



welcome



# WELCOME



## *Goals for Tonight:*

1. Introduction to the *Resilient Bridgman* Project
2. Learn from experts  
Presentations on the impacts of climate variability and coastal resilience, lake dynamics and coastal erosion
3. Ask questions and begin a community conversation



LIAA is a Section 501(c)3 nonprofit corporation created in 1993 to stimulate & support greater civic engagement.

Our mission statement is:

*Helping people shape  
better communities through:*

- *participation,*
- *education,*
- *information &*
- *the effective use of technology*



# What is Resilient Bridgman?

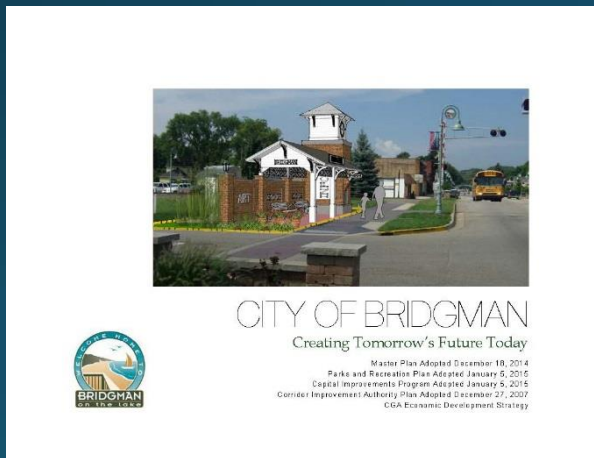
*Resilient Bridgman* is a new land use planning and community development project for the City



The purpose of the project is to:

- Engage citizens, public officials and community stakeholders
- Establish a vision for the City
- Develop a new Master Plan

## Why do we need a New Master Plan?



- Last comprehensive update to the Master Plan (2014)



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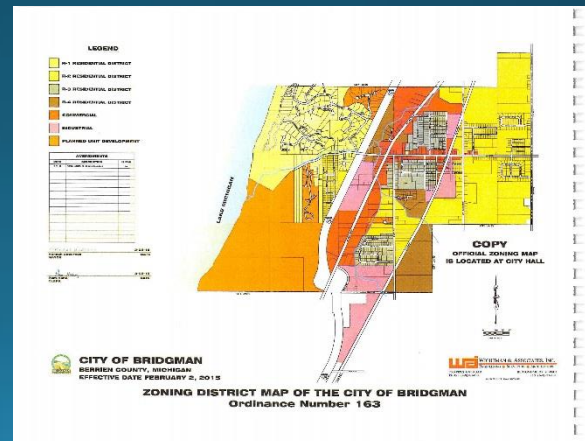
# What is a Master Plan?

A formal policy guide or “blueprint” for community development

A formal assessment of the strengths & weaknesses of the community

Through civic engagement, it’s the expressed vision for the future of the community

A flexible document - should respond to changing conditions, innovations, new information



# How is a Master Plan used?

Basis for land use regulation (e.g., zoning)

Guides decisions on development and public capital improvements

Provides support and improves eligibility for potential projects

- Grant Requests
- Millage
- Special Assessments

Provides a guide for the conservation of community resources and quality of life

Positions community to meet future challenges



# Why is this Master Plan effort unique?

## Planning for a Resilient Bridgman

### *Learning, Adapting & Thriving*

A different way of viewing the master plan process, focusing on the cooperative preparation, adaptation and the creative development of community systems in the face of changing conditions and circumstances.



# What changing conditions and circumstances?



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Rapidly changing economy

Population shifts

Extreme weather events and climate variability

Changes in health, lifestyle and financial stability

The next unknown shift



*Road damage on Lake Michigan Drive near Ludington due to runoff from the June 12, 2008 storm that dumped 10 inches of rain in 12 hours. Photo: Chris Pierce*

## Floodington

On June 12, 2008, a massive storm inundated the city of Ludington, Michigan with 10 inches of rain in 12 hours. The rain flooded waterways and caused erosion that damaged numerous roads and infrastructure, including the sewer main that carries 90 percent of the city's sewage. The storm sent large amounts of debris and sediment into the harbor, and beaches and boat launches were closed due to contamination. The storm cost the city nearly \$400,000 in emergency repairs and clean-up, and hundreds of homeowners reported basement flooding and wind damage.





