



9.25 TOWN OF ONONDAGA

This section presents the jurisdictional annex for the Town of Onondaga. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Onondaga’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Onondaga’s hazard mitigation plan primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Name: Benjamin Vincent Title: Code Enforcement Officer Phone Number: 315-469-3144 Address: 5020 Ball Rd Syracuse, NY 13215 Email: Bvincent@townofonondaga.com	Name: John Wheatley Title: Highway Superintendent Phone Number: 315-469-1664 Address: 4478 W. Seneca Turnpike, Syracuse, NY 13215 Email: Jwheatley@townofonondaga.com
Floodplain Administrator	
Name: Benjamin Vincent Title: Code Enforcement Officer Phone Number: 315-469-3144 Address: 5020 Ball Rd Syracuse, NY 13215 Email: Bvincent@townofonondaga.com	

9.25.2 Municipal Profile

The Town of Onondaga is centrally located in Onondaga County in western New York State. The Town of Onondaga has a total area of 57.8 square miles. It is bordered by the Town of Geddes to the north, the Town of Camillus to the northwest, the City of Syracuse to the northeast, the Town of Lafayette to the southeast, the Town of Otisco to the south, the Town of DeWitt to the east and the Town of Marcellus to the west.

Interstate 81 passes along the east side of the town. US Route 11 is a north-south highway in the eastern part of Onondaga, paralleling the interstate. US Route 20 is an east-west highway in the south of the town. New York State Route 173 is an east-west highway through the middle of Onondaga. New York State Route 11A diverges westward from US-11. New York State Route 80 cuts through the south part of the town.

There are several communities located within the town: Cards Corners, Cedarvale (hamlet), Griffin’s Corners, Gwilt’s Corners, Howlett Hill (hamlet), Indian Village (hamlet), Ironsides, Joshua, Kellys Corners, Loomis Hill, Lord’s Corners (hamlet), Navarino (hamlet), Nedrow (hamlet), Nichols’ Corners (hamlet), Onondaga Castle (hamlet), Onondaga Nation Reservation, Onondaga Hill (hamlet), Sentinel Heights, South Onondaga (hamlet), Southwood (hamlet), Split Rock (hamlet), Taunton (hamlet), and Wellington Corner. The estimated 2016 population was 23,107, a 0 percent decrease from the 2010 Census (23,101). The Town of Onondaga is governed by a supervisor and four councilors.

Data from the 2016 U.S. Census American Community Survey estimates that 4.6 percent of the town population is five years of age or younger, and 16.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.





History and Cultural Resources

Before the American Revolution, the Town of Onondaga was the capital of the Six Nations. It was attacked by the Continental Army on April 21, 1779. The town is still located within the territory of the Onondaga, a constituent tribe of the Iroquois. This region was within the Central New York Military Tract, but part of the town was a reservation in the tract reserved for members of the Onondaga.

The Town of Onondaga was incorporated on April 2, 1798 from parts of other towns, with several subsequent boundary changes. The town was established originally, when Onondaga County was formed in 1794, from parts of the Towns of Marcellus, Pompey, and Manlius.

Growth/Development Trends

Table 9.25-1 summarizes major residential/commercial development and any known or anticipated major residential/commercial development and major infrastructure development that is likely to occur within the municipality in the next five years (as of August 2018).

Table 9.25-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to present					
Brittany Hills Section 12	Res.	14	Kingsford Terrace	None Identified	Single family/ Active
Hallinan Meadows	Res.	19	Off of November Lane	Carbonate Bedrock	Single Family/ Active
Skyland Meadows Section 5	Res.	12	Outlook Drive	None Identified	Single Family/ Active
Crownpoint Ext 2	Res.	21	Providence Road	None Identified	Single Family/ Active
Stone Gate Heights Sect 2	Res.	18	Mystic Drive	Carbonate Bedrock	Single Family/ Active
Known or Anticipated Development in the Next Five (5) Years					
Tabitha Creek Section G2	Res.	13	Tabitha Creek	None Identified	Future
Olde Towne Off Cleveland Rd	Res.	79	Off Cleveland road	None Identified	Future
Cleveland Heights	Res.	87	Off Cleveland road	None Identified	Future

** Only location-specific hazard zones or vulnerabilities identified.*

9.25.3 Hazard Event History Specific to the Town of Onondaga

Onondaga County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Town of Onondaga’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Onondaga County. Table 9.25-2 provides details regarding municipal-specific loss and damages the town experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.



