

# Resilience Hubs Initiative



The **Resilience Hubs Initiative 2021 Overview** is a living document that encapsulates the work of the Urban Sustainability Directors Network (USDN), the NorCal Resilience Network (NCRN) and the Resilience Hubs Leadership Training advisory team.



## 2021 Overview





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## Introduction and Executive Summary

**In this increasingly chaotic world of never-ending disasters, we must be “ready for anything”.**

**Resilience hubs are some of the most promising and equitable approaches to scaling up local resilience.**

The Resilience Hubs Initiative was created by the NorCal Resilience Network in response to the urgent need to build resilience in our homes and communities in light of the Intergovernmental Panel on Climate Change’s [Red for Humanity Report](#), worsening climate crisis, and growing social inequality. Using the framework of the Urban Sustainability Directors Network, the Initiative supports neighborhood centers and neighborhoods in transforming to become model sites for community resilience.

The Resilience Hubs Initiative is centered in equity, and supports a trauma-informed response, rooted in three pillars:

- **Community programs**
- **Ecologically-based climate solutions**
- **Disaster preparedness and response**



The **Resilience Hubs Leadership Training Program** was an 8-month pilot program that introduced participants to the building blocks for becoming resilience hubs, spaces and blocks, through monthly zoom sessions and skill shares. The training worked with both community leaders from site-based organizations and government partners who are interested in supporting sites in their jurisdictions. You can read more about the training in our [final report](#).

**This report is part of our goal to help support the planning, creation, and support for resilience sites, to help build the skills, relationships and capacity to respond effectively to change and crises.**



# Collaborators

## About the NorCal Resilience Network

The purpose of the [NorCal Resilience Network](#) is to catalyze a Just Transition to an equitable and regenerative region by supporting and activating community-based and ecological solutions in Northern California. NorCal Resilience has been supporting three distinct but overlapping programs and projects since its inception:

- The [Resilience Hubs Initiative](#), a program of the NorCal Resilience Network, is creating a network of homes, schools, community gardens and neighborhood centers that are model sites for resilience and “ready for anything” - better prepared for natural disasters, climate impacts and other stressors in our community.
- The [Circle of Collaborators](#) is our membership directory, supporting a platform for community resilience practitioners to share their needs and offers. We have also supported capacity building, collaborations and collective impact campaigns, with the intention of building solidarity across divides of race, class, sector and region with organizations and leaders who are committed to growing thriving, resilient communities.
- NorCal Resilience has also donated tens of thousands of dollars to our partners, and is currently formalizing this program, a **“Just Resilience Fund”** to redistribute both private and public dollars to both resilience hubs and members of the Circle of Collaborators.

## About the Urban Sustainability Directors Network

The [Urban Sustainability Directors Network](#) is a network of local government professionals across the United States and Canada sharing best practices that can create a healthier environment, economic prosperity, and increased social equity. USDN staff Kristin Baja pioneered the concept and developed the framework for resilience hubs. The USDN provided major funding to support the resilience hubs leadership training.

*“Resilience hubs provide an opportunity to effectively work at the nexus of community resilience, emergency management, climate change mitigation, and social and racial equity while also providing opportunities for communities to become more self-determining, socially connected, and successful before, during, and after disruptions. Resilience Hubs shift the power to neighborhoods and residents, while prioritizing the leadership of Black, Indigenous and People of Color communities who are affected first and worst by climate disruption due to ongoing legacies of marginalization, racism, and disinvestment”* -- Kristin Baja, Urban Sustainability Directors Network





## Resilience Hubs: Definitions

### Resilience Hubs USDN Definition

Resilience Hubs are community-serving facilities augmented to support residents, coordinate communication, distribute resources, and reduce pollution while enhancing quality of life year-round. Hubs can meet myriad physical and social goals by utilizing a trusted physical space such as a community center, recreation facility, or multi-family housing building as well as the surrounding infrastructure such as a vacant lot, community park, or local business. Resilience Hubs are focused on shifting power to the community and are intended to provide services and programming to communities year-round as well as in times of disasters or emergencies.

### Full Service Hubs

This means that most/all of the services essential during sudden emergencies are available at these sites (as determined by the community). Hubs may consist of one facility or two or more nearby closely-linked facilities, which together provide all of the needed services (such as the West Oakland Resiliency Hub - consisting of a senior center, library and park).

