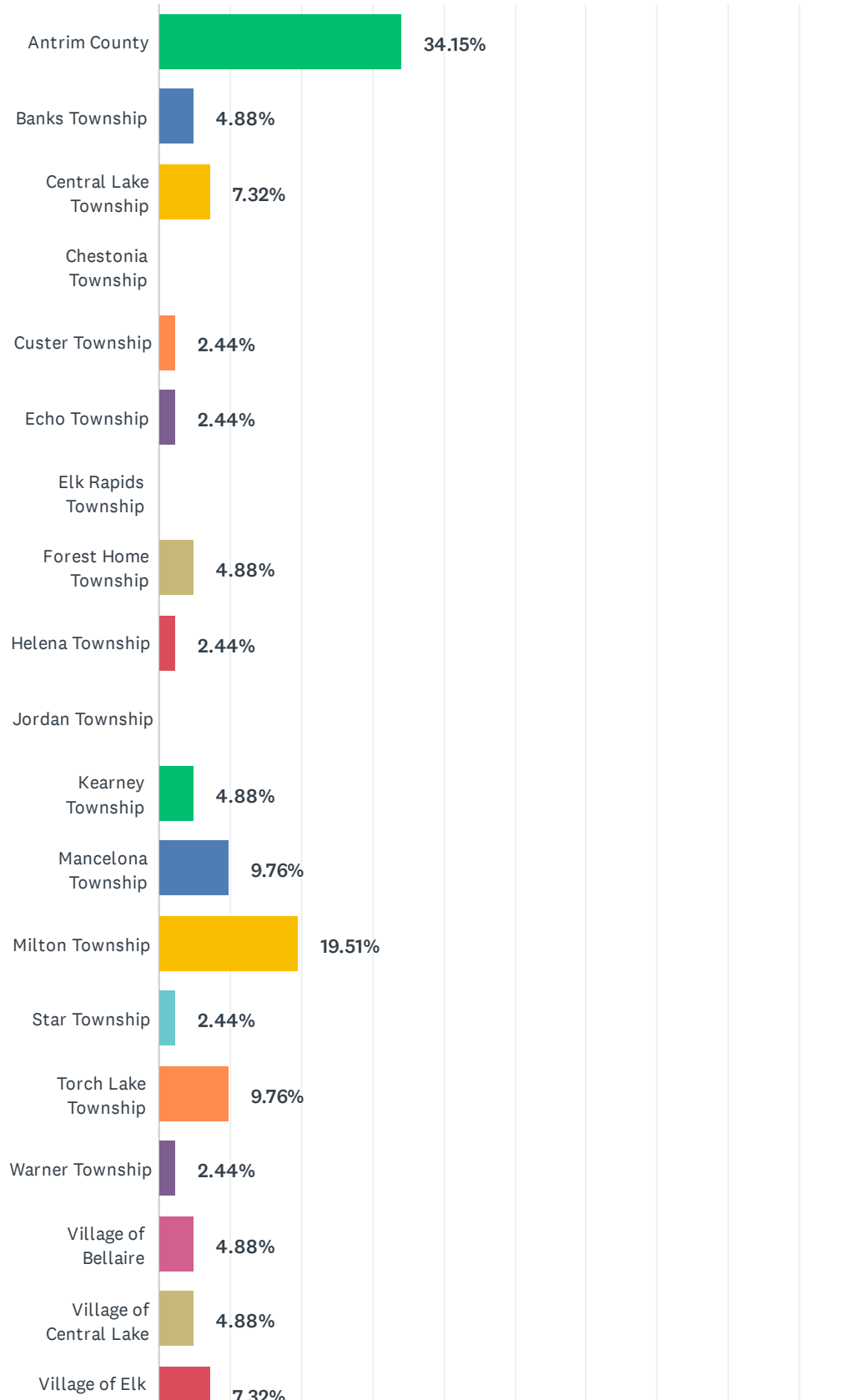
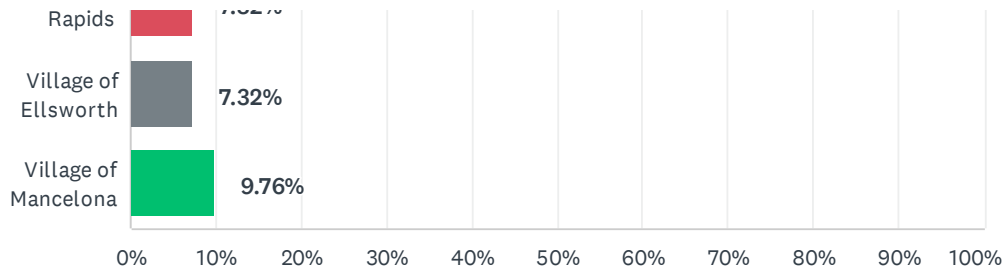


