4.3 LOCAL MITIGATION PLAN INTEGRATION INTO STATE PLAN

44 CFR 201.4(c)(4)(ii) requires a description of the state's process and timeframe by which the LHMPs will be reviewed, coordinated, and linked to the State Mitigation Plan.

LOCAL HAZARD MITIGATION PLAN REVIEW AND COORDINATION PROCESS

The Ohio EMA Mitigation Branch reviews all Local Hazard Mitigation Plans (LHMP); however, FEMA is the final approval authority. Following Presidential Disaster Declaration DR-4360, a PAS Pilot agreement between FEMA and Ohio EMA delegated to the State the ability to review and approve four out of five local hazard mitigation plans. The State reviews the draft to ensure compliance with 44 CFR 201.6 local mitigation plan criteria within 45 days of arrival. If the plan is found to have met all requirements, the jurisdiction will be sent a letter saying that the plan is now "Approved Pending Adoption" (APA). The state will also notify FEMA when it has determined any approved plans along with the APA letters and completed local mitigation plan review tools. For quality assurance of the PAS Pilot Agreement, every fifth plan that the state receives will have to undergo both state and Federal reviews. If found to have met all requirements, FEMA will issue the APA letter for the plan as it did before the agreement. LHMPs are to be logged into the State Hazard Analysis Resource and Planning Portal (SHARPP) whether or not it has to go through FEMA review.

LHMP TRACKING

Local Hazard Mitigation Plan status is tracked through the SHARPP. When a local official uploads a draft plan into SHARPP for state review the status of the plan is tracked from the time of submittal to FEMA final approval. Once the plan receives final federal approval, it is posted to SHARPP for view by the public. A report can be generated in SHARPP that summarizes the status of all LHMPs in the state.

SHARPP is a repository for past, present, and future versions of all local natural hazard mitigation plans in Ohio. These documents are stored as PDF files and can be searched and retrieved by local jurisdictions or the general public. Providing easier public access to these documents will help inform citizens about local natural hazard risk and the actions that communities have planned to undertake that will reduce risk. As local mitigation plans are updated they will be uploaded into SHARPP.

LINKING LHMPS TO THE SHMP

Because LHMPs are developed based on Federal guidance and must meet specific Federal criteria, there are some similarities in their content. Nonetheless, LHMPs tend to be very different from one another in terms of: the quantity and quality of data presented in the HIRA; the techniques used to complete risk assessments and vulnerability analyses; and the "structure" of goals, objectives and action items. For that reason, the Mitigation Branch has determined that the two most logical areas where the LHMP should link back to the state plan are in the Risk Assessment and the State Mitigation Strategy.

LINK TO STATE MITIGATION STRATEGY

Because the state mitigation strategy is a global view, its objectives and actions may be of a different nature than those found in LHMPs. However, the goals in the state mitigation strategy reflect and are complimentary to LHMP goals. LHMP goals/objectives/actions are useful to identify trends, needs, and do have a bearing in the development of state mitigation strategy goals and action items. To determine whether or not a particular local objective / action is reflected in the state plan, it is evaluated to determine whether it has statewide applicability and whether it is a need expressed in a large number of LHMPs.

SHARPP has simplified the task of reviewing mitigation action items in LHMPs. Local officials enter information into SHARPP that summarizes the local mitigation action items identified in their jurisdictions mitigation plan. SHARPP captures basic information about the proposed mitigation action including: project lead, cost, potential funding sources, estimated start and end dates. SHARPP can generate a report that summarizes the locally proposed mitigation action items in each community. Analyzing these datasets will help the state to identify trends, needs, and assist in project identification and development. Local officials can update the status of proposed mitigation action items as they are implemented to help track progress.

LOCAL RISK ASSESSMENT INTEGRATION

The LHMPs were reviewed and used to "ground truth" the data the state used to determine the most serious hazards facing the state. In Section 2, flooding, tornadoes, severe summer storms and winter storms were identified among the most significant risk facing the state. These four were also the highest ranked hazards based on the number of LHMPs reviewed indicating them as serious hazards. Coastal flooding, landslides, and invasive species are ranked high in the state plan; however only some LHMPs identified these hazards as significant. This is likely due to the more limited geographical extent of these hazards. Narrative descriptions and summaries of LHMP data are included throughout the state HIRA.

