SMALL BUSINESS RECOVERY TO RESILIENCE GUIDE

A Resource for California Communities to Support Small Business Resilience

January 2023

DR. LUCY JONES CENTER FOR SCIENCE AND SOCIETY
Introduction

This guide was created to be used by those in community-leadership positions to support the building of resilience of their small businesses in California. From local elected officials and emergency managers to businesses and organizational leaders, those that care about the future of their community must act to support the resilience of their small business sector. With the increasing intensity and frequency of wildfires and other disasters, it takes all different sectors of our communities working together to get us through it.

This guide was developed as a partnership between the Dr. Lucy Jones Center for Science and Society, the North Valley Community Foundation, and Wells Fargo as wildfires continue to intensify and impact more communities in California. Climate and fire scientists agree that as temperatures continue to increase, this risk will grow, affecting more and more communities with a threat and the impact of the fires themselves. Looking at the catastrophic Camp Fire and the loss of Paradise serves as an even greater impetus to take action now.

The actions included in this guide may not apply to every small business or every community, but each tactic should be considered for your existing circumstances and see how it might be modified to apply. Users of this guide should identify the pieces that make sense for their community and take just one step – a first step – to supporting the community-defining institutions that are often the most vulnerable to closing or being lost in a disaster. There will be a pressure to put everything back together as it was, but outdated standards will not work post-disaster. Instead of working to rebuild as it was, we will need to work towards building resilience and building back better.

The Resilience Equation\(^1\) provides a framework we can use to think about how we can move towards a more resilient community. The risk we face is a product of the hazard, the exposure, and the fragility of our community, and is reduced by our actions for response and recovery. The hazard is what the earth does to us, and for many disasters, it is increasing because of climate change. Without reversing climate change, we cannot change the hazard. Exposure is the parts of our community at risk from the hazard and short of abandoning our communities and rebuilding in another area, it also cannot be changed. Fragility is how vulnerable the buildings and other parts of our community are to the hazard. Reducing fragility and improving response have been the main focus of our disaster preparations, such as CalFire.

We should also focus on our will to recover in order to reduce our community risk. The losses during recovery can exceed those caused by the disaster itself, so speeding up recovery makes a community more resilient and viable. Recovery can be sped up with mitigation, planning and better response. Mitigation prevents damage, reducing the need for response. Planning improves response and recovery. Better immediate response improves the long term recovery. How do you create community recovery and a sense that this is a “doable” task?

Fundamentally, this work is about building interpersonal connections before the disaster in order to leverage the relationships in a time of shock or stress. With insights from two convenings in 2022 and individual conversations with social scientists, state government representatives, key business leaders, local city leaders, firefighters, nonprofit and philanthropy partners, and emergency managers across California, four key areas of work were identified:

1. COLLECT AND USE DATA AND SCIENCE TO CRAFT YOUR PLANS

2. DEVELOP AND DEPLOY A “SMALL BUSINESS COMMUNICATION AND EDUCATION PLAN”

3. ADOPT PRE-DISASTER POLICIES IN SUPPORT OF SMALL BUSINESS RESILIENCE

4. BUILD THE RIGHT RELATIONSHIPS AND INCREASE SOCIAL CAPITAL WITH THE SMALL BUSINESSES IN YOUR COMMUNITY

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2 This 2022 study found that risk perception and community preparedness increased with stronger interpersonal connections: “People with more dense social networks and more emotionally close network compositions were more likely to prepare for a hurricane regardless of its severity. People with dense networks and people who perceived an evacuation norm in their network also reported being more likely to evacuate regardless of the severity.”
How To Use This Guide:

This guide offers more than 50 tactics and approaches to increase the resiliency of your community. Each community is unique, and as shown in the Resilience Equation, different levels and types of hazards, fragility, and exposure lead to different community risk. With that in mind, response and recovery will look different for every community and every disaster. Not every tactic may be applicable to your community, or you may not have the capacity to apply every tactic immediately. This guide is a place for you to start your planning before the disaster hits.

The first step, regardless of how many other tactics you employ, is to assess your community and get your data. This will reveal which tactics are most needed and most easily achieved. Think of this guide as a staircase, where each section builds on the last. For instance, when creating a list of the specific vulnerabilities and physical risks in your business community (item #1a), you will likely have to form partnerships across disciplines and sectors (item #4). Each key area of work informs the other and is an ongoing process.