# Q1 Please indicate the local jurisdiction you represent in Antrim County.

Answered: 41 Skipped: 0



## Antrim County Hazard Mitigation Community Survey



ANSWER CHOICES	RESPONSES	
Antrim County	34.15%	14
Banks Township	4.88%	2
Central Lake Township	7.32%	3
Chestonia Township	0.00%	0
Custer Township	2.44%	1
Echo Township	2.44%	1
Elk Rapids Township	0.00%	0
Forest Home Township	4.88%	2
Helena Township	2.44%	1
Jordan Township	0.00%	0
Kearney Township	4.88%	2
Mancelona Township	9.76%	4
Milton Township	19.51%	8
Star Township	2.44%	1
Torch Lake Township	9.76%	4
Warner Township	2.44%	1
Village of Bellaire	4.88%	2
Village of Central Lake	4.88%	2
Village of Elk Rapids	7.32%	3
Village of Ellsworth	7.32%	3
Village of Mancelona	9.76%	4
Total Respondents: 41		

## Q2 What is your role/organizational representation within Antrim County (i.e., citizen, type of local government employee, elected official, etc.) ?

Answered: 41 Skipped: 0

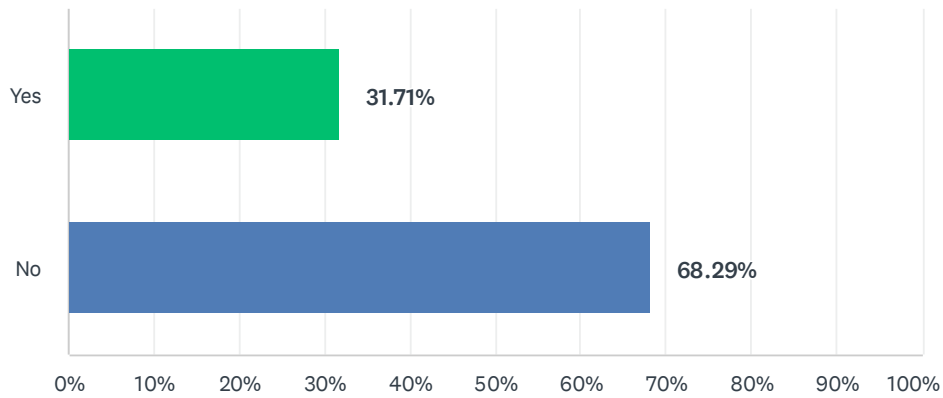
#	RESPONSES	DATE
1	Twp Trustee	1/28/2022 7:34 PM
2	President	11/22/2021 9:30 AM
3	Elected Official	11/18/2021 8:53 AM
4	elected official	11/8/2021 1:28 PM
5	Planning com. chairman	11/4/2021 11:29 AM
6	Planning Commission	11/2/2021 8:51 AM
7	Both Citizen and Antrim County employee.	11/2/2021 8:38 AM
8	Twp Trustee	10/31/2021 12:00 AM
9	Village of Elk Rapids Treasurer/Planning/Zoning/Community Development and Village of Elk Rapids Citizen	10/29/2021 12:16 PM
10	Lieutenant of the south Torch lake fire department, planning commission And life long resident.	10/29/2021 11:48 AM
11	Summer resident	10/29/2021 10:44 AM
12	Zoning Administrator	10/29/2021 10:28 AM
13	COUNTY GOVERNMENT EMPLOYEE	10/28/2021 9:21 PM
14	Trustee on the Village Council	10/28/2021 5:19 PM
15	Citizen CERT member	10/28/2021 4:38 PM
16	Firefighter, Planning Commissioner	10/28/2021 4:08 PM
17	Township Planning Commission member	10/28/2021 3:21 PM
18	Citizen	10/28/2021 2:37 PM
19	President ProTem	10/28/2021 2:11 PM
20	911 Manager	10/28/2021 1:19 PM
21	Elected official	10/28/2021 1:17 PM
22	Deputy Assessor	10/28/2021 12:49 PM
23	citizen - Custer Township EDC Board member - Antrim County	10/28/2021 12:34 PM
24	Milton Township Planning Commission	10/27/2021 11:07 AM
25	citizen	10/26/2021 6:54 PM
26	Planning Commission	10/26/2021 2:32 PM
27	elected official	10/26/2021 12:04 PM
28	FIRE CHIEF - MILTON TOWNSHIP	10/26/2021 10:25 AM
29	Village Clerk/Zoning Administrator	10/26/2021 9:00 AM
30	Engineer-Manager, Antrim County Road Commission	10/26/2021 7:23 AM
31	Clerk/Treasurer	10/26/2021 7:16 AM

