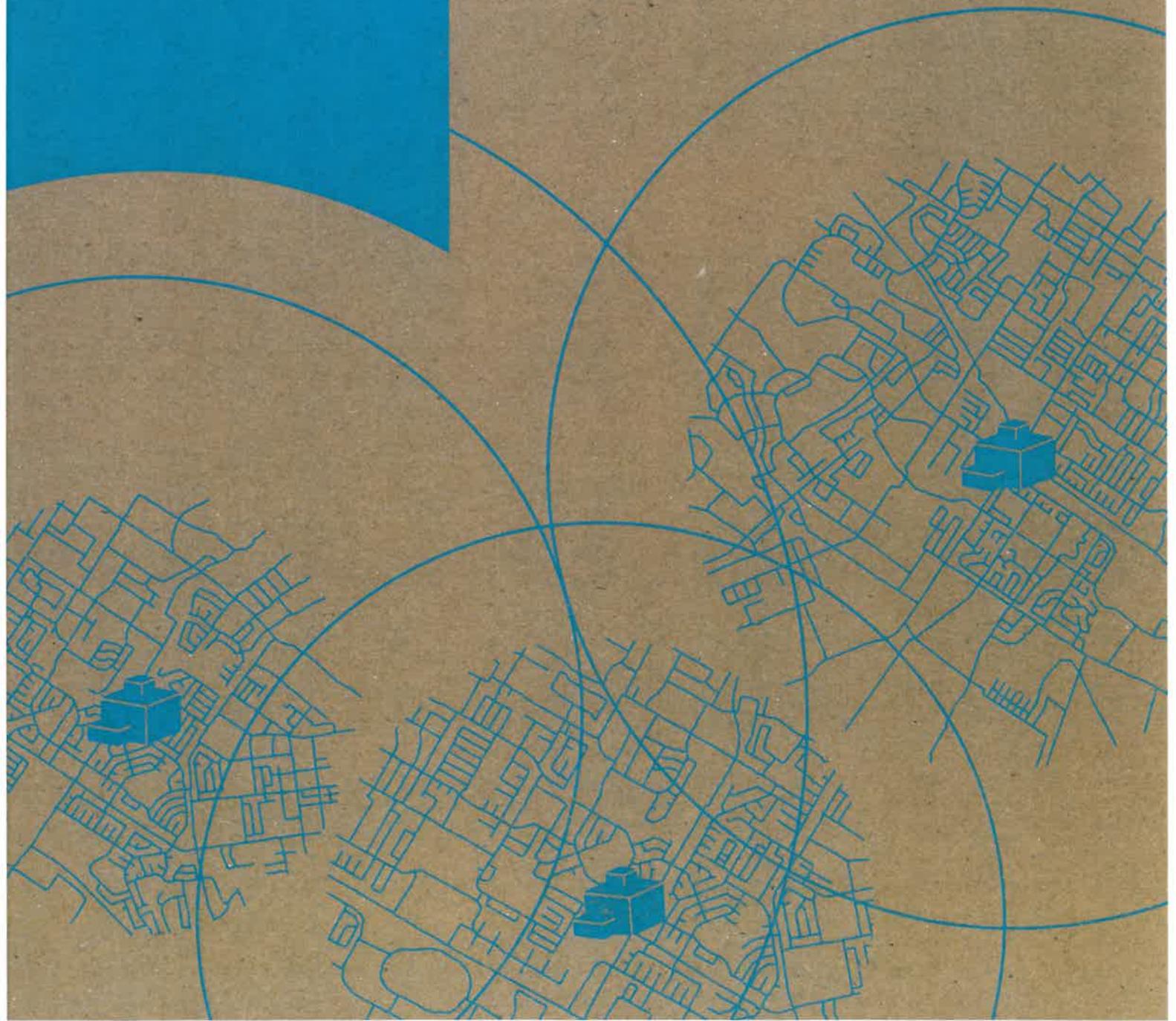




Alameda County
Health Care Services
Agency
Alex Briscoe, Director

Fire Station Health Centers



Fire Station Health Centers Preliminary Site Assessments Hayward

December, 2012 (version 2)



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Hayward

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Challenges facing the Alameda County health care safety net:

90 day wait times for new primary care patients

56,000 Medi-Cal avoidable emergency department visits per year

200,000 uninsured residents

Project background

Why Fire Station Health Centers?

Alameda County, as with other regions in the country, faces a shortage of primary care services for all segments of the population, but particularly for those who are publicly insured or uninsured. Growth in demand for services is expected to expand even further under health care reform, which is slated to be fully implemented in 2014. The necessity to help integrate the underserved population into the coverage system and to provide newly insured individuals with access to care is now critical.

In this context, Alameda County is putting forward an innovative Fire Station Health Center project to provide an alternative source of primary care to thousands of publicly insured, uninsured, and underinsured residents facing health care access problems. The Fire Station Health Center is a medical clinic co-located on the grounds of fire stations in Alameda County. It represents a new level of care in the County's health care safety net that aims to complement existing system strengths.

To this end, the Fire Station Health Center will mitigate the problem of costly but avoidable emergency department visits; divert one-time, one-issue low-acuity medical care that overwhelm primary care community clinics; and address unmet demand for services among communities historically excluded from the health care system. To deliver services and

take advantage of potential efficiencies, the Fire Station Health Center involves a unique collaboration between Fire Departments, Acute Care Hospitals, Federally Qualified Health Centers (FQHC's) and Alameda County Health Care Services Agency's Emergency Medical Services (EMS) Division. Through a competitive bidding system, FQHC's will be contracted by Alameda County to license, operate, and supervise the Fire Station Health Centers.

What is a Fire Station Health Center?

The Fire Station Health Center will place providers alongside fire emergency medical technicians (EMT's) to deliver care at newly constructed clinical sites on the grounds of a local fire station. The staff at the Fire Station Health Center will include 4.0 full time employees (FTE's): a nurse practitioner from the FQHC, an emergency medical technician who will be cross-trained as a medical assistant (EMT/MA), an RN care coordinator and clinic manager, and a patient care technician. The Centers will be open from 2pm to 10pm, Monday through Friday—the time during which emergency department (ED) diversions and 911 call volumes are particularly high. Specifically, health care staff will:

- Provide on-site medical services including follow-up from ED visits
- Provide health care navigation services by connecting the patient to the best insurance program

available, and more importantly, connect the patient to a medical home

- Provide follow-up to inpatient discharge from acute care facilities to reduce avoidable hospital readmissions
- Respond to sub-acute 911 Omega calls, drawing on fire's strength as emergency responders
- Take direct referrals from 211 for medical advice or consultation and enrollment eligibility

To further integrate the Fire Station Health Center into the existing health system and to ensure that clients receive ongoing care, the RN care coordinator will connect individuals and families to medical homes (i.e., the flagship FQHC site) and to the insurance system more broadly.

Timing

Under this proposal, Alameda County will establish five Fire Station Health Centers at selected fire stations over a three-year pilot period. During the first year of rollout in 2013, one Fire Station Health Center will be opened for operation, followed by an additional two sites in the second and third years of the pilot. During the three-year pilot period, evaluations of service delivery, community impacts, and financial sustainability will be conducted to further inform the development of the Fire Station Health Center. Upon conclusion, the goal of Alameda County and its partners is to build the capacity of the Fire Station Health

Center to independently sustain operations beyond the initial pilot phase.

Report goal

To understand where the Fire Station Health Center may be appropriately located in the County, and in particular the City of Hayward, this report offers a preliminary analysis of community health and service needs along with initial physical site assessments of potential fire station locations. This analysis is intended to aid City officials and relevant stakeholders in the decision-making process for further consideration and possible investment in the Fire Station Health Center in their jurisdictions.

1.

Health & population data

Hayward health indicators

Population and community needs

The need to provide better access to preventative and primary care services to populations that have historically been marginalized in the health care system is one of the main drivers behind the Fire Station Health Center model. The demand for services is expected to grow under health care reform as thousands of Alameda County residents will become eligible for public insurance in 2014. These newly eligible residents will require an appropriate care setting and medical home to address their medical needs. As of now, the County safety net does not have adequate capacity to fulfill all such demand for health care services. Community clinics (i.e. FQHC's) and emergency departments (ED's) in the safety net continue to be overwhelmed with patient visits. For example, wait times for obtaining a primary care appointment at community clinics can be up to 3-6 months, while at ED's patient diversions are increasingly common.