## WHAT IS A RESILIENCE HUB?



*Graphic Design: Maryland Resilience Hubs Program*



## Resilience Hubs Initiative: *Definitions and Recommendations*

### Resilient Spaces

These can include neighborhood and community spaces that are intended to enhance community resilience on a smaller scale and are often, but not always, connected to a full-service Resilience Hub. These can include schools, community gardens and community managed open spaces, and can support community events, community-supported green infrastructure, tool-banks, or other similar infrastructure and programming that are intended to **enhance** community resilience, while integrating the pillars of community, sustainability and disaster preparedness. These can also be virtual spaces to gather, and to exchange information at a neighborhood level.

### Resilience Blocks/Neighborhoods

A resilient block consists of neighbors working together to build resilience through disaster preparedness, climate solutions, and community organizing (i.e. community events, projects, block parties, mutual aid, etc.). Resilient neighbors ideally would be connected to a full-service Resilience Hub, working in coordination to support emergency preparedness services and year-round community programming. Resilient neighbors do not traditionally serve the wider community outside the neighborhood during times of emergency, but can fulfill other important local functions such as creating mutual aid systems or checking on neighbors during an earthquake, fire, heatwave, flood or other disaster.



*Garden work party at Canticle Farm, a resilience hub in East Oakland. Photo credit: Natalie Nava*



# Components

How does a resilience hub ideally run and function? The USDN lists the following components as integral to a **full-service resilience hub**. Please note that the case studies listed do not necessarily have all of these components because they are still in various stages of being developed as full-service hubs. Again, some hubs consist of several nearby facilities that are linked and networked together to provide all of the services needed for a full-service hub.



**Resilience Services and Programming:** Services and relationships that build relationships, promote community preparedness, and improve residents' health and well-being. *Examples include garden work days, disaster preparedness workshops and rain water catchment skill shares.*



**Resilient Communications:** Building relationships and respect, communications within and outside the service area during disruption. *Examples include ham radios, newsletters, listservs and door-to-door strategies for reaching community members during disasters.*



**Resilient Buildings and Landscape:** Strengthening the resilience of the facility to ensure that it meets operational goals in all conditions, including earthquakes, as demonstrations for climate solutions. *Examples include earthquake retrofits, energy efficiency upgrades, greywater and rainwater catchment systems and community gardens.*



**Resilient Power Systems:** Ensuring unintentional power to the facility during a hazard while also improving the cost-effectiveness and sustainability of operations in all three resilience modes. *Examples include solar power and battery backup or generators*



**Resilience Operations:** Ensuring personnel and processes are in place to operate the site year-round and also continue operation during disruption and recovery. Distribution of food and other emergency materials. *Examples include distribution of food or disaster preparedness materials, coordination of mutual aid networks etc.*



# Resilience Hubs Case Studies

### Case Study: RYSE Center (Richmond)



[RYSE](#) is a youth center born out of the organizing efforts of Richmond and West County young people who were determined to create safe spaces for themselves and their peers. The center hosts a variety of resilience-based programming and is installing solar with battery backup, in partnership with the Asian Pacific Environmental Network (APEN). As a completely youth-led and youth-designed project, the RYSE Center is a model for supporting youth-centered resilience hubs elsewhere

### Case Study: Boyle Heights Arts Conservancy (Los Angeles)



The [Boyle Heights Art Conservatory](#), located just south of Downtown Los Angeles, has a rich history of collaborative spirit and energy, starting with its original construction as a multicultural gathering place in 1925. In partnership with the nonprofit organization Climate Resolve, this center serves as a model example of a Resilience Hub: a trusted space that displays both their deep-rooted culture and disaster preparedness. As of

2021, the conservatory includes cooling and heating facilities. The building has been retrofitted for earthquakes, water filtration systems have been set in place, and the landscaping is drought tolerant. Back-up power is also available in case of a disaster.

### Case Study: West Oakland Resiliency Hub



This project, which has been spearheaded by the [West Oakland Environmental Indicators Project](#), seeks to adapt existing West Oakland community spaces at 18th and Adeline Streets into the **West Oakland Resiliency Hub**. Existing buildings and outdoor spaces to be incorporated into the program include: the West Oakland Senior Center, West Oakland Branch of the Oakland Public Library, and the DeFremery Recreation Center and Park – all of which are owned and operated by the City of Oakland. This hub would

offer regular programming to increase neighborhood resilience every day and provide vital community services during both sudden disasters and ongoing environmental crises, including food distribution, solar plus storage and serving as a temporary emergency shelter.





## Resilience Spaces Case Studies

### Case Study: The Dream Youth Clinic's Garden of Dreams (Oakland)



**Dr. Aisha Mays** and her team of young volunteers began the Garden of Dreams as a way to remedy the effects of COVID-19 by providing a healthy environment to relax, remain active, and reflect. Two years after the first visioning session, the garden now offers a variety of fruits and vegetables that are often unaffordable for many young people. The Garden of Dreams is located next to the [Dream Youth Clinic](#) in downtown Oakland.