## Antrim County Hazard Mitigation Community Survey

32	Planning Commissioner for 4+ years-appointment ending October 31.	10/25/2021 8:22 PM
33	Star township supervisor	10/25/2021 8:11 PM
34	Township Clerk	10/25/2021 7:11 PM
35	township trustee	10/25/2021 4:52 PM
36	Elected official	10/25/2021 4:50 PM
37	Township Trustee, Planning Commision	10/25/2021 3:32 PM
38	Emergency Services Coordinator	10/25/2021 3:30 PM
39	Zoning Administrator	10/25/2021 3:21 PM
40	Elected Official	10/25/2021 3:12 PM
41	County commissioner	10/25/2021 3:09 PM

### Q3 Are you familiar with the county's Natural Hazard Mitigation Plan?

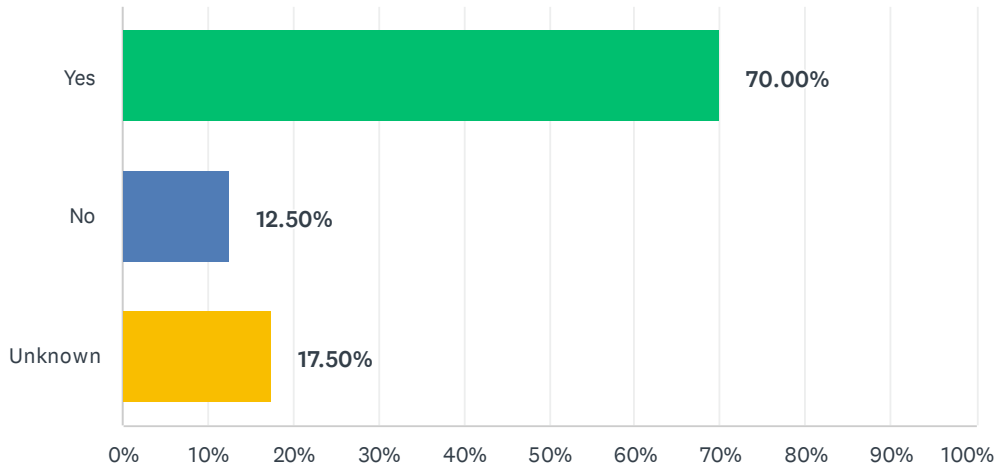
Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	31.71%	13
No	68.29%	28
TOTAL		41

### Q4 Does the community you represent have an adopted Master Plan?

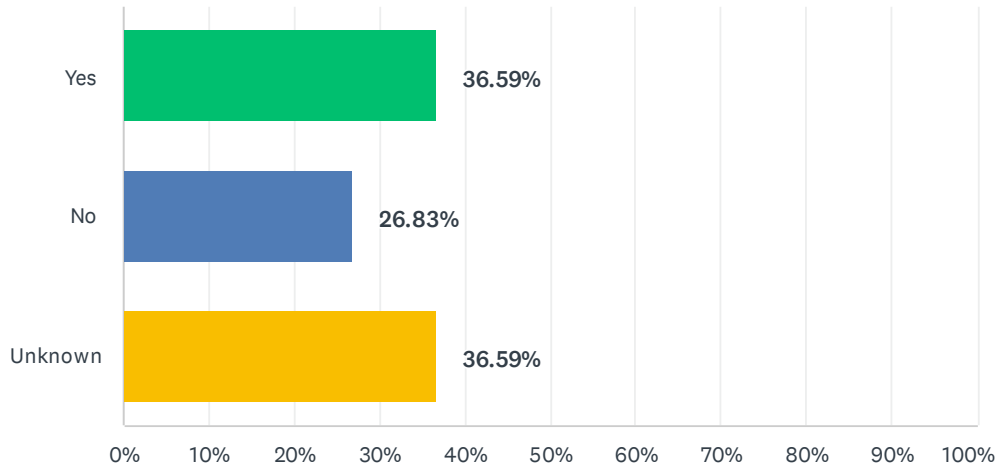
Answered: 40 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	70.00%	28
No	12.50%	5
Unknown	17.50%	7
<b>TOTAL</b>		<b>40</b>

