

# RISK REDUCTION FOR SMALL BUSINESS RESILIENCY IN RHODE ISLAND

CONNECTICUT ASSOCIATION OF  
FLOOD MANAGERS CONFERENCE  
October 30, 2019

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**90% of small businesses fail  
within 2 years of being impacted  
by a disaster**



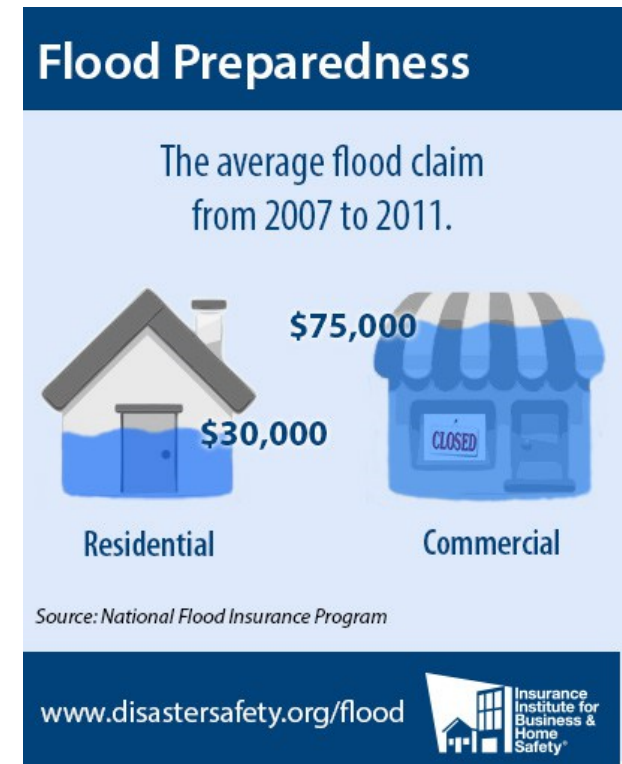


## In Rhode Island:

- **99%** of businesses are “small”
- Small businesses employ **53%** of private workforce

## Intended Outcomes

- Create tailored risk prevention guides with relevant, actionable risk reduction measures
- Promote understating of how to prepare for and minimize potential future losses from extreme weather events.
- Engage business owners in the statewide climate adaptation strategy.
- Educate municipal decision makers on how local business community can become more resilient to natural disasters.
- Identify recommendations for state and local agencies to support small business resilience.



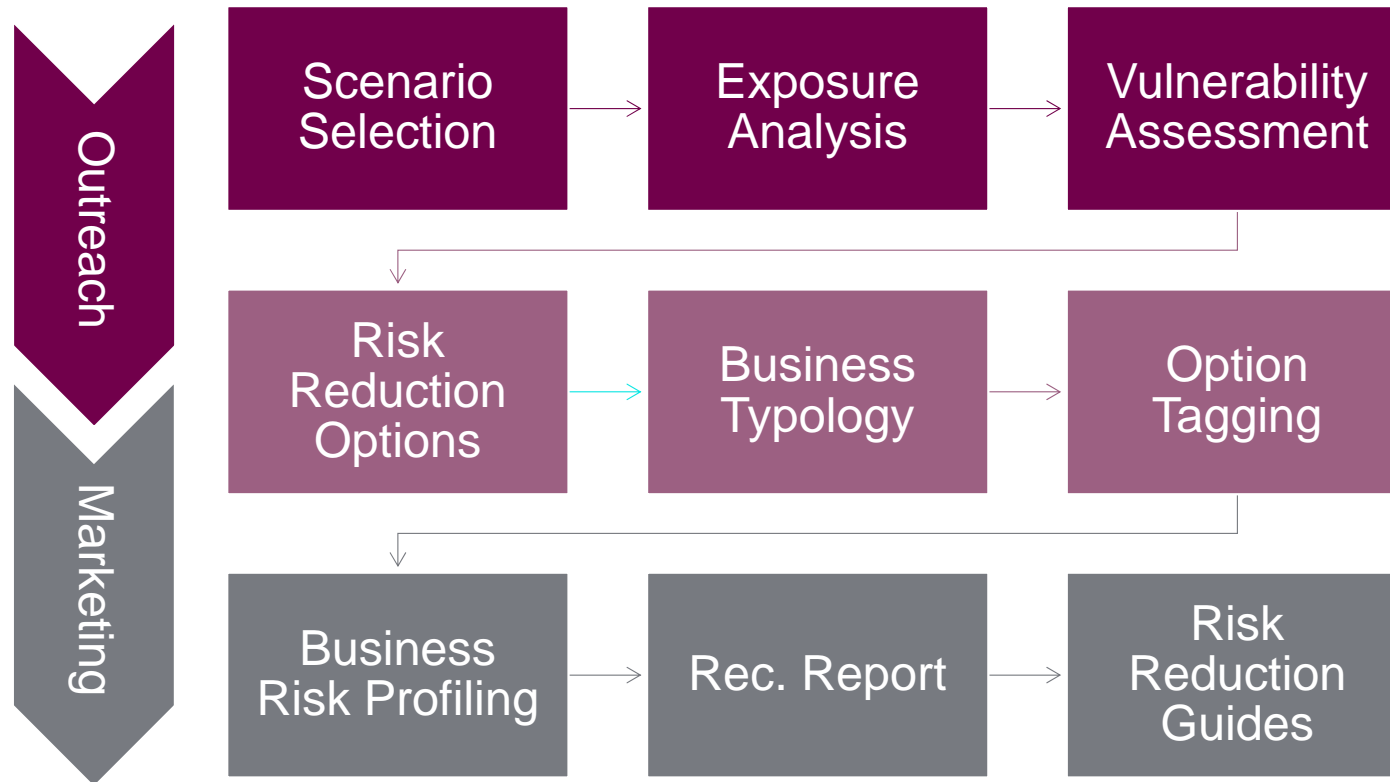
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## Project Team