Analyses in the state plan HIRA are utilized by local officials and may be incorporated into LHMP updates. The Mitigation Branch has completed and provided HAZUS runs for every county in the state for the 25 and 100 year recurrence intervals. The Mitigation Branch regularly informs county emergency management agency directors of the availability of these HAZUS runs and encourages them to incorporate this information into their LHMP updates.

When local officials upload a mitigation plan into SHARRP, they are asked to input data that summarizes their local hazard analysis and vulnerability assessment. In order to standardize the local data collected, SHARPP utilizes the factors considered in the HIRA methodology used by the State of Ohio. Local officials use information collected in their mitigation plans to complete the hazard analysis summary screen in SHARPP. Collecting the information in a standardized format allows the state to analyze risk statewide based on local risk assessments. Many local plans also contain estimates of the potential dollar losses to vulnerable structures. Vulnerability analysis information can be entered into SHARPP as part of the local mitigation plan upload process. Each approved hazard mitigation plan is highly encouraged and, often times, required to be uploaded onto SHARPP. The Mitigation Branch provides training to local officials and contractors on how to use SHARPP.

Standardizing the local HIRA information in the form of SHARPP was an effort to allow the state to analyze vulnerability and potential loss to structures based on local risk assessments. However, it remains difficult to compare each of the counties' potential losses because there is no requirement for a standardized plan template in local hazard mitigation plans. Therefore, each county had the liberty to use its own methodology and approaches for determining potential loss. Although this assessment considers the hazard analysis documented by the 2018 State of Ohio Hazard Identification and Risk Assessment (HIRA), the source behind the methodology in this section are specifically from local hazard mitigation plans entered onto SHARPP. The results of the local HIRA analysis through SHARPP tend to agree with the State HIRA, the risk analyses done throughout section 2 of the SOHMP, and the state priorities for local mitigation project funding.

METHODOLOGY

The Ohio EMA has incorporated and analyzed data from local mitigation plans with the assistance of SHARPP. Hazard Analysis Data from local counties were assessed and a total of 57 local hazard mitigation plans was reviewed as part of this analysis. These 57 plans were the plans that were approved and not expired as of April 2018.

When entering a plan onto SHARPP, there are 13 default hazards that the LHMP can assess. 12 are which the hazards assessed in the State Hazard Mitigation Plan, with the addition of Windstorm. If a hazard/event does not apply, the County can enter it as "N/A". If there are additional hazards assessed in the Local Hazard Mitigation Plan, the County can enter them into empty boxes below the default hazards. Figure 4.3.a shows the overlay when entering in Hazard Analysis data onto SHARPP.

Figure 4.3.a

Hazards	Frequency	Response	Onset	Impact	Business	Human	Property
Coastal Erosion	NA	1	1	1	1	1	1
Dam/Levee Failure	1	1	1	1	1	1	1
Drought	2	2	2	2	2	2	2
Earthquake	3	3	3	3	3	3	3
Flooding	4	4	4	4	4	4	4
Invasive Species	5	5	1	1	1	1	1
Land Subsidence	1	1	1	1	1	1	1
Mud/Landslide	1	1	1	1	1	1	1
Severe Summer Storms	1	1	1	1	1	1	1
Tornado	1	1	1	1	1	1	1
Wildfire	1	1	1	1	1	1	1
Windstorms	1	1	1	1	1	1	1
Winter Storms	1	1	1	1	1	1	1
Power Outages/	1	1	1	1	1	1	1
Hazmat Inciden	1	1	1	1	1	1	1
Extreme Temps	1	1	1	1	1	1	1
Disease impact	1	1	1	1	1	1	1
	NA	1	1	1	1	1	1
	NA	1	1	1	1	1	1

There are seven factors for each hazard: Frequency, Response, Onset, Impact (magnitude), Impact on business, Impact on people, and Impact on Property. Each have four or five level of inputs that the county can enter. For frequency, all hazard scores were derived from inputs of every one of the 57 plans

assessed—even if a majority of the plans did not assess or entered a "N/A" input for some hazards. For example, only seven of 57 county plans saw coastal erosion as a hazard, but the "Frequency" scores entered was weighed amongst all 57 plans. This resulted in the hazard scoring lower in frequency on a state-wide assessment even though it may have a high frequency in the counties that did consider it a hazard. For the other six factors, hazards were assessed based on the scores of only the plans that have considered it a hazard. For example, "Invasive Species" was only considered a hazard in 16 of 57 plans but the State-wide "Response" score was obtained by averaging only the 16 scores inputted for that hazard. The goal of this methodology was to assess "Frequency" on a broad state-wide scale while assessing the other six factors solely by the attributes of the hazard.