While this guide focuses on wildfire risk in California, the applied tactics and the connections developed will help your community build resilience to any disaster you might face. The improved communication and stronger ties between your community organizations and businesses will yield benefits in times without disasters, as well.

And just as planning for disasters is an ongoing process and commitment, The Jones Center will be updating this guide annually as additional resources for small businesses and new recommendations for preparing for the increased intensity and frequency of hazards due to climate change are published.
RECOMMENDED ACTIONS TO BUILDING SMALL BUSINESS RESILIENCE IN YOUR COMMUNITY

1. COLLECT AND USE DATA AND SCIENCE TO CRAFT YOUR PLANS

Before crafting your plan, start with the science. Scientific findings can inform what we do and more importantly, tell us what we can expect from the natural hazards that a community might experience. Additionally, social science research can tell us how people respond to the risks they face and how to work together to build a stronger community in the face of disaster.

By bringing science into the recovery process, the rebuilding process will take into account the changing risk, the changing climate, and the new factors affecting community resilience post-disaster, so the community will be rebuilt and create plans more resilient than before. However, many preparedness plans are not created with the guidance of social and physical science. When planning, assessment of physical systems and the built environment are needed, but assessments should go beyond that. Disaster social scientist, Susan Cutter, said the following:

“While emergency managers at all levels have shown an interest in identifying vulnerable populations before and after disasters, the ability to systematically measure or monitor social vulnerability—the differential disaster impacts on social groups based on pre-event social conditions and capacities to adequately prepare for, respond to, and recover from disruptive events—across a range of places has been lacking.”

Know what makes your business community unique physically and socially. Use these insights to craft a plan that meets the unique needs of your community.

**A. Create a list of the specific vulnerabilities and physical risks in your business community.**

Plan two working sessions with key business and civic leaders (5-7 people to brainstorm a list in the first meeting, and then refine the list in the second meeting), which also creates a leadership group to move this work forward.

**Consider This:**

Where are your industry clusters? Where are your older buildings? What businesses employ or serve vulnerable populations? What businesses are “essential” due to their employment numbers, service/product offering, or unique role within the community (e.g. the oldest business on main street)? Also, what is the geography and geology of your community that make it unique to a particular disaster?
B. Then, plot the data you’ve identified on a map (as demonstrated on the Social Vulnerability Index (SoVI) or the CDC’s Social Vulnerability Index) to visualize the unique risks to your community and help provide focus on where to build resilience. Plot your community’s demographic clusters on the map. Consider where employees of your small businesses live and how they commute. Small businesses are supported when their employees can come back to work. This recognizes employees of businesses as an asset that needs protecting. Small businesses can only be supported when their employees come back to work. What other circumstances do they face that might prevent them from returning to work?

Examples include individuals with Access and Functional Needs (AFN), caring for a family member, loss of housing, difficulty accessing insurance or emergency relief, etc.

This community mapping is a way to plan for a more equitable recovery. Recovery is not linear or continuous; it is predicated on pre-existing conditions, including personal and community vulnerabilities.4

Identifying which individual businesses and business districts are most vulnerable and in need of the most support and “(often scarce) resources before, during, and after disasters allows for a clear and sustained unity of effort among organizations.”5 This process will also “streamline” how resources are allocated, reducing confusion and panic post-disaster as well as providing support where it is most needed.

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4 Disasters reveal social vulnerabilities, they don’t cause them: “Extreme events reveal the extreme differences in the way we live and die, cope, and rebuild.” Focusing on recovery in New Orleans post-Katrina as a case study, Kates et al. detail how recovery can take more or less time dependent on social vulnerabilities present before the hurricane.”


Case Study: Camp Fire Community Mapping

The 2018 Camp Fire is the “deadliest and most destructive wildfire in California history” as of 2022, and the “world’s most expensive disaster of 2018.” The fire started at 6:45AM on November 8 due to a broken power line and extremely dry conditions. The Camp Fire caused at least 85 fatalities, burned 153,336 acres, and destroyed 18,000 structures, most of which occurred in the first 12 hours.\(^6\) While there were challenges with inter-jurisdictional evacuations with unsolidified regional partnerships prior to the disaster, 50,000 people were evacuated within six hours of the fire’s start. The surrounding counties received thousands of evacuees.