- RI Division of Statewide Planning
- Steering Committee
- RPS
- Milone & MacBroom Inc. (MMI)
- URI Coastal Resources Center (CRC)
- Climate Action Business Assoc. (CABA)
- RI Small Business Dev. Center (RISBDC)
- Spaulding Env. Assoc.



# Project Tasks





# Outreach

Are you prepared for the impacts of extreme weather events?



Experience shows that 40% of small businesses affected by disaster never reopen, and another 25% that do reopen, fail.

## We Want to Help YOU!

By collecting your input, we can help you prepare.

**COME TO US!** Participate in a Focus Group to provide input on improving small business resiliency in Rhode Island.

**WE'LL COME TO YOU!** Allow a member of the Project Team to come to your business to address your specific vulnerabilities.

**REVIEW OUR WORK!** Review the draft Risk Reduction Guides and provide us feedback on what we missed.

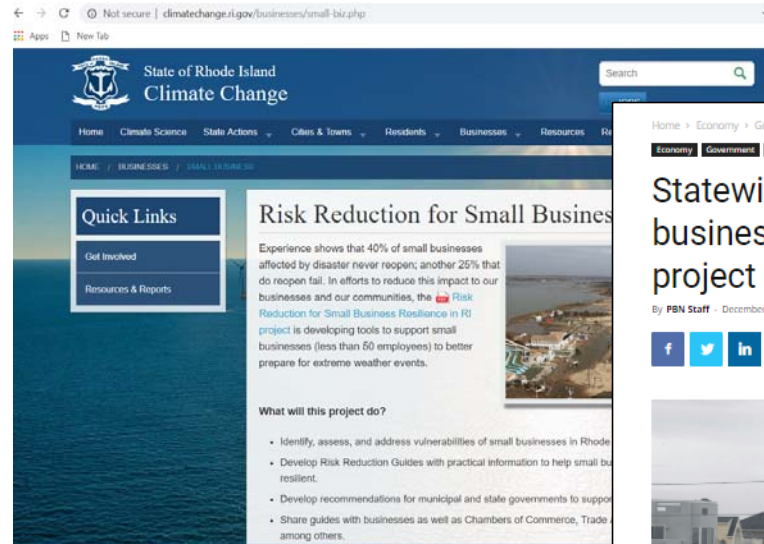
## For More Information:

**Visit:** <http://www.climatechange.ri.gov/smallbiz>

**Email:** Project Manager Gabrielle.McGrath@rpsgroup.com

Risk Reduction for Small Business Resiliency:

A Project to Prepare Rhode Island Small Businesses for Extreme Weather Events



Home > Economy > Government > Statewide Planning to interview small businesses for weather-resiliency project

Economy Government Natural Resources

## Statewide Planning to interview small businesses for weather-resiliency project

By PBN Staff - December 5, 2018 11:51 am



THE R.I. DIVISION of Statewide Planning is leading a project to support small businesses' ability to survive extreme weather events. Above, a machine clears sand off Atlantic Avenue in Westerly after Hurricane Sandy. / PBN FILE PHOTO/BRIAN McDONALD

PROVIDENCE – The R.I. Division of Statewide Planning is launching a project to help small businesses' extreme weather event and climate change resiliency, the R.I. Department of Administration announced Wednesday. As a pilot to the program, the division is seeking to interview local businesses in the Woonasquatucket Watershed, companies in Bristol, Newport and Warren, as...



