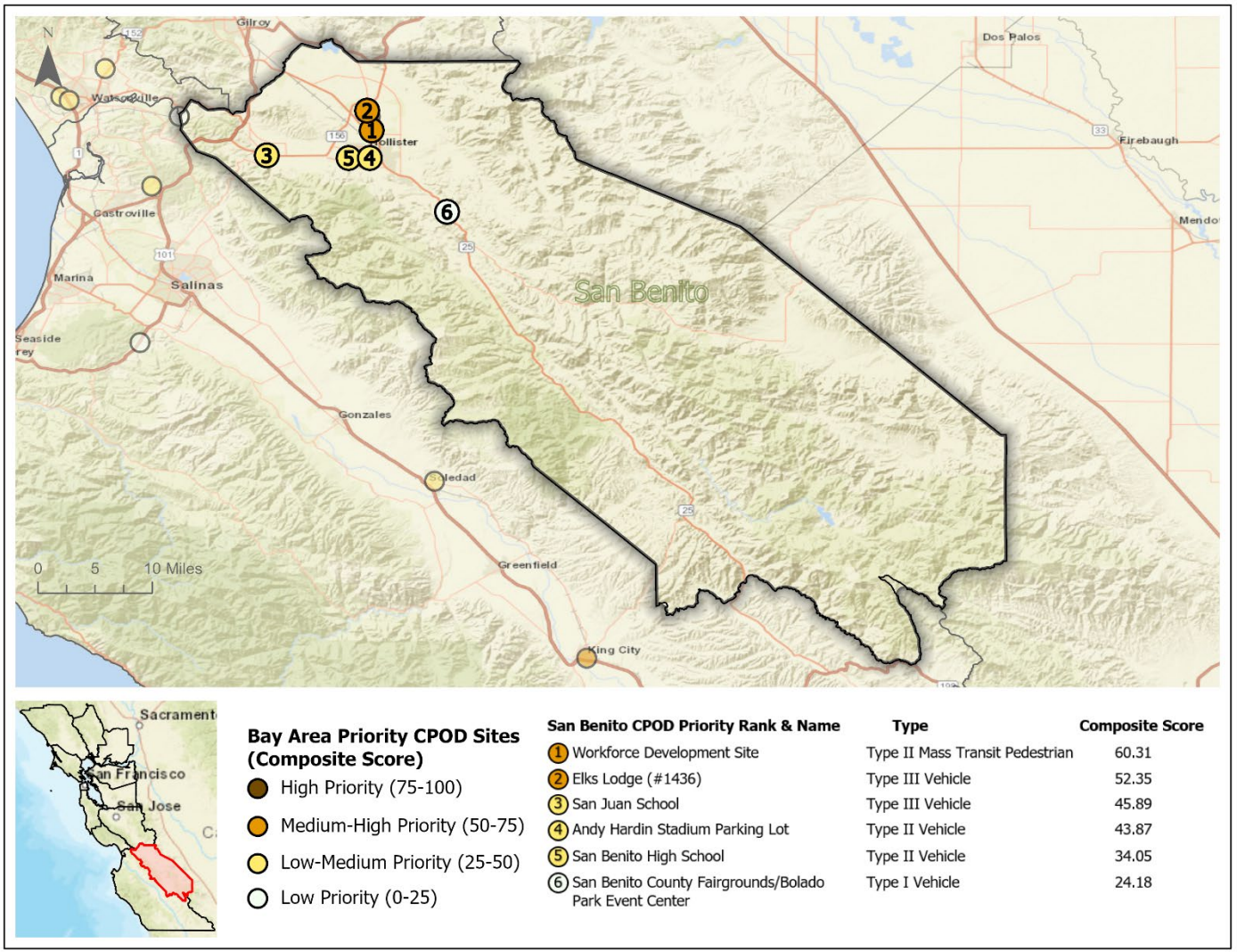
OAKLAND, CITY OF



City of Oakland CPOD Priority Rank & Name	Type	Composite Score
1 West Oakland Library	Type II Pedestrian	98.55
2 Arroyo Viejo Recreation Center	Type II Pedestrian	74.04
3 Alliance Academy Parking Lot	Type II Pedestrian	63.97
4 Oakland Inter-Stake Center Events Office	Type III Vehicle	57.28
5 Mills College	Type III Vehicle	57.08
6 OUSD Central Family Resource Center	Type II Pedestrian	55.38
7 Laney College	Type I Vehicle	37.79

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	2	City of Oakland	High	West Oakland Library	Type II Pedestrian	98.55	87.27	100.00	81.65
2	7	City of Oakland	Medium-High	Arroyo Viejo Recreation Center	Type II Pedestrian	74.04	59.52	77.69	73.71
3	22	City of Oakland	Medium-High	Alliance Academy Parking Lot	Type II Pedestrian	63.97	58.70	61.23	67.49
4	31	City of Oakland	Medium-High	Oakland Inter-Stake Center Events Office	Type III Vehicle	57.28	56.21	61.10	53.49
5	32	City of Oakland	Medium-High	Mills College	Type III Vehicle	57.08	56.19	61.24	52.88
6	34	City of Oakland	Medium-High	OUSD Central Family Resource Center	Type II Pedestrian	55.38	78.31	47.38	40.92
7	70	City of Oakland	Low-Medium	Laney College	Type I Vehicle	37.79	66.60	41.80	15.25

