

# Climate and Emergency Preparedness



Housing Authority  
— of the —  
City of Alameda

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*CivicSpark Fellow* – 06/2024

Prepared for: The Housing Authority of the City of Alameda



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# Background

- San Francisco State University – BA Urban Studies and Planning. Focus: Environmental Planning
  - Career Goals: To serve the community through outreach and engagement.
- CivicSpark:
  - Mission: Increase government's capacity for unique projects through Fellow services
  - Fellows: 108 Across the United States, with 3 of them in Alameda and 20 throughout the Bay Area



# Main Deliverable

**A report on the Emergency and Climate preparedness of the City of Alameda's low-income communities, with a focus on AHA communities and service providers.**

1. Identify geographic vulnerabilities and climate hazards threatening AHA communities and properties.
2. Identify emergency preparedness procedure for the 4 main entities (AHA, FPI, LifeSteps, and the City of Alameda) that serves this community.
3. Identify strategic ways to implement the Whole Community Approach through the coordination of the four lead entities their resources, relationship to the community, and decision-making powers.
4. Explore outreach efforts to emphasize the importance of Emergency Preparedness.



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# Methodology

## 1. Research:

- Local, regional, state, and federal emergency and climate plans and research.
- Internal documents and procedures (FPI, AHA, LifeSteps, and the City of Alameda).
- Geographic and social history of the City of Alameda.
- Distributed an Emergency Needs Assessment Survey.



## 2. Community Outreach and Engagement:

- Coordinated with LifeSteps to conduct an Emergency Preparedness Class/Bingo Tournament.
- Attended AHA Food Bank distribution.
- Became a familiar face with the residents.



## 3. Social Service Provider Engagement and Support:

- Built a relationship with CARES team of the City of Alameda.
- Collaborate with other Alameda Fellows to achieve small projects goals.
- Attended Council Meetings, city events, and trainings to become familiar with the community.



# Why Does Emergency and Climate Preparedness Matter?

## 1. **Saves Lives:**

It's literally a life/death matter. Preparing saves lives!

## 2. **Equity:**

Low-Income and ethnic minority communities are more likely to live in areas with extreme temperature, coastal flooding, and poor air quality. [\*EPA: Vulnerability in the US Report.\*](#)

## 3. **Asset Protection**

Disaster funds/disaster-related insurance: Public government entities must have an emergency plan that can be reviewed and followed.

## 4. **Cost Effectiveness:**

"For every \$1 spent on mitigation society saves \$6" [\*National Institute of Building Science\*](#)

## 5. **"It is a matter of when, not if"**

There is a 75% chance of a 6.7M earthquake in the Bay Area.  
*California Earthquake Authority*



# “It is a matter of when, not if”

Climate events are occurring throughout the nation and are having significant impacts on residents and infrastructure locally, nationally, and internationally.

## **HURRICANES**

Hurricane Ida (New York), dropped 3 inches of rain in hour.

## **WILDFIRES**

In 2020, wildfires surged throughout the North and East Bay, covering the atmosphere with smoke and turning the skies red.