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## Outreach

- 10 Key Informant Interviews
- 4 Focus Groups held (3 cancelled)
- 3 Additional Information-gathering Meetings
- Conducted “on the ground” outreach directly with businesses

**43 Business Owners**  
**40 Professional Group Members**  
**83 Total Participants**



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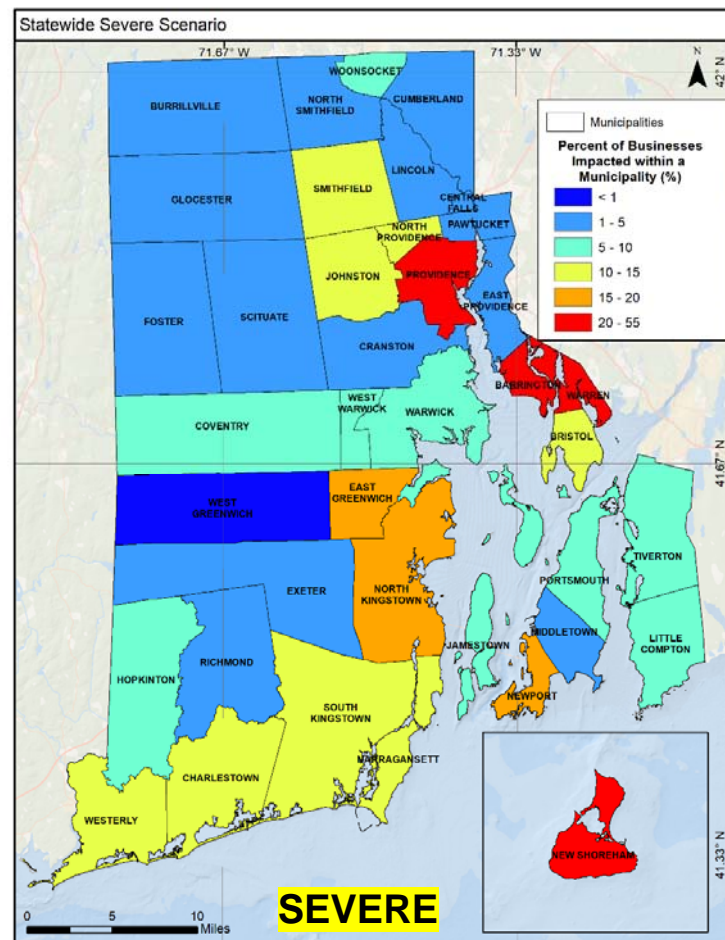
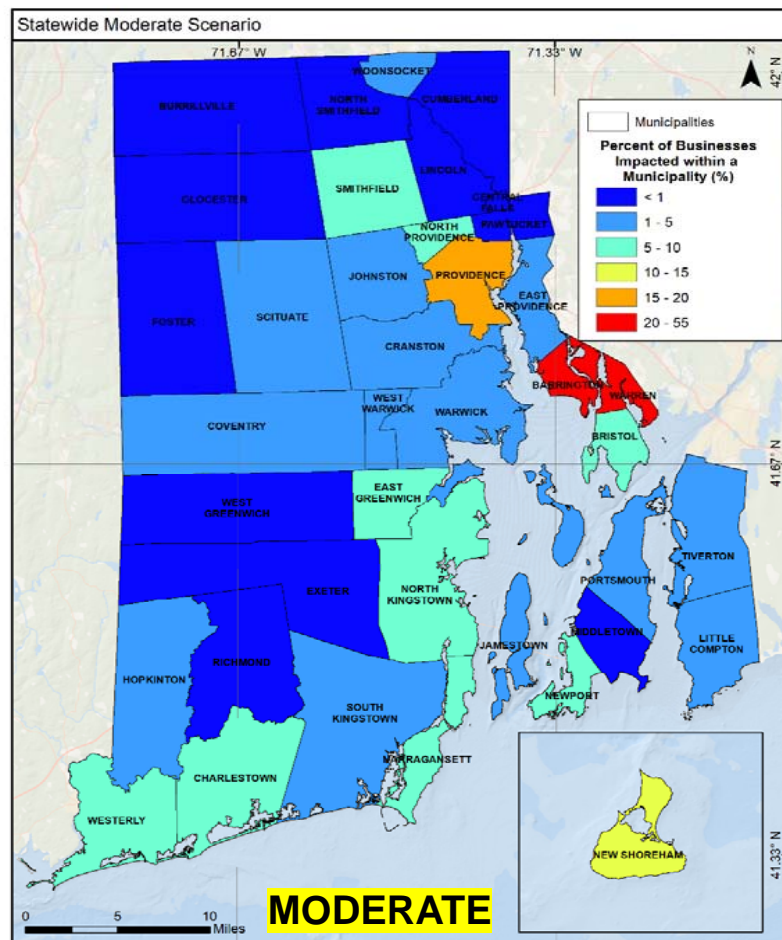
## Scenarios Selected