However, 79% percent of those who died were older and had access or mobility issues. The community demographics were not reviewed or included in planning when the preparation plans were created. If the older population had been considered, those who created the plan would have known to include more paratransit buses for evacuation.\(^7\)

Since the fire, more work has gone into creating long-term disaster and recovery plans that include demographic considerations and other lessons learned from the Camp Fire. The population demographics have changed since many homes were destroyed and some families were unable to return and relocated. This new population will need to be understood and taken into account when creating their community’s disaster plan.

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\(^7\) Kevin Phillips, Town Manager of the Town of Paradise, in his featured presentation at the “Recovery to Resilience” Symposium
C. Develop a roster of your social infrastructure, including faith-based and community-based organizations, neighborhood organizations, schools, shelters, and medical organizations. This is not merely a listing of organizations, but a roster of contacts with at least two representatives for each organization, including name, title, phone number, and email. Before including them on the roster, make a connection with them. Contact them to ask, what resources, social and physical, do your organization have?

Consider the following resources:

<table>
<thead>
<tr>
<th>Social</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPLOYEES WITH CHILDCARE EXPERIENCE</td>
<td>WATER STORAGE</td>
</tr>
<tr>
<td>SPIRITUAL/EMOTIONAL SUPPORT EXPERIENCE</td>
<td>FOOD STORAGE</td>
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<tr>
<td>FIRST AID/CPR TRAINING</td>
<td>SHELTER SPACE</td>
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<td>HAM RADIO TRAINING</td>
<td>OTHER STORAGE SPACE</td>
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<td>FIRE EXTINGUISHER TRAINING</td>
<td>GENERATOR</td>
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<tr>
<td>SEARCH AND RESCUE TRAINING</td>
<td>SPECIALIZED EQUIPMENT/TOOLS</td>
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Now that you have assessed your community, craft your plan. Before, during, and after a disaster, clear communication with small businesses is key. Centering the lessons from social science in emergency communications will ensure effective action. While FEMA’s communication training explains that “communications may include alerts and warnings; directives about evacuation, curfews, and other self-protective actions; and information about response status, family members, available assistance, and other matters that impact response and recovery,” some of the most important communications required are those well in advance of an event. The way leaders communicate about the risk and disaster before it happens is critical to eliciting the resilience-building actions required to survive and thrive after the disaster. This resilience planning communication is informed by experts quoted in this guide and others about how to communicate a future risk aligning with the way humans are likely to receive it well.

Evoking the appropriate emotions in the communications is key to motivating action. The psychology of preparation is a major hurdle: no one wants to plan the “party” that won’t happen, and disasters are abstract/intangible. Social science has shown that fear motivates short-term action and immediate response, but it is also a poor motivator for long-term action, such as mitigation. Fear can often drive people to avoid thinking about the problem rather than dealing with it. Shifting emotions to pride in community drives effective community action that fosters the support network that will help residents stay in communities during the challenging process of restoration and rebuilding.

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8 Lesson 3. Communicating In An Emergency, Effective Communication (IS-242.b), FEMA, USA, February 2014, pp. 3.2. [https://training.fema.gov/emiweb/is/is242b/student%20manual/sm_03.pdf](https://training.fema.gov/emiweb/is/is242b/student%20manual/sm_03.pdf)

A. Include unexpected partners in resilience planning activities. Planning for recovery should include all city departments and community organizations, not just the emergency manager. And by including small businesses in these conversations, they can request coordination before the response is needed and plan for unusual circumstances. Engaging the trusted voices of small businesses within their own communities will focus on their narratives and needs. Engage with small businesses about mitigation, risk reduction and resilience before the disaster happens to make it less daunting and make sure they are prepared.

Consider This:

Include input in your planning from employees who don’t live in the communities where they work (will they need shelter?), insurance providers who do not cover your disaster risk, and federal agencies who might be deployed to your community.

Case Study: Wildlife Risk Assessments

The California Joint Powers Insurance Authority, in response to the worsening impact and threat of wildfires in the state, is conducting wildfire risk assessments in collaboration with Fireline Defense, LLC. Once they have identified the most vulnerable properties according to their wildfire risk assessment, they will “take preemptive measures to reduce risks for some of our most vulnerable members,” said Senior Risk Manager Tony Leite.

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B. Communicate using social science insights. For decades, researchers have studied the way the human brain processes information about risk. This work has developed the best way to allow people to understand and take action about an uncertain event, like a disaster. This includes:

**Being vivid in descriptions.** Social scientists have found that using concrete, localized examples engages and activates individuals more than just listing vague data. Using storytelling and building narratives to communicate risk adds context and meaning for non-experts.