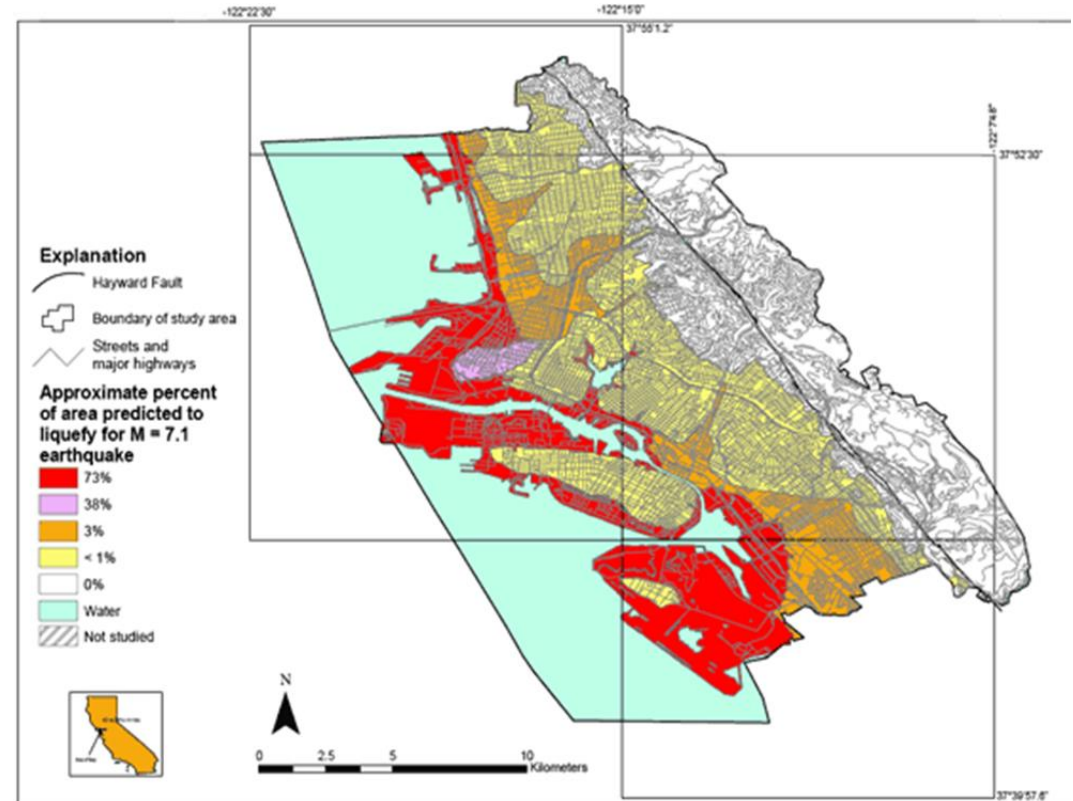
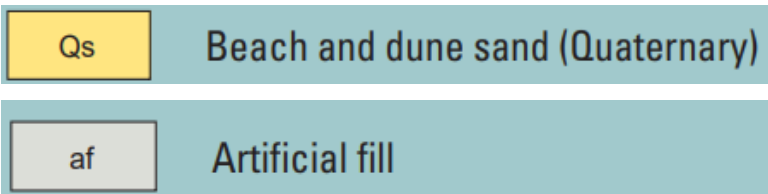
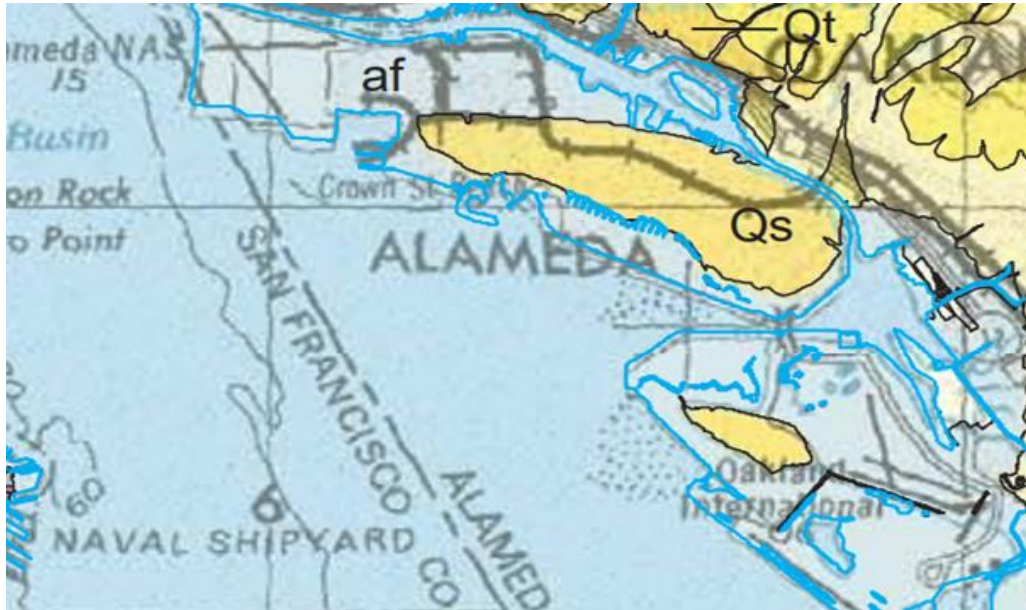
## **FLOODS**

The winter storm of January 2023 challenged California’s infrastructure, causing landslides, sinkholes, and major flooding.