To address these population needs and to identify geographic areas where Fire Station Health Centers can strengthen the existing safety net, we provide an overview of the communities surrounding the potential sites with a presentation of GIS data maps. These community maps demonstrate the availability of health care providers in the area as well as the poverty, insurance status, and relevant health measures of the population.

First, to provide a general overview of the health needs in the City of Hayward, epidemiological data on chronic disease as well as ED data are presented in this report. While chronic diseases may not be addressed at the Fire Station Health Center directly, due to the scope of the clinic, they may be addressed at the medical home to which patients will be connected upon visiting the Center. Chronic disease data is presented as age-adjusted rates of hospitalization or cancer incidence per 100,000 residents across all cities in Alameda County.* An understanding of the hospitalization rates is important as they may also represent potential opportunities for the Centers to conduct inpatient hospital discharge follow-up. Graphs of disease-related hospitalization rates are provided for the following: diabetes, coronary heart disease (CHD), stroke, and asthma. Rates are also presented for incidence of all cancers combined as well as lung, colorectal, female breast, and prostate cancers.

In the City of Hayward, a higher rate for disease-related hospitalization than the County average is shown for diabetes (Fig. 1.0), stroke (Fig. 1.2), and asthma (Fig.1.3). For incidence of all cancers com-

* Age-adjusted rates are important to note since they nullify the effect of differences in the age composition of a given population, particularly in populations with a large component of elderly people. This is appropriate since risk of disease is determined mostly by age (Alameda County Public Health Department 2010).

bined, Hayward actually has a lower rate of incidence than the County average (Fig. 1.5). Broken down by specific cancer diseases, however, Hayward reveals a higher than County average rate for colorectal (Fig. 1.7) cancer.

ED visits in 2010 are evaluated according to ambulatory care sensitive (ACS) conditions (Fig. 1.10). These are conditions for which quality outpatient care can potentially prevent hospitalization or further severity of the illness or condition. The data is presented in rank order of the total number of visits per health indicator among residents in the City of Hayward. These ED visits are worth noting as they represent opportunities for the Fire Station Health Center to provide community-specific services to residents. The age-adjusted rate per 100,000 residents is provided to take into account population dynamics that underlie these health indicators. The Hayward age-adjusted rate can be compared with the County rate which is also provided.

In the City of Hayward, the most common ED visits for ACS conditions are severe ear/nose/throat infections, urinary tract infections, asthma, bacterial pneumonia, diabetes, and hypertension. Obesity and stroke-related ED visits are also among the most common. Additionally, the Hayward rate of all chronic ACS conditions combined as well as the rate of Medi-Cal avoidable visits are both higher for Hayward than the

County rate. These are visits that could have been managed by or referred to a primary care provider in an office or non-emergent clinical setting (California Department of Health Care Services 2010).

Citations

- Alameda County Public Health Department. 2010. *The Health of Alameda County Cities and Places: A Report for the Hospital Council of Northern and Central California, 2010.*
- California Department of Health Care Services. 2010. *Statewide Collaborative Quality Improvement Project: Reducing Avoidable Emergency Room Visits, 2008-2009 Interim Report.*

Hospitalization & cancer incidence rates

Fig. 1.0 Diabetes-related hospitalizations by city

Fig. 1.1 CHD-related hospitalization by city

Fig. 1.2 Stroke-related hospitalization by city

Fig. 1.3 Asthma hospitalization by city

Fig. 1.4 Asthma hospitalization by city, children under 5 years

Fig. 1.5 All cancers combined incidence by city

Fig. 1.6 Lung cancer incidence by city

Fig. 1.7 Colorectal cancer incidence by city

Fig. 1.8 Female breast cancer incidence by city

Fig. 1.9 Prostate cancer incidence by city

Fig. 1.10 ED visits 2010, Hayward : ACS conditions

Fig. 1.0
Diabetes-related hospitalizations, age-adjusted rates by city
 Rate per 100,000
 Source: CAPE with 2010 OSHPD Data

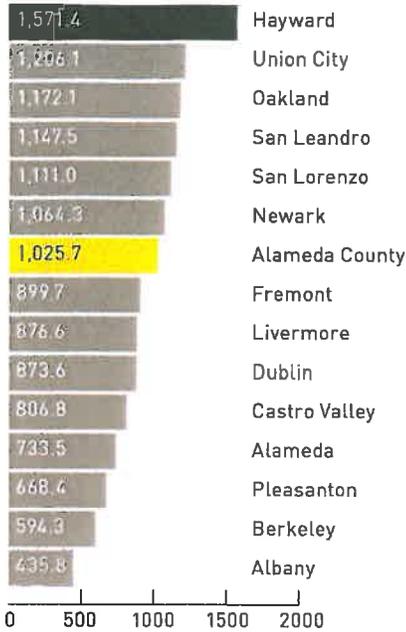


Fig. 1.1
CHD-related hospitalization by city
 Rate per 100,000
 Source: OSHPD patient discharge data, 2006-08



Fig. 1.2
Stroke-related hospitalization by city
 Rate per 100,000
 Source: OSHPD patient discharge data, 2006-08

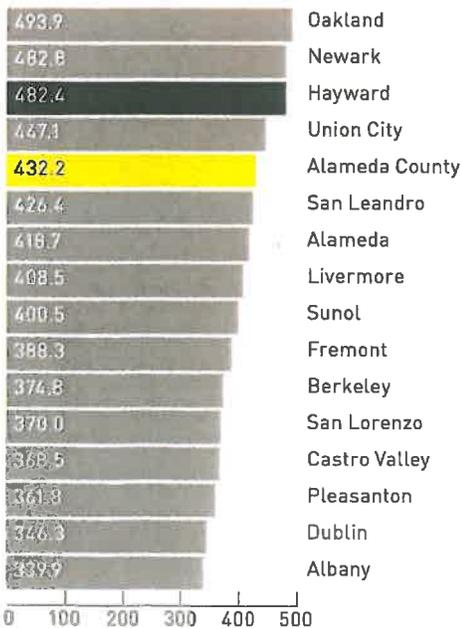


Fig. 1.3
Asthma hospitalization by city
 Rate per 100,000
 Source: OSHPD patient discharge data, 2006-08

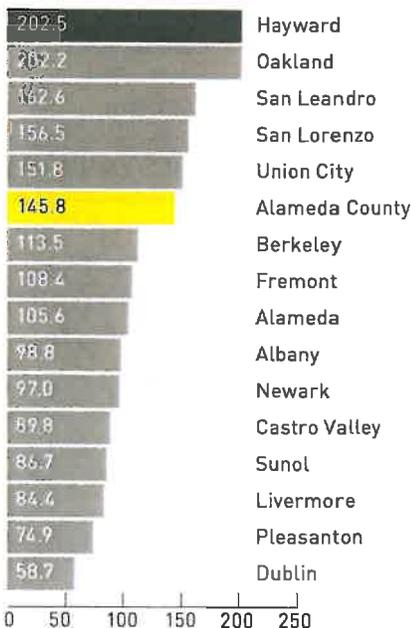


Fig. 1.4
Asthma hospitalization by city, children under five years
 Rate per 100,000