# Planning for a Resilient Community

If the Bridgman Community can plan and prepare for change, they can reduce exposures and increase their adaptive capacity; that is, communities can develop greater **resilience**.

## Community Resilience Is:

1. The capacity to withstand disruptions & shocks (i.e., take the hit)
2. The capacity learn from adversity and adapt quickly to new circumstances

# Acknowledging Community Challenges

## Climate Change and Variability

### Potential Impacts and Challenges

- Increases in winter and spring precipitation
- Less precipitation as snow and more as rain
- Less winter ice on lakes
- Greater frequency and intensity of storms
- More flooding events and risk of erosion
- Increases in frequency and length of severe heat events
- Increased risk of drought, particularly in summer

### Rivers, Streams and Lakes

Decline in cold water fish - changing fisheries

Increases in stormwater runoff

Lower lake levels

### Plants and Wildlife

Increase in invasive species that damage trees and plants

Changes in tree species able to survive

Extended growing seasons

### Energy & Industry

Increase in electrical demand

Reduced water availability

### Transportation

Increased damage to roads and other infrastructure

### Public Health

Increased risk of illness due to heat

Increased risk of water contamination

Increased risk of vector diseases



## Pirates beat Tigers again

SPORTS, 1B



## Movie legend Lauren Bacall dies at 89

OBITUARY, 2A

## Creditor bares teeth in Chap. 9 objection

City lawyer disputes Syncora claim of 'conflicted' mediators

BY CHAD LIVINGOOD  
The Detroit News

The financial insurance of

# The Detroit News

Wednesday, August 13, 2014 [detroitnews.com](http://detroitnews.com)

'We've never dealt with anything like this before'



# August 11<sup>th</sup> 2014

## Metro Detroit - 6 inches of rain in 36 hours



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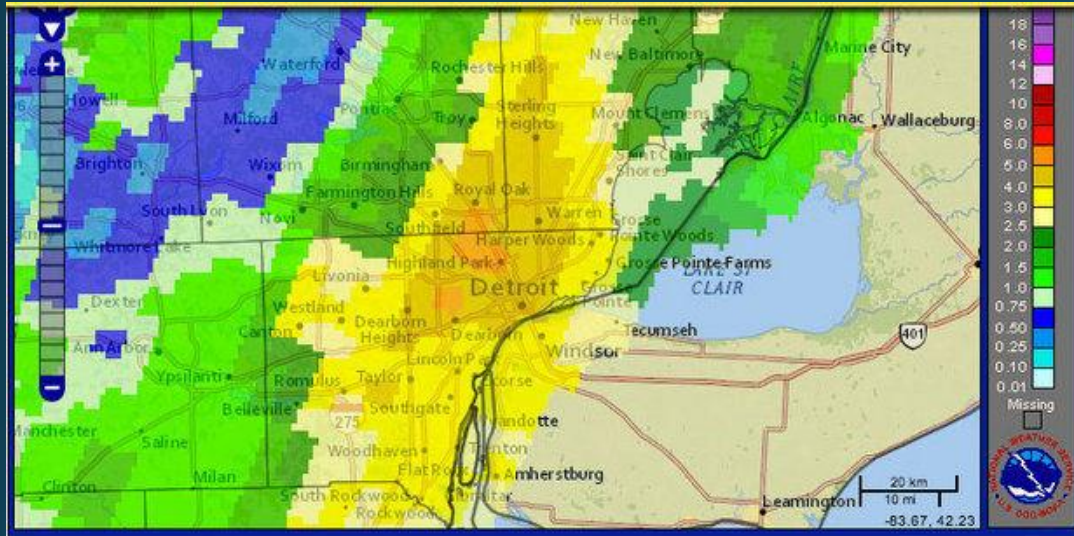


Image: NOAA



Photo: Detroit News



Photo: Detroit News



Photo: Fox News

# Impacts to Community Systems continue to be significant

## Access and Transportation



## Public Services and Community Health



## Natural Areas



## Businesses and Neighborhoods

Warren, one of the communities hardest hit by the flooding, estimated \$231 million in total property damage to 22,782 affected homes and buildings.