Table 9.25-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Onondaga County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April – May 2011	Severe Storms, Flooding, Tornadoes, and Straight-Line Winds (FEMA-DR-1993)	Yes	<p>A slow moving warm front pushed northward across central New York late in the afternoon on April 25th. Severe weather developed, and in addition to reports of severe wind damage and hail, plenty of wind shear in the vicinity of the warm front allowed for a few super-cell thunderstorms and tornadoes to develop. In addition, areas of heavy rain caused significant flash flooding in several locations of central New York.</p> <p>On May 26, a deep upper level low pressure system shifted east from the mid-Mississippi Valley region through the afternoon and evening, allowing numerous showers and thunderstorms to develop. Many reports of large hail and damaging winds occurred in central New York.</p>	While the county was impacted, the town did not report damages.
June 30- July 1, 2015	Flash Flood	No	An unseasonably strong storm system tapping into above normal moisture sources across the Great Lakes and Northeast triggered multiple heavy rain producing thunderstorms across the region. Localized torrential rainfall in central New York caused serious urban flash flooding in the Syracuse, NY metropolitan area. Damages are estimated between three and five million dollars.	At 101 Hillcrest, a basement collapsed. Breckenridge Asphalt surface peeled 6/30/15 Brookdale senior living flooded facility caused short circuit in attic and resulted in fire.
July 1, 2017	Flash Flood	No	<p>A tropical moisture laden air mass produced numerous showers and thunderstorms which traveled repeatedly over the same areas of the Finger Lakes Region and Upper Mohawk Valley. Widespread flash and urban flooding developed in portions of Cayuga, Onondaga, Madison and Oneida counties. Hardest hit areas were the villages and towns of Moravia, Chittenango, Oneida, and Utica to name a few. Total rainfall amounts along a narrow corridor from Moravia to Utica generally ranged from 2.5 to 5 inches, most of which fell in less than 1 to 2 hours. Total damages from this event range from \$10-\$15 million dollars Countywide.</p>	While the county was impacted, the town did not report damages.

Notes:

- EM* *Emergency Declaration (FEMA)*
- FEMA* *Federal Emergency Management Agency*
- DR* *Major Disaster Declaration (FEMA)*
- N/A* *Not applicable*



9.25.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Town of Onondaga. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk Ranking

Table 9.25-3 includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Onondaga County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Onondaga. The Town of Onondaga has reviewed the County hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

The town indicated that the geologic hazard should be increased from a low to a medium hazard, as the town has numerous steep slope areas that could be impacted by mudslide, resulting in lost roadways. The town also indicated that invasive species should be increased from a low to a medium hazard. The town has been impacted by emerald ash borer resulting in dead trees throughout the town, many of which have been removed from roadsides. The town has also been impacted by tick outbreaks, including invasive tick species.

During the review of the hazard/vulnerability risk ranking, the town indicated that they agreed with the following hazard rankings:

- The town changed the risk ranking for drought from high to low.
- The town changed the risk ranking for geologic from low to medium.
- The town changed the risk ranking for invasive species from low to medium.
- The town agreed with the remainder of the calculated risk rankings.