Source: OSHPD patient discharge data, 2006-08

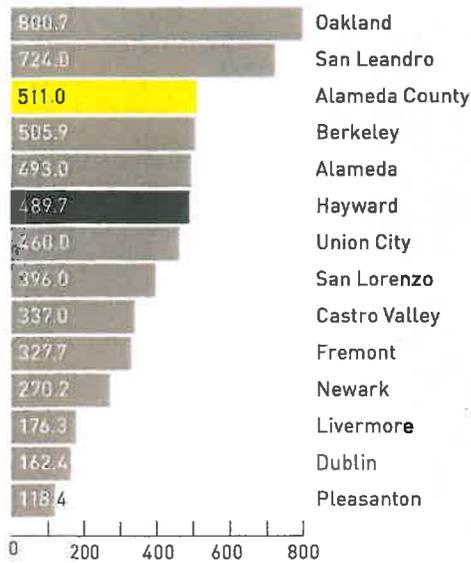


Fig. 1.5
All cancers combined incidence by city
 Rate per 100,000

Source: Cancer Prevention Institute of California, 2005-07

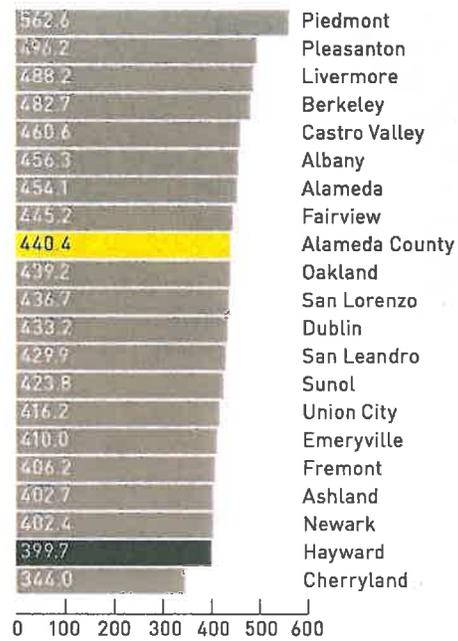


Fig. 1.6
Lung cancer incidence by city
 Rate per 100,000

Source: Cancer Prevention Institute of California, 2005-07

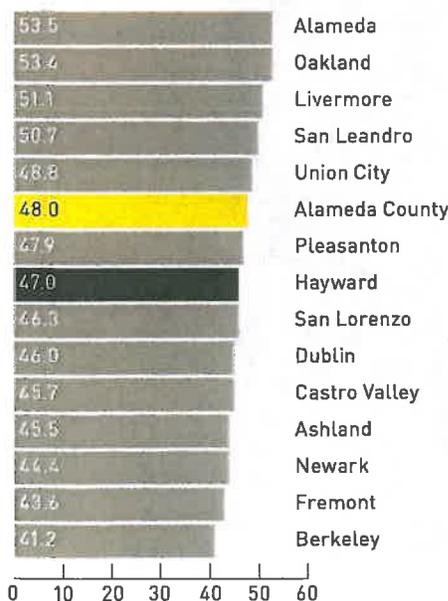
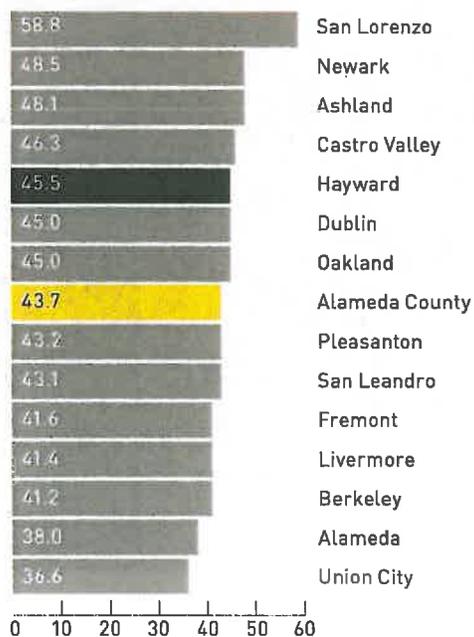


Fig. 1.7
Colorectal cancer incidence by city
 Rate per 100,000

Source: Cancer Prevention Institute of California, 2005-07



Fire Station Health Centers

Fig. 1.8
Female breast cancer incidence by city
 Rate per 100,000

Source: Cancer Prevention Institute of California, 2005-07

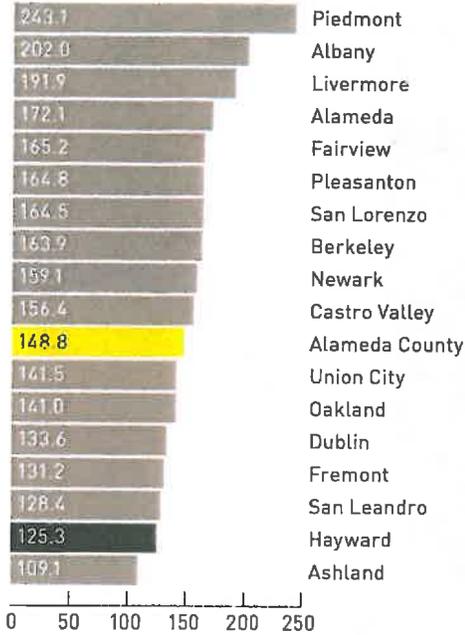


Fig. 1.9
Prostate cancer incidence by city
 Rate per 100,000

Source: Cancer Prevention Institute of California, 2005-07

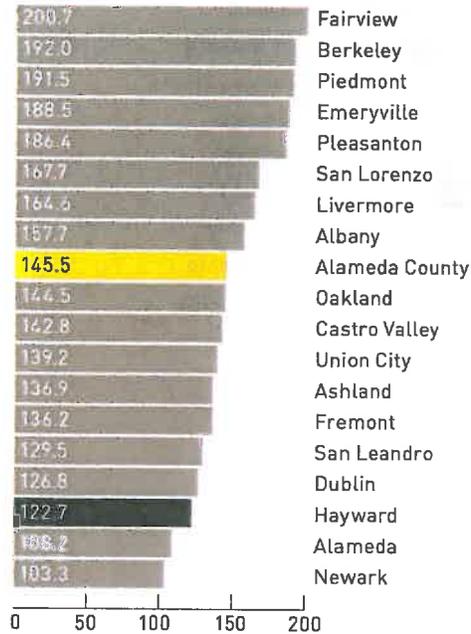


Fig. 1.10
ED visits 2010, Hayward: ambulatory care sensitive (ACS) conditions
 Number & rate per 100,000

Health indicator	Hayward: total number visits	Hayward rate	Alameda County rate
Severe Ear/Nose/Throat Infections	4125	2271.5	1175.6
Urinary Tract Infections	1366	774.5	438.1
Asthma	1316	743.9	519.2
Obesity-Related	814	447.7	272.5
Bacterial Pneumonia	740	430.4	223.3
Diabetes	576	331.0	219.1
Stroke-Related	406	255.5	191.4
Hypertension	402	233.4	185.7
Epilepsy	237	127.5	138.1
COPD	188	110.2	92.9
CHF	124	76.7	70.0
All Chronic ACS Conditions	2865	1635.5	1233.8
Medi-Cal Avoidable	10548	5845.4	3666.4
All Emergency Department Visits	67916	37910.0	28337.5

GIS data maps

Fig 1.11 Health care providers - Central County

Fig 1.12 Health care providers - Hayward

Fig 1.13 Number of individuals living at 200% poverty

Fig 1.14 Number of uninsured

Fig 1.15 Zoning

For each fire station identified, geographic information systems (GIS) maps have been created to visually display the following data: (1) the location of health care providers; (2) the number of individuals living in poverty by census tract; and (3) the number of uninsured individuals by census tract living in the immediate vicinity of the fire station. Taken together, these measures indicate the level of population need as well as access to health care services.

- **The availability of health care providers (Figs. 1.11 and 1.12)**

Service points of acute care hospitals, FQHC's, county-sponsored school-based health centers, and other health care providers (e.g., private and specialty care practices) are mapped for the Central County area, with the subsequent map zooming in on the City of Hayward and environs. These representations show community access points to health care services by the aforementioned provider type and allow us to visually see any service gaps or concentrations in the specific geography.

- **Number of individuals living at 200% of poverty (Fig. 1.13)**

The estimated number of individuals living at or below 200 percent of poverty is mapped by census tract. The number of individuals rather than the percentage of population living at this poverty level was chosen to demonstrate the volume of potential

clients who may need access to affordable and readily available health care services in the area. The 200 percent poverty level is particularly important as it provides an indication of the number of individuals who are currently eligible for public insurance or who will become eligible in 2014.

- **Number of uninsured individuals (Fig. 1.14)**

The estimated number of uninsured individuals is also mapped by census tract. As with poverty level, this data is presented as individual counts to demonstrate the volume of potential clients who will need insurance navigation services in addition to obtaining affordable and accessible health care. It also provides an indication of which neighborhoods are in special need of insurance education and enrollment outreach. In the report Appendix, the number of uninsured individuals by census tract is also broken down into the following age groups: 0-17; 18-44; 45-64; and 65+ years. This breakdown is important to note, especially among the groups aged 18-44 and 45-64, as this is the population that will be most affected by health care reform's new insurance expansions. Moreover, at this time, this population is the most likely to be excluded from the mainstream health care system.

- **Zoning classifications (Fig. 1.15)**

Zoning classifications (residential, commercial, public/institutional, industrial, and rural) within the municipality are mapped to provide an understanding of the makeup of the neighborhood in which the candidate fire stations are located.