FREQUENCY

If a hazard/event does not apply it is given a value of NA. If a hazard/event resulted in no local disaster declarations, it scored a one. If the hazard/event resulted in one – two local disaster declarations, it has a Low Probability of occurrence and scored a two. If it resulted in three – five declarations, it has a Medium Probability and numerical score of three. If the hazard/event resulted in six – eight local disaster declarations, it has a High Probability and scored a four. If the hazard/event resulted in nine or more declarations, it should receive an Excessive Probability rating and a score of five. It is important to note that frequency was considered a key factor in determining the hazard profile. To that end, an Adjusted Frequency score was added for this factor and multiplied by 1.5 to weight the score more importantly than other factors.

1	2	3	4	5
None	Low	Medium	High	Excessive
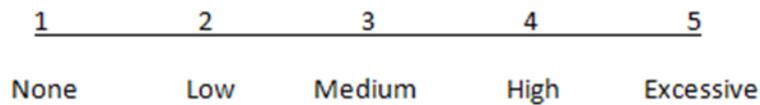
AVERAGE RESPONSE DURATION

Average Response Duration may be defined as "time on the ground" or the time-period of response to a hazard, or event. Transportation accidents may last a few hours whereas a tire fire may last a week or a flood several weeks. Duration, therefore, may not always be indicative of the degree of damage but it remains an important planning factor.
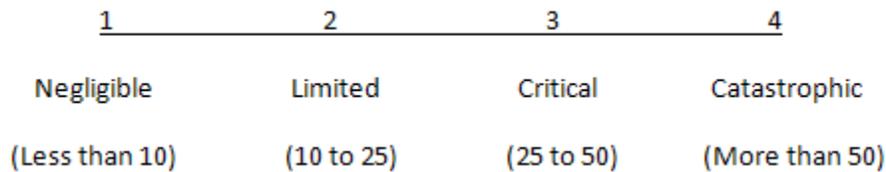
1	2	3	4	5
Less than ½ day	Less than 1 day	Less than 1 week	Less than 1 month	Less than 1 Year
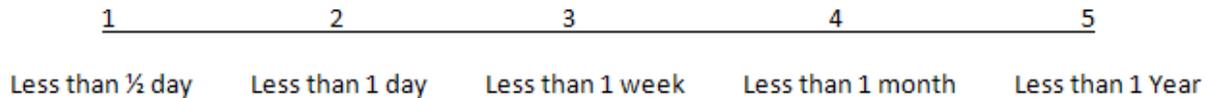
AVERAGE SPEED OF ONSET

Average Speed of Onset may affect all other factors due to lack of warning or time to prepare for impact. The lead-time required protecting lives and property varies greatly with each event. For instance, a winter storm may develop so slowly that there is time to alert crews and emplace plows, but flash floods can occur with no warning.

1	2	3	4
Over 24 hours	12 – 24 hours	6 to 12 hours	Minimal to no warning

AVERAGE MAGNITUDE (IMPACT)

Average Magnitude is the geographic dispersion of the hazard. For instance, how much of your community would be impacted by a flood or hazardous material incident? Similar to the Frequency, this factor is deemed more important and therefore received a weighted value of 1.25 above the raw score. The score is based on the percent of land area impacted by an event.

1	2	3	4
Negligible	Limited	Critical	Catastrophic
(Less than 10)	(10 to 25)	(25 to 50)	(More than 50)

IMPACT ON BUSINESS

The Impact on Business refers to enduring economic impact of the hazard on the community by an event. A score of one compares to a shutdown of critical facilities for less than 24 hours. Two equals a complete shutdown of critical facilities for one week. A score of three means a complete shutdown of critical facilities for at least two weeks. A score of four equals a complete shutdown of critical facilities for 30 days or more.