Event Type	Coastal Flooding	Inland Flooding
Moderate	25-Year Water Level	100-Year Flood
Severe	100-Year Water Level + 2 Feet of Sea Level Rise	100-Year Flood + 3 Feet of Freeboard

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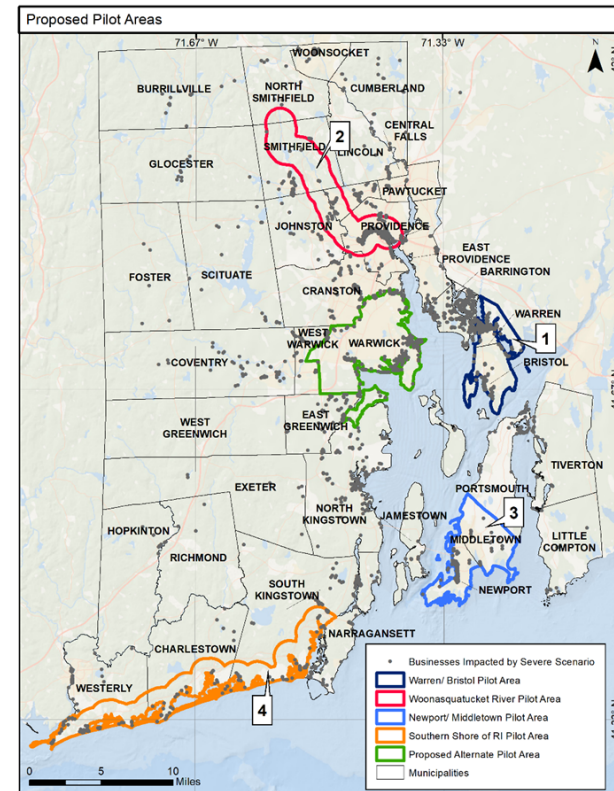
## Exposure Analysis Methods

- Started with the Rhode Island Secretary of State Business Database
- Identified business physical locations from E911 data
- Assessed impacted businesses for each scenario
- Looked at inland and coastal, moderate and severe flooding scenarios separately and combined
- Considered percent of businesses impacted by municipality



# Pilot Area Selection Considerations

- Most impacted areas
- Must be a community tied to a disaster (i.e. Sandy, Irene, Nemo)
- Other considerations:
  - A community “champion”
  - Existing community activities
  - Support of local business community
  - Where businesses would be receptive



# Vulnerability Analysis

Pilot Area	Completed
Newport / Middletown	25
South Coast	23
Warren / Bristol	25
Woonasquatucket River Corridor	26
* Warwick	3
<b>TOTAL</b>	<b>102</b>



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## Vulnerability Analysis

- Extensive work effort to accomplish 102 assessments
- Types of businesses assessed were not as diverse as planned
- Storms have impacted multiple facets of businesses including access to property and clients, lost time while making claims, and operation interruptions
- Business owners are generally aware of risks and work to increase resiliency to the best of their ability
- Despite this, businesses are typically self-reliant and believe they could sustain a temporary shut-down



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# Risk Reduction Options

## Operational/Continuity

- Multiple locations available
- Partial operations
- Inventory management or sharing
- Work from home
- Business continuity plan
- Multiple supply chains/vendors
- Backup electronic data

## Logistical

- Flexible rental payments
- Business interruption insurance
- Purchase flood insurance
- Review coverage, store copies of insurance policies, dialog with agents