# General Approaches to Building Community Resilience

There are a number of “pathways” to greater resilience:

- ❑ Prepare for Climate Variability & Extreme Weather
- ❑ Increase Energy Efficiency & Renewable Supplies
- ❑ Renew & Strengthen Infrastructure  
(e.g., green infrastructure/ecosystem services)
- ❑ Strengthen the Local Economy  
(e.g., diversify, increase local production)
- ❑ Build Social Connections & Social Capital

# Planning for Resilient Communities

## Program Partners



## Project Grant Support from:



## Coastal Zone Management, MDEQ

Similar Resilient Planning Efforts in:

Monroe, Ludington, St. Joseph, Grand Haven, Macomb County and East Jordan

# Planning for Resilient Communities

## Why are we here?

1. To provide community assistance in planning with the most up-to-date information & processes.
2. To demonstrate these techniques for adoption and use by other communities.

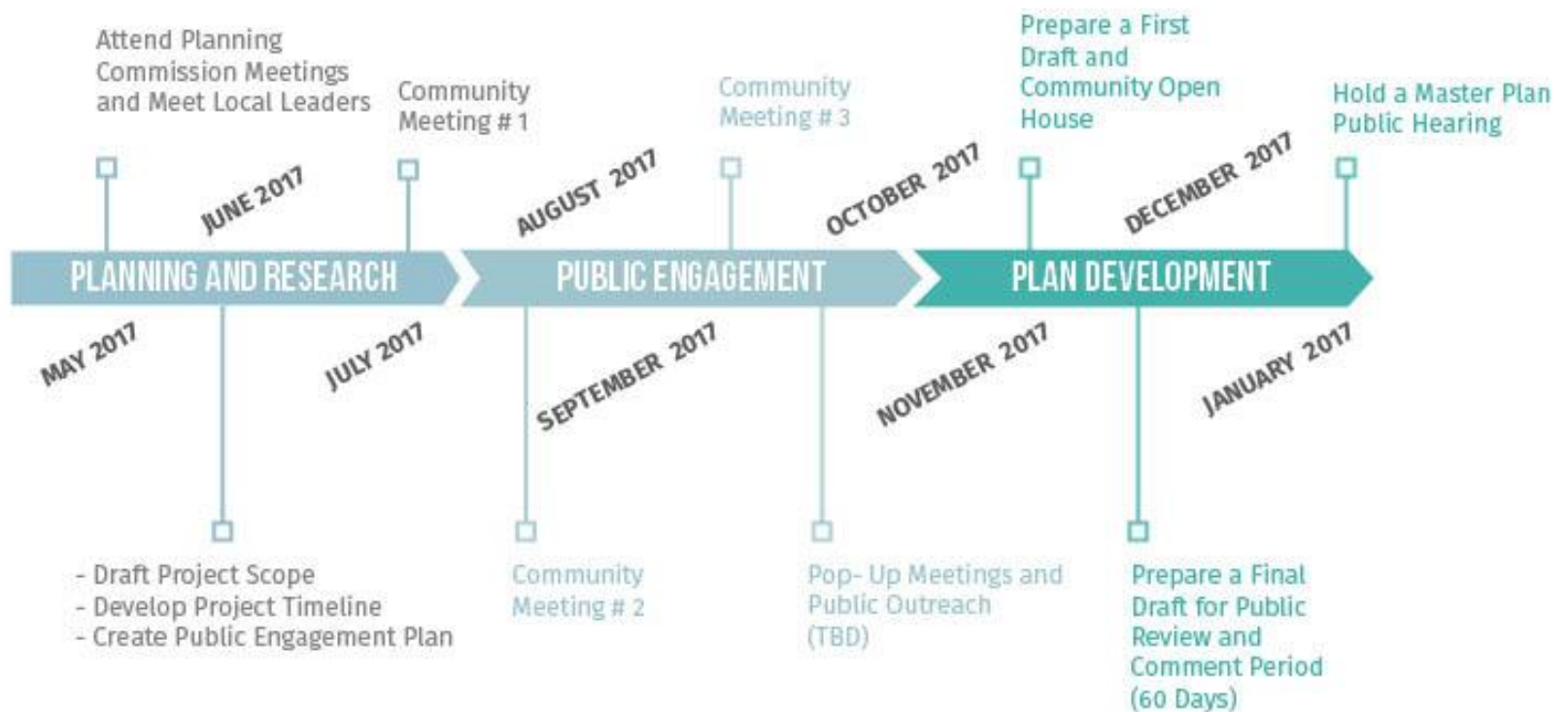
## What's in it for the Bridgman Community?