Fig. 1.11
Health care providers
Central County
 Data from OSHPD, Alameda Health Consortium,
 Dun & Bradstreet

-  Fire Station Health Center
-  Parks & open space
-  Acute care hospital
-  SBHC
-  FQHC
-  Other medical providers



0 1.5 3 miles

Fire Station Health Centers

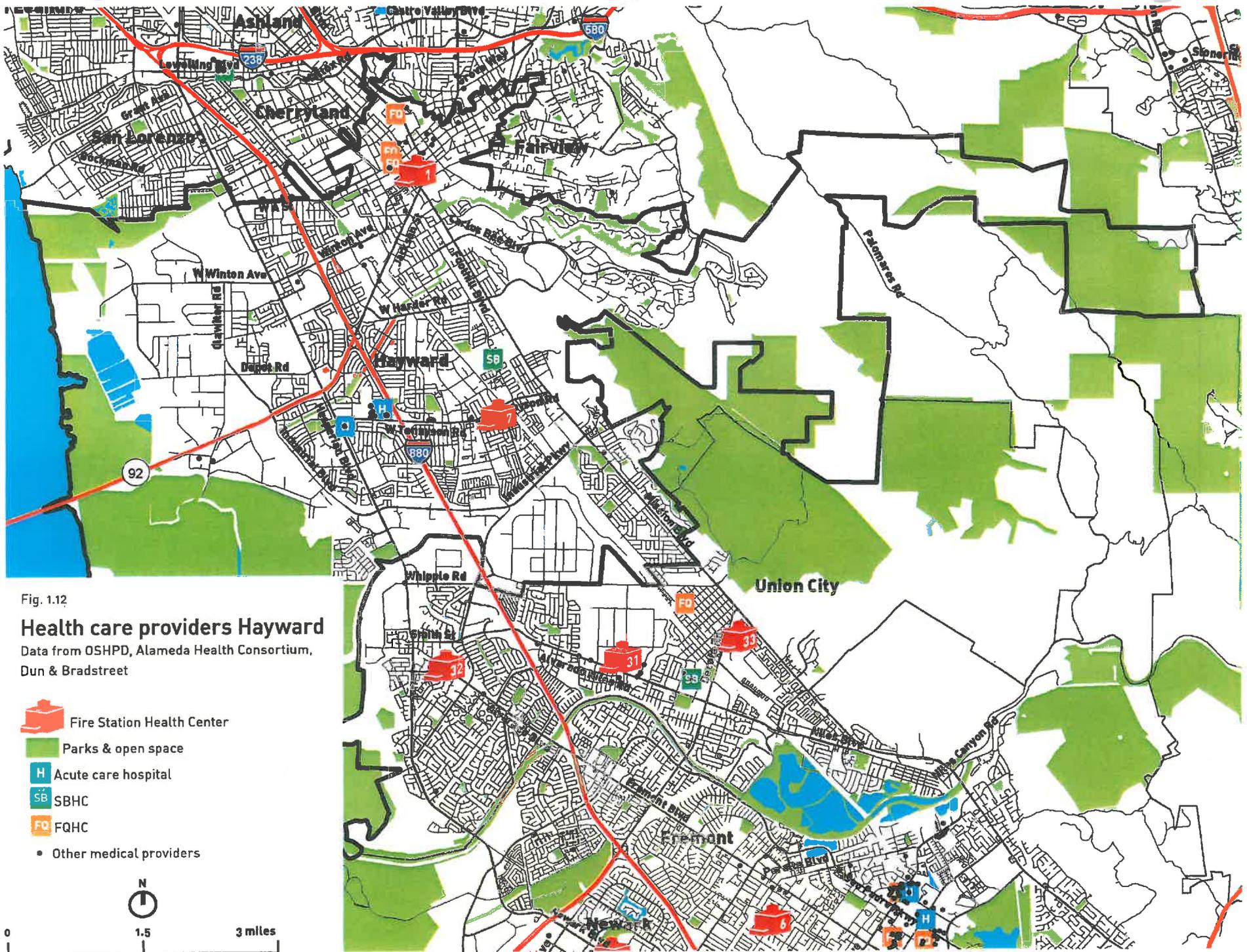


Fig. 1.12
Health care providers Hayward
 Data from OSHPD, Alameda Health Consortium,
 Dun & Bradstreet

-  Fire Station Health Center
-  Parks & open space
-  Acute care hospital
-  SBHC
-  FQHC
-  Other medical providers



0 1.5 3 miles

Fire Station Health Centers

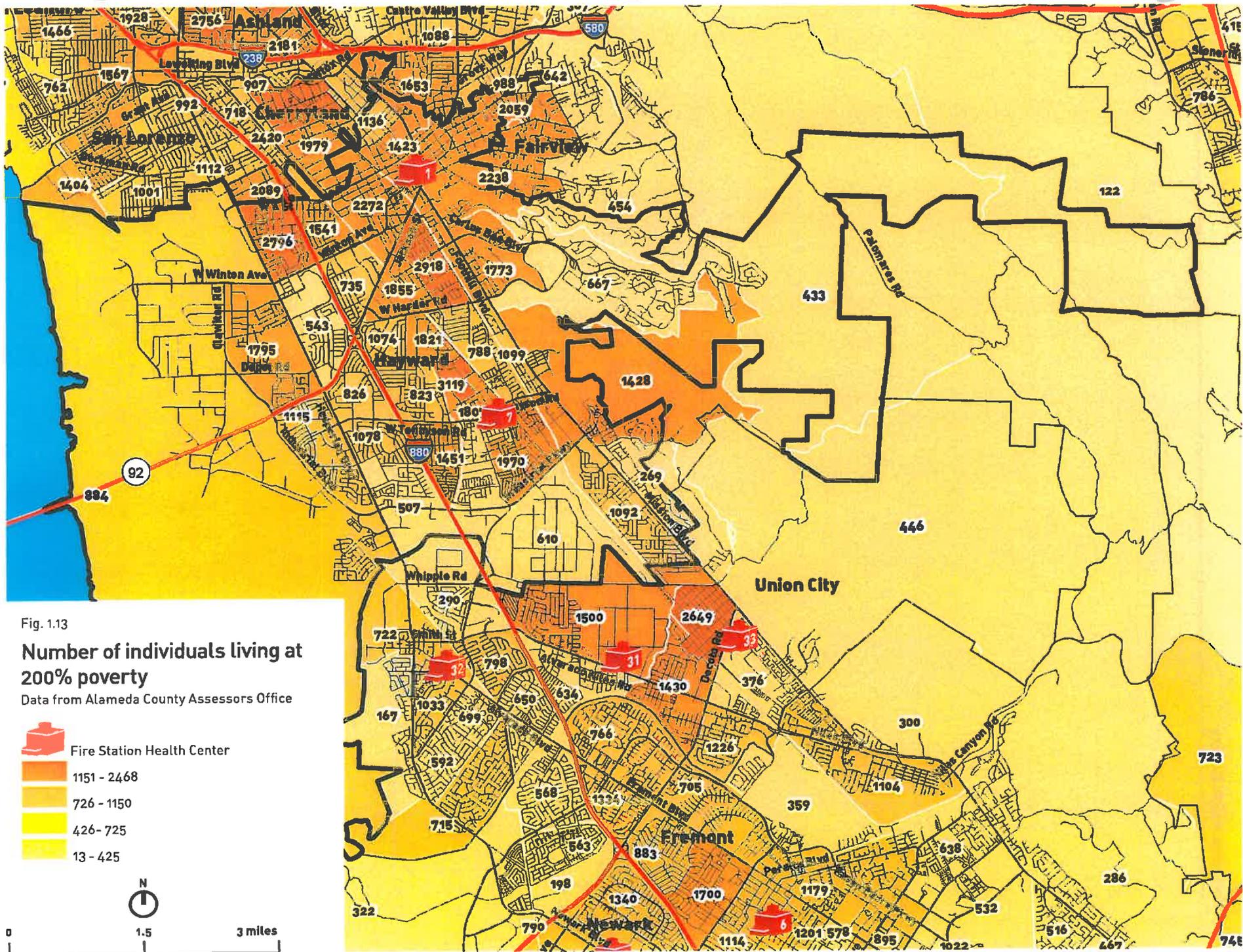
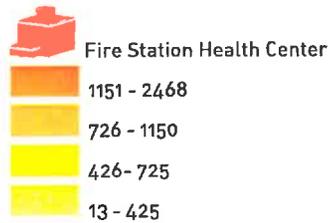