## Operational/Emergency Preparedness

- Sandbags
- Plywood for windows
- Emergency plan w/ communications strategy
- Staff contact tree/list/email
- Maintain supplies for staff
- Trim and maintain trees and tree limbs
- Install and use generator
- Consider microgrids
- Programming of elevators

## Structural Improvements/Wind

- Hurricane Glass for Windows
- Increase code for wind (“code plus”)

# Risk Reduction Options – Structural / Operational / Logistical

**Category: Structural Improvements / Wind**

**Option Name: Hurricane Glass for Windows**

**Description**

Hurricane glass provides increased tensile strength, which guards against penetration by flying debris and winds. Hurricane glass also reduces the need for plywood installation when a storm approaches, giving home and business owners more time to prepare or evacuate.

**Costs**

\$\$\$	\$	Nominal
	\$\$	>\$1,000
	\$\$\$	>\$10,000
	\$\$\$\$	>\$100,000



**Staffing**

Additional staff not needed; existing staff will coordinate contractors

**Space**

Additional space not needed

**Permitting**

Local building permit

**Applicable Businesses**  
All types

**Category: Operational / Continuity**


**Option Name: Back Up Electronic Data**

**Description**

Companies should frequently back up electronic data to ensure that critical information is not stored in a single location. A cloud service can be employed which automatically backs up information to a central offsite server. Additionally, IT employees can use portable hard drives to back up company files if there is an impending emergency situation.

**Costs**

\$ to	\$	Nominal
\$	\$\$	>\$1,000
	\$\$\$	>\$10,000
	\$\$\$\$	>\$100,000



**Staffing**

An IT professional may be needed to ensure that regular backups of electronic data take place.

**Space**

Additional space not needed

**Permitting**

Not applicable

**Applicable Businesses**  
All types

# Risk Reduction Guides



# Risk Reduction Guides

- Important Definitions
- Identify Your Strengths and Vulnerabilities
  - Includes graphic depicting potential vulnerabilities and strengths
  - Checklist with business specific elements
- Risk Reduction Strategies
- Insurance & Flood Insurance Questions
- Additional Resources

### SOME THINGS TO KNOW

This guide is targeted at businesses that are involved in all aspects of construction and building.

- This guide is meant to suggest actions to reduce risk to your business. However, the success of these strategies will be site dependent, and cannot be guaranteed.
- Each business is different; always consult with your local building official before starting a construction project.
- In most communities, if a project costs 50% or more of the value of the structure, "substantial improvement" requirements in the building code are triggered. This requires the property to be brought into compliance with the most up-to-date municipal floodplain management code.

### IMPORTANT DEFINITIONS

**Natural Hazards** = Extreme weather events that can cause damage. Examples include hurricanes, floods, blizzards, or severe wind.

**Business Features** = The many parts that make a business run. By looking at how a hazard affects each feature, you can take focused steps to reduce risk.

**Vulnerability** = Business features that make your business more likely to be impacted by a natural hazard.

**Risk** = The level of exposure that a business has to a certain hazard. Higher vulnerability and a frequent natural hazard create higher risk.

**Resilience** = The ability of a business to "bounce back" after a severe event. It is how much individuals, institutions, and businesses can survive, adapt, and grow no matter the weather events they experience.

### IDENTIFY VULNERABILITIES AND STRENGTHS

Vulnerabilities	Strengths
1. Is access essential for customers, employees, others? How often is it blocked?	ACCESS Multiple routes of access Can operate remotely or offline Easy access to foot (good sidewalks)
2. How are documents stored? Is information management a specific service?	DOCUMENTS AND RECORDS Hard copies Electronic copies Stored on "the cloud" and/or offline
3. How important is the site to operations? How vulnerable is it to damage?	BUSINESS SITE Near coast or river, in mapped flood zone Located uphill, out of flood areas Structural protection in place on site
4. Can employees work remotely? Do you rely on third party vendors?	EMPLOYEES AND VENDORS Staff do not live locally Staff may be exposed to natural hazards Rely on third-parties Staff are trained in hazard response Redundancy in supply chain Staff/vendor communication protocol
5. Where are the items stored? Are any hazardous?	INVENTORY & STORAGE Unsecured, outdoor storage Chemicals or hazardous materials Fuel stored on site Outdoor storage is secure Storage elevated Minimal storage
6. Can you operate without utilities? Where are utilities and equipment located?	SITE UTILITIES & SPECIALIZED EQUIPMENT Temporary power supply to site Power lines located near trees Site experiences frequent utility outages Permanent, below ground utilities Backup power (batteries, generators) & fuel Served by municipal water & sewer
7. Do you have insurance? Does it cover contents, interruption, or natural disasters?	INSURANCE Standard insurance policy Not sure about insurance policy Specialized disaster insurance Business interruption & contents

