

Community Resilience Toolkit 2.0



Tool:
Climate Risk
and Job
Opportunity
Assessment

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Climate Risk and Job Opportunity Assessment

Rooted in Resilience Community Resilience Toolkit 2.0

Community Resilience Toolkit 2.0

The *Community Resilience Toolkit 2.0* brings out **your** best ideas for building resilience where you live.

The *Community Resilience Toolkit 2.0* is a collection of online tools to learn about the local impacts of the climate and energy crisis, and what you can do about them.

The *Toolkit* is designed for use by individuals, community groups, teachers, and municipalities.

To view and download free copies of all the tools in the *Community Resilience Toolkit 2.0*, go to www.rootedinresilience.org/toolkit.

Rooted in Resilience's mission is to inspire and support **you** in building equitable, resilient communities.

Support this work and become a member of Rooted in Resilience!

Climate Risk and Job Opportunity Assessment

What this Tool Does

The Climate Risk and Job Opportunity Assessment helps you identify:

- How the climate and energy crisis will impact where you live
- Actions your community can take to prepare
- Jobs and business opportunities these actions could create

Who Should Use this Tool

- Individuals seeking jobs or a career change
- Businesses developing new markets
- Community groups or planners creating climate resilience plans

How to Use this Tool

The impact information sheets offer examples to spur your thinking about what could happen in your area. As you read through them, circle the risk factors, impacts, needs, and jobs that most relate to you. Then, based on your knowledge of where you live, fill out the Planning At-A-Glance or Business Concept worksheets with ideas you think will work locally.

Groups: Hold a fun informal contest for the best resilience plan or business concept. First nominate a judge, and identify the evaluation criteria for the contest (for example, "Most Practical"). Then divide the group into pairs. Give each pair one topic on which to focus. The pairs fill out either a Planning At-A-Glance or a Business Concept worksheet on the specified impact, and share their results with the whole group. Greet each idea with wild applause, and announce the winner.

Floods and Sea Level Rise: Heavy rains flood rivers and creeks; melting ice caps raise tide and storm surge levels.

<p><i>Risk factors</i></p>	<p>Your community is located near a river, creek, bay, ocean, delta, or below a dam. Your home or workplace is in a floodplain or an area with poor storm drainage. Your community's storm drainage and flood control infrastructure is outdated.</p>		
<p>Local Impacts</p>	<p>Examples of Adaptation Needs</p>	<p>Potential Jobs Created</p>	<p>Potential Clients</p>
<p><i>More severe flooding and higher tides and storm surges put more buildings at risk. Families and businesses may lose homes and investments.</i></p>	<ul style="list-style-type: none"> • Upgrade storm drainage infrastructure for heavier rains. 	<ul style="list-style-type: none"> • Construction trades • Civil engineers 	<p>Local government</p>
	<ul style="list-style-type: none"> • Change public zoning laws to prevent new development in low coastal zones or floodplains. 	<ul style="list-style-type: none"> • Urban planners • Map makers 	<p>Local government</p>
	<ul style="list-style-type: none"> • Raise insurance rates for coastal or floodplain property to reflect risk. 	<ul style="list-style-type: none"> • Insurance adjustors 	<p>Insurance industry</p>
	<ul style="list-style-type: none"> • Aid relocation of low and middle income families losing primary residence. Build green affordable housing in safer locations. 	<ul style="list-style-type: none"> • Construction trades • Real estate agents • Green architects • Urban planners 	<p>Local or state government, real estate industry, developers, families</p>
<p><i>Flooding of public infrastructure such as roads, railway, and airports impacts local economy.</i></p>	<ul style="list-style-type: none"> • Restore wetlands and watersheds to protect infrastructure naturally and provide wildlife habitat. 	<ul style="list-style-type: none"> • Workers planting trees and wetlands • Hydrologists • Wildlife biologists 	<p>Local or state government, private land owners</p>
	<ul style="list-style-type: none"> • Construct sea walls or levies to protect infrastructure, or move infrastructure to a safer location. 	<ul style="list-style-type: none"> • Construction trades • Urban planners • Civil engineers 	<p>Local or state government</p>

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Heat Waves: Unprecedented high temperatures endanger residents' and workers' health and safety.

<i>Risk factors:</i>			
Your home or workplace gets very hot or cold.			
You have health conditions such as asthma or heart disease.			
You have difficulty traveling to a cooler location due to limited mobility.			
Your job requires working outside, and you have little control over your work conditions.			
Local Impacts	Examples of Adaptation Needs	Potential Jobs Created	Potential Clients
<i>Residents suffer from heat waves, especially those in poor health. Heat waves can make air quality worse, impacting asthma patients.</i>	❖ Make cities cooler by planting trees to shade buildings, sidewalks, and streets. Design and equip buildings with energy efficient cooling.	<ul style="list-style-type: none"> • Tree growing, planting, and care • Energy efficiency services 	Families, building owners, local government
	❖ Designate accessible buildings as cooling centers open to all during hot hours. Equip with air conditioning and filtration, healthy food options, and transportation.	<ul style="list-style-type: none"> • Air conditioning and filtration installers • Mobile food providers • Transit workers 	Public health agencies and local government
	❖ On hot days with poor air quality enforce special clean air controls and fund free public transit, especially to cooling centers.	<ul style="list-style-type: none"> • Air quality specialists • Transit workers 	Public health and transit agencies
<i>Residents with limited mobility may not be able to travel to a cooling center.</i>	❖ Identify at-risk households. Install energy efficient air conditioning, and a system to check in on residents during heat waves.	<ul style="list-style-type: none"> • Public health outreach • Energy efficiency services 	Families, public health and senior agencies, neighborhood groups
<i>People working outside (e.g. farm workers, construction, road crews) may be required to do so under unsafe heat conditions.</i>	❖ Work with unions, industry, and OSHA to adjust labor regulations to strengthen safeguards for at-risk workers. Increase enforcement.	<ul style="list-style-type: none"> • Labor organizers • Occupational safety enforcement • Labor lawyers 	Unions, industry, OSHA, labor relations agencies