Fig. 1.13

Number of individuals living at 200% poverty

Data from Alameda County Assessors Office



1.5

3 miles

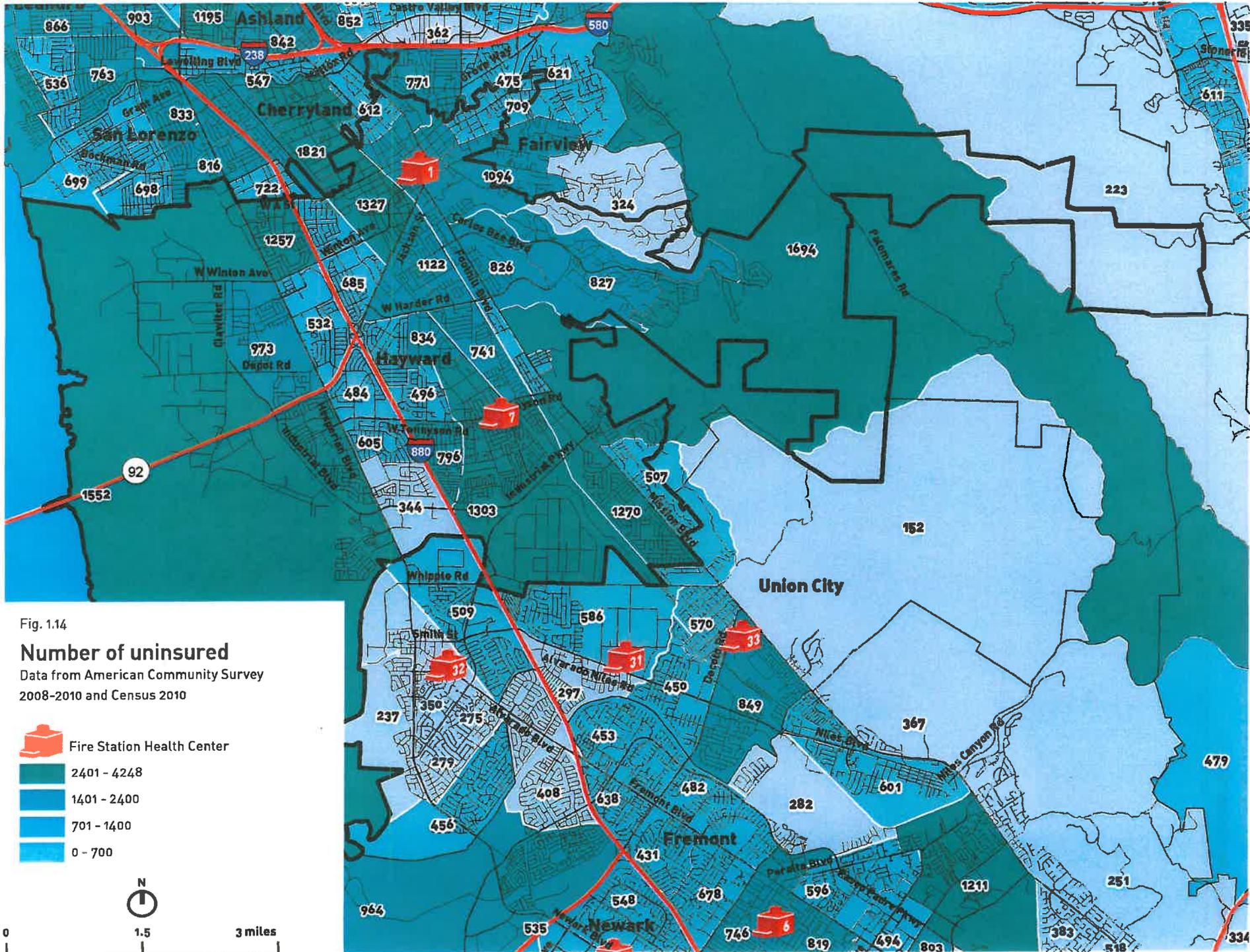
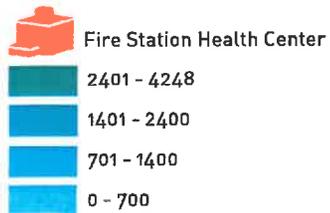


Fig. 1.14

Number of uninsured

Data from American Community Survey 2008-2010 and Census 2010



0 1.5 3 miles

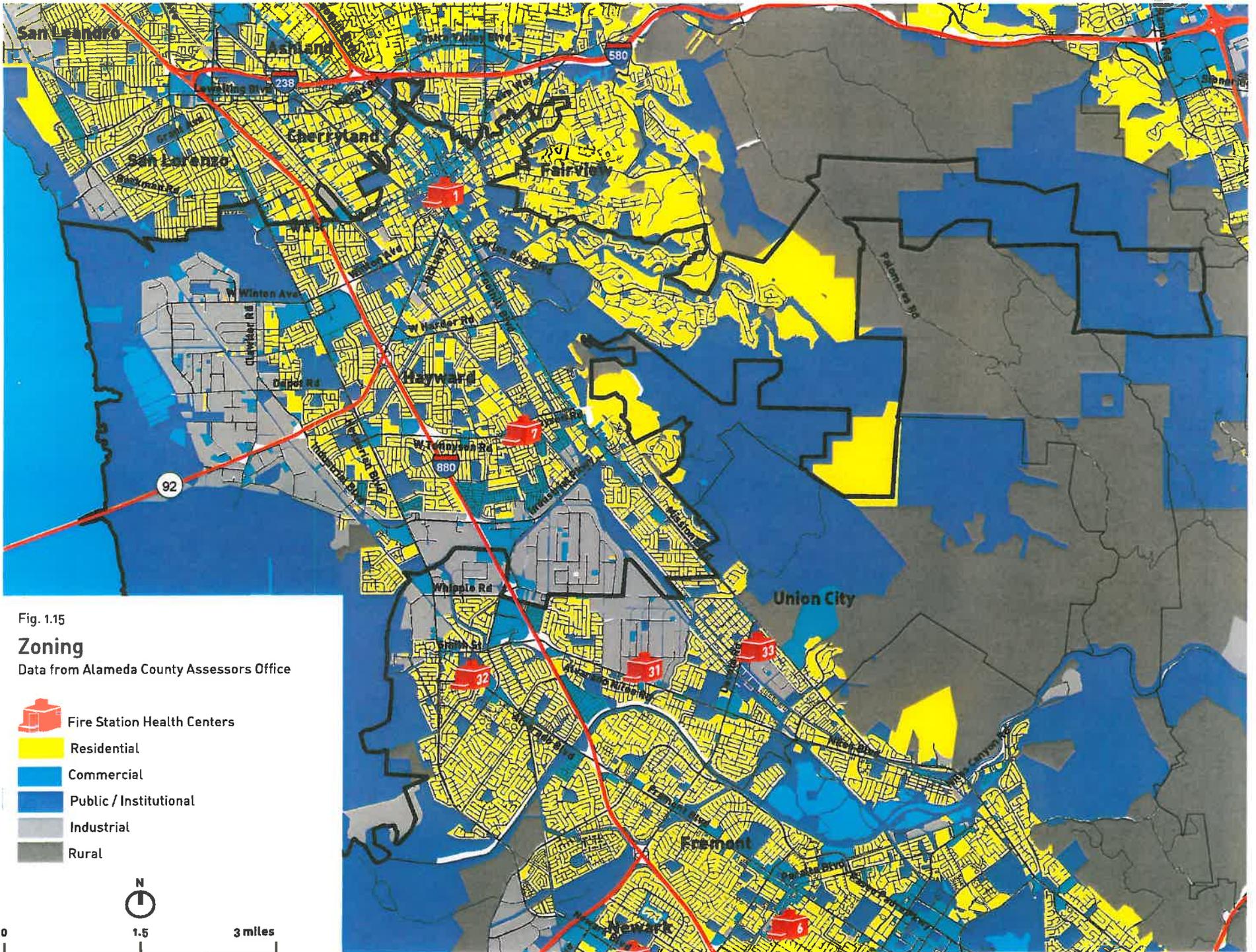


Fig. 1.15

Zoning

Data from Alameda County Assessors Office

-  Fire Station Health Centers
-  Residential
-  Commercial
-  Public / Institutional
-  Industrial
-  Rural



0 1.5 3 miles

2.