### SELECT RISK REDUCTION STRATEGIES

Strategy	Required Investment
1. Access: Develop abilities to continue operations and collaborate without site access. Relocate to a site to prepare ready-made components.	Low
2. Documents & Records: Protect Documents and Records. Back up records on the cloud. This will protect them from damage and make them accessible remotely.	Low
3. Site: Store Mitigation Materials. Store items on-site such as sand bags to reduce flooding. Use sand placed to protect windows, or sand for snow and ice.	Medium
4. Employees & Vendors: Install Flood Walls. Construct flood walls to protect an entire site from flooding. Flood walls may not be permitted in some riverine or coastal flood zones.	High
5. Third-Party Vendor Reliance: Identify backup vendors in case a hazard prevents third-party services from operating.	Low

Staff Time Required: No staff time needed, Over time needed, Within normal operations, Additional staff or help.

Relative Cost: \$0, \$100, \$500, \$1000, \$5000, \$10000.

Space Required: Minimal space needed, Additional space needed, Find space on site, Buy or rent more space.

### CONSIDER KEY BUSINESS FEATURES

1. DOCUMENTS & RECORDS: Documents, if or records that are important to your business can be vulnerable to damage or loss during a natural disaster event.

2. ACCESS: A construction site may become inaccessible due to blocked roads, damaged infrastructure, and limited site access.

3. BUSINESS SITE: A business site may be vulnerable to damage or loss during a natural disaster event.

4. EMPLOYEES & VENDORS: Employees and vendors may be vulnerable to damage or loss during a natural disaster event.

5. INVENTORY & STORAGE: Inventory and storage may be vulnerable to damage or loss during a natural disaster event.

6. SITE UTILITIES & SPECIALIZED EQUIPMENT: Site utilities and specialized equipment may be vulnerable to damage or loss during a natural disaster event.

7. INSURANCE: Insurance may be vulnerable to damage or loss during a natural disaster event.

### CHOOSING INSURANCE

A business is never completely safe from hazards. Insurance helps to protect the time and money you invest in your business against the worst-case scenarios.

Your insurance agent can provide detailed answers to these questions specific to your business.

**What is covered by my business insurance policies?**  
A standard insurance policy may not cover important situations, like damages caused by floods or losses from business interruption. Talk with your agent about different situations that concern you to see if you're protected.

**I rent my workspace. What is covered by my landlord's insurance?**  
A landlord's insurance policy may or may not cover losses incurred by tenants. Ask for a copy of the insurance policy and bring it to your own agent to review.

**Does my standard policy cover business interruption?**  
You may lose business after a storm if power goes out, if roads are blocked, or if you need to close for repairs. Check with your agent whether lost business is covered or you should purchase a rider to increase coverage.

**What about liability and automobile insurance?**  
Liability and auto insurance are separate from business insurance and flood insurance. Talk to your agent about other policies you may need and what they cover. For example, auto insurance may partially cover your vehicle(s) for hazard events like severe storms.

**What is a hurricane deductible?**  
Some policies include a separate hurricane deductible. Because hurricanes are rare, you pay less monthly. However, if a hurricane does hit, you will pay more before insurance kicks in. A storm must be hurricane-force when it hits Rhode Island for hurricane deductibles to apply. You may have other weather-related deductibles (for example wind or hail). Check with your insurance agent to discuss what deductibles you may have and how they apply to other weather-related events.

**How do I make filing a claim easier?**  
Have insurance information and current inventory and equipment lists on-hand. Take photos or videos of your business site and inventory now, BEFORE an event occurs. Then, take photographs/videos of any damage before clean-up or repairs. DO NOT make permanent repairs until your insurance company inspects the property. Save all receipts, including those from any temporary repairs.

### USEFUL RESOURCES

**Federal Government**

**U.S. Small Business Administration**  
www.sba.gov/funding-programs/disaster-assistance RI District Office (401) 528-4561  
Provides low-interest loans to help businesses recover from declared disasters.