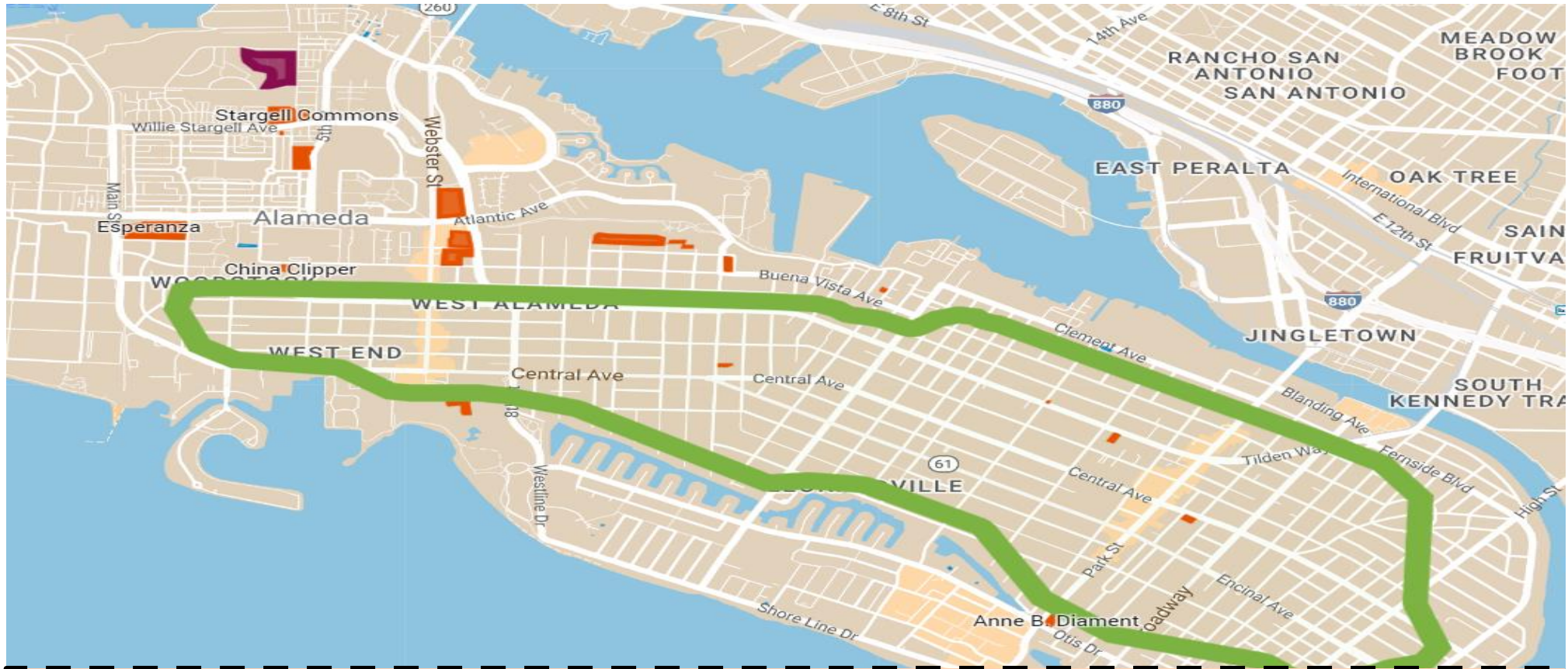
# Liquefaction

During an earthquake, the ground below shakes causing water deposits to mix with soil causing mud to form that results in unstable foundations. ***M = magnitude***



Source: USGS

# AHA Properties Vulnerable to Liquefaction



## "THE DONUT" :

Inside the green border is the safest place to be in an event of an earthquake, tsunami, and liquefaction. Currently, there are 73% of AHA Units are located just outside of this.



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# Sea Level Rise Here on the Island

- The warming of the of the planet causes ice glaciers to melt and the rising temperature of the water causes thermal expansion. NASA
- “Global Sea Level Rise has risen 8-9 inches since 1980.” National Oceanic and Atmospheric Association

## Impact on the Island:

- Rising Ground Water
- Saltwater Intrusion

## Current mitigation strategies for the City of Alameda:

Nature-Base Mitigation: Restoration of marsh habitat and bioswales.