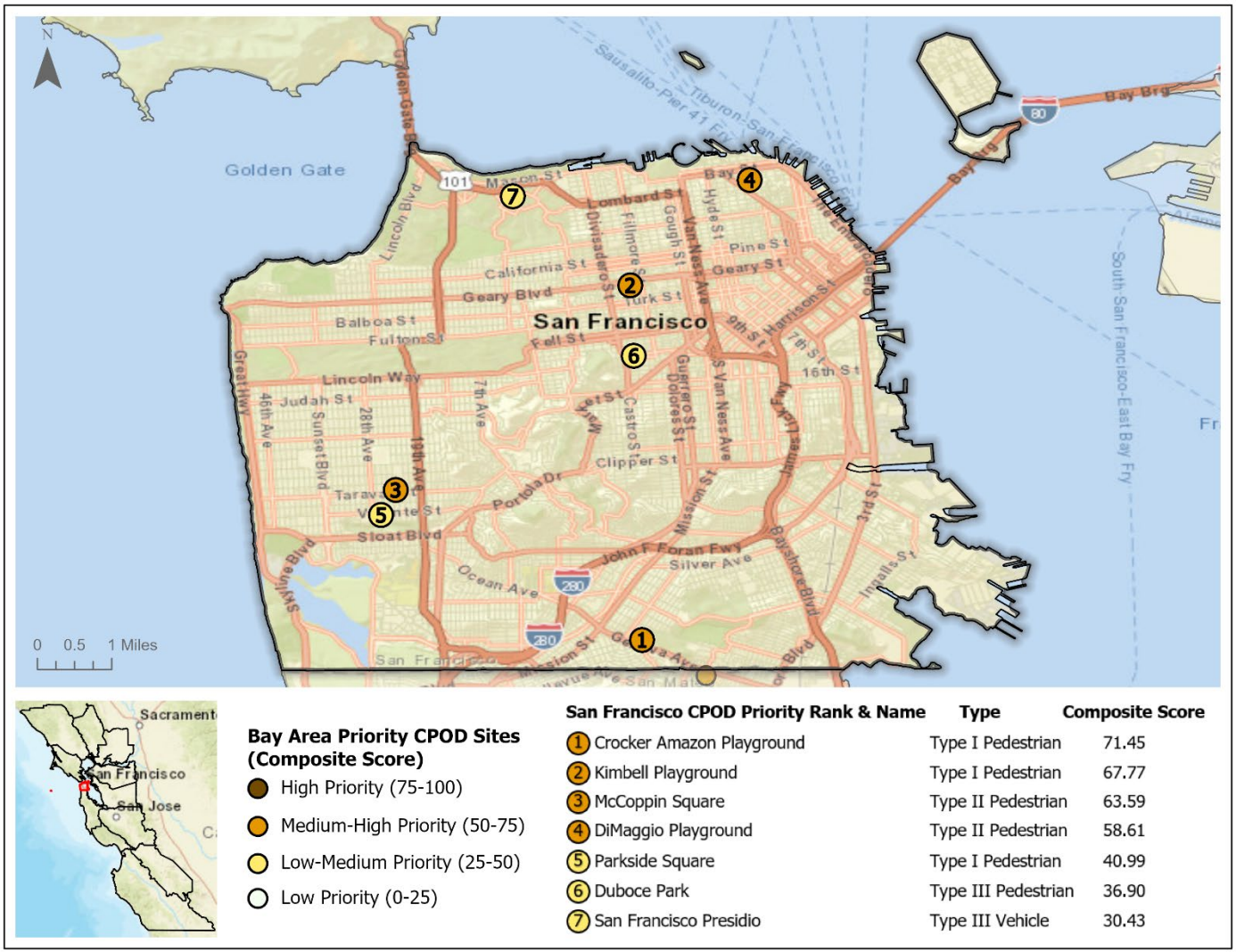
SAN BENITO COUNTY



San Benito CPOD Priority Rank & Name	Type	Composite Score
1 Workforce Development Site	Type II Mass Transit Pedestrian	60.31
2 Elks Lodge (#1436)	Type III Vehicle	52.35
3 San Juan School	Type III Vehicle	45.89
4 Andy Hardin Stadium Parking Lot	Type II Vehicle	43.87
5 San Benito High School	Type II Vehicle	34.05
6 San Benito County Fairgrounds/Bolado Park Event Center	Type I Vehicle	24.18

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	26	San Benito County	Medium-High	Workforce Development Site	Type II Mass Transit Pedestrian	60.31	46.84	74.53	56.05
2	39	San Benito County	Medium-High	Elks Lodge (#1436)	Type III Vehicle	52.35	44.82	58.33	56.05
3	51	San Benito County	Low-Medium	San Juan School	Type III Vehicle	45.89	42.41	44.49	57.62
4	57	San Benito County	Low-Medium	Andy Hardin Stadium Parking Lot	Type II Vehicle	43.87	27.86	55.86	55.15
5	75	San Benito County	Low-Medium	San Benito High School	type II Vehicle	34.05	25.87	35.42	55.15
6	93	San Benito County	Low	San Benito County Fairgrounds/Bolado Park Event Center	Type I Vehicle	24.18	6.74	29.61	56.70