Site

assessments

Methodology

In total, thirteen high priority fire station or adjacent sites in Alameda County have been evaluated as candidates for Health Center co-location. Two are located in Hayward. One is the Hayward Area Historical Society Museum building, across the street from Hayward Fire Station 1. Based on dialogue with Hayward Fire Department, Hayward Planning Division officials, and a preliminary survey, that site appears to have the space for 1,350 square foot Health Center and other attributes necessary to be a possible co-location site. The other candidate location is the site of Fire Station 7. The existing Station 7 building is temporary and slated to be demolished. Planning is underway for a new, permanent fire station and Health Center to replace it.

Fire Station Health Centers

	Fire Station 1 (in adjacent Hayward Historical Society building)	Fire Station 7
Target population in neighborhood	✓	✓
Proximity to residential area(s)	✓	✓
Proximity to commercial area(s)	✓	✓
Public transit access	✓	✓
Visibility	✓	✓
Adequate space	✓	✓
Construction type	○	□

Fig. 2.0 Physical site criteria snapshot: Hayward candidate sites

Construction type symbol key

- Stand-alone** – facility cost estimated* at \$960,000
- Interior renovation** – facility cost estimated* at \$550,000
- +** **Addition** – facility cost estimated* at \$890,000

* Estimated facility cost includes construction, soft costs, and FF&E (furniture, fixtures, and equipment).

Site analysis

Fig 2.1 Historical Society building existing site features

Fig 2.2 Historical Society building site strategy

Fig 2.3 Fire Station 7 existing site features

Fire Station

1*

Hayward Fire Department

22701 Main Street

*Proposed Health Center site to be in adjacent Hayward Area Historical Society building

Overview

The Hayward Area Historical Society building and Station 1 are centrally located with access to public transit. Target populations are located in the surrounding residential areas. Though separated from Fire Station 1 by Main Street, the Historical Society building will be increasingly used by Hayward Fire Department in the future and, therefore, can be designed to feel as part of a 'campus' that is connected to station 1. Within the Historical Society building, the specific space under consideration is on the building's east side. It is currently occupied by offices, a library, and other rooms.

Fig 2.1 Existing site features



- 1 Building front entry
- 2 Building side entry
- 3 Existing parking area

Outstanding questions

- Use of the building's existing parking by the Health Center will require approval from the City of Hayward



4 Existing parking area to accommodate Health Center

Fire Station

7*

Hayward Fire Department

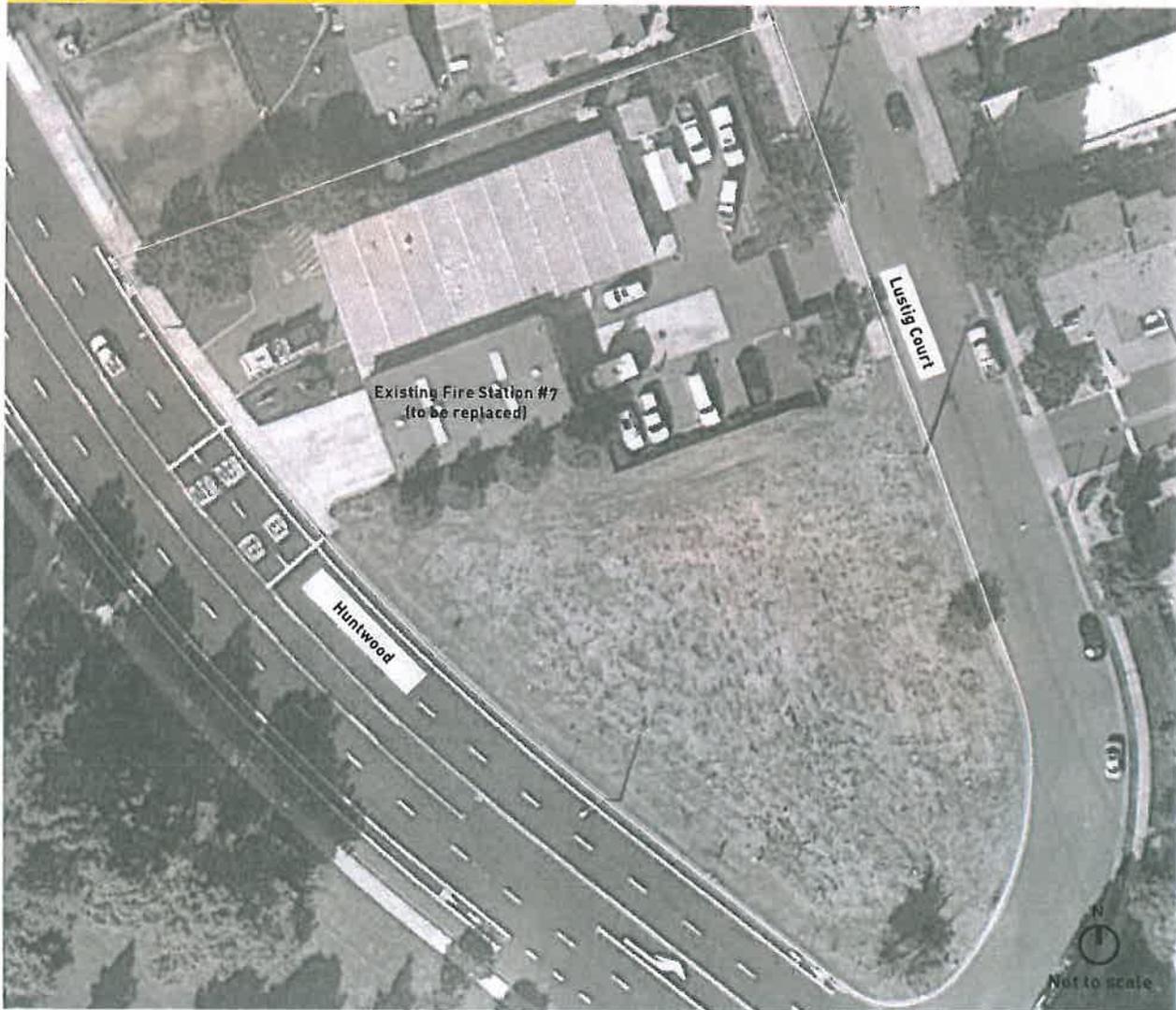
28270 Huntwood Avenue

*A site assessment and strategy are not shown for Fire Station 7 as it is slated for demolition and a new building is to be constructed at this location.

Overview

Station 7 is accessibly located with proximity to target populations as well as public transportation. The existing Station 7 building is temporary and slated to be demolished. A new permanent fire station and Health Center will replace it. Design proposals been developed (not included in this report), which show the new fire station building on the northern portion of the site (in a location similar to the existing building) as well as a stand-alone Health Center near the southern tip of the site.

Fig 2.3 Existing site features



3.

Budget & next steps

Budget

Facilities costs

Initial one-time facilities costs are estimated to range from \$550,000-\$960,000 for the building of clinics on the grounds of a fire station. The least expensive option is a remodel or renovation of space within an existing structure, whereas the most expensive option is a fully stand-alone structure on an existing fire station. A separate but congruous structure on an existing fire station is estimated at \$890,000. These estimates include construction costs, soft costs, and a budget for FF&E (furniture, fixtures, and equipment).

Operating costs

Preliminary projections for operating budgets are estimated at \$700,000 per year, offset by \$285,000 in third-party reimbursements and claiming. The five pilot sites would require \$2.1 million in base allocation per year for three years which will be derived from outside sources by Alameda County Health Care Services Agency (HCSA).

Funding

To be included in the pilot project, municipalities are required to make financial contributions to either initial construction costs or to ongoing operational costs, to be negotiated between Alameda County and the City of Hayward. The goal of HCSA is to limit the expenses incurred by municipalities by supporting the pilot through outside sources including discretionary County funds and philanthropic grants. Upon conclusion of the program, the goal of HCSA is to ensure long-term sustainability of the Fire Station Health Centers. This will be done through increased third party revenue from expanded coverage under health care reform and from sustainable, County-controlled sources.

Next steps

Site selection

The site assessment diagrams, shown in Chapter 2, suggest potential site locations for Health Center co-location on fire station sites. They also identify key site issues and questions, which will need to be addressed with officials in relevant municipal agencies such as Planning and Public Works, prior to final site selection. The site assessments are primarily intended as a tool to advance those conversations. Once final site selection is made, a more in-depth analysis of each selected site will be required to fully understand the costs, constraints, and opportunities associated with Health Center co-location.