Improving multimode transportation and access to green spaces.



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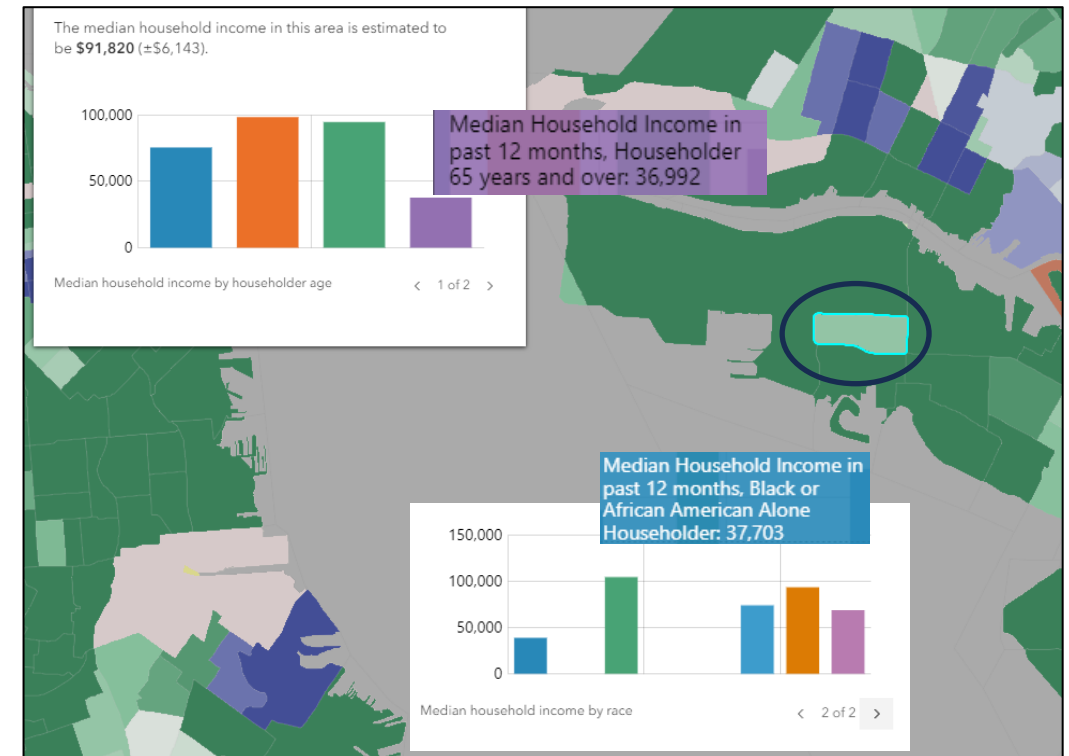
# AHA Properties Vulnerable to Sea Level Rise

- Without mitigation efforts, 46% of units are extremely vulnerable to SLR. *Independence Plaza, 701 Office, ABD, PV, PG, and EV. City of Alameda's [Climate and Resiliency Plan \(CARP\)](#) recommendations for planning timeline: 2030.*
- 28% units that are low priority but need to be considered for long-term planning. (*Esperanza and Rosefield Village*). **CARP recommendation: 2040-2050.**
- While 12% have no impact.



# Overview of Low-Income Population on the Island

- African Americans and older adults have a median income that is 3x less than the AMI.
- 2,062 individuals are living in households with Public Assistance Income (e.g., social security, SSI, etc.)
- There are 3,658 individuals living in households which participate in AHA's Housing Programs.







