RISK REDUCTION FOR SMALL BUSINESS
RESILIENCY IN RHODE ISLAND

CONNECTICUT ASSOCIATION OF
FLOOD MANAGERS CONFERENCE
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Funding for this project was provided by the Office of Housing and Community Development - Rhode Island and the U.S. Department of Housing and Urban Development.
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.

Flood Preparedness

The average flood claim from 2007 to 2011.

- Residential: $30,000
- Commercial: $75,000

Source: National Flood Insurance Program

www.disastersafety.org/flood
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

- Scenario Selection → Exposure Analysis → Vulnerability Assessment
  - Risk Reduction Options
  - Business Typology
  - Option Tagging


Outreach

Marketing
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

Statewide Planning to interview small businesses for weather-resiliency project

R.I. small businesses asked to take part in project to reduce their risk in storms

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Statewide Planning to interview small businesses for weather-resiliency project

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Statewide Planning is looking for small businesses to support its mission to help small businesses prepare for extreme weather events. The project is focusing on small businesses that have experienced extreme weather events in the past. The project will ask businesses to provide feedback on their experiences and to identify areas for improvement in preparedness. The project will provide resources and guidance to help businesses reduce their risk in the future.
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
### Scenarios Selected

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Coastal Flooding</th>
<th>Inland Flooding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>25-Year Water Level</td>
<td>100-Year Flood</td>
</tr>
<tr>
<td>Severe</td>
<td>100-Year Water Level + 2 Feet of Sea Level Rise</td>
<td>100-Year Flood + 3 Feet of Freeboard</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Pilot Area</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newport / Middletown</td>
<td>25</td>
</tr>
<tr>
<td>South Coast</td>
<td>23</td>
</tr>
<tr>
<td>Warren / Bristol</td>
<td>25</td>
</tr>
<tr>
<td>Woonasquatucket River Corridor</td>
<td>26</td>
</tr>
<tr>
<td>* Warwick</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>102</strong></td>
</tr>
</tbody>
</table>
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
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

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

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

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 $2
- $$$ to $$$
- $$$$>10,000
- $$$$$>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

- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for CONSTRUCTION SERVICES
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for WATER DEPENDENT BUSINESSES
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for RESTAURANTS & FOOD SERVICE
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for MANUFACTURING
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for SERVICE PROVIDERS
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for RETAIL BUSINESSES
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for REAL ESTATE & PROPERTY MANAGEMENT
- Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island
  - A Guide for LODGING & ACCOMMODATIONS
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
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
## Marketing and Evaluation Outreach

- **52** individuals reviewed the guides.

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

<table>
<thead>
<tr>
<th>Category</th>
<th># of Evaluators</th>
</tr>
</thead>
<tbody>
<tr>
<td>All/General</td>
<td>3</td>
</tr>
<tr>
<td>Construction</td>
<td>6</td>
</tr>
<tr>
<td>Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>Real Estate/Property Management</td>
<td>8</td>
</tr>
<tr>
<td>Restaurant/Food</td>
<td>4</td>
</tr>
<tr>
<td>Retail</td>
<td>11</td>
</tr>
<tr>
<td>Service Provider</td>
<td>6</td>
</tr>
<tr>
<td>Water-Dependent</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
</tr>
</tbody>
</table>
### What did the Evaluators say?

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Blank/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does this booklet cover all the main points related to small business adaptation?</td>
<td>31</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(60%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would you recommend this as an information source for others?</td>
<td>39</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(75%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you learn anything new by reading this booklet?</td>
<td>34</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(65%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Distribution of Guides

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)
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
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
Roberta Groch
Assistant Chief
Rhode Island Division of Statewide Planning
David Murphy
Manager of Water Resources Planning
Milone and MacBroom, Inc. (MMI)
Questions?

Future Comments, Questions, or Concerns?
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Email: roberta.groch@doa.ri.gov