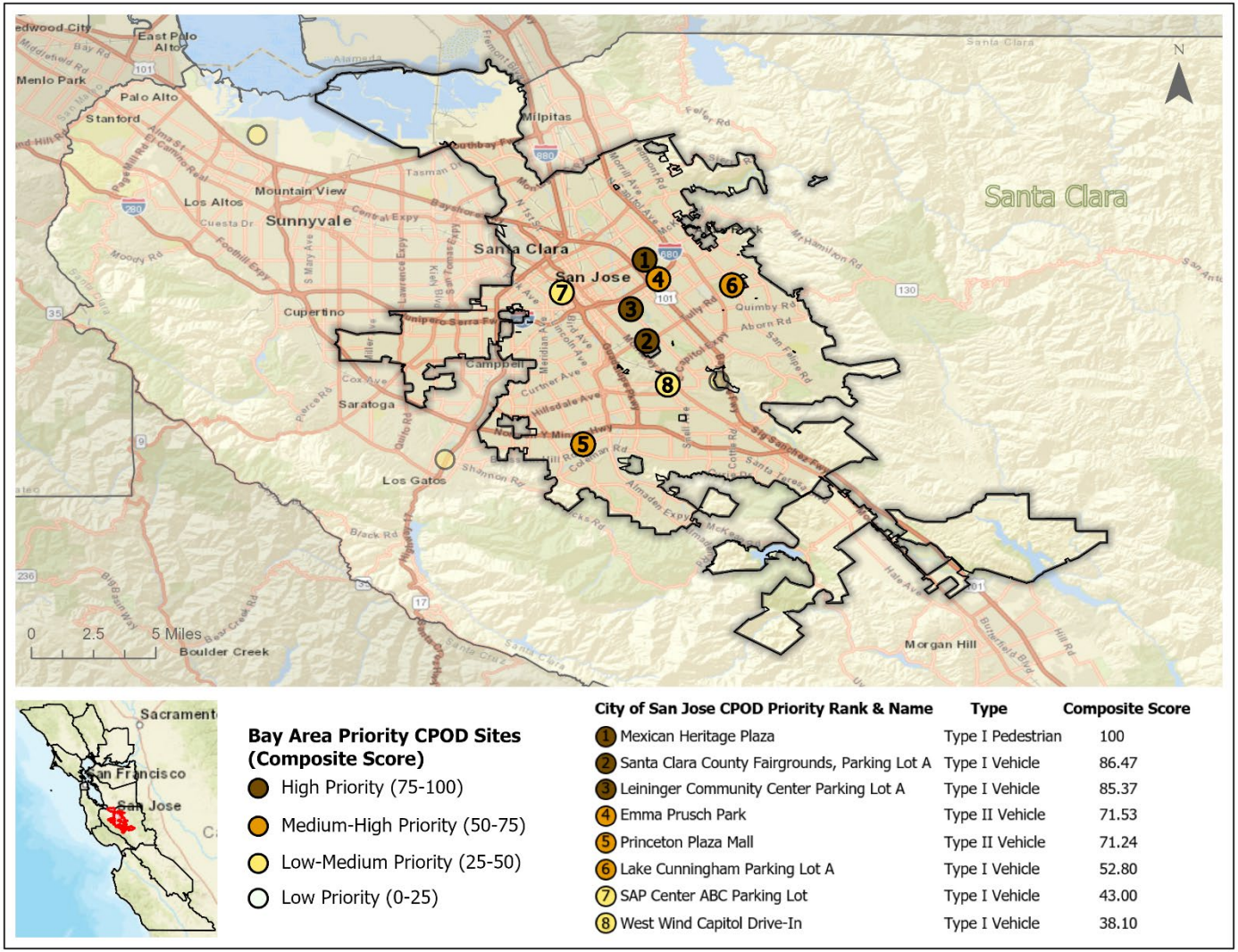
San Francisco, City and County



San Francisco CPOD Priority Rank & Name	Type	Composite Score
1 Crocker Amazon Playground	Type I Pedestrian	71.45
2 Kimbell Playground	Type I Pedestrian	67.77
3 McCoppin Square	Type II Pedestrian	63.59
4 DiMaggio Playground	Type II Pedestrian	58.61
5 Parkside Square	Type I Pedestrian	40.99
6 Duboce Park	Type III Pedestrian	36.90
7 San Francisco Presidio	Type III Vehicle	30.43

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	11	San Francisco (City and County)	Medium-High	Crocker Amazon Playground	Type I Pedestrian	71.45	73.64	65.21	66.31
2	16	San Francisco (City and County)	Medium-High	Kimbell Playground	Type I Pedestrian	67.77	77.66	55.15	63.98
3	23	San Francisco (City and County)	Medium-High	McCoppin Square	Type II Pedestrian	63.59	68.37	56.31	61.90
4	29	San Francisco (City and County)	Medium-High	DiMaggio Playground	Type II Pedestrian	58.61	82.13	50.47	41.64
5	64	San Francisco (City and County)	Low-Medium	Parkside Square	Type I Pedestrian	40.99	49.40	54.47	27.18
6	72	San Francisco (City and County)	Low-Medium	Duboce Park	Type III Pedestrian	36.90	79.99	40.54	0.57
7	81	San Francisco (City and County)	Low-Medium	San Francisco Presidio	Type III Vehicle	30.43	51.88	48.13	5.21