1	2	3	4

1- (Shutdown of critical facilities for less than 24 hours)
2- (Complete shutdown of critical facilities for one week)
3- (Complete shutdown of critical facilities for at least two weeks)
4- (Complete shutdown of critical facilities for 30 days or more)
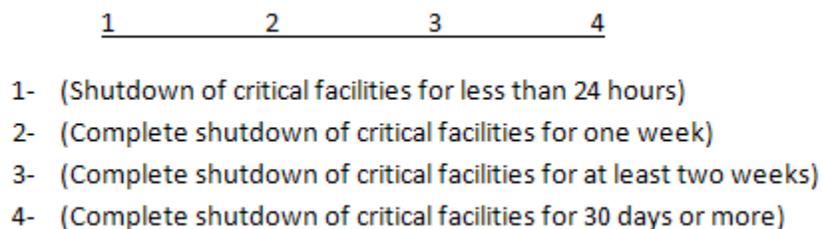
IMPACT ON PEOPLE

This factor relates to the number of lives potentially lost to a particular hazard agent. This factor can vary between jurisdictions based on economic, geographic, and demographics of the particular populations. Therefore, some generalization should be inflected on this factor.

1	2	3	4
Minimum	Low	Medium	High
(Minor injuries)	(Some injuries)	(Multiple severe injuries)	(Multiple deaths)

IMPACT ON PROPERTY

This factor relates to the amount of property potentially lost to a particular hazard agent. This factor can vary between jurisdictions based on economics, geographic amount owned, and demographics of the particular populations. Therefore, some generalization need be inflected on this factor.

1	2	3	4

1- (Less than 10% of property severely damaged)
2- (More than 10% of property severely damaged)
3- (More than 25% of property damaged)
4- (More than 50% of property severely damaged)

Results

Frequency		
Hazard	Score	Rank
Flooding:	5.55	1
Severe Summer Storms:	5.26	2
Winter Storms:	5.11	3
Tornado:	3.45	4
Drought:	3.24	5
Earthquake:	2.18	6
Dam/Levee Failure:	1.71	7
Landslide:	1.42	8
Land subsidence:	1.34	9
Wildfire:	0.92	10
Invasive Species:	0.82	11
Coastal Erosion:	0.39	12

Response Time		
Hazard	Score	Rank
Flooding	2.95	1
Tornado	2.53	2
Winter Storms	2.51	3
Severe Summer Storms	2.23	4
Wildfire	2.20	5
Landslide	2.17	6
Drought	2.07	7
Dam/Levee Failure	2.06	8
Earthquake	2.06	9
Land subsidence	1.96	10
Invasive Species	1.38	11
Coastal Erosion	1.29	12

Onset Time		
Hazard	Score	Rank
Invasive Species	3.81	1
Drought	3.79	2
Coastal Erosion	3.43	3
Winter Storms	3.14	4
Land subsidence	2.93	5
Flooding	2.54	6
Dam/Levee Failure	2.38	7
Landslide	2.29	8
Severe Summer Storms	2.15	9
Wildfire	1.60	10
Earthquake	1.49	11
Tornado	1.49	12

Impact (Magnitude)		
Hazard	Score	Rank
Winter Storms	4.63	1
Severe Summer Storms	3.80	2
Flooding	3.78	3
Drought	3.66	4
Tornado	3.60	5
Earthquake	3.45	6
Dam/Levee Failure	2.89	7
Invasive Species	2.64	8
Land subsidence	2.23	9
Landslide	2.21	10
Wildfire	2.19	11
Coastal Erosion	1.56	12

Impact on Business		
Hazard	Score	Rank
Earthquake	2.30	1
Tornado	2.19	2
Flooding	2.11	3
Dam/Levee Failure	1.89	4
Winter Storms	1.68	5
Severe Summer Storms	1.53	6
Wildfire	1.45	7
Drought	1.38	8
Coastal Erosion	1.29	9
Landslide	1.25	10
Land subsidence	1.18	11
Invasive Species	1.00	12

Impact on People		
Hazard	Score	Rank
Tornado	2.57	1
Earthquake	2.19	2
Dam/Levee Failure	2.04	3
Flooding	1.96	4
Severe Summer Storms	1.72	5
Winter Storms	1.70	6
Wildfire	1.40	7
Landslide	1.33	8
Drought	1.23	9
Land subsidence	1.18	10
Invasive Species	1.13	11
Coastal Erosion	1.00	12

Impact on Property		
Hazard	Score	Rank
Tornado	2.23	1
Flooding	2.19	2
Earthquake	2.00	3
Winter Storms	1.77	4
Severe Summer Storms	1.75	5
Dam/Levee Failure	1.72	6
Drought	1.55	7
Wildfire	1.45	8
Coastal Erosion	1.43	9
Landslide	1.29	10
Invasive Species	1.25	11
Land subsidence	1.14	12

Overall Hazard Ranking		
Hazard	Score	Rank
Flooding	21.09	1
Winter Storms	20.54	2
Severe Summer Storms	18.44	3
Tornado	18.04	4
Drought	16.91	5
Earthquake	15.67	6
Dam/Levee Failure	14.71	7
Invasive Species	12.02	8
Landslide	11.97	9
Land subsidence	11.97	10
Wildfire	11.21	11
Coastal Erosion	10.39	12

STATE OF OHIO HAZARD IDENTIFICATION AND RISK ASSESSMENT (HIRA)

Separate from the assessment of local HIRA's above, the 2018 State of Ohio HIRA also provides research and updates on hazards that the state is vulnerable to. While the SHARPP assessments primarily focuses on natural hazards from local hazard mitigation plans, the state HIRA assesses a wider range of hazards that are natural, technological, and human-caused. There are 49 hazards assessed in the State of Ohio HIRA. There are 12 hazards that relate to the 12 hazards assessed in the SOHMP. Because of how certain hazards are categorized, it may be difficult to directly compare the ranking of hazards between the two documents. However, it is worth noting that three of the top four natural hazards in either documents are also the top four of the other.

State of Ohio HIRA	SHARPP Local Hazard Mitigation Plan Assessment
1. Terrorism, Radioactive	1. Flooding
2. Nuclear Accident	2. Winter Storms
3. Terrorism, Chemical	3. Severe Summer Storms
4. Terrorism, Biological	4. Tornado
5. Public Health Emergency	5. Drought
6. Mass Casualty Incident (Medical)	6. Earthquake
7. Tornado	7. Dam/Levee Failure
8. Mass Casualty Incident (Trauma)	8. Invasive Species
9. Accidental Hazmat Release	9. Landslide
10. Blizzard or Ice Storm	10. Land subsidence
11. Flood, Riverine	11. Wildfire
12. Electrical Grid Failure	12. Coastal Erosion
13. Earthquake	
14. Dam Failure	
15. High Winds	
16. Animal/Crop Eco-terrorism	
17. Urban/Flash flood	
18. Urban Fire	
19. Wild Fire	
20. Mass Communications failure	
21. Water Supply Failure	
22. IT System Security Breach	
23. Aircraft Incident	
24. Shortage of Critical Materials	
25. Drought	
26. IT Infrastructure Disruption	
27. Natural Gas Failure	
28. Temperature Extremes	
29. Fuel Shortage	
30. Transportation Failure	
31. Public Event Disturbance	
32. Landslide / Erosion	
33. Hurricane	
34. Sewer Failure	
35. Severe Thunderstorm	
36. Suspicious Powder	
37. Bomb Threat	
38. Emergency Generator Failure	
39. Hostage Situation	
40. Civil Disturbance	
41. Flood, Internal	
42. Space Weather	
43. Abduction	
44. Mail/Package Bomb	
45. Workplace Violence	
46. Labor Action	
47. Stalking	
48. VIP Situation	
49. Space Debris	

BARRIERS TO LOCAL PLANNING AND APPROACHES TO ADDRESS THEM

The majority of local hazard mitigation plan updates in Ohio are done on a countywide, multi-jurisdictional basis. While there are clear benefits in undergoing the planning process and having a federally approved hazard mitigation plan, there are also barriers in the local planning process. This section will attempt to summarize the most common barriers. However, the problems encountered when undergoing planning processes and doing mitigation actions often results from a combination of multiple barriers.

Local Motivation

The underlying reason behind this lack of local motivation may stem from various factors including the perceived return from having a hazard mitigation plan to local officials. This positive return may not outweigh the perceived effort of undergoing a planning process. Hazard mitigation planning can be a time-consuming and expensive process. County emergency management directors are responsible for many roles in emergency management including hazard mitigation and this can lead to having many competing priorities that limit the amount of time that can be reasonability spend on mitigation.