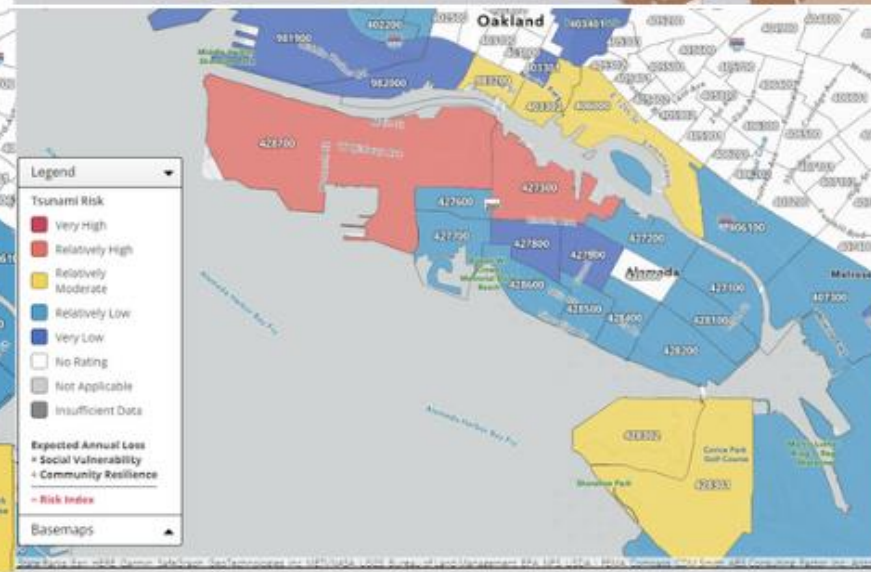
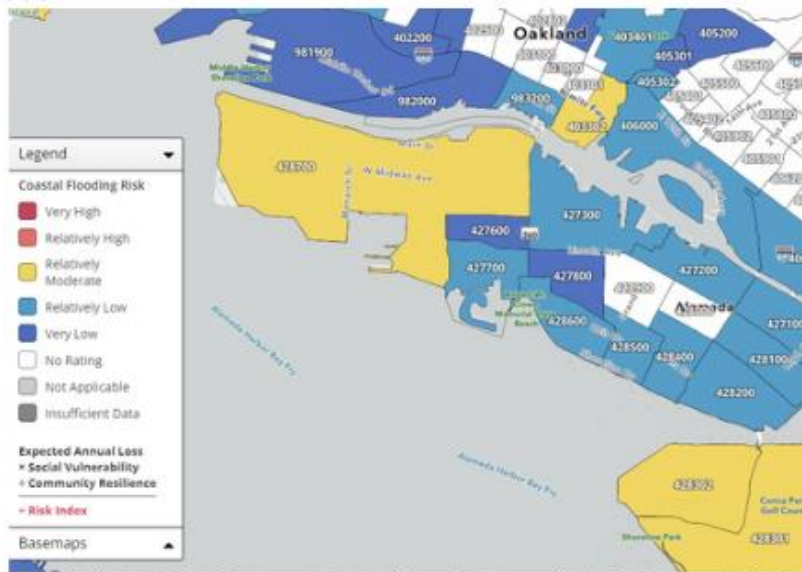
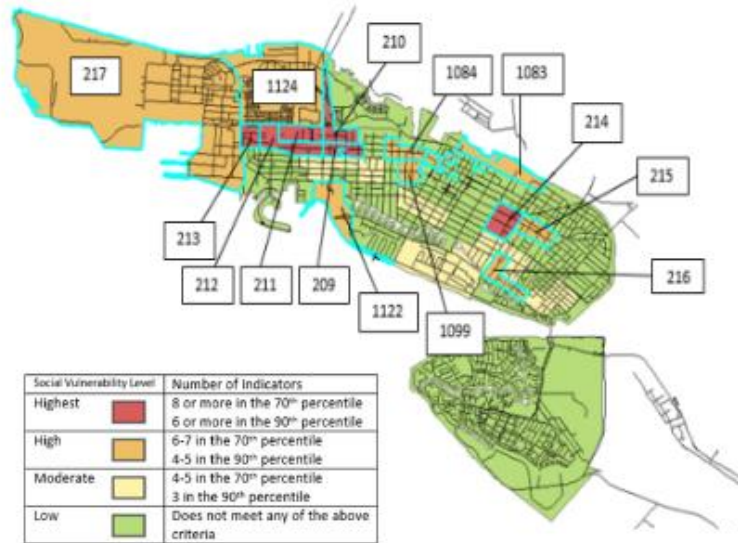
# Access and Functional Needs Populations