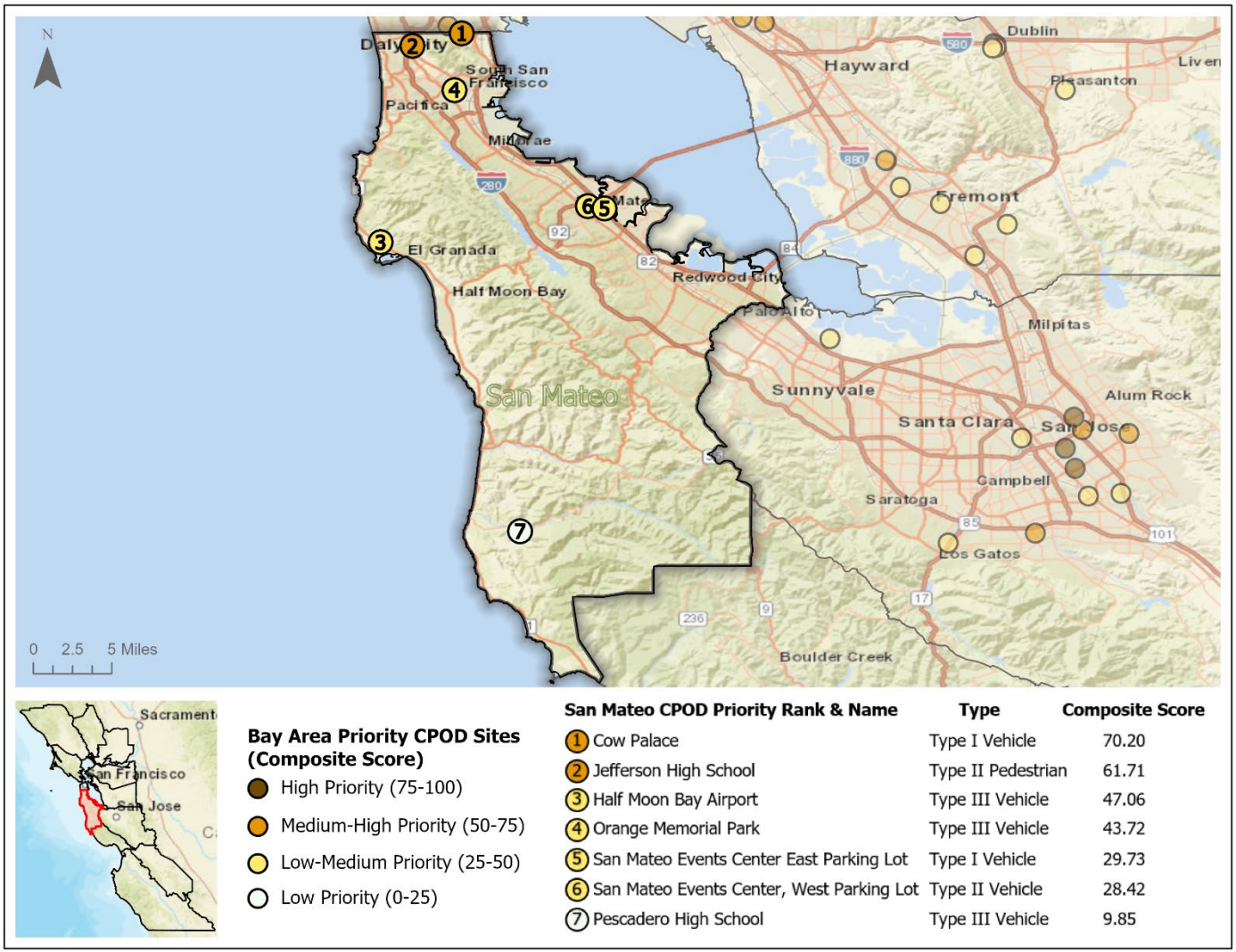
SAN JOSE, CITY OF



City of San Jose CPOD Priority Rank & Name	Type	Composite Score
1 Mexican Heritage Plaza	Type I Pedestrian	100
2 Santa Clara County Fairgrounds, Parking Lot A	Type I Vehicle	86.47
3 Leininger Community Center Parking Lot A	Type I Vehicle	85.37
4 Emma Prusch Park	Type II Vehicle	71.53
5 Princeton Plaza Mall	Type II Vehicle	71.24
6 Lake Cunningham Parking Lot A	Type I Vehicle	52.80
7 SAP Center ABC Parking Lot	Type I Vehicle	43.00
8 West Wind Capitol Drive-In	Type I Vehicle	38.10

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	1	City of San Jose	High	Mexican Heritage Plaza	Type I Pedestrian	100.00	100.00	94.00	78.66
2	3	City of San Jose	High	Santa Clara County Fairgrounds, Parking Lot A	Type I Vehicle	86.47	75.30	67.09	100.00
3	4	City of San Jose	High	Leininger Community Center Parking Lot A	Type I Vehicle	85.37	71.45	71.48	96.45
4	10	City of San Jose	Medium-High	Emma Prusch Park	Type II Vehicle	71.53	68.60	66.29	70.56
5	12	City of San Jose	Medium-High	Princeton Plaza Mall	Type II Vehicle	71.24	71.77	60.05	73.38
6	37	City of San Jose	Medium-High	Lake Cunningham Parking Lot A	Type I Vehicle	52.80	60.66	51.62	48.11
7	60	City of San Jose	Low-Medium	SAP Center ABC Parking Lot	Type I Vehicle	43.00	54.99	42.74	39.28
8	69	City of San Jose	Low-Medium	West Wind Capitol Drive-In	Type I Vehicle	38.10	49.13	28.41	48.85