Table 9.25-3. Town of Onondaga Hazard Ranking Input

HAZARD	Drought*	Earthquake	Flood	Geologic*	Harmful Algal Bloom	Invasive Species*	Severe Storm	Severe Winter Storm
RELATIVE RISK FACTOR	Low	Low	Medium	Medium	Low	Medium	High	High

Notes: The scale is based on the following hazard rankings as established in Section 5.3.
 High = Total hazard priority risk ranking score of 5 and above
 Medium = Total hazard priority risk ranking of 3.9 – 4.9
 Low = Total hazard risk ranking below 3.8
 *The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality

Critical Facilities Flood Risk

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related





to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet this criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.25-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
Veterans Memorial Cemetery	County Facility	X	X	20%	100%	T. Onondaga-6
NGRID Tanner Rd Substation	Natural Gas	X	X	-	-	T. Onondaga-7

Source: FEMA 2016, SOPA 2018

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Harris Road floods due to a low spot. Haven’t closed the road but do put up barricades.
- Cross culvert on Fox Road clogs with debris.

Specific areas of concern based on resident response to the Onondaga County Hazard Mitigation Citizen survey include:

- Portions of Broad Road (Town of Onondaga) floods during heavy rains and spring thaws causing flooding on and within properties immediately downhill. Routinely maintaining the drainage system would mitigate the damage.
- Routine maintenance of existing structures and systems is necessary so they function properly
- DPW and local highway departments maintain/improve infrastructure
- Understanding who to contact (which agency, point of contact) for each hazard type encountered would be helpful to know.

9.25.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms



Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Onondaga.

Table 9.25-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Comprehensive Plan	Yes	Local	Planning	Master Plan
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	Yes	Local	Planning	L.L #3 of 1987 Chapter 16A
Stormwater Management Plan	Yes	Local	Planning	L.L #6 of 2008 Chapter 29C
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Operation Plan	Yes	Local	Planning	Executive order #1 of 1993
Evacuation Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Climate Adaptation Plan	No	-	-	-
Resilience Plan	No	-	-	-
Other Plans:	No	-	-	-
Regulatory Capability				
Building Code	Yes	Local	Codes	L.L #3 1989 Chapter 8
Zoning Ordinance	Yes	Local	Codes	L.L #1 1994 Chapter 35
Subdivision Ordinance	Yes	Local	Codes	L.L #1 1967 Chapter 30
NFIP Flood Damage Prevention Ordinance	Yes, 5/18	Local	Codes	Local Law #6 Chapter 249
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	Local	Codes	State mandated BFE+2 for all construction, both residential and non-residential
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	No	-	-	-
Stormwater Management Ordinance	Yes, 9/19/16	Local	Planning board	L.L #3 2016
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Codes	-



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Onondaga.

Table 9.25-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Town Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	No	-
Mutual aid agreements	No	-
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	C&S Engineers
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	C&S Engineers
Planners or engineers with an understanding of natural hazards	Yes	C&S Engineers
NFIP Floodplain Administrator (FPA)	Yes	Ben Vincent/Codes Department
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	C&S Engineers
Scientist familiar with natural hazards	No	-
Warning systems/services	Yes	911 dispatch center
Emergency Manager	No	-
Grant writer(s)	No	-
Staff with expertise or training in benefit/cost analysis	Yes	Kim Burt- Director of finance
Professionals trained in conducting damage assessments	No	-



Fiscal Capability

The table below summarizes financial resources available to the Town of Onondaga.

Table 9.25-7. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	No
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	No

Community Classifications

The table below summarizes classifications for community programs available to the Town of Onondaga.

Table 9.25-8. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-
Public-private partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable





The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule (<https://www.isomitigation.com/bcegs/>)
- The ISO Mitigation online ISO’s Public Protection website at <https://www.isomitigation.com/ppc/>
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>)
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/communities>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of the Town of Onondaga’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.25-9. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and regulatory capability			X
Administrative and technical capability			X
Fiscal capability			X
Community political capability		X	
Community resiliency capability		X	
Capability to integrate mitigation into municipal processes and activities		X	

National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

NFIP Floodplain Administrator (FPA)

Ben Vincent, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The Town of Onondaga maintains lists/inventories of properties that have been flood damaged and identifies property owners who are interested in mitigation though there are currently none interested. The FPA noted there is 1 property that has been flooded in past events. The town does not make substantial damage estimates.