**Access and Functional Needs (AFN):**  
Individuals who have limited access due to multiple indicators:

- **39%** of low-income households do not speak English at home
- **18%** have a disability
- **39%** are single female households with children.
- **38%** are children
- **20%** are 65+



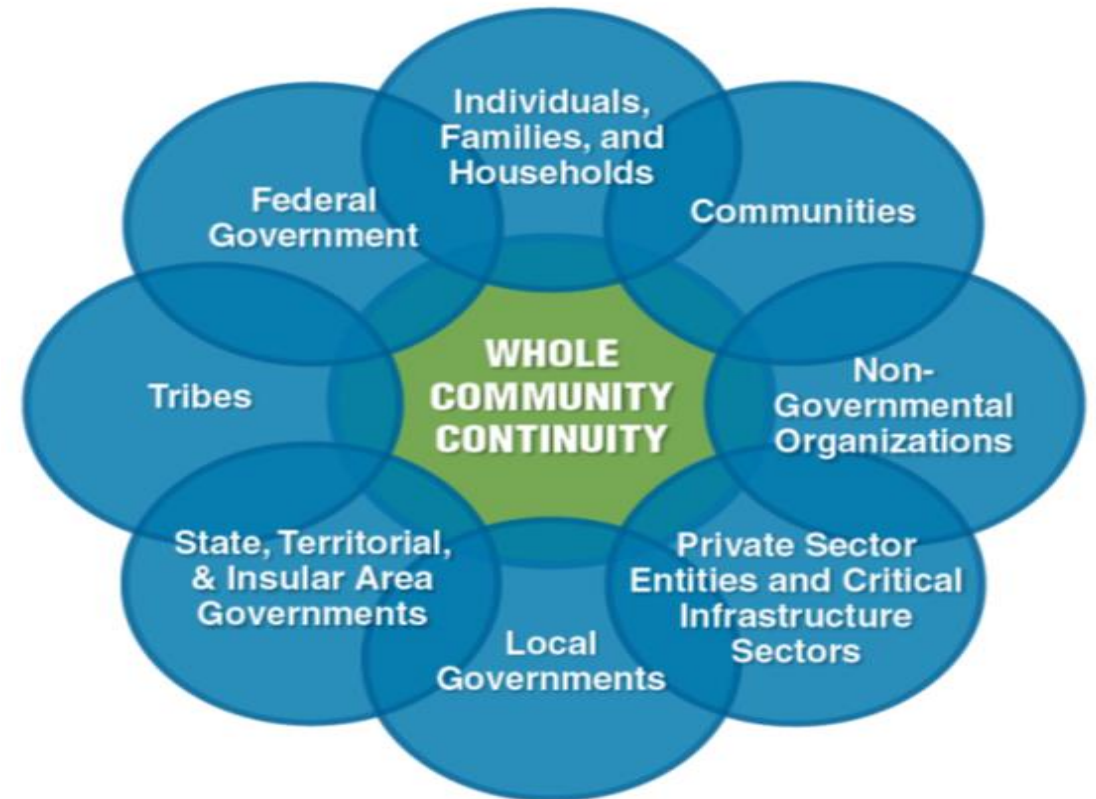
Social Vulnerability Level	Number of Indicators
Highest 	8 or more in the 70 <sup>th</sup> percentile 6 or more in the 90 <sup>th</sup> percentile
High 	6-7 in the 70 <sup>th</sup> percentile 4-5 in the 90 <sup>th</sup> percentile
Moderate 	4-5 in the 70 <sup>th</sup> percentile 3 in the 90 <sup>th</sup> percentile
Low 	Does not meet any of the above criteria



# Emergency Preparedness

## The Whole Community Approach

- Preparing for emergencies and climate preparedness is vital in alleviating vulnerabilities and creating sustainable and resilient communities.
- A whole community approach emphasizes coordination among community members, organizations, and other public entities in sharing resources for planning, handling, and recovering from emergencies.
- Sharing resources and connections would allow each party to fill any possible gaps in emergency preparedness.