## Q5 Does the community you represent have an adopted Capital Improvements Plan?

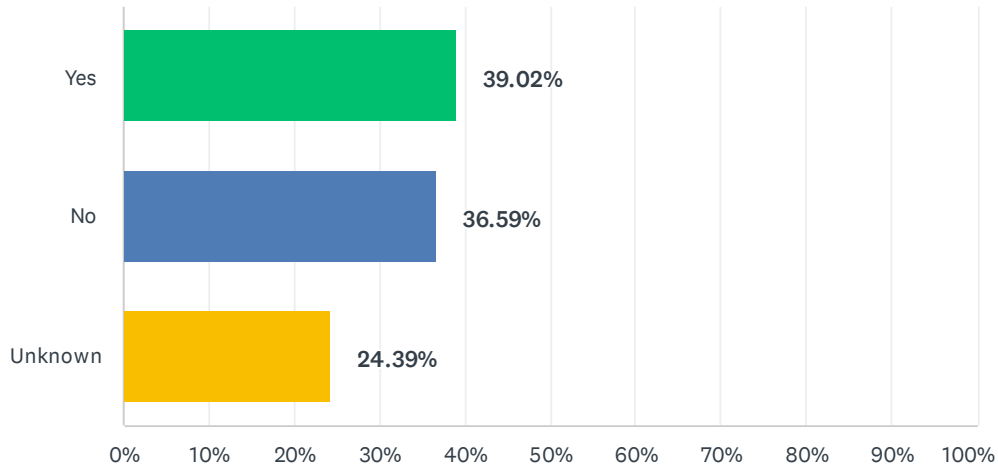
Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	36.59%	15
No	26.83%	11
Unknown	36.59%	15
<b>TOTAL</b>		<b>41</b>

## Q6 Has the community you represent experienced a significant natural hazard event within the last 10 years?

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	39.02%	16
No	36.59%	15
Unknown	24.39%	10
<b>TOTAL</b>		<b>41</b>



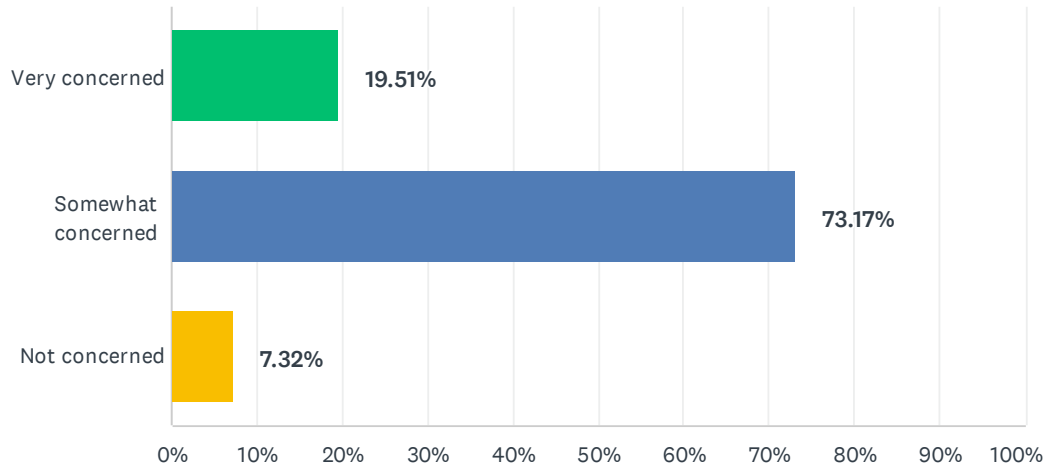
## Q7 If so, what was the nature of the event?

Answered: 23 Skipped: 18

#	RESPONSES	DATE
1	/	1/28/2022 7:34 PM
2	flooding, multiple day power outages, high winds, significant snow fall with road closures for multiple days, multiple years drought conditions	11/18/2021 8:53 AM
3	severe flooding on inland waterways and severe high waters on Lake Michigan also, the COVID-19 Pandemic	11/8/2021 1:28 PM
4	Extreme amount of rainfall	11/4/2021 11:29 AM
5	?	11/2/2021 8:51 AM
6	N/A	10/29/2021 12:16 PM
7	We had a main road wash away in a 100 year storm, And an abundance of flooding And other road damage done, inadequate culverts And or drainage for storm run off.	10/29/2021 11:48 AM
8	TORNADO AND FLOODING	10/28/2021 9:21 PM
9	A severe wind/rain storm created a lot of damage through fallen trees and flooding.	10/28/2021 5:19 PM
10	Na	10/28/2021 2:11 PM
11	A large scale Thunder Storm struck Antrim, Benzie, Grand Traverse, Kalkaska and Leelenau Counties with in a 20 minute period with multiple fronts over a six hour period. High winds brought down thousands of trees in each county. These trees cuased wide spread damage, injusry and incpacitated the 9-1-1 system in some places. The sheer volume of call also prevented action on all but the most severe requests for help.	10/28/2021 1:19 PM
12	Heavy snow-power outage Thunderstorms- significant flooding/erosion	10/27/2021 11:07 AM
13	flooding, strong winds,	10/26/2021 6:54 PM
14	Rain Storms	10/26/2021 2:32 PM
15	2015 - SEVERE THUNDERSTORM AND HIGH WIND DAMAGE SUSTAINED IN THE SOUTHERN END OF OUR TOWNSHIP	10/26/2021 10:25 AM
16	COVID-19	10/26/2021 9:00 AM
17	Heavy rainfall causing damage to roads and culverts including the complete failure of culverts and closing of roads.	10/26/2021 7:23 AM
18	N/A	10/26/2021 7:16 AM
19	Tornado /wind shear	10/25/2021 8:11 PM
20	Not applicable	10/25/2021 7:11 PM
21	no	10/25/2021 4:52 PM
22	Wind Sheers, Flooding, Tornadoes, Fire, Pandemics	10/25/2021 3:30 PM
23	Wind event	10/25/2021 3:12 PM

## Q8 How concerned are you about future natural hazard events impacting your community?

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very concerned	19.51%	8
Somewhat concerned	73.17%	30
Not concerned	7.32%	3
<b>TOTAL</b>		<b>41</b>

## Q9 What type of natural hazard events are likely to have the largest impact on your community, for example fire, flood, drought, illness outbreak, etc.?

Answered: 38 Skipped: 3

#	RESPONSES	DATE
1	Fire, illness outbreak	1/28/2022 7:34 PM
2	Tornado, high winds, blizzards	11/22/2021 9:30 AM
3	drought, illness outbreak, power outages	11/18/2021 8:53 AM
4	flood, illness outbreak	11/8/2021 1:28 PM
5	Flood	11/4/2021 11:29 AM
6	?	11/2/2021 8:51 AM
7	Tornado	11/2/2021 8:38 AM
8	illness, fire	10/31/2021 12:00 AM
9	illness outbreak, flooding	10/29/2021 12:16 PM
10	Flood and fire.	10/29/2021 11:48 AM
11	Storm damage	10/29/2021 10:44 AM
12	ILLNESS	10/28/2021 9:21 PM
13	Most likely, flood. Lots of waterfront and low-lying areas. Would eventually have implications with drought, but it would have to be incredibly severe to have large impacts.	10/28/2021 5:19 PM
14	Illness outbreaks Winter storms Power outage Drought	10/28/2021 4:38 PM
15	Weather related	10/28/2021 4:08 PM
16	fire, severe weather, illness,	10/28/2021 3:21 PM
17	Fire, illness outbreaks	10/28/2021 2:37 PM
18	I do not know.	10/28/2021 2:11 PM
19	A winter storm with high winds, large volumes of snow coupled with freezing temperatures is the most critical hazard. Large Drifts with downed trees and power lines will severely limit rescue efforts and could trap home owners with out access to life saving utilities.	10/28/2021 1:19 PM
20	With heavy rains, we have concerns with road culverts not being able to handle the increase water flow and possibly causing erosion of the road bed and banks.	10/28/2021 1:17 PM
21	Blizzard and floods	10/28/2021 12:34 PM
22	Flooding, flooding properties and road erosion.	10/27/2021 11:07 AM
23	flood, wind	10/26/2021 6:54 PM
24	flood	10/26/2021 2:32 PM
25	fire	10/26/2021 12:04 PM
26	FLOODING / WIND DAMAGE	10/26/2021 10:25 AM
27	Fire	10/26/2021 9:00 AM
28	Heavy short duration rainfall.	10/26/2021 7:23 AM
29	Flood	10/26/2021 7:16 AM

## Antrim County Hazard Mitigation Community Survey

30	In my opinion, fire especially any forest fire with winds after a drought.	10/25/2021 8:22 PM
31	Severe weather, Fire	10/25/2021 8:11 PM
32	Possibly fire or Covid related issues	10/25/2021 7:11 PM
33	illness?	10/25/2021 4:52 PM
34	fire, illness	10/25/2021 3:32 PM
35	Tornado, fire and pandemic	10/25/2021 3:30 PM
36	drought, fire, flood	10/25/2021 3:21 PM
37	Flood and illness event	10/25/2021 3:12 PM
38	Illness,fire	10/25/2021 3:09 PM

**Q10 Does your community have concerns about infrastructure (dams, bridges, utilities, etc.) and the potential for a hazardous event in the future?  
Please describe.**

Answered: 33 Skipped: 8

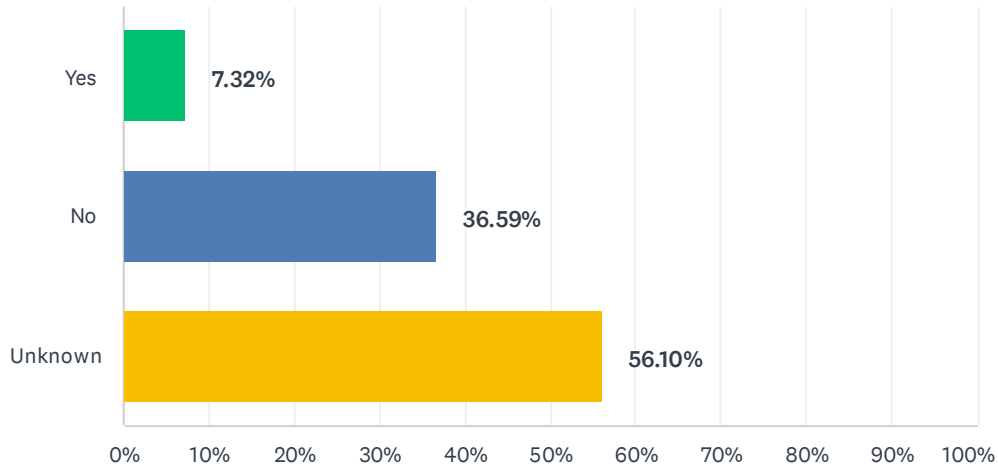
#	RESPONSES	DATE
1	/	1/28/2022 7:34 PM
2	yes on all infrastructure, we seem to not invest in our infrastructure to keep it up to date	11/18/2021 8:53 AM
3	the village within our township has a bridge/culvert that is impeding the flow of water from the upper chain of lakes. Also, they have a culvert on a main trunkline that is deteriorated and in need of replacement.	11/8/2021 1:28 PM
4	No	11/4/2021 11:29 AM
5	?	11/2/2021 8:51 AM
6	None that I know of.	11/2/2021 8:38 AM
7	Yes. We have a dam and a bridge (the bridge is not in the best of shape either). Utilities are always a concern as well.	10/29/2021 12:16 PM
8	They should now after 2 consecutive years of parts of town And homes that have flooded.	10/29/2021 11:48 AM
9	YES. BRIDGES AND DAMS	10/28/2021 9:21 PM
10	I think that our infrastructure is aging -- and there are significant pieces within our jurisdiction -- but I also know that there are plans in place to inspect and maintain them. We need to monitor this to make sure that there is follow-through.	10/28/2021 5:19 PM
11	Unknown	10/28/2021 4:38 PM
12	Not to my knowledge	10/28/2021 4:08 PM
13	dams, bridges, Power outage	10/28/2021 3:21 PM
14	No	10/28/2021 2:37 PM
15	Yes	10/28/2021 2:11 PM
16	Bellaire has two dams in proximity of Bellaire that could cause some issues.	10/28/2021 1:19 PM
17	We only have one bridge that is connected to the one dam that we have in out township, this was last renovated about 20 - 25 years ago.	10/28/2021 1:17 PM
18	I would say as an average all areas are experiencing an aging infrastructure.	10/28/2021 12:49 PM
19	Utilities regarding storms, flooding with bridges	10/28/2021 12:34 PM
20	unknown	10/27/2021 11:07 AM
21	yes, dams, bridges	10/26/2021 6:54 PM
22	utilities	10/26/2021 2:32 PM
23	bridges and culverts	10/26/2021 12:04 PM
24	WE HAVE CONCERNS TO THE BRIDGE IN OUR AREA - TORCH RIVER BRIDGE - AS WELL AS UTILITIES AND THE POTENTIAL FOR WEATHER RELATED EVENTS	10/26/2021 10:25 AM
25	There are three bridges into the Village, and two dams within the Village.	10/26/2021 9:00 AM
26	Culverts, bridges and roads.	10/26/2021 7:23 AM

## Antrim County Hazard Mitigation Community Survey

27	State Street Bridge	10/26/2021 7:16 AM
28	do not know	10/25/2021 8:22 PM
29	No	10/25/2021 7:11 PM
30	no	10/25/2021 4:52 PM
31	no	10/25/2021 3:32 PM
32	Our dams are aging. Power outages are a regular occurrence. Elected Officials at the County Level do not believe that a pandemic is upon us. We had a road washout from the storm in August that is still not fixed and requires up to a 32 mile detour for some.	10/25/2021 3:30 PM
33	Yes Bridges and dam	10/25/2021 3:12 PM

## Q11 Has your community requested assistance for mitigation projects in the past?

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES
Yes	7.32% 3
No	36.59% 15
Unknown	56.10% 23
TOTAL	41

## Q12 If so, was your request granted and what type of project did the request include?

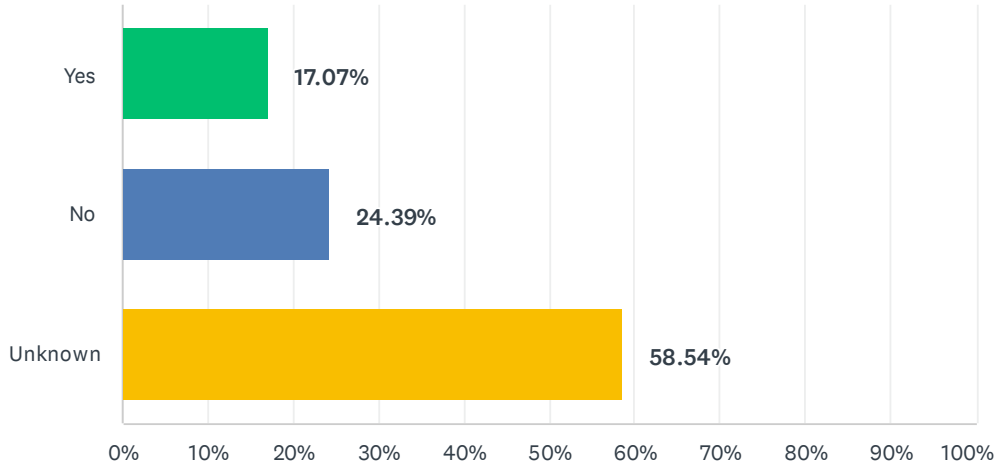
Answered: 13 Skipped: 28

#	RESPONSES	DATE
1	/	1/28/2022 7:34 PM
2	?	11/2/2021 8:51 AM
3	Unknown	10/29/2021 12:16 PM
4	Unknown	10/29/2021 11:48 AM
5	N/A	10/28/2021 9:21 PM
6	Unknown	10/28/2021 4:38 PM
7	Culvert,,,it was not funded.	10/28/2021 2:11 PM
8	n/a	10/26/2021 2:32 PM
9	YES, ASSISTANCE FROM EMERGENCY SERVICES COORDINATOR DURING THE STORM OF 2015	10/26/2021 10:25 AM
10	N/A	10/26/2021 7:16 AM
11	Not applicable	10/25/2021 7:11 PM
12	no	10/25/2021 4:52 PM
13	Unknown	10/25/2021 3:12 PM



### Q13 Has your community considered mitigation strategies for potential or current hazards?

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	17.07%	7
No	24.39%	10
Unknown	58.54%	24
<b>TOTAL</b>		<b>41</b>

## Q14 If so, please identify potential strategies you would like to explore in the near future.

Answered: 14 Skipped: 27

#	RESPONSES	DATE
1	.	1/28/2022 7:34 PM
2	not our jurisdiction, have expressed concern to the village officials without much response	11/8/2021 1:28 PM
3	?	11/2/2021 8:51 AM
4	Unknown	10/29/2021 12:16 PM
5	I would need to know what And where the problem is.	10/29/2021 11:48 AM
6	N/A	10/28/2021 9:21 PM
7	Funds to replace a culvert under a County road...	10/28/2021 2:11 PM
8	n/a	10/26/2021 2:32 PM
9	Replacement of bridge and culvert	10/26/2021 12:04 PM
10	Working with partner agencies on grants to replace old/damaged/obsolete/undersized culverts.	10/26/2021 7:23 AM
11	N/A	10/26/2021 7:16 AM
12	Not applicable	10/25/2021 7:11 PM
13	unknown, I am fairly new	10/25/2021 4:52 PM
14	A slew of mitigation strategies were identified in the prior plan. Some have been accomplished - including adopting base flood elevations for new construction. It is my hope that many others will be identified this time around.	10/25/2021 3:30 PM

## Q15 Is there any additional information you would like us to consider as we update the county's Natural Hazard Mitigation Plan?

Answered: 20 Skipped: 21

#	RESPONSES	DATE
1	/	1/28/2022 7:34 PM
2	Please address the two culverts that are failing with the Village of Ellsworth officials. Maybe you can get somewhere. The ACRC also needs to take some interest in these before a catastrophe occurs and people are not able to get to/from their homes when the roadway collapses.	11/8/2021 1:28 PM
3	No	11/4/2021 11:29 AM
4	?	11/2/2021 8:51 AM
5	I am not sure at this time	10/29/2021 12:16 PM
6	Talk to your local firefighters about information, they are your first line of defense, we respond to everything.	10/29/2021 11:48 AM
7	NO	10/28/2021 9:21 PM
8	Water quality could be considered. We have a large amount of lakes and a lot of livelihoods and quality of life rely on the continued good quality of the water. A spill, leak, or unattended issues could create water quality issues that could have an affect on the entire chain of lakes (and most of the county).	10/28/2021 5:19 PM
9	None I can think of at this time.	10/28/2021 4:38 PM
10	No	10/28/2021 4:08 PM
11	No	10/28/2021 2:11 PM
12	Water drainage management	10/28/2021 12:34 PM
13	no	10/26/2021 2:32 PM
14	No	10/26/2021 12:04 PM
15	MORE INFORMATION ON RESOURCES AVAILABLE FROM THE COUNTY LEVEL TO HELP MITIGATE A HAZARDOUS CONDITION	10/26/2021 10:25 AM
16	N/A	10/26/2021 7:16 AM
17	no--never knew had one. Will it be on the Antrim County website and alerted via news stores in local papers?	10/25/2021 8:22 PM
18	Not at this time	10/25/2021 7:11 PM
19	forest management	10/25/2021 4:52 PM
20	No not at this time	10/25/2021 3:12 PM

**Q16 Are you interested in serving on the advisory team or being involved in future public engagement events for the plan update? Please share your contact information so we may include you on future invitations.**

Answered: 28 Skipped: 13

#	RESPONSES	DATE
1	brettpharo@gmail.com	1/28/2022 7:34 PM
2	No, thank you	11/22/2021 9:30 AM
3	Donna Heeres, Banks Township Clerk clerk@bankstownship.net	11/8/2021 1:28 PM
4	I set on three boards now	11/4/2021 11:29 AM
5	?	11/2/2021 8:51 AM
6	brettpharo@gmail.com	10/31/2021 12:00 AM
7	Kerri Esterley Village of Elk Rapids Planning/Zoning and Community Development	10/29/2021 12:16 PM
8	I could be, 231-677-9883, email mrobinson2528@gmail.com	10/29/2021 11:48 AM
9	YES	10/28/2021 9:21 PM
10	Possibly - if I can fit it into my schedule. Laura Shumate, Lshumate@elkrapids.org.	10/28/2021 5:19 PM
11	Not at this time	10/28/2021 4:08 PM
12	Dick Jacques 3391 Stover Rd Bellaire, 49615 2485063387	10/28/2021 3:21 PM
13	Maybe	10/28/2021 2:11 PM
14	I could be interested	10/28/2021 1:19 PM
15	Not at this time. Always willing to share opinions but I don't have enough background to be advisable.	10/28/2021 12:34 PM
16	Joe Renis 231.392.6833 Hoserf15@aol.com	10/27/2021 11:07 AM
17	NO	10/26/2021 12:04 PM
18	JEREMY BALL miltontwpfd@gmail.com	10/26/2021 10:25 AM
19	Nicole Essad, vlgclerk@bellairemichigan.com, (231) 533-8213	10/26/2021 9:00 AM
20	Burt Thompson Engineer-Manager Antrim County Road Commission bthompson@antrimcrc.org 231-587-8521	10/26/2021 7:23 AM
21	No	10/26/2021 7:16 AM
22	future public engagements. contact information: kulkaj123@gmail.com I will be away at different times this winter.	10/25/2021 8:22 PM
23	No	10/25/2021 8:11 PM
24	No thank you	10/25/2021 7:11 PM
25	no thank you	10/25/2021 4:52 PM
26	I think by default, I already am.	10/25/2021 3:30 PM
27	Not at this time	10/25/2021 3:12 PM
28	Not at this time	10/25/2021 3:09 PM