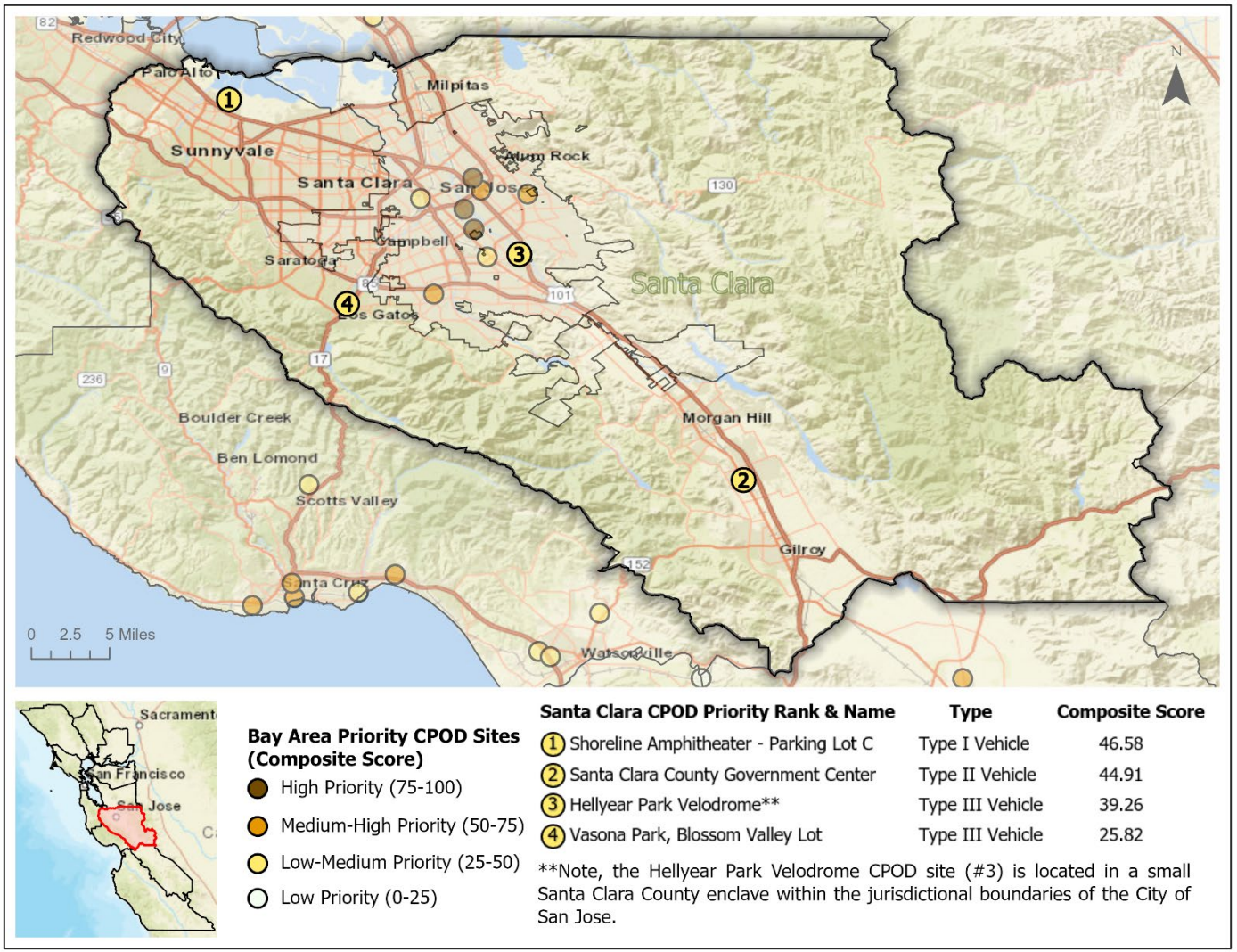
San Mateo County



San Mateo CPOD Priority Rank & Name	Type	Composite Score
1 Cow Palace	Type I Vehicle	70.20
2 Jefferson High School	Type II Pedestrian	61.71
3 Half Moon Bay Airport	Type III Vehicle	47.06
4 Orange Memorial Park	Type III Vehicle	43.72
5 San Mateo Events Center East Parking Lot	Type I Vehicle	29.73
6 San Mateo Events Center, West Parking Lot	Type II Vehicle	28.42
7 Pescadero High School	Type III Vehicle	9.85

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	13	San Mateo County	Medium-High	Cow Palace	Type I Vehicle	70.20	68.68	80.44	51.61
2	25	San Mateo County	Medium-High	Jefferson High School	Type II Pedestrian	61.71	81.69	55.33	44.50
3	49	San Mateo County	Low-Medium	Half Moon Bay Airport	Type III Vehicle	47.06	63.45	42.91	40.46
4	58	San Mateo County	Low-Medium	Orange Memorial Park	Type III Vehicle	43.72	51.69	60.09	25.45
5	83	San Mateo County	Low-Medium	San Mateo Events Center East Parking Lot	Type I Vehicle	29.73	42.74	59.89	0.00
6	88	San Mateo County	Low-Medium	San Mateo Events Center, West Parking Lot	Type II Vehicle	28.42	50.53	49.58	0.00
7	103	San Mateo County	Low	Pescadero High School	Type III Vehicle	9.85	13.38	25.65	18.40