**Setting expectations that recovery takes time and articulating what long-term recovery truly means.** There will be a pressure to put everything back together as it was, but outdated standards will not work post-disaster. Regaining a new steady-state can take years, even decades, depending on what vulnerabilities were present and the level of disaster intensity. Building resilience is a never-ending process. Setting an expectation for the long term commitment will avoid disaster recovery fatigue.

**Not “talking down”, but laying out the situation in an understandable way.** Similar to building a narrative, making the data and risk understandable to all is key for motivating action. A central goal of risk communication is to inform the public, not confuse them with jargon. At the same time, do not omit information because it is believed to be too complicated for non-experts. Additionally, your community may have special insights dependent on local industry or geography. What needs to be explained and what information would your public already know?

**Having open conversations about the challenges with the recovery process.** It is difficult to share weaknesses and failures, but maintaining transparency and honesty is necessary to ensure your message is even being heard. As Covello et al. highlight, “trust and credibility are difficult to obtain. Once lost they are almost impossible to regain completely.”

**Repeating the messaging as much as possible.** While not repeating the same message verbatim, communicating the same message at least three times will increase the likelihood of action. Identify, what is the central message needed to be communicated?

**Having consistent messaging from the various sources of authority.** Many different publics make up a community. So, different credible sources are trusted by these groups and need to be in collaboration, communicating the same messages. Conflicts or inconsistency among these community leaders is one of the main ways to undermine effective risk communication. Which leaders in your community will need to collaborate on messaging in order to reach all sectors of your community? Note as well, will communicating in other languages reach more sectors of your community?

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11 Susan Cutter, Director of the Hazards Vulnerability & Resilience Institute at University of South Carolina, in her featured presentation at the “Recovery to Resilience” Symposium.
14 Ibid
Informed by social science research, The Warn Room offers guidance on how to create effective emergency alerts and warnings for all hazards. By issuing warnings that utilize evidence-based guidance, risk communicators “can increase the likelihood that a person who is at risk will take action and decrease their protective action delay”\(^{18}\). Effective warnings will include the source of the message, the hazard name/description, the location affected, the consequences of threat, protective action guidance, and time to take action or when the message expires.

C. Clearly educate businesses on how to get their finances in order by providing case management before and after a disaster. Create a roster to answer the following questions: Who can small businesses turn to to ask questions about their finances? Does your community have a Business Operation Center? Which businesses in your community don’t have the capacity to have a 28 day savings account in case of disruption? Which businesses don’t have wildfire insurance?

3. ADOPT PRE-DISASTER POLICIES IN SUPPORT OF SMALL BUSINESS RESILIENCE

Now that you have your plan, advocate for policies to assist. Recovery needs to start when the disaster event starts. Research has shown that the most effective way to reduce losses from disasters happens before the disaster, with every dollar spent on preventing losses saving $6 in the long run.19 For wildfire risk specifically, the Natural Hazard Mitigation Saves: 2019 Interim Report found that for every $1 spent on preventing losses from Wildland-Urban Interface Fire, $4 was saved.20 These policies can be programmatic and operational, or they can be legal from a local government body. Voted on or directed policies can change the entire trajectory of a recovery.

A. Plan for flexibility, adaptability, and customization.

Every community is different, so every community’s disaster plan should be different as well. Currently, many statewide plans are “one size fits all,” even though communities have different vulnerabilities. In building a local plan, allow for multiple sources of support, including self-help and neighborhood help rather than relying solely on first responders.

Who can be mobilized during and after a disaster? Are there adjacent communities with less risk that have social organizations that can be coordinated with in advance?

Consider This:

What would your community need to plan for that others may not? Think beyond the template plan of somewhere else: what makes your community what it is? Refer back to section 1.a. to understand the unique facets of your community that need to be taken into consideration when building your plan.

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B. Create flexible financial policies before the disaster happens. Small businesses are already financially vulnerable as they are still experiencing debt exhaustion from COVID-19. As you consider flexible financial policies, be mindful of the level of technological access and sophistication that small businesses have with what you’re asking of them before and after a disaster.

**Consider This:**

These following pre-disaster event financial policies to make sure when the next disaster hits, small businesses are more resilient:

**FORGIVABLE LOANS**

Institute a policy, or triggering mechanism to activate a policy, by which funds can be distributed to small businesses with certain, simple criteria that allow those funds to be forgiven if met.