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Drought: Unprecedented droughts can raise food and water prices, impact farm economies, and increase wildfires.

<i>Risk factors:</i>	<p>You live in a dry climate. Your household sometimes has trouble paying for healthy food or water bills. Your community relies on water supplies (wells, creeks, springs) that could run dry. Your community does not own its water supply. Your job or local economy relies on agriculture.</p>		
Local Impacts	Examples of Adaptation Needs	Potential Jobs Created	Potential Clients
<i>Drought and crop failure in any major agricultural region of the world may raise global food prices, as well as your food bill.</i>	❖ Guarantee access to healthy food for all residents regardless of income or inflation in food prices.	<ul style="list-style-type: none"> • Community food security specialists • Urban garden installers 	Households, public health agencies, local government, food banks
<i>Local and regional droughts reduce or endanger public supplies and ecosystems. Increased water rates can cause economic hardship and conflict over water rights.</i>	❖ Reduce water use and install water efficiency and recycling measures. Adjust rates so those who use more water pay more. Guarantee minimum supply for low-income users. Diversify water supplies.	<ul style="list-style-type: none"> • Water efficiency specialists • Plumbers • Low-water landscapers 	Households and businesses, water districts, local government
<i>Dry conditions increase risk of forest fires, impacting air quality for miles around.</i>	❖ Clear defensible space around rural homes. Invest in fire fighting capacity.	<ul style="list-style-type: none"> • Fire fighters • Foresters • Landscapers 	Households, fire districts, local government
<i>Local droughts cause economic hardship for farmers, farm workers, and regional agricultural economies.</i>	❖ Install water efficiency measures in agriculture. ❖ Ensure drought “disaster zone” economic relief reaches farm worker families.	<ul style="list-style-type: none"> • Specialists in water efficient irrigation • Irrigation installers • Bilingual disaster relief workers 	Farms and ranches, rural development agencies Emergency response and community services agencies

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Inflation: Combination of ecological and economic shocks raises prices of food, oil, and other necessities.

<i>Risk factors:</i>			
<p>Your income is low, especially in a region with a high cost of living. You live on a fixed income, without much financial cushion (e.g. seniors). Transportation is a major expense for your family or your community. You work in a luxury industry that relies on cheap oil (e.g. airlines, tourism).</p>			
Potential Impacts	Resulting Local Needs	Examples of Jobs	Potential Clients
<i>Rising oil prices makes driving more expensive.</i>	❖ Support affordable, fast, and effective public transportation, rideshares, walking, biking, and commuter shuttles.	<ul style="list-style-type: none"> • Transit operators • Bus/train manufacture • Bike shops and repair • Construction of sidewalks, bike paths • Shuttle services 	Regional transit agencies, general public, local government, employers, schools
	❖ Construct affordable housing near transit, jobs, and services.	<ul style="list-style-type: none"> • Construction trades • Green architects 	Developers, housing organizations
<i>Inflation results in economic contraction as residents buy fewer goods, workers get laid off, tax revenues decrease, and public services get cut.</i>	❖ Guarantee human rights of food, water, housing, education, health care, social services, and work opportunities to all residents.	<ul style="list-style-type: none"> • Community food security specialists • Construction trades • Social services 	Public health agencies, schools, hospitals, local government
	❖ Invest in job re-training, adult education, and new business support services.	<ul style="list-style-type: none"> • Job training • Small business support 	Schools, community colleges, SBA
	❖ Adjust tax rates on wealthiest residents to ensure social services are fully funded.	<ul style="list-style-type: none"> • Nurses and doctors • Teachers • Social workers 	Local, state, and federal government

Community Resilience and Jobs Planning At-A-Glance

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What impacts are most likely to be felt in your community?	Who is most at risk in your community from these impacts?	What actions could be taken in your community to reduce these risks?	Who would be responsible for taking these actions?	What jobs could this action create?
<i>Example: Flooding in heavy rains</i>	<i>Residents and businesses near river, especially low-income</i>	<i>Upgrade flood control measures</i>	<i>City and county government</i>	<i>Backhoe operators, tree planters, storm sewer repair workers</i>
1.				
2.				
3.				
4.				

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Climate Resilience Business Concept Worksheet

1. Impact addressed:

2. How your business addresses this impact:

3. Specific goods and services you provide:

4. Your customers:

5. Where your customers get the money to pay: