

# Charlevoix County Hazard Mitigation Plan Update

August 15, 2022



**Networks  
Northwest**

Talent / Business / Community



# Welcome

- Thank you for joining us!
- We will be discussing the following:
  - Introduction to the project
  - Project Requirements by Mike Sobocinski, MSP
  - Charlevoix County and local jurisdiction's Community Profile
  - Draft Community Survey questions



# Introductions

- Networks Northwest Staff
  - Jennifer Neal, AICP
  - Stephanie Loria
- Community Partners

# Purpose

Natural Hazard

**A natural hazard is the threat of an event that will likely have a negative impact.**

Hazard Mitigation Planning

**“The effort to reduce loss of life and property by lessening the impact of disasters”**

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## Billion-Dollar Disasters Shattered U.S. Record in 2020

The 22 events that each caused at least \$1 billion in damage show the increasing costs of climate change

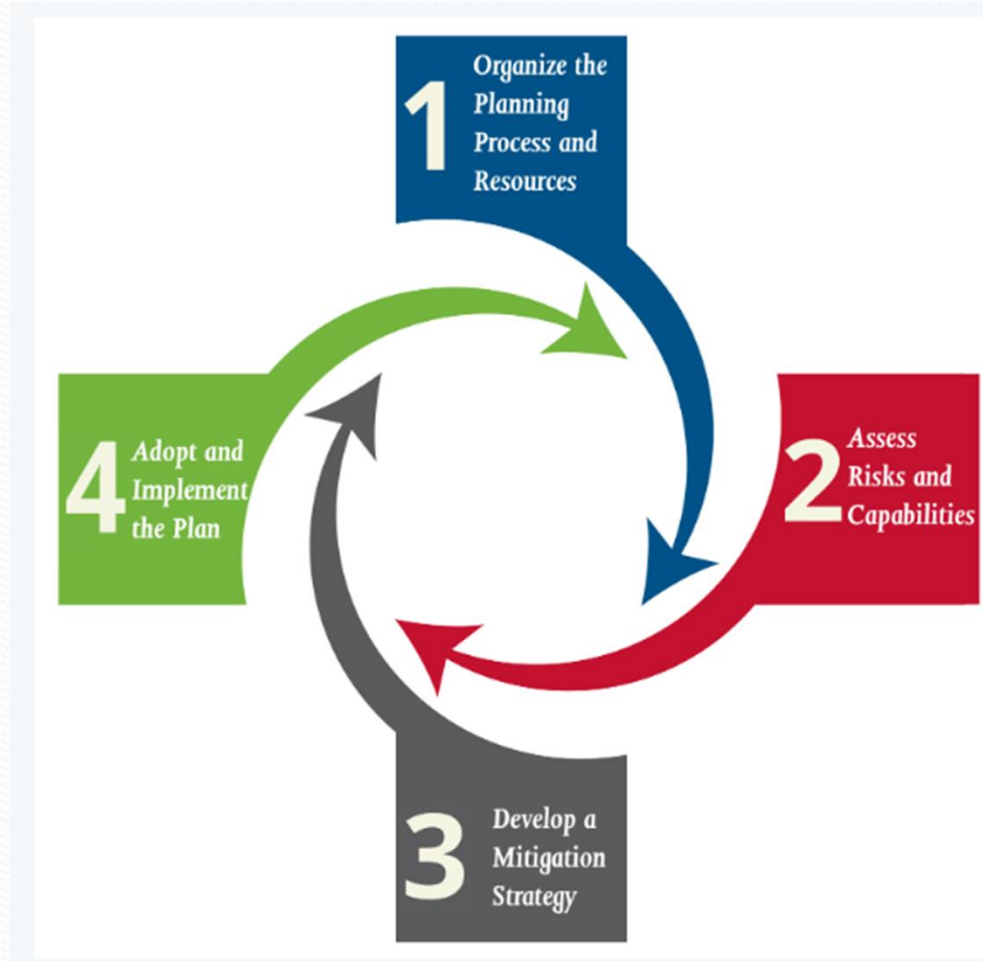
By Thomas Frank, E&E News on January 11, 2021



An aerial view of flood waters from Hurricane Delta surrounding structures destroyed by Hurricane Laura on October 10, 2020 in Creole, Louisiana. Credit: Mario Tama Getty Images

# Project Timeline

- Now through May 2025





# Charlevoix County LEPC/LPT Participation

Local Units of Government  
County Staff

Charlevoix County Conservation District  
Tip of the Mitt Watershed Center

Surrounding County's Emergency Management Staff  
Tribal Governments  
Other partners...



# Project Requirements and Approval

- Mike Sobocinski, Michigan State Police



# Community Profile\*

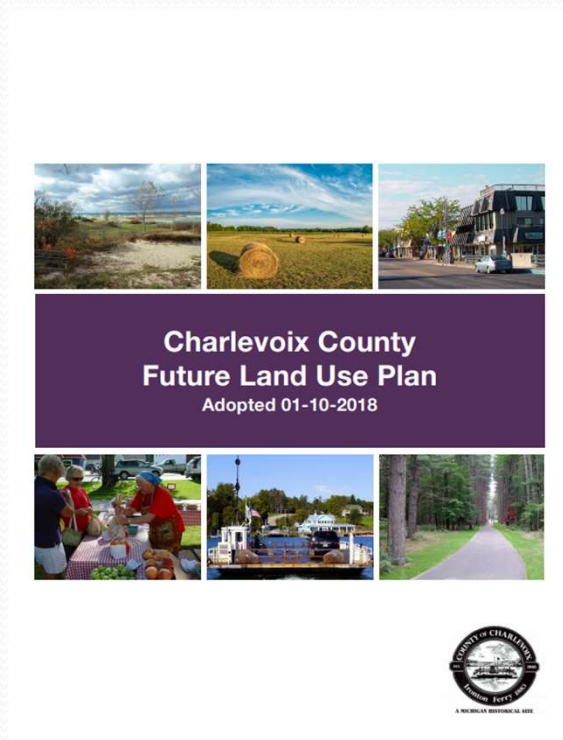
- Demographics
- Housing
- Income
- Economy
- Agriculture

\*2020 ACS 5-year data unless otherwise specified



# Reference Documents

- Charlevoix County Future Land Use Plan
- Charlevoix County Recreation Plan
- Other local and regional reports



County

# Charlevoix County, Michigan

Charlevoix County, Michigan has 416.3 square miles of land area and is the 80th largest county in [Michigan](#) by total area. Charlevoix County, Michigan is bordered by [Otsego County, Michigan](#), [Leelanau County, Michigan](#), [Cheboygan County, Michigan](#), [Mackinac County, Michigan](#), [Schoolcraft County, ...](#) [Read More](#)

// [United States](#) / [Michigan](#) / Charlevoix County, Michigan



## Populations and People

Total Population

**26,054**

[P1](#) | 2020 Decennial Census



## Employment

Employment Rate

**57.0%**

[DP03](#) | 2020 American Community Survey 5-Year Estimates



## Business and Economy

Total Employer Establishments

**802**

[CB2000CBP](#) | 2020 Economic Surveys Business Patterns



## Income and Poverty

Median Household Income

**\$60,433**

[S1901](#) | 2020 American Community Survey 5-Year Estimates



## Housing

Total Housing Units

**17,451**

[H1](#) | 2020 Decennial Census



## Families and Living Arrangements

Total Households

**11,725**

[DP02](#) | 2020 American Community Survey 5-Year Estimates

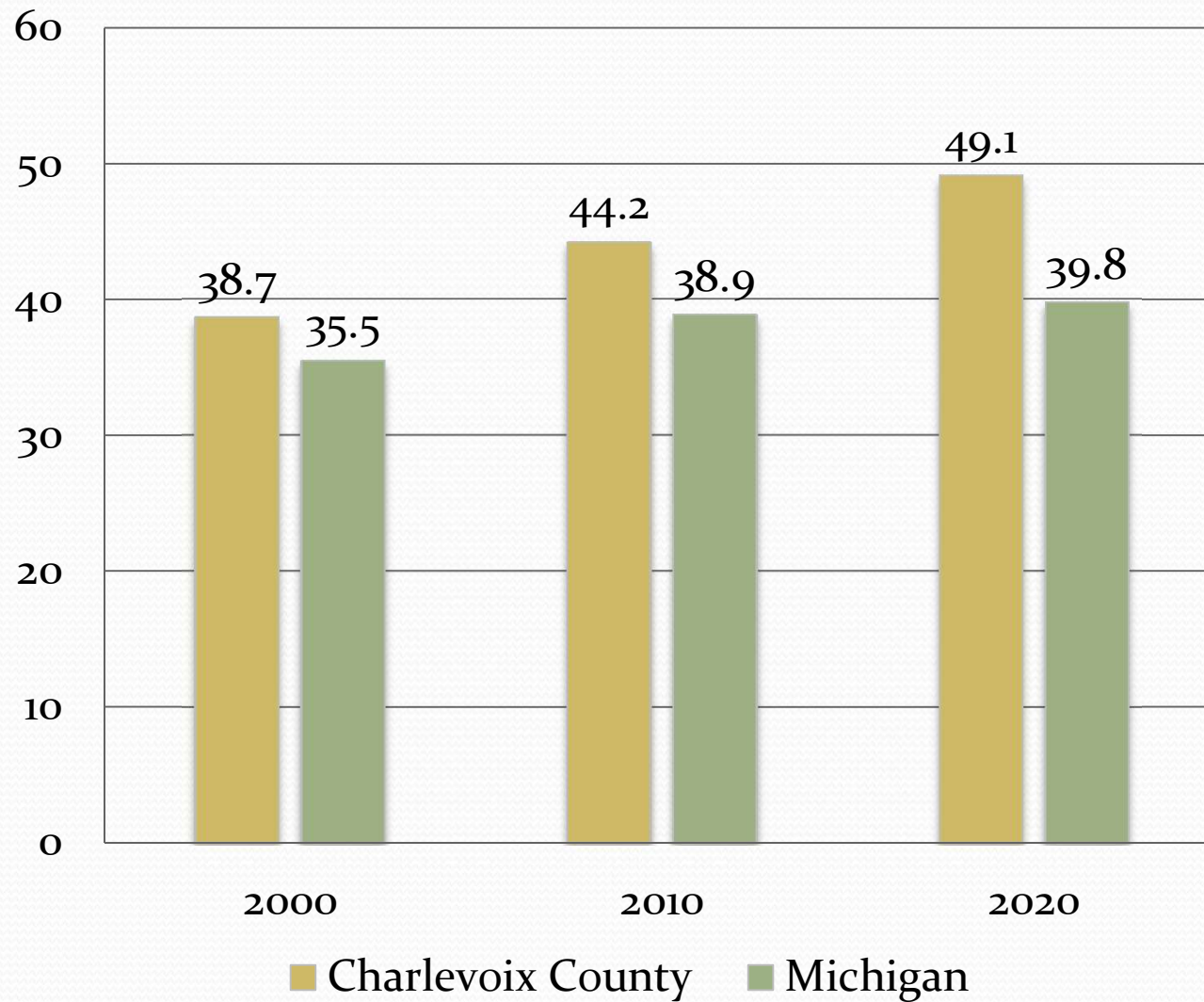


# Demographics – Population Change

| <b>Municipality</b>    | <b>2010 Estimated Population</b> | <b>2020 Estimated Population</b> | <b>Numeric Change</b> | <b>Percent Change</b> |
|------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|
| Charlevoix County      | 26,228                           | 26,197                           | -31                   | -0.1%                 |
| Village of Boyne Falls | 299                              | 343                              | 44                    | 14.7%                 |
| Bay Township           | 1,497                            | 1,036                            | -461                  | -30.8%                |
| Boyne Valley Township  | 1,244                            | 1,356                            | 112                   | 9.0%                  |
| Chandler Township      | 228                              | 255                              | 27                    | 11.8%                 |
| Charlevoix Township    | 1,892                            | 1,780                            | -112                  | -5.9%                 |
| Evangeline Township    | 600                              | 776                              | 176                   | 29.3%                 |
| Eveline Township       | 1,682                            | 1,560                            | -122                  | -7.3%                 |
| Hayes Township         | 1,902                            | 1,784                            | -118                  | -6.2%                 |
| Hudson Township        | 681                              | 730                              | 49                    | 7.2%                  |
| Marion Township        | 1,682                            | 1,774                            | 92                    | 5.5%                  |
| Melrose Township       | 1,281                            | 1,405                            | 124                   | 9.7%                  |
| Norwood Township       | 639                              | 737                              | 98                    | 15.3%                 |
| Peaine Township        | 268                              | 259                              | -9                    | -3.4%                 |
| South Arm Township     | 2,151                            | 2,014                            | -137                  | -6.4%                 |
| St. James Township     | 258                              | 319                              | 61                    | 23.6%                 |
| Wilson Township        | 1,916                            | 2,091                            | 175                   | 9.1%                  |
| City of Boyne City     | 3,760                            | 3,721                            | -39                   | -1.0%                 |
| City of Charlevoix     | 2,620                            | 2,467                            | -153                  | -5.8%                 |
| City of East Jordan    | 1,927                            | 2,133                            | 206                   | 10.7%                 |

Source: U.S. Census Bureau, ACS 5-Year Estimates

# Demographics - Median age

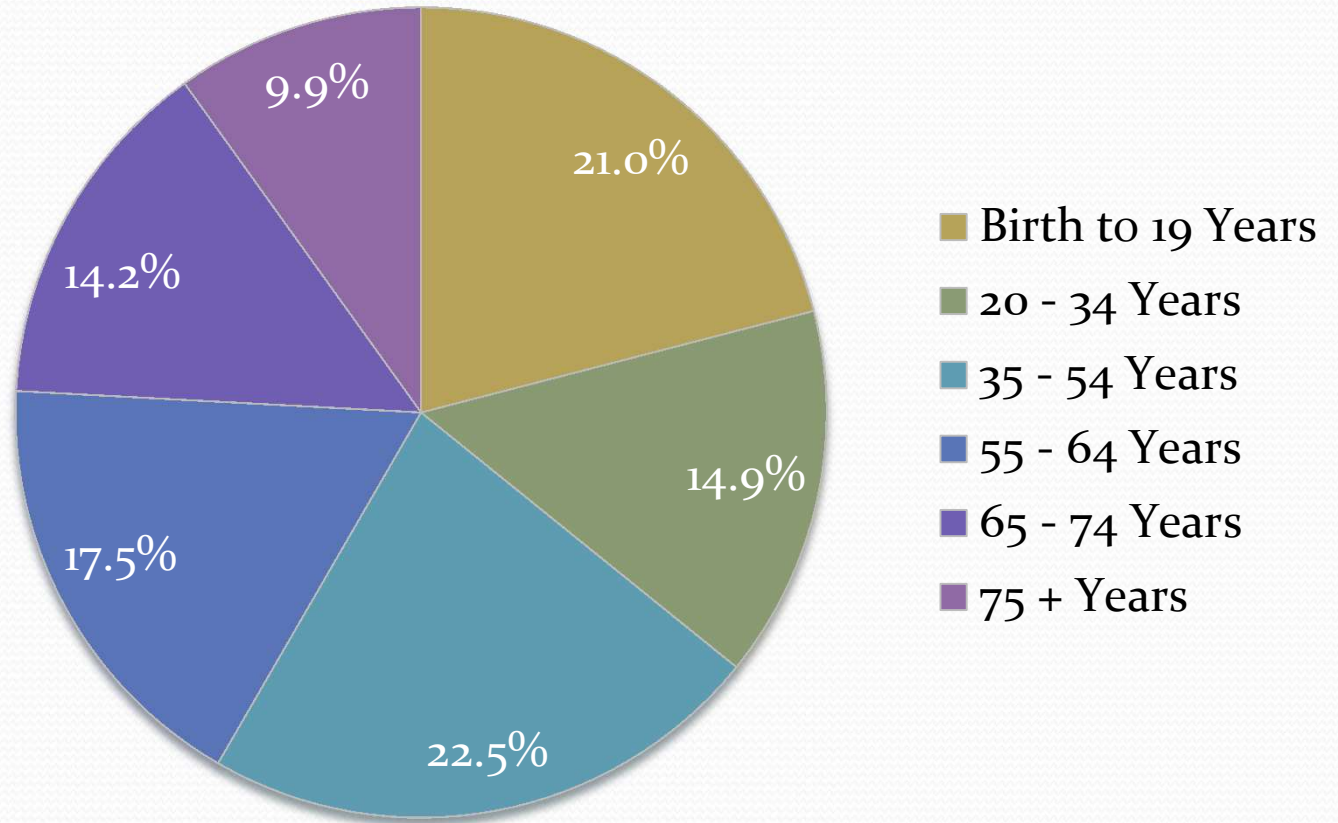


# Demographics – Median Age



# Demographics

- Age Distribution



# Demographics – Disability and Race

|                   | <b>Charlevoix County</b> |  | <b>Race</b>                                | <b>Charlevoix County</b> |
|-------------------|--------------------------|--|--|--------------------------|
| Under 18 Years    | 5,058                    |  | White                                      | 24,951                   |
| With a Disability | 272                      |  | Black or African American                  | 122                      |
| Percent           | 5.4%                     |  | American Indian and Alaskan Native         | 410                      |
| 18 to 64 Years    | 14,841                   |  | Asian                                      | 129                      |
| With a Disability | 1,755                    |  | Native Hawaiian and Other Pacific Islander | 16                       |
| Percent           | 11.8%                    |  | Some Other Race                            | 23                       |
| 65 Years and Over | 6,036                    |  | Two or More Races                          | 537                      |
| With a Disability | 1,801                    |  | Hispanic Origin                            | 523                      |
| Percent           | 29.8%                    |  | TOTAL                                      | 26,188                   |



# Housing

- Units by local jurisdiction

| <b>Municipality</b>    | <b>2020<br/>Housing<br/>Units (ACS)</b> |
|------------------------|---|
| Charlevoix County      | 17,753                                  |
| Village of Boyne Falls | 217                                     |
| Bay Township           | 880                                     |
| Boyne Valley Township  | 881                                     |
| Chandler Township      | 167                                     |
| Charlevoix Township    | 1,155                                   |
| Evangeline Township    | 472                                     |
| Eveline Township       | 1,421                                   |
| Hayes Township         | 1,150                                   |
| Hudson Township        | 605                                     |
| Marion Township        | 913                                     |
| Melrose Township       | 910                                     |
| Norwood Township       | 479                                     |
| Peaine Township        | 549                                     |
| South Arm Township     | 1,073                                   |
| St. James Township     | 478                                     |
| Wilson Township        | 1,046                                   |
| City of Boyne City     | 2,293                                   |
| City of Charlevoix     | 2,085                                   |
| City of East Jordan    | 1,196                                   |

# Housing

- County Occupancy Status

|                            |               |
|----------------------------|---------------|
| <b>Charlevoix County</b>   |               |
| <b>Total Housing Units</b> | <b>17,753</b> |
| Occupied Housing Units     | 11,725        |
| Owner Occupied             | 9,579         |
| Renter Occupied            | 2,146         |
| Vacant Housing Units       | 6,028         |
| Vacant Housing Units (%)   | 34.0%         |

# Housing

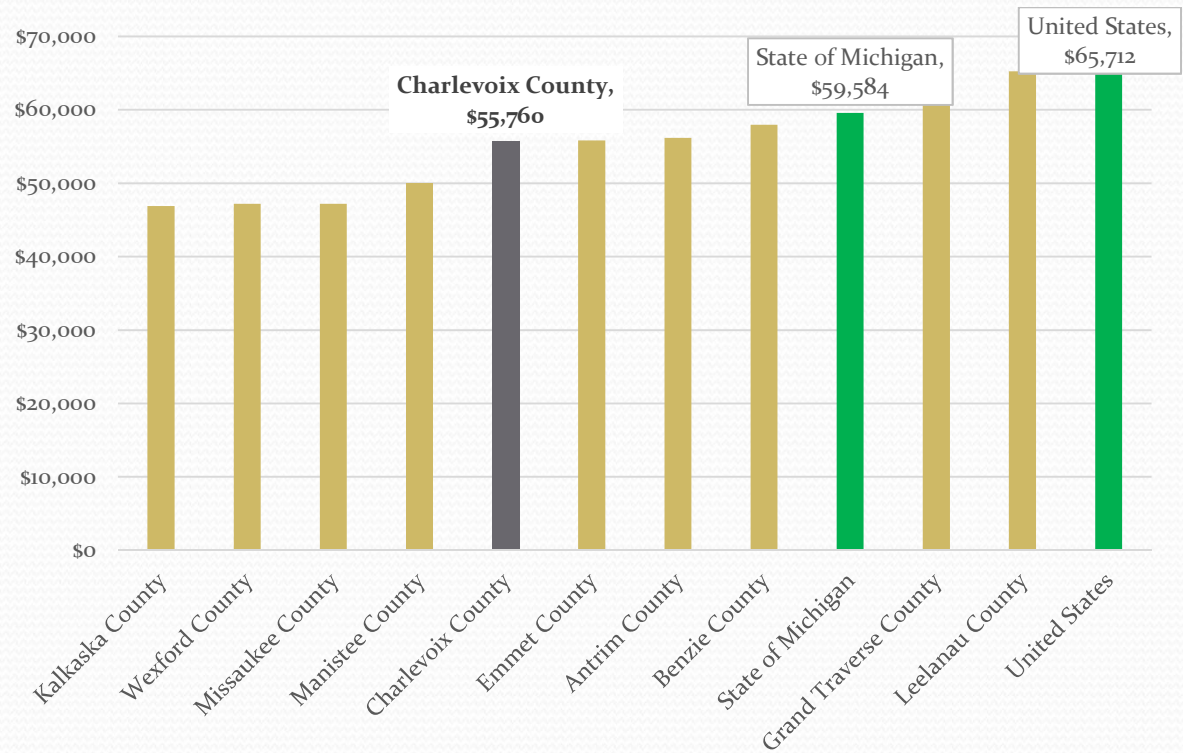
- Units by Year Structure Built

| <b>Year Built</b>     | <b>Percentage of Units</b> |
|-----------------------|----------------------------|
| Built 2000 or later   | 14.0%                      |
| Built 1990 to 1999    | 15.6%                      |
| Built 1980 to 1989    | 14.8%                      |
| Built 1970 to 1979    | 16.7%                      |
| Built 1960 to 1969    | 11.8%                      |
| Built 1950 to 1959    | 7.4%                       |
| Built 1940 to 1949    | 7.8%                       |
| Built 1939 or earlier | 11.9%                      |

# Income

- Median Household Income by County

| 2019 Median Household Income |                 |
|------------------------------|-----------------|
| Location                     | Median Income   |
| Kalkaska County              | \$46,898        |
| Wexford County               | \$47,193        |
| Missaukee County             | \$47,194        |
| Manistee County              | \$50,055        |
| <b>Charlevoix County</b>     | <b>\$55,760</b> |
| Emmet County                 | \$55,829        |
| Antrim County                | \$56,165        |
| Benzie County                | \$57,974        |
| State of Michigan            | \$59,584        |
| Grand Traverse County        | \$63,575        |
| Leelanau County              | \$65,249        |
| United States                | \$65,712        |