SANTA CLARA COUNTY



Santa Clara CPOD Priority Rank & Name	Type	Composite Score
(1) Shoreline Amphitheater - Parking Lot C	Type I Vehicle	46.58
(2) Santa Clara County Government Center	Type II Vehicle	44.91
(3) Hellyear Park Velodrome**	Type III Vehicle	39.26
(4) Vasona Park, Blossom Valley Lot	Type III Vehicle	25.82

**Note, the Hellyear Park Velodrome CPOD site (#3) is located in a small Santa Clara County enclave within the jurisdictional boundaries of the City of San Jose.

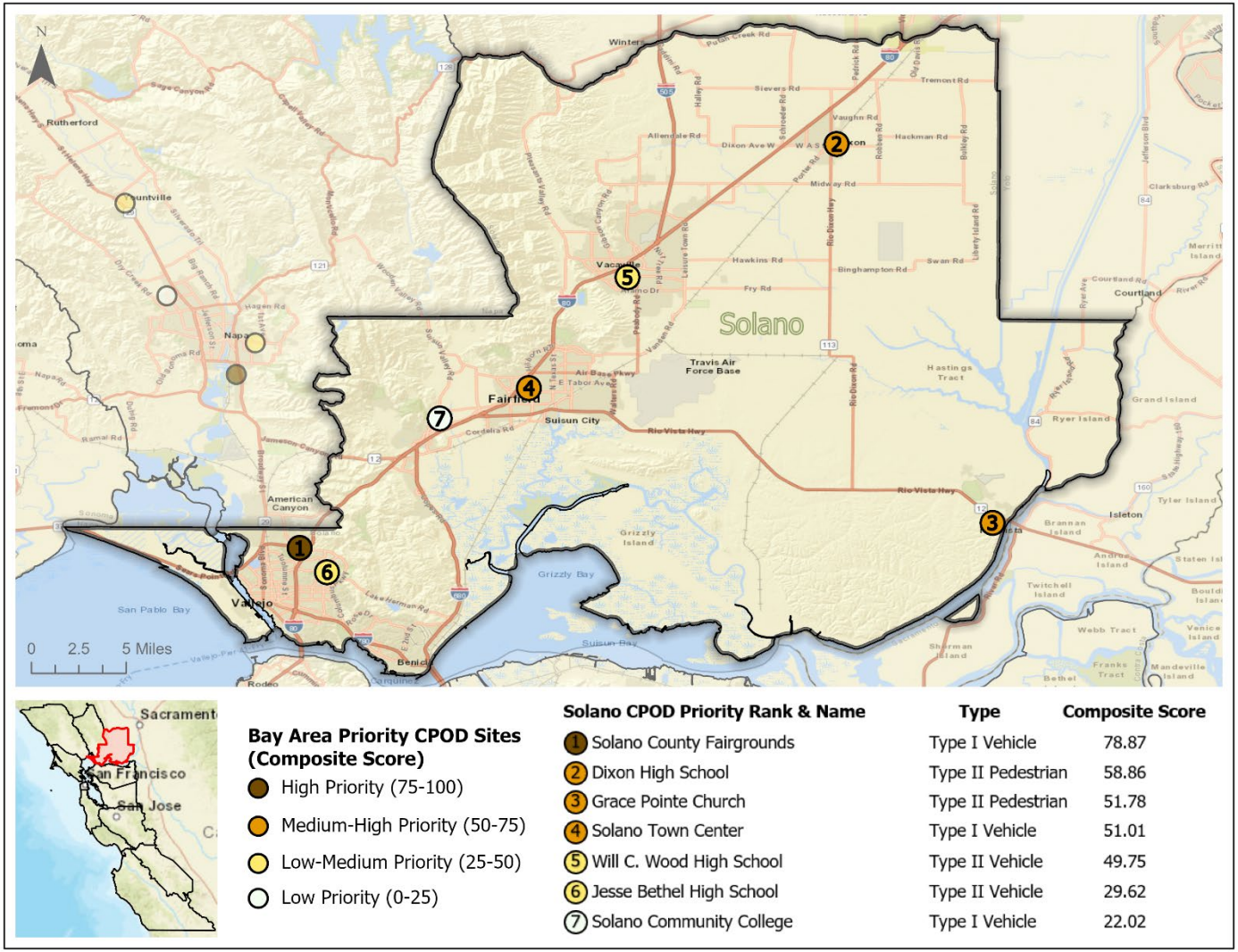
Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	50	Santa Clara County	Low-Medium	Shoreline Amphitheater - Parking Lot C	Type I Vehicle	46.58	35.22	45.80	65.32
2	53	Santa Clara County	Low-Medium	Santa Clara County Government Center	Type II Vehicle	44.91	75.50	6.72	62.35
3	65	Santa Clara County	Low-Medium	Hellyear Park Velodrome	Type III Vehicle	39.26	38.32	49.04	40.31
4	91	Santa Clara County	Low-Medium	Vasona Park, Blossom Valley Lot	Type III Vehicle	25.82	54.29	25.58	15.95