**FAST ACCESS TO FUNDS**

Implement a streamlined process to get money out quickly to businesses most impacted by disaster by identifying the most vulnerable businesses in the community before it happens. Pre-register/prequalify businesses to be able to receive funds if they are impacted. The faster money gets to those impacted, the faster the local economy will get restarted. Update existing processes to capture information needed to make this happen. Consider adjusting your city’s business licensing process to include key information that can be used during and after a disaster to communicate with and, more importantly, qualify small businesses to receive funds.

**FEE WAIVERS**

While inspections and permitting should be streamlined in terms of time it takes to submit and get approvals, just as important is a waiver of permitting, processing, and inspection fees for qualified small businesses after a disaster event. This could be those of a certain size, specific geography, or other defined characteristic that allows for ease of rebuilding and reopening.

**Note:** Planning departments and other permitting agencies are stretched thin in the case of recovery when small businesses need permits to be approved quickly in order to get back to business. However, these departments can be utilized to redistribute resources or modify processes in times of disaster recovery. They also need to address rebuilding such as grandfathered structures that may not be able to be rebuilt in the same location or manner.

**LOANS FOR LOW-CREDIT BUSINESSES**

Often with small businesses, especially in underserved areas, conventional loans are not available. Creating opportunities for funding of loans through CDFIs or other sources will create an additional safety net for businesses to recover quicker from disaster. By educating small businesses about this non-conventional source of funds, they will be ready to access funds when they need it most.
As a response to job losses and small businesses struggling to stay open after a year of enduring economic losses from the COVID-19 pandemic, in 2021 the Together for L.A. (TFLA) partnership formed to “strengthen and support women and diverse-owned small businesses in L.A. County.”

Bringing in partners from the nonprofit, government, chambers of commerce, philanthropy, and economic development sectors allowed for connections to various resources and funding sources for small businesses. In 2021, TFLA was able to reach “over 21,465 small businesses and nonprofits in the poorest neighborhoods of Los Angeles with technical assistance tools, training opportunities, and easy-to-use information.”

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C. Set training times to practice the plan, including collaborative scenarios. Without leader accountability or set expectations to practice the plan, momentum and lessons learned can be lost. Programming institutional knowledge with regularly paced task-force meetings and trainings can maintain the momentum.

**Consider This:**

For the first days after a disaster, do you have plans for detailed assessment and inspections, insurance, communications, and are you prepared to engage the local community?

For the first weeks after a disaster, can you continue operations with financial protection, repair/reconstruction and recovery, establish communications, provide mental health recovery, restore operations fully, and document the lessons learned? Providers who do not cover your disaster risk, and federal agencies who might be deployed to your community.

Other methods to maintain planning continuity and community readiness include:

- Widespread preparedness training both in individual homes and in small businesses.
- Long term recovery frameworks established before the disaster event to understand where responsibilities lie and readily mobilize support to those most vulnerable with least amount of time to prepare.
- Training for city management outside of the current first responders, including clerical and administrative staff whose role will facilitate the flow of resources.
- Providing mentors for small businesses to guide them through possible financial opportunities.
- Formalizing relationships among task force members and between community leaders.
Case Study: Camp Fire Long Term Recovery Group

As a result of the 2018 Camp Fire, the Economic Workforce Recovery Committee, “Camp Fire Long Term Recovery Group,” was formed. Key partners included: economic development agencies, American Job Center agency, local workforce development board, small business development centers, county or city economic department, chambers of commerce, community colleges, universities, and industry specific workgroups. Their planning for continuity decided to meet quarterly, provide support and collaboration to partners, and track available resources.25

D. Plan to appropriately allocate resources to small businesses. Small businesses often don’t have the capacity on their own to prepare for disasters ahead of time. Due to their smaller size and decreased capacity to stockpile, the Manta Wellness Index in 2016 found that 37% of small businesses identified themselves as vulnerable to and unable to recover from a disaster.26 With the COVID-19 pandemic starting in 2019, these small businesses’ vulnerability has only increased with the changes in businesses policies, and are often still operating on a day-to-day basis. Identifying gaps and providing resources will help small businesses get prepared beforehand and strengthen the resilience of the community. Resource support could include:

Create an inventory of what a small business has and what it needs. The list should include: Generator, water storage, food storage, other storage space, physical and digital versions of important documents, medical supplies, and other office supplies necessary to keep the business functioning.