### Case Study: Hoover Elementary School Garden (Oakland)



Urban farmer and [Common Vision director Wanda Stewart](#) turned this empty plot of land on the schoolyard into a garden oasis, thanks to the help of community members and organizations. The garden boasts a chicken coop, rainwater catchment, and a huge variety of edible plants and trees. The garden also serves as a food distribution center for the neighborhood and gathering place for many garden work days.



# Resilient Neighborhoods

## Blocks, Intentional Communities, and Unhoused Encampments

### Case Study: Canticle Farm (Oakland)



[Canticle Farm](#) is an intentional community experimenting at the intersection of faith-based and earth-based activism. The common area supports an array of conservation features, from solar with battery backup and rainwater catchment to a restored creek and large garden. Their community work includes restorative justice work, neighborhood food distribution and a community kitchen.

### Case Study: La Colina Circle (El Sobrante)



La Colina Community Circle is a model resilience block situated in the hills of El Sobrante, California. The neighborhood itself contains a multitude of gardens that grow a variety of fruits and vegetables. Their food forest, Rising Spring, contains three 208-gallon tanks, a single 10,000 gallon tank, an in-house water filtration system, a laundry to landscape greywater system, water-efficient appliances, and various drought-resistant landscaping.

### Case Study: Village In Oakland (aka The Village)



The Village, a nonprofit led by and serving Oakland's unhoused residents, created a Tiny Home Village model to provide emergency transitional tiny home structures for unhoused folks. Each tiny house has solar power and grey water systems. Additional infrastuctures on site include medical clinics, communal kitchens and gardens, free stores, bathroom and showers, and safe spaces to relax. Other services and programs include free hot meal distribution & groceries, clean drinking water, education and arts programs, support with social and legal services, recreational activities, and town hall meetings.



# Creating a Resilience Hub

The following recommended steps are a compilation from the [Urban Sustainability Directors Network's](#) recommendations and the NorCal Resilience Network. They are intended for sites that have already been selected as resilience hubs, spaces and blocks. Most, **but not all**, of the recommendations can also be used if developing spaces or blocks (and not full-service hubs).

### 1) **Establish a site team.**

- Get to know each other! Build trust and relationships with team members, and come to an understanding about your shared vision.
- Work democratically to choose roles, establish meeting times, & create protocols, including for conflict resolution and decision-making. Consider studying about sociocracy and other models of decentralized leadership structures.
- Discuss existing and potential strategic partnerships. Strategize which ones you will prioritize, including community groups, local utilities & local government offices/agencies.

### 2) **Coordinate an initial site and neighborhood assessment.**

- Learn about the various tools to identify community assets, resources, hazards and vulnerabilities: including Cal-Adapt, Cal Enviroscreen and the California Healthy Places Index. Then choose the appropriate one(s) to use to conduct the assessment.

### 3) **Coordinate community visioning sessions, surveys & audits.**

- Solicit ideas for creative ways to engage with and include a diverse set of community members, including meetings, block parties, movie nights and incentivized surveys.
- Evaluate the recommended five components of resilience hubs: power, operations, communication, programming, and buildings & landscape.
- Do specific analyses to determine the phases and funding for implementing more complex infrastructure, such as solar with battery backup or earthquake retrofits.

### 4) **Set long-term and short-term goals with community members.**

- Create a budget for long-term and short-term project goals.
- Prioritize the goals in order of importance and capacity, and identify funding needs.

### 5) **Start small! Implement your first projects based on priorities, available funding, and people power.**

- Create MOU's with partners and local governmental agencies, as needed.
- Invite other nearby resilience hubs, spaces and blocks to your events, to establish relationships and build trust with them.

### 6) **Maintain the five components through regular communications and programming, consistent feedback and check-ins with community members and local governments.**



# Recommendations for Resilience Hubs

Please note that this is a recommended list. No site will have all of these features! As noted below, features will often be different for spaces (sites without buildings) and for neighborhoods.