SANTA CRUZ COUNTY

Santa Cruz CPOD Priority Rank & Name	Type	Composite Score
1 Santa Cruz Boardwalk Main Parking Lot	Type I Vehicle	73.06
2 Santa Cruz Office Building	Type I Vehicle	57.45
3 Cabrillo College - Parking Lot L	Type I Vehicle	52.48
4 UC Santa Cruz Parking Lot 302, West side Research park	Type II Vehicle	51.94
5 Santa Cruz County Facilities Building	Type III Vehicle	48.79
6 Scotts Valley High School	Type I Vehicle	44.65
7 Santa Cruz County Fairgrounds	Type I Vehicle	41.95
8 Jade Street Park	Type II Vehicle	41.66
9 Parajo Valley High School	Type I Vehicle	32.15

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	8	Santa Cruz County	Medium-High	Santa Cruz Boardwalk Main Parking Lot	Type I Vehicle	73.06	64.82	74.13	69.66
2	30	Santa Cruz County	Medium-High	Santa Cruz Office Building	Type I Vehicle	57.45	80.10	59.46	30.97
3	38	Santa Cruz County	Medium-High	Cabrillo College - Parking Lot L	Type I Vehicle	52.48	44.09	69.84	44.47
4	41	Santa Cruz County	Medium-High	UC Santa Cruz Parking Lot 302, West side Research park	Type II Vehicle	51.94	58.26	44.59	56.18
5	46	Santa Cruz County	Low-Medium	Santa Cruz County Facilities Building	Type III Vehicle	48.79	48.66	58.02	43.51
6	54	Santa Cruz County	Low-Medium	Scotts Valley High School	Type I Vehicle	44.65	40.76	61.11	37.98
7	62	Santa Cruz County	Low-Medium	Santa Cruz County Fairgrounds	Type I Vehicle	41.95	31.14	39.52	64.90
8	63	Santa Cruz County	Low-Medium	Jade Street Park	Type II Pedestrian	41.66	37.43	36.21	61.28
9	79	Santa Cruz County	Low-Medium	Parajo Valley High School	Type I Vehicle	32.15	39.73	20.32	52.62