# Economic Sectors

| Industry   | Establishments | Jobs   | Percent Distribution in County | Average Annual Wage |
|--|----------------|--------|--------------------------------|---------------------|
| Total Covered Employment   | 782            | 10,527 | 100.00%                        | \$44,558            |
| Agri., forestry, hunting   | 5              | D      | D                              | D                   |
| Mining   | 1              | D      | D                              | D                   |
| Construction   | 120            | 646    | 6.10%                          | \$43,806            |
| Manufacturing  | 45             | 2,451  | 23.30%                         | \$60,866            |
| Wholesale trade  | 16             | 53     | 0.50%                          | \$53,155            |
| Retail trade   | 114            | 876    | 8.30%                          | \$29,009            |
| Transportation, warehousing  | 17             | 129    | 1.20%                          | \$42,443            |
| Utilities  | 4              | 147    | 1.40%                          | \$107,000           |
| Information  | 13             | 72     | 0.70%                          | \$27,706            |
| Finance and Insurance  | 29             | 160    | 1.50%                          | \$47,784            |
| Real Estate, rental, leasing                                       | 29             | 184    | 1.70%                          | \$27,435            |
| Professional, technical services                                   | 44             | D      | D                              | D                   |
| Administrative, waste services                                     | 53             | 253    | 2.40%                          | \$33,625            |
| Educational services   | 11             | 648    | 6.20%                          | \$51,753            |
| Health care, social assistance                                     | 59             | 1,687  | 16.00%                         | \$46,962            |
| Arts, entertainment, recreation                                    | 37             | 266    | 2.50%                          | \$31,888            |
| Accommodation and food services                                    | 79             | 1,826  | 17.30%                         | \$27,051            |
| Other services, exc. public admin.                                 | 76             | 305    | 2.90%                          | \$44,314            |
| Public administration  | 22             | 618    | 5.90%                          | \$41,886            |
| Other: Includes (private, management of business, and unallocated) |                |        |                                |                     |

# Agriculture



**“WE ARE IN A WAR ZONE AGAINST THIS DISEASE.”**

CLIMATE CHANGE IS FUELING FIRE BLIGHT, AND NORTHERN MICHIGAN'S APPLE ORCHARDS ARE AT RISK.

BY TODD VANSICKLE | OCT. 5, 2019

*What is this contagion? What does it mean for the future of our fruit and orchards? And what — if any? — can we do about it?*

## Charlevoix County Profile, 2017 USDA Census of Agriculture

| Total  | 2017        | % Change since 2012 | Rank out of counties in MI producing item(s) | Rank out of counties in U.S. producing item(s) |
|--|-------------|---------------------|--|--|
| Number of farms                              | 271         | -9%                 |  |  |
| Land in farms (acres)                        | 29,940      | -20%                |  |  |
| Average size of farm (acres)                 | 110         | -13%                |  |  |
| Percent of state agricultural sales          |             |                     |  |  |
| Market value of products sold                | \$8,415,000 |                     | 64 out of 83                                 | 2,722 out of 3,077                             |
| Crops  | \$4,991,000 |                     | 61 out of 83                                 | 2,377 out of 3,073                             |
| Livestock, poultry and other animal products | \$3,424,000 |                     | 61 out of 82                                 | 2,590 out of 3,073                             |
| Government payments (avg per farm receiving) | \$104,000   | -43%                |  |  |
| Farm-related income                          | \$1,082,000 | 194%                |  |  |
| Farm production expenses                     | \$7,005,000 | -22%                |  |  |
| Net cash farm income                         | \$2,596,000 | 72%                 |  |  |
|  |             |                     |  |  |
| Per Farm Average                             | 2017        | % Change since 2012 |  |  |
| Market value of products sold                | \$31,050    | -7%                 |  |  |
| Government payments (avg per farm receiving) | \$3,251     | -23%                |  |  |
| Farm-related income                          | \$12,583    | 194%                |  |  |
| Total farm production expenses               | \$25,850    | -14%                |  |  |
| Net cash farm income                         | \$9,578     | 88%                 |  |  |

[https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/Michigan/](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Michigan/)