# Emergency Preparedness: Plans and Roles

## 1. AHA:

Owns properties, distributes affordable housing services, makes decisions in retrofitting and other changes in construction/building

## 2. FPI:

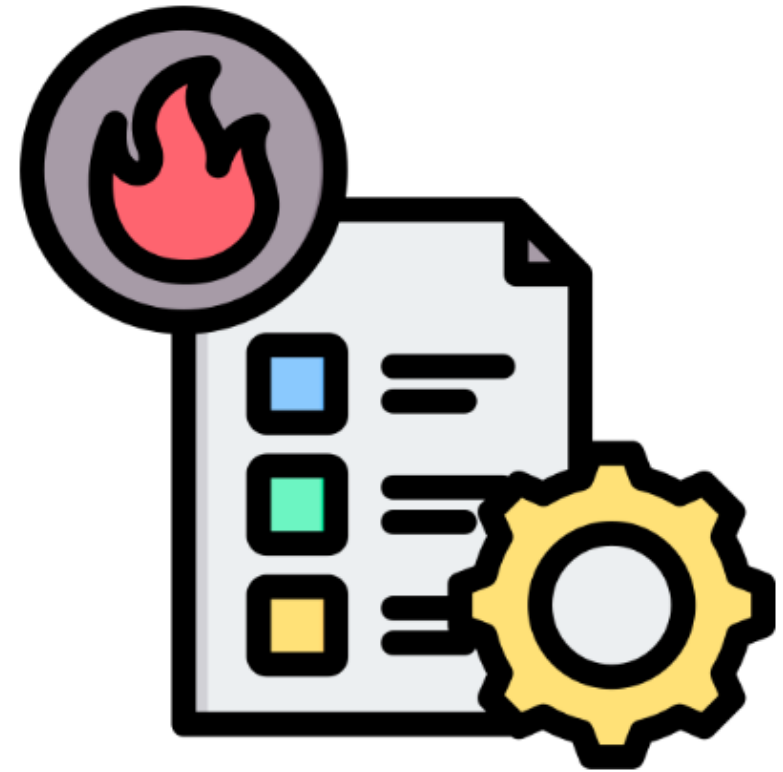
Provides property-specific Emergency Response Plan (ERP) and Standard Operations Plan (SOP).

## 3. LifeSteps:

Provides outreach services: classes, events, and distribution of emergency information.

## 4. City Of Alameda:

Consists of many agencies that have decision-making power in larger infrastructure projects, City's emergency plans and procedures, larger grant applications, etc.



# Emergency Preparedness: AHA's Current Efforts

- Emergency protocols for staff, including regular trainings and pocket-sized emergency contact lists.
- Emergency Point Of Contact (EPOC) procedures and trainings for designated responders.
- 24 hour answering service for after-hours emergencies.
- Supplies of Personal Protective Equipment (PPE) for staff.
- Emergency Response Training and Care from LifeSteps.
- Cloud-based data storage and back up.
- Portable generator for emergencies at 701 Atlantic Avenue.





# Key Takeaway #1

## Work Together!

Use a whole community approach when preparing for emergencies. Each leading organization has valuable resources that can be enhanced with each other's support.

### Example:

The community room in AHA properties can be used to perform outreach and planning meetings, increasing residents' access to information about climate hazards, preparation, and provide input in city plans.



# Key Takeaway #2

## Regular Updating of Emergency Documents:

All emergency-related documents for the various properties need to be updated regularly.

### Example:

During the monthly FPI, LifeSteps, and AHA meeting it would be useful to set aside some time to review and update documents such as the priority list for evacuation. If there is no change, then that should also be mentioned.



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# Key Takeaway #3

## Emergency Preparedness Outreach and Education:

Preparing individuals and households for emergencies is one of the key components in mitigating issues during and after an emergency.

### Example:

**FPI/AHA:** Schedule annual or bi-annual drills at each property or section of the property.

**LifeSteps:** Provide educational materials for emergency preparedness, contouring the materials to the population's needs.

**City of Alameda:** Invite the Fire Department and CERT officials to speak at townhall meetings with residents.



# Key Takeaway #4

## Continue to support the City's climate mitigation projects and proposals:

There are mitigation programs on the island that AHA can support and utilize.

### Example:

Recently, AHA partnered with the City of Alameda's Sustainability and Resiliency Department and was approved for the Urban and Community Forestry grant for Esperanza. Partnerships like this can enhance AHA's ability to assist the community that they serve and the homes they reside in.



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*Thank You!*  
*Any Questions?*



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