**FEMA**  
www.fema.gov/small-businesses Or www.ready.gov/business  
Provides resources & information to help businesses prepare for disasters. Subsidized insurance, available to businesses through most insurance agencies.

**State Government**

**Rhode Island Commerce Corporation**  
www.ricommerce.com (401) 278-9100  
Hosts a Small Business Hotline, where business owners can ask questions and get support for a wide array of issues.

**Rhode Island Department of Emergency Management Agency (RIEMA)**  
www.riema.gov/resources/business/ Emergency & After Hours: (401) 222-3070  
Organizes emergency response efforts at a state level. RIEMA has programs in preparedness, mitigation, response and recovery.

**Rhode Island Builders Association (RIBA)**  
www.ribuilders.org (401) 438-7400  
A not-for-profit organization that works to provide support to those in the building industry by providing educational opportunities, and enhancing relationships.

**Department of Business Regulation**  
www.dbrs.ri.gov/divisions/insurance/ Online source for answers to insurance questions and for insurance related inquiries.

**STORMTOOLS**  
www.hurricanestormtools/ An interactive tool to display storm inundation with and without sea level rise scenarios.

**RI Coastal Resources Management Council - Coastal Hazard Application**  
www.crmc.gov/coastal-hazard-app/ Online viewer and worksheet to identify a location's level of coastal hazard.

**Local Government**

Your local institutions, organizations, and utilities are often the best places to turn. Identify key staff and contact information:

**Municipal Emergency Management Agency**  
Fire Department (non-emergency)  
Floodplain Coordinator  
Building Official  
Chamber of Commerce  
Utility Company (ex. gas or electric)

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## Marketing and Evaluation

**Face-to-face:** Meetings, Conferences, Door-to-door

**Emails:** Vulnerability Assessment businesses, Chambers, Associations, Organizations

- ❖ Website with survey
- ❖ Email directly to businesses

**Social Media:** URI, RPS, Chambers posted on Facebook, Twitter, LinkedIn

### Incentives

- ❖ \$500 ACE Hardware Gift card
- ❖ 1-page targeted risk reduction recommendations



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## Marketing and Evaluation Outreach

**52** individuals reviewed the guides.

**57** evaluations were received - some evaluated more than 1 guide

	# of Evaluators
All/ General	3
Construction	6
Hospitality	3
Manufacturing	4
Real Estate/Property Management	8
Restaurant/Food	4
Retail	11
Service Provider	6
Water-Dependent	12
Total	57