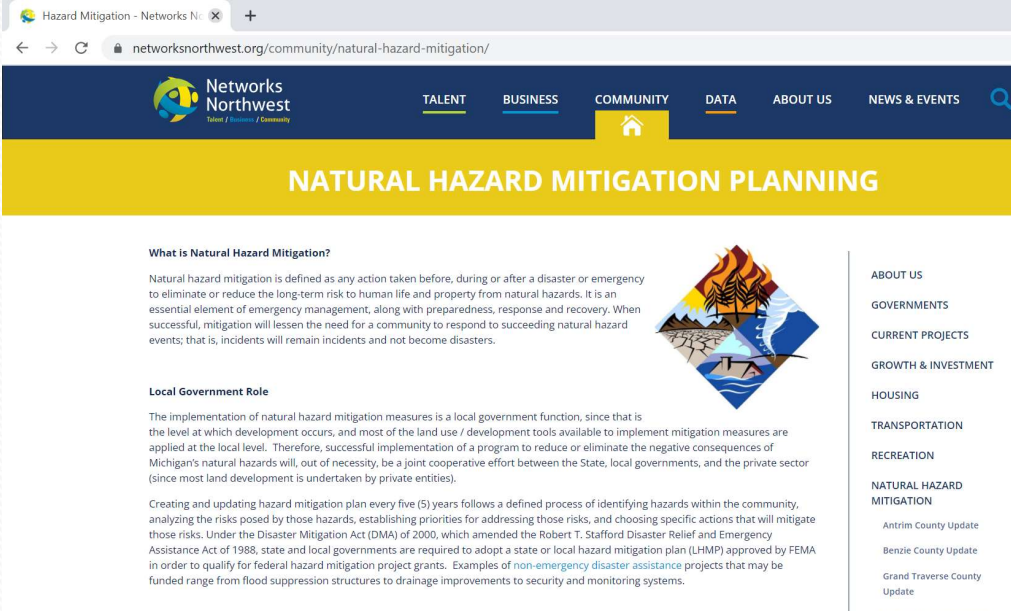
# Hazard Mitigation Community Survey

Coming soon!

- To be distributed throughout the community
- Used to gather information on hazard concerns

# Next Steps

- Identify potential Advisory Team members
- Solicit additional Community Survey responses
- Update project information at: [nwm.org/HazardPlan](http://nwm.org/HazardPlan)
- Prepare hazard analysis
- Next group meeting



The screenshot shows a web browser window with the address bar displaying "networksnorthwest.org/community/natural-hazard-mitigation/". The website header includes the Networks Northwest logo and navigation links for TALENT, BUSINESS, COMMUNITY, DATA, ABOUT US, and NEWS & EVENTS. A prominent yellow banner reads "NATURAL HAZARD MITIGATION PLANNING".

**What is Natural Hazard Mitigation?**  
Natural hazard mitigation is defined as any action taken before, during or after a disaster or emergency to eliminate or reduce the long-term risk to human life and property from natural hazards. It is an essential element of emergency management, along with preparedness, response and recovery. When successful, mitigation will lessen the need for a community to respond to succeeding natural hazard events; that is, incidents will remain incidents and not become disasters.

**Local Government Role**  
The implementation of natural hazard mitigation measures is a local government function, since that is the level at which development occurs, and most of the land use / development tools available to implement mitigation measures are applied at the local level. Therefore, successful implementation of a program to reduce or eliminate the negative consequences of Michigan's natural hazards will, out of necessity, be a joint cooperative effort between the State, local governments, and the private sector (since most land development is undertaken by private entities).

Creating and updating hazard mitigation plan every five (5) years follows a defined process of identifying hazards within the community, analyzing the risks posed by those hazards, establishing priorities for addressing those risks, and choosing specific actions that will mitigate those risks. Under the Disaster Mitigation Act (DMA) of 2000, which amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, state and local governments are required to adopt a state or local hazard mitigation plan (LHMP) approved by FEMA in order to qualify for federal hazard mitigation project grants. Examples of non-emergency disaster assistance projects that may be funded range from flood suppression structures to drainage improvements to security and monitoring systems.

**ABOUT US**  
GOVERNMENTS  
CURRENT PROJECTS  
GROWTH & INVESTMENT  
HOUSING  
TRANSPORTATION  
RECREATION  
NATURAL HAZARD MITIGATION  
Antrim County Update  
Benzie County Update  
Grand Traverse County Update  
Kalkaska County Update





# Thank you!

- Any questions??