An approach that the Ohio Emergency Management Agency have taken to address this barrier is by embracing a dual approach to grant funding. Counties are encouraged to apply for federal grant programs such as the Pre-disaster Mitigation (PDM) grant, and the Hazard Mitigation Grant Program (HMGP). Counties are highly encouraged to apply along the midway point of 5-year approval period of their current plan. Any county with an expired plan is encouraged to apply for either PDM or HMGP grants whenever an opportunity opens. Obtaining a federal grant often reduces the major financial limitations a county or jurisdiction may face by paying for up to 87.5% of a Hazard Mitigation Plan update. In these grant programs, the county or jurisdiction may meet their match commitment with an in-kind contribution. Having this source of funding allows counties and jurisdictions to pay a contractor to assist them with the update, or to fund the update done in-house.

The second part of this approach is by streamlining the grant application process for counties and jurisdictions. Since the PDM FY-17 grant, the State of Ohio began rolling all local planning applications into a statewide application for each grant opportunity. By doing this, the State assumes the applicant role and the county or jurisdiction become sub-applicants. This saves the local entity the time and effort required to each individually develop their applications and enter them into FEMA eGrants or NEMIS systems. Overall, this approach has allowed local entities to reduce the overall amount of steps and effort in order to obtain funding.

Local Participation

Participation from local jurisdictions is a mandatory requirement for their coverage under a multi-jurisdictional hazard mitigation plan. While most plan updates in the state are countywide planning processes, participation by local jurisdictions greatly vary by the resources available to the jurisdiction. For example, a village with a population of 36 (the lowest amongst all jurisdictions in the 2010 census) will likely have less overall capability in participating and contributing to the planning process than larger communities with greater social, technical, and financial resources.

Factors that make it more convenient for larger jurisdictions with dedicated roles and resources (timing, etc.) makes it easier for these jurisdictions to participate and contribute than smaller communities. In many cases, representatives from these smaller communities work other jobs making it harder to attend

daytime countywide meetings. These limitations due resources are not limited to just cities and villages. Counties with more resources may have greater ability in outreach and accommodation.

In addition to the plan update process, the implementation of mitigation actions and objectives are directly limited by the capability of the community. The prioritization of local mitigation actions is largely determined by the capabilities of that jurisdiction. For example, a mitigation action may have more benefit to a jurisdiction but can be ranked lower due that jurisdiction's capabilities- such as their ability to meet the local match of a grant, or to implement that action in general.

While participation is still a mandatory requirement per jurisdiction basis, technologies have allowed for different levels of participation to happen. Where physical presence is not possible, it is encouraged that local jurisdictions participate by various other means that contribute toward a meaningful and collaborative Whole Community Approach. The planning team is always encouraged to pursue the next best option if a jurisdiction is unable to attend a countywide meeting. Such methods include telephone and web conferencing of countywide meetings, bi-lateral communications over email, telephone, survey, and follow-up meetings at different locations. In addition to community representatives, stakeholders such as businesses and institutions are invited. As required by federal regulation, the general public are also invited to participate in the planning process.

Technical Data.

The availability of technical data for local planning may vary from county to county. For example, one of the more common local methods of finding flood-prone properties is by utilizing GIS to intersect local parcel and building footprint layers with FEMA's National Flood Hazard Layer (NFHL). The availability of GIS data can certainly be a limitation depending on what is available in a county. There are currently ten counties out of 88 in Ohio that do not have modernized maps of the NFHL. In addition, there are a handful of counties in the state that do not have local parcel or building footprint data. This lack of local GIS data is a limitation to more hazards than flooding alone. It creates technical barriers in developing modern risk assessments and vulnerability analyses.

There are various approaches taken to address this barrier. The first is by obtaining grant funding to hire a contractor to do the Hazard Mitigation Plan update. Subject-matter experts bring expertise and understanding of the field, as well as tools to make use of the best available data. State and federal agencies are also a great source to obtain data. Grant funding can be used to obtain data that is vital to developing effective risk assessments and vulnerability analyses.

Another way to plan around this limitation is to make the best use of the available data. For example, there are various methods for analyzing risk but two common methods are exposure analyses and historical analyses. Each of these two methods have their strengths and weaknesses, and require a different set of data. While exposure analyses provide a detailed look at risks for site-specific scenarios, they also generally require a great deal of quantitative data and GIS data. Historical analyses, on the other hand, estimate losses based on past events. This is then limited to the availability of documented events and how accurately they were documented. If the data for the ideal analysis method is not available, developers will consider other methods to make the best use of the available data.