Create more state level funding opportunities for small businesses utilizing the bipartisan infrastructure law. This funding is aimed to assist many different facets of small businesses’ operations27 and should be utilized to create opportunities to reduce their vulnerabilities. Currently, with the funding from the Bipartisan Infrastructure Law, “USDOT is on target for 20% of our federal contracts to go to small and disadvantaged businesses.”28

Pre-register/prequalify businesses to be able to receive funds if they are impacted so they are “in the system” and ready to go if needed.

Establish local small business support funds to use before a disaster as well as having a fund in place after a disaster. This could be a grant program, or for more beneficiaries with limited funding, creating a small business revolving loan for physical improvements would allow for these resilience-building improvements.

Create a relationship with your local community or other foundation to establish funds with public and private dollars so it can be easily and quickly deployed after an event.

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In the 2021 Dixie Fire, a pop-up business district was established in Greenville, CA to address community needs after downtown Greenville's commercial district was burned. The Dixie Fire Collaborative and various partners quickly worked to find a lot and connect reliable power and water to the small businesses’ trailers and tents. The businesses included a real estate office, food trailers, a saloon, and a coffee shop. “People are very happy to have places to go,” said Kest Porter of the Dixie Fire Collaborative. “I don’t think I’ve ever gone by the coffee shop and not seen people there. The community is excited about having people drive through Greenville and find a bustling little business district where they expect to see a burned-out town.”

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4. BUILD THE RIGHT RELATIONSHIPS AND INCREASE SOCIAL CAPITAL WITH THE SMALL BUSINESSES IN YOUR COMMUNITY

Throughout this process, include the right partners. Social science has made clear\textsuperscript{30} that social capital – interactions and connections between people in a community – is a critical component in recovery from major disasters. Communities with greater connectivity between members have more resources to rebuild their lives and more reasons to stay in the damaged community, leading to a quicker and more resilient recovery. Without a vibrant, resilient business sector, a community is more challenged in coming back, in defining itself, in being a place residents can rally around. Business districts help to define local communities, fostering a sense of belonging as defined by the research: membership, influence, reinforcement, and shared emotional connection.\textsuperscript{31} They are therefore a nuclei for resilience planning and recovery. The result of this effort is a network of small businesses who are connected and supporting each other in the recovery and in building resilience to what comes next, while accessing the many resources made available post-disaster.

Relationships between local governments, small businesses, community organizations, and philanthropic foundations are vital to reach all parts of the community and to get resources directly to community members when needed.


A. Create connections between local government, small businesses, and community-based organizations.

1. Cities and business leaders can collaborate to establish a business operation center as part of their emergency response. This would also be a place to continue to focus on supporting small businesses to build resilience before the disaster.

2. Any workforce development funding and programs should incorporate disaster planning so they can spring into action immediately when disaster strikes and do the work they already had been doing, as they are already trusted sources of support for employees.

3. Facilitate business to business connections by hosting “micro-mixers” where businesses within close proximity can come together informally/socially with their adjacent neighbors with other city or community leaders to determine: what does your business need to keep functioning during and after a disaster?

B. Foster connections inter-jurisdictionally to support small businesses recovery.

1. Currently, there are conflicting local ordinances. For example, some wildlife ordinances in California may be in conflict with vegetation management ordinances. Additionally, there are gaps in knowledge of legislation due to the lack of communication. Wildfires do not respect jurisdictional boundaries and impact multiple regions. Regional collaboration is needed to achieve multiple objectives. Local cities should annually (at least) convene the other jurisdictions and agencies serving the area to review wildfire planning efforts. These agencies could be county, special district, state or federal agencies.

2. Another connection to be made is between cities/communities who have recently experienced the devastation of wildfire and those who face a high risk. Such a connection could be made through a “big brother city” program within California for experienced cities, communities, or even chambers of commerce to mentor others, thus creating a more nuanced understanding of what should be planned for.
Conclusion

The more of this guide you are able to complete, the more your small business community will be able to shorten the time of recovery post-disaster and be more prepared for future disasters. This is not a one time activity, but the created disaster plan requires regular review, at least annually. For example, as new small businesses join your community and new community leaders emerge, make sure to include them in the renewal process. By strengthening your small businesses through this resilience-building process, you are not only building resilience for your own community, but setting an example for other communities. By taking even just some of the steps in this guide, your community will help your small businesses survive and thrive in the aftermath of a disaster, and thus increase the likelihood that the overall community will recover and remain intact.
Appendix

1. Recovery to Resilience Checklist
2. Definitions
3. Case Studies
4. Additional Resources
5. Acknowledgements
6. Meeting Participants and Contributors
Recovery to Resilience Checklist:

1. Collect and use data and science to craft your plans
   - a. Create a list of the specific vulnerabilities and physical risks in your business community.
   - b. Plot the data you’ve identified on a map.
   - c. Develop a roster of your social infrastructure.