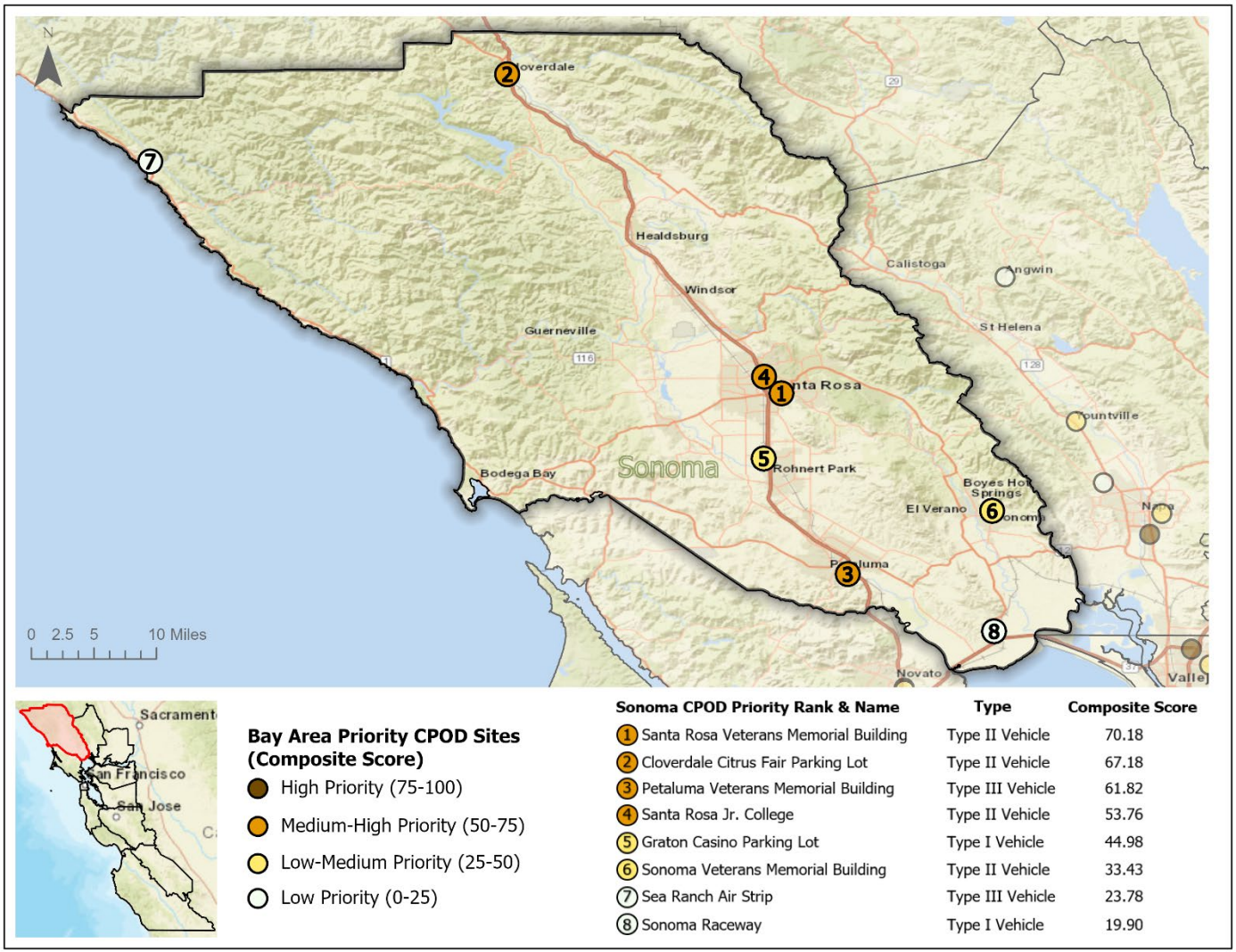
SOLANO COUNTY



Solano CPOD Priority Rank & Name	Type	Composite Score
1 Solano County Fairgrounds	Type I Vehicle	78.87
2 Dixon High School	Type II Pedestrian	58.86
3 Grace Pointe Church	Type II Pedestrian	51.78
4 Solano Town Center	Type I Vehicle	51.01
5 Will C. Wood High School	Type II Vehicle	49.75
6 Jesse Bethel High School	Type II Vehicle	29.62
7 Solano Community College	Type I Vehicle	22.02

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	5	Solano County	High	Solano County Fairgrounds	Type I Vehicle	78.87	58.08	80.80	83.83
2	27	Solano County	Medium-High	Dixon High School	Type II Pedestrian	58.86	36.02	79.27	58.41
3	42	Solano County	Medium-High	Grace Pointe Church	Type II Pedestrian	51.78	10.97	80.62	65.22
4	44	Solano County	Medium-High	Solano Town Center	Type I Vehicle	51.01	52.12	51.89	52.20
5	45	Solano County	Low-Medium	Will C. Wood High School	Type II Vehicle	49.75	42.39	51.32	59.77
6	84	Solano County	Low-Medium	Jesse Bethel High School	Type II Vehicle	29.62	40.64	49.45	13.39
7	97	Solano County	Low	Solano Community College	Type I Vehicle	22.02	15.84	51.25	18.14

SONOMA COUNTY



Sonoma CPOD Priority Rank & Name	Type	Composite Score
1 Santa Rosa Veterans Memorial Building	Type II Vehicle	70.18
2 Cloverdale Citrus Fair Parking Lot	Type II Vehicle	67.18
3 Petaluma Veterans Memorial Building	Type III Vehicle	61.82
4 Santa Rosa Jr. College	Type II Vehicle	53.76
5 Graton Casino Parking Lot	Type I Vehicle	44.98
6 Sonoma Veterans Memorial Building	Type II Vehicle	33.43
7 Sea Ranch Air Strip	Type III Vehicle	23.78
8 Sonoma Raceway	Type I Vehicle	19.90

Jurisdiction Priority Rank	Bay Area Priority Rank	Jurisdiction	C-POD Priority Level	C-POD Name	C-POD Type	Composite Index Score	Transportation Score	Food Insecurity Score	Social Vulnerability Score
1	14	Sonoma County	Medium-High	Santa Rosa Veterans Memorial Building	Type II Vehicle	70.18	64.67	73.74	63.06
2	17	Sonoma County	Medium-High	Cloverdale Citrus Fair Parking Lot	Type II Vehicle	67.18	58.56	77.41	57.86
3	24	Sonoma County	Medium-High	Petaluma Veterans Memorial Building	Type III Vehicle	61.82	56.51	60.84	64.80
4	36	Sonoma County	Medium-High	Santa Rosa Jr. College	Type II Vehicle	53.76	46.73	66.78	48.31
5	52	Sonoma County	Low-Medium	Graton Casino Parking Lot	Type I Vehicle	44.98	38.81	52.49	50.27
6	76	Sonoma County	Low-Medium	Sonoma Veterans Memorial Building	Type II Vehicle	33.43	15.23	30.65	69.84
7	95	Sonoma County	Low	Sea Ranch Air Strip	Type III Vehicle	23.78	6.74	29.79	55.51
8	98	Sonoma County	Low	Sonoma Raceway	Type I Vehicle	19.90	23.12	14.38	45.77

APPENDIX C: RESOURCES FOR ACCESSIBILITY AND REASONABLE ACCOMMODATIONS AT C-POD SITES

General Resources

- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, Americans with Disabilities Act Title II Regulations
- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, Guidance & Resource Materials
- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, ADA Update: A Primer for State and Local Governments
- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, The ADA and City Governments: Common Problems
- California Governor's Office of Emergency Services, Access and Functional Needs Library
- City and County of San Francisco, Mayor's Office on Disability, ADA Coordinator Toolkit
- City and County of San Francisco, Mayor's Office on Disability, Get disability access posters and signs

Physical Accessibility

- ADA National Network, A Planning Guide for Making Temporary Events Accessible to People with Disabilities (2015)
- City and County of San Francisco, Host an accessible event
- City and County of San Francisco, Plan your site for an accessible event

Transportation Access

- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, Accessible Parking Spaces
- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, ADA Compliance Brief: Restriping Parking Spaces

Communications

- U.S. Department of Justice, Civil Rights Division, Disability Rights Section, ADA Requirements: Effective Communication
- City and County of San Francisco, Communicate effectively to all
- City and County of San Francisco, Mayor's Office on Disability, Communication tips and resources for people with disabilities