Near future

In the coming months, 5 sites will be selected for the Fire Station Health Center pilot. In addition, health policy, procedures, and financing models will be further developed and finalized through Workgroup and Steering Committee collaboration. Formal support from labor and other stakeholders will be facilitated by HCSA and partners and secured through memoranda of understanding (MOU'S). HCSA will also bid out operations contracts to FQHC's.

4.

Appendix

Fig 4.0 Number of individuals living at 200% poverty, age 0-17

Fig 4.1 Number of individuals living at 200% poverty, age 18-44

Fig 4.2 Number of individuals living at 200% poverty, age 45-64

Fig 4.3 Number of individuals living at 200% poverty, age 65+

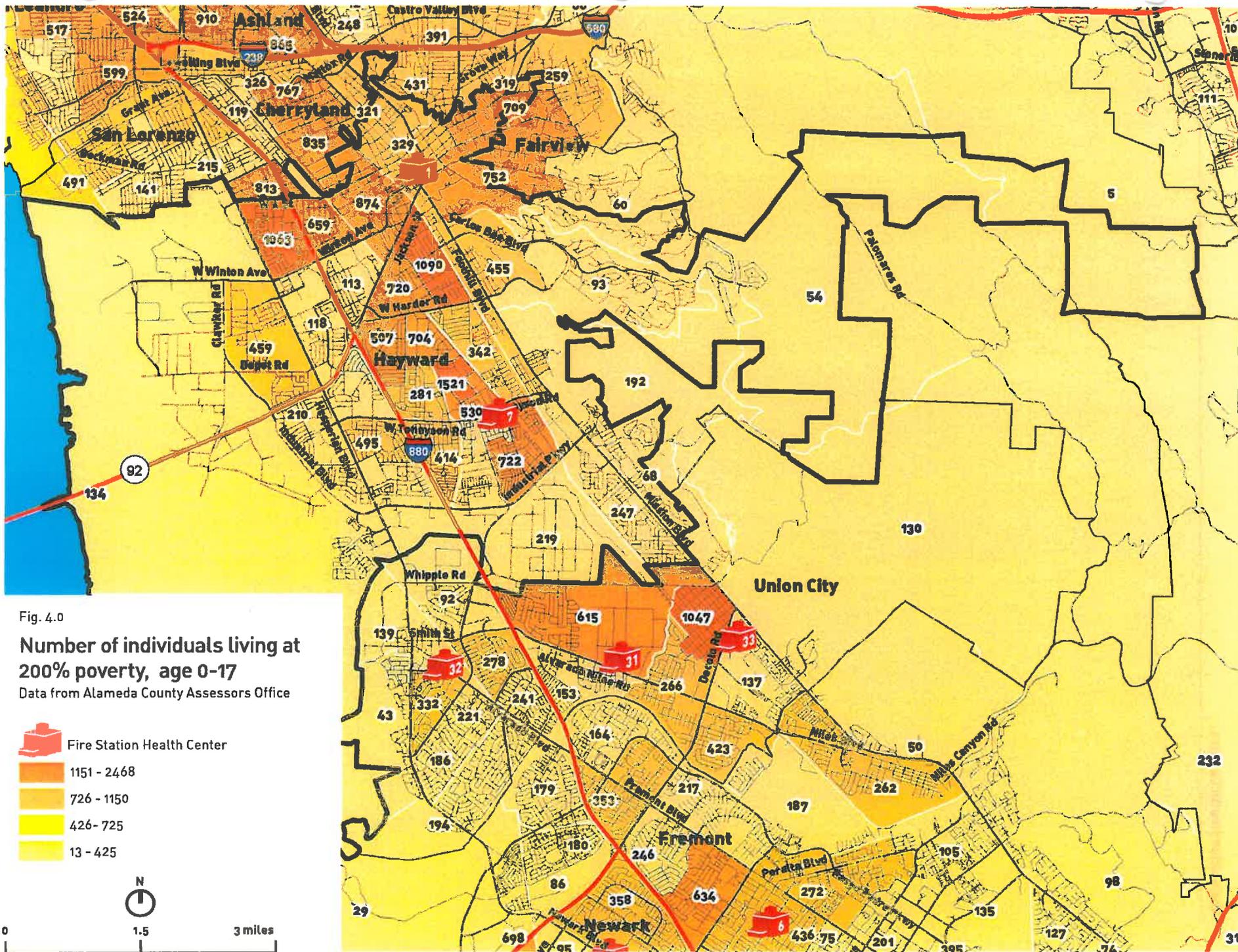


Fig. 4.0

Number of individuals living at 200% poverty, age 0-17

Data from Alameda County Assessors Office

-  Fire Station Health Center
-  1151 - 2468
-  726 - 1150
-  426 - 725
-  13 - 425



0 1.5 3 miles

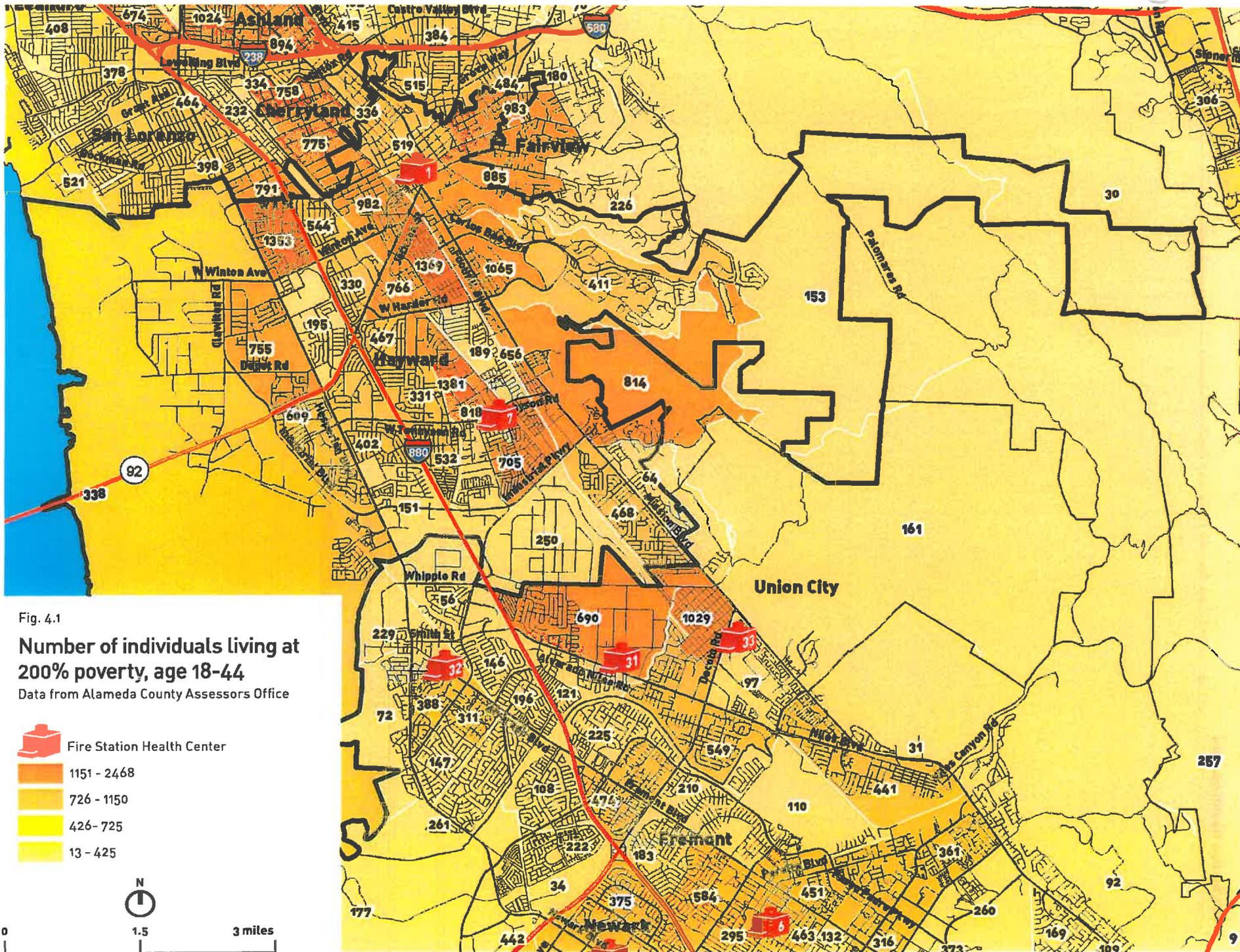
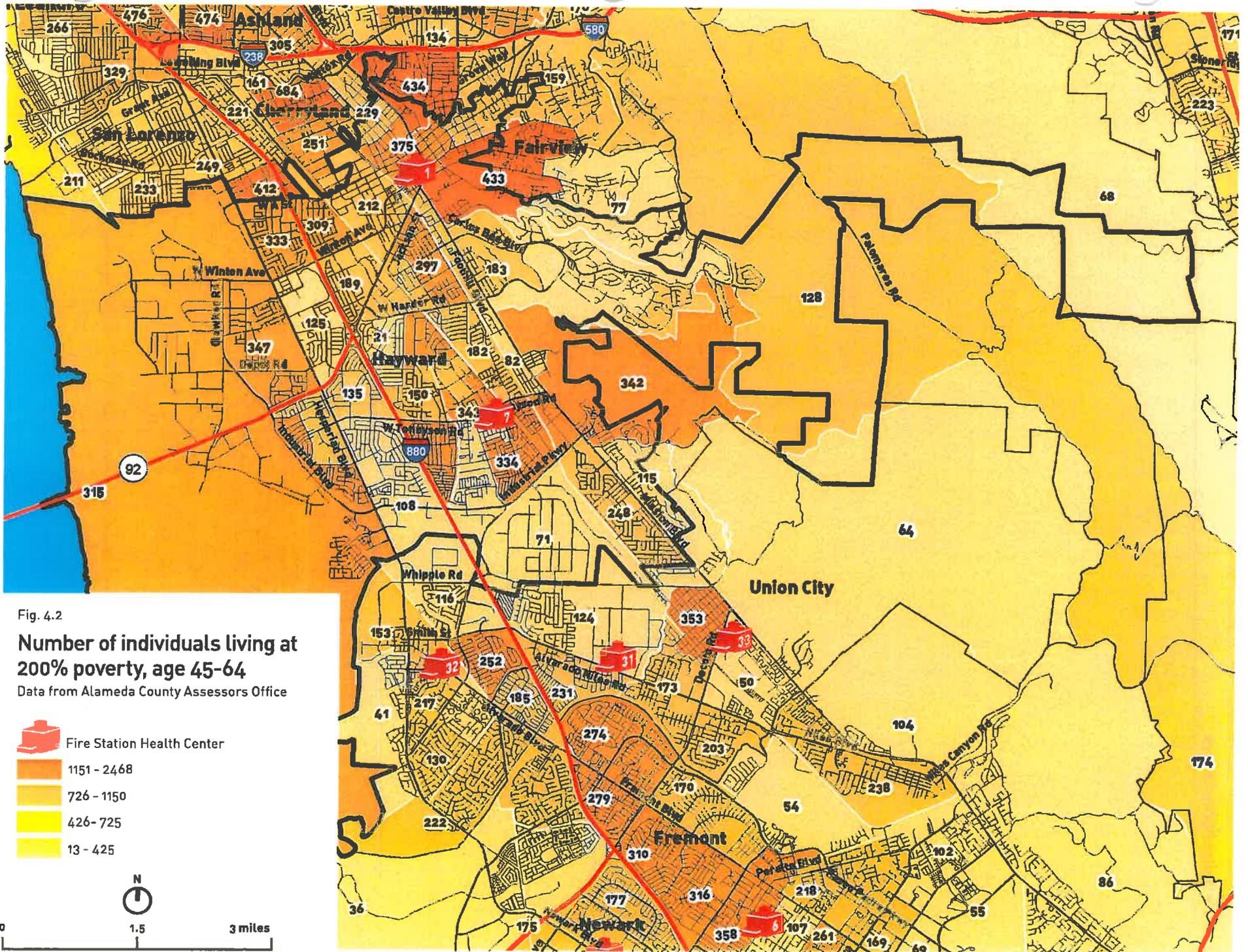


Fig. 4.1
Number of individuals living at 200% poverty, age 18-44
 Data from Alameda County Assessors Office

-  Fire Station Health Center
-  1151 - 2468
-  726 - 1150
-  426 - 725
-  13 - 425



0 1.5 3 miles



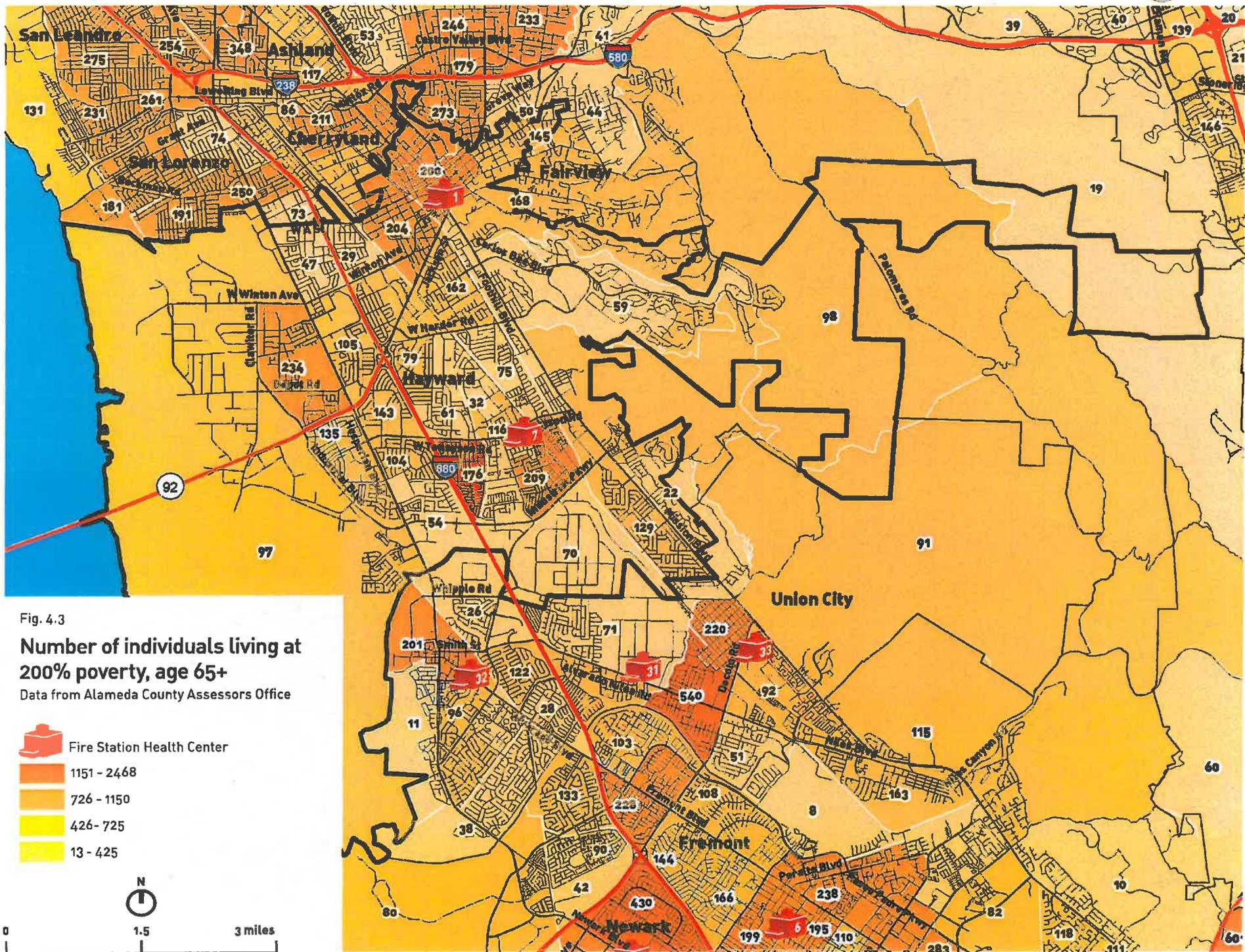


Fig. 4.3
Number of individuals living at 200% poverty, age 65+
 Data from Alameda County Assessors Office

-  Fire Station Health Center
-  1151 - 2468
-  726 - 1150
-  426 - 725
-  13 - 425





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