Policies and Capabilities in Addressing Repetitive Loss and Severe Repetitive Loss Properties

The State of Ohio strives to promote sustainable communities and development (Goal #2, Objective 4). The ODNR Floodplain Management Program's effort to promote sound floodplain management statewide is one example of the state's commitment. Ohio EMA's promotion of mitigation planning through SHARPP also demonstrates the state's commitment to promoting community sustainability principles. The mitigation priorities identified in the State of Ohio Hazard Mitigation Plan align well with the identified risk in the state. In partnership with the Federal government and local communities, the State of Ohio will continue to develop, implement and administer mitigation grant programs that reduce risk to repetitive loss properties. These mitigation planning and project activities will continue to decrease the burden of repetitively flood damaged structures on the Disaster Relief Fund and the National Flood Insurance Fund.

Recent legislation is focused on reducing the number of repetitive loss structures by offering mitigation options to the owners. FEMA mitigation grant programs have also prioritized the mitigation of repetitive loss structures including: HMGP, FMA, and the PDM-C. The repetitive loss data should be used to identify areas that are repetitively flooded in a community. Given the current prioritization of repetitive loss structures, these structures should be considered when developing mitigation projects that utilize FEMA funding.

As part of the State mitigation strategy, Goal #4 includes the elimination of repetitive loss flood-prone structures. One of the three objectives under this Goal is to prioritize repetitive loss properties for available funds from FEMA mitigation programs. As opportunities for mitigation funding have developed, Ohio has worked with local jurisdictions, counties and FEMA to address repetitive loss and other issues to reduce loss or disaster impact. The table below shows the top 12 counties in the state by the number of mitigated properties funded by FEMA grants.

County	RL/SRL Properties	Flood Mitigation Projects	Mitigation Type				Mitigated Properties	Project Funding Total*
			Acquisition	Elevation	Floodproofing	Relocation		
HANCOCK	266	5	49	-	-	-	49	$ 4,161,905.11
WASHINGTO	202	2	10	-	-	-	10	$ 312,291.00
CUYAHOGA	148	7	7	19	4		30	$ 4,329,054.74
HAMILTON	141	15	232	-	16	-	248	$ 12,517,282.16
OTTAWA	130	3	-	12	-	-	12	$ 702,213.77
ERIE	99	-	-	-	-	-	-	
SUMMIT	89	6	14	-	-	-	14	$ 1,646,427.00
LUCAS	80	3	24	-	-	-	24	$ 745,694.85
LAKE	78	3	79	-	-	-	79	$ 6,372,783.00
FRANKLIN	70	4	28	-	-	-	28	$ 3,802,125.53
BELMONT	61	2	37	-	-	-	37	$ 1,275,083.00
ATHENS	60	5	56	1	4	-	61	$ 3,060,510.01
Grand Total	1,424	55	536	32	24	-	592	$ 38,925,370.17

Assumptions:
- Chart reflects structures that have been mitigated as of April 16, 2019.
- Project Funding Total column for completed projects = Final Project Cost.

Records from closed mitigation projects in Ohio indicate that there have been 1,546 structures mitigated in the state, with a project-funding total of about $99,022,173 and an average of $64,051 invested in mitigation actions per structure. The grant-funded mitigated properties in the top 12 counties with RL/SRL properties account for about 38 percent of the total mitigated properties in the state. This aligns with the state mitigation strategy of prioritizing acquisitions and concentrating efforts on mitigating repetitive loss structures. Ohio's record of successfully mitigating these structures helps the state reach the goal of minimizing societal disruption and damage to property from hazard events (Goal 2, Objective 3).

Ohio continues to be very active in accomplishing the objectives set forth in the mitigation strategy regarding repetitive loss structures. Still, there are counties where there have been few or no mitigated repetitive loss structures. Ultimately, mitigation occurs at the local level. There are many valid reasons why a particular community has not yet addressed identified repetitive loss structures including: lack of property owner interest, the targeted structure cannot meet benefit-cost analysis requirements, lack of grant match dollars, etc. As demonstrated by the number of successful mitigation projects, the Ohio EMA Mitigation Branch is committed to working with Ohio communities to overcome these obstacles and support local mitigation efforts.