2. Develop and deploy a “Small Business Communication and Education Plan”
   - a. Include unexpected partners in resilience planning activities.
   - b. Communicate using social science insights.
   - c. Clearly educate businesses on how to get their finances in order.

3. Adopt pre-disaster policies in support of small business resilience
   - b. Create flexible financial policies.
   - c. Set training times to practice the plan.
   - d. Plan to appropriately allocate resources to small businesses.

4. Build the right relationships and increase social capital with the small businesses in your community
   - a. Create connections between local government, small businesses, and community-based organizations.
   - b. Foster connections inter-jurisdictionally to support small businesses recovery.
Definitions

Community: is “an integrated and inter-related set of systems and sectors; a system of systems.” 31

Community Risk: is the impacts of hazard, exposure, and fragility, mitigated by response and recovery.

Exposure: is the extent and density of the built environment, or where you are located in regards to where the hazard is going.

Fragility: is vulnerability, when applied to people. Applied to communities, it is structural weaknesses.

Hazard: is what the Earth does to us, including wildfires, warming climate, and dryness of the ground.

Recovery: is the ability to regain the “steady state” present before a disaster event.32

Resilience: is “the ability of a community exposed to hazards to prepare and plan for, resist, absorb, adapt to, transform, and recover from the effects of adverse events.”33

Response: is the planning to improve immediate response, such as search and rescue.

31 Ibid
Case Studies

**page 8**  Strengthening SoCal (2016) - [Southern California Disaster Risk Reduction Initiative](https://www.socalsafety.org/). Contact for follow-up: John Bwarie, Dr. Lucy Jones Center for Science and Society: john@stratiscopes.com

**page 11**  JPIA- [Wildfire Resources](https://www.pafia.org/). Contact for follow-up: Regional Risk Manager

**page 13**  The Warn Room - [The Warning Gallery](https://www.warnroom.com/). Contact for follow-up: Jeannette Sutton, College of Emergency Preparedness, Homeland Security, and Cybersecurity at the University at Albany, SUNY: jsutton@albany.edu


**page 18**  EconomicWorkforceRecoveryCommittee(2018 CampFire)- [LessonsLearnedpresentation National VOAD presentation](https://www.foh.org/). Contact for follow-up: Kristine ZuaZua, Camp Fire Collaborative: kfarrell@ncen.org

**page 19**  Pop-Up Business District in Plumas County (2021 Dixie Fire) - Dixie Fire Impact Report. Contact for follow-up: Sue Weber, Dixie Fire Collaborative: weber.susan@me.com

Additional Resources

PEPPER (Pre-Event Planning for Post-Event Recovery) Plans: In the creation of your disaster plans, you can use the formatting of PEPPER plans that focus on recovery. Find recommendations and information in the following articles.


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Report Contributors:

John Bwarie- Deputy Director, Dr. Lucy Jones Center for Science and Society

Isabela Lovelace- Project Coordinator, Dr. Lucy Jones Center for Science and Society

Lucy Jones- Founder & Chief Scientist, Dr. Lucy Jones Center for Science and Society

Jovanni Tricerri- Vice President, Regional Recovery & Partnerships, North Valley Community Foundation

Jeanette Sutton- Associate Professor and Director of Graduate Studies in the College of Emergency Preparedness, Homeland Security, and Cybersecurity, University at Albany, SUNY

Susan Cutter- Director, Hazards Vulnerability & Resilience Institute at University of South Carolina

Chara Espaldon- Report Designer, Stratiscope
Meeting Participants and Contributors

Special thanks to those who participated in a series of meetings to reveal needs and tactics for communities to support their small businesses.