## **BUILDINGS & LANDSCAPE**

**Strengthening the resilience of the facility to ensure that it meets operational goals in all conditions.**

### **Community Features**

- Indoor and/or shaded outdoor space for the community to gather
- Extra bicycles
- Space for pets
- ADA accessible and fragrance free

### **Green Building & Landscaping**

- Building is LEED-certified, including construction from low-toxic materials and low/no VOC paints
- Low-waste structures and practices: composting & recycling systems and signage
- Energy efficiency features, including:
  - Light fixtures, adjustable & programmable thermostat, double-pane windows, Energy Star equipment, insulation, air sealing
  - No on-site gas use (i.e. all-electric building)
  - At least one electric vehicle charging station for the community to use
  - Water-efficient appliances (clothes washer)

### **Infrastructure**

- Air Conditioning and heating; able to serve as a cooling center for the immediate community during extreme heat days
- Adequate ventilation and air filtration systems for refuge during smoke days
- Limited shelter capacity
- Refrigeration for food and medicines during disasters
- Showers
- Community bathrooms
- Zero waste system, including composting and recycling
- Secure bike parking
- Outdoor lighting





## Resilience Hubs Initiative: *Definitions and Recommendations*

- Retrofit for earthquake safety
- Appropriate security
- Water
- Drought tolerant landscaping
- Rainwater catchment or other water storage system
- Water conservation systems: greywater, drip irrigation, faucet aerators or other water conservation infrastructure
- Low-flow toilets
- Composting toilets

### Food

- Community garden with produce that can be shared with immediate community members, or partnership with a nearby community garden
  - greenhouse
  - garden tools
  - community composting
- Fruit trees: orchard or food forest
- Herb/medicinal garden
- Community kitchen
- Chicken coop

### **RESILIENT POWER**

Ensuring reliable backup power to the facility during a hazard while also improving the cost-effectiveness and sustainability of operations in all three operating modes.

- Solar or other onsite/community-owned renewable energy
- Backup power through a generator or battery
- Low-tech resilient power: solar lanterns, bicycle-powered power, rocket stoves & flashlights
- Community visioning meetings

### **COMMUNITY OPERATIONS & PLANNING**

Ensuring personnel, supplies and processes are in place to operate the facility in all three modes

### Emergency Preparedness

- Site/community members trained in CERT and/or First Aid
- Regular meetings to discuss disaster preparedness
- Evacuation Plan



## **Resilience Hubs Initiative: *Definitions and Recommendations***

- Emergency supplies and resources for 72 hours after a disaster:
  - Sufficient food and water
  - Extra emergency supplies for community members or neighbors: N95 masks, air filters, fans, air purifiers, tents, emergency go-bags
- Map of vulnerable neighbors, who will need help during sudden disasters

### **Community Engagement & Site Assessments**

- Site assessment to determine both long-term goals and short-term needs
- Neighborhood asset mapping for assets and vulnerabilities
  - Printed map at the site that describes the resilience-based neighborhood assets
- Community asset mapping & surveys, to assess the skills and needs of the immediate community members
  -

### **Site Team**

- Site Team with at least 4-5 members who meet on a regular basis
- Clear roles and responsibilities
- System to manage projects and communicate with each other
- Translation and/or interpretation services when needed for community members
- Shared agreements about decision-making
- Fundraising team and plan
- Conflict resolution protocols and practices, including nonviolent communication practices
- Restorative justice programs and/or protocols detailing alternatives to calling the police
- Staff on site: Resiliency Coordinator who organizes regular events.

### **PROGRAMMING AND SERVICES:**

**Offering additional services and programs that build relationships, promote community preparedness, and improve residents' health and well-being**

### **Resilience-based education programming, could include:**

- Job training/job seeking resources
- Child care
- After school programming
- Fix-it clinics
- Immigrant & refugee services (including legal aid)
- Reentry support services
- Food growing/preserving



## **Resilience Hubs Initiative: *Definitions and Recommendations***

- Native edible and medicinal plants of the region
- Energy & water conservation
- Racial, social & disability justice workshops
- Anti-displacement and affordable housing advocacy and education
- Food
- Systems for donating and sharing excess garden produce with food banks, gleaners or other community members
- Food distribution program for neighbors and community members
- Regular community events and skill shares about resilience-based organizing, including food growing and disaster preparedness
- Understanding the potential climate impacts and hazards of your bioregion, with an equity lens to disproportionately impacted communities

### **Relationships and Social Cohesion**

- Relationships with local Indigenous tribes; understanding the history and current struggles of the local Indigenous tribes
  - Programs or support to give land back to local Indigenous tribes
- Support for Black, Indigenous and People of Color leadership
- Support for youth voices and leadership
- Providing labor, time, money to support any current demands for reparations, repatriation and self-determination for folks most impacted by the climate crisis
- Regular relationship-building with local community organizations, to collaborate on a regular basis
- Regular community events to build trust and community
  - Block parties, potlucks or other social gatherings
  - Garden work days or crops swaps
  - Skill shares
  - Tours of your site
- Language interpretation
- Local hiring practices
- MOU's for engagement with community and government partners
- Relationships with nearby hubs, spaces and blocks:
  - If your site is abundant with resilience, support a nearby resilience hub or space with volunteers and financial resources
- Trauma and Mental Health
- Support acupuncture, massage and meditation classes both in non-emergency times and during disasters
- Understand the sources and impacts of trauma responses in the body