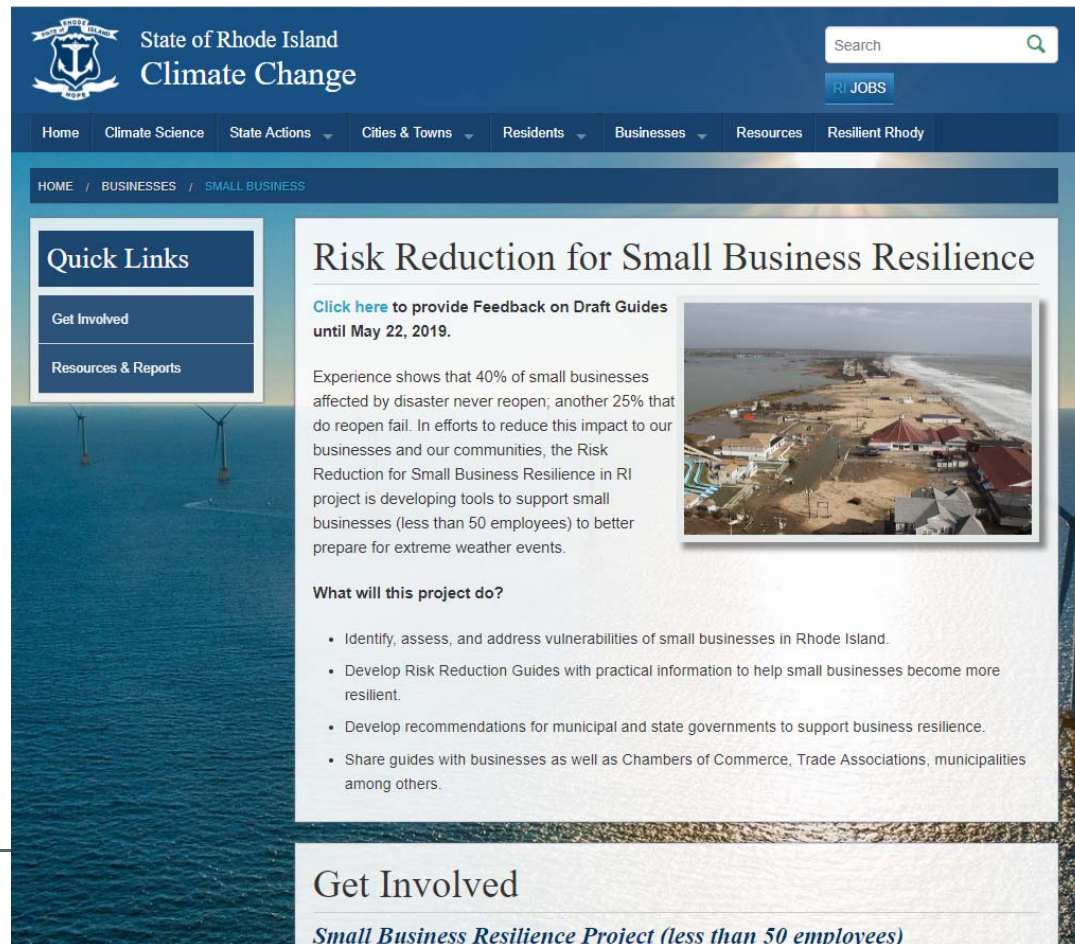


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## What did the Evaluators say?

	Yes	No	Blank/Other
Does this booklet cover all the main points related to small business adaptation?	31 (60%)	10	11
Would you recommend this as an information source for others?	39 (75%)	2	11
Did you learn anything new by reading this booklet?	34 (65%)	7	11

# Distribution of Guides



The screenshot shows the State of Rhode Island Climate Change website. The header includes the state seal, the text 'State of Rhode Island Climate Change', a search bar, and a 'RI JOBS' button. A navigation menu contains links for Home, Climate Science, State Actions, Cities & Towns, Residents, Businesses, Resources, and Resilient Rhody. Below the menu, a breadcrumb trail reads 'HOME / BUSINESSES / SMALL BUSINESS'. On the left, a 'Quick Links' sidebar contains 'Get Involved' and 'Resources & Reports'. The main content area is titled 'Risk Reduction for Small Business Resilience' and includes a call to action to provide feedback on draft guides until May 22, 2019. It features a paragraph about the project's goals, a list of objectives, and an aerial photo of a coastal town. A 'Get Involved' section at the bottom highlights the 'Small Business Resilience Project (less than 50 employees)'.

State of Rhode Island  
Climate Change

Search

RI JOBS

Home Climate Science State Actions Cities & Towns Residents Businesses Resources Resilient Rhody

HOME / BUSINESSES / SMALL BUSINESS

Quick Links


Get Involved

Resources & Reports

## Risk Reduction for Small Business Resilience

[Click here to provide Feedback on Draft Guides until May 22, 2019.](#)

Experience shows that 40% of small businesses affected by disaster never reopen; another 25% that do reopen fail. In efforts to reduce this impact to our businesses and our communities, the Risk Reduction for Small Business Resilience in RI project is developing tools to support small businesses (less than 50 employees) to better prepare for extreme weather events.



**What will this project do?**

- Identify, assess, and address vulnerabilities of small businesses in Rhode Island.
- Develop Risk Reduction Guides with practical information to help small businesses become more resilient.
- Develop recommendations for municipal and state governments to support business resilience.
- Share guides with businesses as well as Chambers of Commerce, Trade Associations, municipalities among others.

## Get Involved

*Small Business Resilience Project (less than 50 employees)*

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## How Can the Guides be Used?

- Small business development or loan programs
- Proactive planning
- Training opportunities
- Resources for Associations, Chambers, etc.
- Coordinating with Municipal Planning and Economic Development programs
- Resource and outreach through Commerce RI – Small Biz Hotline

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# Resiliency Recommendations – State Agencies

- Transition project to State agencies
- Short-term, interest-free loans
- Training on Substantial Damage and Substantial Improvement
- Training on Preparedness Initiatives
- Assistance with Disaster Plans
- Small Business Resilience Audits
- Expedite Permitting
- Outreach about variances for historical structures
- Guidance for historic buildings
- Insurance Information
- Streamline confidentiality issues
- Training for entities to act as small business liaisons
- Work with utilities to strengthen grid
- Implement use of microgrids



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## Questions?

Future Comments, Questions, or Concerns?

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