1. The opportunity to complete the required 5-year master plan review.
2. The opportunity to receive detailed information, analysis, and support.

## What's in this bargain?

You get assistance in exchange for thoughtfully considering new ideas and approaches. You are **NOT** obligated to adopt them. You choose what you want.





# Opportunities for Public Involvement

## Citizen Engagement

- Meeting with students (once school is back in session)
- Community Stakeholder Meetings
- About Town
- Public Meetings



# Opportunities for Public Involvement



**Kick-Off Meeting** (7:00 p.m.)  
Monday, July 31<sup>st</sup> - Weko Beach House

**Public Meeting** (7:00 p.m.)  
Thursday, August 17<sup>th</sup> – Weko Beach House

**Public Meetings** (7:00 p.m.)  
Tuesday, September 12<sup>th</sup> – Weko Beach House

**Open House** (6:30 pm - 8:00 p.m.)  
TBD

**Public Hearing**  
TBD

**All Events Open to the Public**



# Resilient Bridgman Opportunities for Public Involvement

## Project Website

[www.resilientmichigan.org/bridgman](http://www.resilientmichigan.org/bridgman)



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The screenshot shows a web browser window displaying the website [www.resilientmichigan.org/bridgman.asp](http://www.resilientmichigan.org/bridgman.asp). The page features a dark blue header with the "Resilient MICHIGAN" logo on the left and navigation links for "ABOUT", "COMMUNITIES", "VIDEO SERIES", and "HANDBOOK" on the right. Below the header, there is a large landscape photograph of a beach and Lake Michigan. On the left side of the page, a grey sidebar contains four menu items: "Public Meetings and Events", "Project Information", "Project Timeline", and "Contact Us". Below the photograph, the breadcrumb trail reads "Home > Communities > Bridgman". The main heading is "RESILIENT BRIDGMAN", followed by a paragraph: "Located 80 miles east of Chicago on the shores of Lake Michigan, Bridgman is one of several Michigan 'beach towns' that are working to understand and address how rapid economic changes and increasing climate variability will be felt by the unique communities that lay along the Great Lakes shoreline."

# Resilient Bridgman Opportunities for Public Involvement

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### SIGN IN SHEET// MONDAY JULY 31 2017

Name	Address	Full Time Resident? (Y/N)	Email
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#### What is Community Resilience?

**Community Resilience** is a measure of the long-term ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. Communities that are resilient are able to learn from adversity and adapt quickly to change.

**Please share your email address for project updates, news, and public input opportunities!**

[www.resilientmichigan.org/bridgman](http://www.resilientmichigan.org/bridgman)

# Featured Speakers

**1. Dr. Richard Norton, Ph.D.**

Professor, University of Michigan School of Urban Planning

**2. Guy Meadows, Ph.D.**

Director, Great lakes Research Center, Michigan Tech. University



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# Brain Storming Exercise

# Brainstorming Exercise Instructions

1. Using the flip-charts and maps: (15 min)
  - a. List assets on flip-chart
  - b. Label assets with red dot on map
  
2. Using the sticky notes: (15 min)
  - a. What are the strengths of the community? (yellow notes)
  - b. What/where can the community improve? (blue notes)
  
3. Using the flip charts: (15 min)
  - a. Key words and phrases describing community vision
  
4. Report Out (15 min)



**Thank You For Coming!**

[www.resilientmichigan.org/holland](http://www.resilientmichigan.org/holland)