## Resilience Hubs Initiative: *Definitions and Recommendations*

- Host regular climate grief workshops
- Deepen our capacity for presence, connection and action under pressure
- Learn, share and strengthen individual and collective somatic resilience practices
- Provide mental health & trauma resources for community members
- For neighborhoods:
  - Affordable housing for lower-income residents
  - Reduced rent for activists & organizers

### COMMUNICATIONS

Ensuring the ability to communicate within and outside the service area year-around, especially during disruptions and throughout recovery

- Ham radios on site, with site team trained on usage
- Disaster evacuation plan, including a community meeting place and plan for quickly leaving the community
- Community members signed up for emergency alerts and other disaster communications systems (such as Nixle and Zone Haven)
- Community bulletin board
- Mutual aid systems
- Mutual Aid system, to provide support, safety and care to immediate community members
- Registered with recovers.org to set up city-wide mutual aid system
- Analog communication systems:
  - Neighborhood bulletin board
  - Phone tree, printed out

#### Digital Communications

- System for communicating with community members about resilience hubs activities, such as a listserv or newsletter

#### Communications with Local Governmental Agencies

- Set up meetings with government staff to introduce your site and resilience plan, and needed support.
- Set up communications plans and an agreement with city or county government to disseminate information about disasters and climate change during disasters and on a regular basis.





## Our Vision Moving Forward



**Imagine...** a Resilience Hub in every neighborhood. Community gardens support disaster preparedness classes. Every community member has access to safe, affordable and dignified housing. Schools serve as learning labs for climate solutions and students learn about vulnerabilities, assets and resources in their local area.



# **Suggested Next Steps to Manifest this Vision**

### **Nurture deeper relationships between governmental agencies and community-based organizations.**

- Host introductory presentations and training sessions for government partners about resilience hubs, including best practices in working with community groups.
- Provide opportunities for building trust and relationships through community events, workshops and office hours hosted by government partners.
- Develop a resilience hub scorecard that is compatible with local governments and their current climate action plans.
- Develop policies, MOU's and partnership agreements to formalize relationships between local governments and resilience hubs.

### **Provide opportunities for sites to share resources, tools and support with each other**

- Support online platforms to promote resource sharing, best practices and success stories about resilience hubs in action.
- Encourage sites to build trust and relationships between each other by attending each other's events or visiting each other's sites.

### **Organize various types of training sessions, including:**

- **Training Sessions customized for specific type of sites:** recreation centers, youth centers, senior centers, libraries, unhoused encampments, community gardens, schools, libraries, apartment complexes, co-housing/intentional communities, neighborhoods
- **Training Sessions for specific bioregion:** Organize workshops with sites in a specific city or county to coordinate asset mapping, needs and offers.
- **Training Sessions for specific organizations:** Bigger chapter-based organizations could create their own customized training sessions for hubs, spaces and blocks

### **Support both bioregional and regional collaboratives (such as the NorCal Resilience Network)**

- Map out organizations doing community resilience work, as well as existing resilience hubs, spaces and blocks.
- Organize regional convenings to strengthen relationships, skills and collaboration opportunities.



## **Resilience Hubs Initiative: *Definitions and Recommendations***

- Create cross-sector working groups, such as renewable energy, food justice, conflict resolution and anti-oppression.

### **Create accessible and justice-oriented funding streams to plan and implement resilience planning and projects**

- Create/support an intermediary fund that pools both private and public dollars and redistributes the funds to resilience hubs, spaces and blocks equitably and easily.
- Prioritize funding for resilience sites led by and within Black, Indigenous and People of Color communities.
- Provide funding for the training sessions, collaborative work and other above-mentioned programs and projects.

### **Cultivate this program as a movement that **EVERYONE** can get involved in!**

- Promote the DIY resources listed on the NorCal Resilience website.
- Share stories on new and traditional media about the power and potential of resilience hubs, spaces and blocks.
- Provide introductory presentations about resilience hubs, spaces and blocks to schools, businesses, places of worship and other sites interested in the model.



## Acknowledgements and Thank You's

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A large graphic with a teal background. The words "Thank You" are written in a large, orange, cursive script. A white horizontal line is drawn underneath the text.

Thank You