Alexa Benson-Valavanis- President & CEO, North Valley Community Foundation

Tess Slaton- Program Coordinator, North Valley Community Foundation

Casey Hatcher- Deputy Chief Administrative Officer, Office of Emergency Services, Butte County

Abby Browning- Chief, Office of Private Sector/Nonprofit coordination, California Office of Emergency Services

Clay Kerchof- Associate Planner, Wildfire Resilience and Recovery, Governor’s Office of Planning and Research

Kathleen Kelly Janus- Senior Advisor on Social Innovation, Governor’s Office

Bennett Cummings- County Emergency Manager, Los Angeles County

Kevin Phillips, Town Manager, Town of Paradise

Julie Kachgal- Director, Global Crisis Management, Walt Disney Company

Justine Gonzalez- Vice President, Social Impact and Sustainability - Southern California Region, Wells Fargo

Kären Woodruff- Vice President, Community Relations, Wells Fargo

Tunua Thrash-Ntuk- President and CEO, The Center by Lendistry

Andrea Nunn- Senior Vice President, LA Area Chamber

Patty Hess- Executive Director, 3 CORE

Leslie Luke- Deputy Director, LA County Office of Emergency Management

Phillip Fligiel- Fire Deputy Chief, LAFD

Jimmie Cho- Senior Vice President, Gas Engineering and Distribution Operations, SoCalGas

Ashley Atkinson- Board President, American Planning Association, California Chapter

Aaron Singer- Executive Director, Paradise Stronger

Katherine Fox-Glassman- Lecturer in the Discipline of Psychology and Director of Undergraduate Studies, Columbia University

Yolanda Bundy- Environmental Sustainability Director/Building Official, City of Malibu

Adrian Covert- Senior Vice President of Public Policy, Bay Area Council

Ray Bonilla- Head of Global Business Continuity, Meta

Mike Castillo- Battalion Chief, LAFD

Daryl Osby- Chief, LA County Fire

Richard Fields- Deputy Chief, Operations West Bureau, LAFD

Ben Golombek- Executive Vice President and Chief of Staff for Policy, California Chamber of Commerce

Sherri Binder- Department of Emergency Management and Homeland Security

Kelly LoBianco- Executive Director, LA County Workforce Development Aging & Community Services

Ronnie Villanueva- Deputy Chief, LAFD

Maziar Movassaghi- Chief Disaster Recovery Officer, CA Department of Housing and Community Development
Meeting Participants and Contributors

Neena Master- Director of Emergency Management, SoCalGas
Carol Parks- Emergency Manager, LA City
Casey Hatcher- Deputy Chief Administrative Officer, Office of Emergency Services Butte County
Ben Raju- District Director, Los Angeles District Office, SBA
Sierra Grossman- Vice President and Co-Owner, Sierra Nevada Brewery
Keila Puello- Emergency Management Support Specialist, The Resiliency Initiative
Robert Moutrie- Policy Advocate, Cal Chamber
Linda Zorn- Executive Director of Economic and workforce Development, Butte College
Rico Gross- Captain, LAFD
Brandon Harrell- Senior Planner, Climate Resilience, Governor’s Office of Planning and Research
Aaron Gross- Chief Resilience Officer, Office of Mayor Garcetti
Sue Weber- Executive Director, Plumas Strong
Anne Wein- Operations Research Analyst, USGS
Keith Porter- Professional Engineer, Institute for Catastrophic Loss Reductions
Dale Cox- Project Manager, USGS
Roberto Barragan- Executive Director, CCEDA
Javiera Cartegena- Director of Government and Public Affairs, SCAG
Trevor Richmond- Deputy Fire Chief, LAFD
Patricia Utterback- NGO coordinator, CalOES
Katie Oran- Climate & Disaster Resilience Fellow, Northern California Grantmakers
Jeff Lusk- Deputy Director, SBA
Justin Dombrowski- Corporate Emergency Manager, Apple, Inc.
Kevin Johnson- Captain/Paramedic Resilience Officer, LAFD
Mike Daniel- Regional Director, California State University Fullerton
Andrea Davis- Founder, Resiliency Initiative
Bri Lentz- Emergency Management Support Specialist, The Resiliency Initiative
Coral Abbott- Community Resilience Centers Program Manager, California Strategic Growth Council
Kory Jackson- Captain/ Paramedic, LAFD
Mario Garcia- Captain II, LAFD
Alan Kwok- Northern California Grantmakers
Sahar Derakhshan- Post-Doc Fellow, UCLA Institute of the Environment & Sustainability
Hector Hernandez- Battalion Chief, LAFD
Skip Skivington- Business Continuity and Disaster Response, Kaiser Permanente
Emily Smith- Assistant Chief, CalFire
Jackie Koci Tamayo- Emergency Manager, Alameda County Courts
Stephen Carruth- Senior Advisor Mitigation Directorate, Federal Insurance and Mitigation Administration, FEMA