The following table summarizes the NFIP statistics for the Town of Onondaga.

Table 9.25-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of Onondaga	33	14	\$28,470	0	0	15

Source: FEMA Region 2 2018.

(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Onondaga County boundary, based on provided latitude and longitude coordinates.

RL Repetitive Loss
SRL Severe Repetitive Loss

Resources

The FPA is the sole person responsible for floodplain administration, with the assistance of other local officials. The town does not supply any NFIP administration services and functions or education and outreach regarding flood hazards/risk and flood risk reduction. The FPA noted that they do not have access to resources to determine possible future flooding conditions from climate change. However, they feel adequately supported and do not feel there are any barriers to running an effective floodplain management program. The FPA noted they would consider attending continuing education and/or certification training on floodplain management if it were offered in the County for all local floodplain administrators.

Compliance History

The Town of Onondaga is in good-standing in the NFIP. The most recent compliance audit [e.g. Community Assistance Visit (CAV)] was September 1, 2017. The Town determines if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedules if needed.

Regulatory

The Flood Damage Prevention Ordinance for the Town of Onondaga meets FEMA and State minimum standards. The town maintains compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. The FPA noted that the Town Boards look at all plans and procedures to determine ways to reduce flooding. The FPA stated that the town has not considered joining the Community Rating System (CRS) program to reduce flood insurance premiums for their insured.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community’s progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.



Planning

Existing Integration

Master Plan: The Town of Onondaga Master Plan, with an addendum most recently adopted in 2017, is a guide for land use and development in the town over the next 20 years. A primary goal of the plan is to preserve the high quality residential character of the town while encouraging properly planned development. The plan also aims to preserve the integrity of the town's environment and natural resources. Specific objectives include limiting public sewer and water infrastructure expansion, limiting risky development in flood-prone areas, and requiring the flood-proofing of existing structures within flood prone areas over the next 20 years. The Plan does not include information on natural hazard risk or refer to the Countywide Hazard Mitigation Plan.

Stormwater Management Plan: The Town of Onondaga is an MS4 Regulated Community and has a formal Stormwater Management Plan. The 2017 Stormwater Management Program MS4 Semi-Annual Report (SWMPP) is a progress report that provides compliance measures for the watershed of Onondaga Lake. The report encompasses a watershed improvement strategy to reduce the discharge of phosphorous in Onondaga Lake. Additionally, the report focuses on programs and criteria that guide overall stormwater management within the town such as regularly maintaining all of the public stormwater infrastructure on an annual basis. The Plan specifies projects/actions/initiatives to reduce the volume of stormwater, or otherwise mitigate stormwater flooding.

Onondaga County Hazard Mitigation Plan: The Town of Onondaga supports the implementation, monitoring, maintenance, and updating of this Plan. The town supports county-wide initiatives identified in Section 9.1 of the County Annex. Within the first year of plan implementation, the town will identify order of magnitude costs for structural and infrastructure mitigation projects identified in this municipal annex, and identify the mitigation benefits associated with each of these initiatives.

Emergency Plans: The Comprehensive Emergency Management Plan refers to the Hazard Mitigation Plan. The town has a Post-Disaster Recovery Plan/Strategic Recovery Plan that refers to the Hazard Mitigation Plan and includes specific mitigation projects and activities. The town is developing a Continuity of Operations/Continuity of Government (COOP/COG) plan(s). The town continues to develop, enhance, and implement existing emergency plans.

The Town of Onondaga does not have a Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Watershed or Stream Corridor Management Plan, Local Waterfront Revitalization Plan, a Continuity of Operations/Continuity of Government (COOP/COG) plan(s), Comprehensive Emergency Management Plan, Post-Disaster Recovery Plan/Strategic Recovery Plan, resilience plan/strategy, or Climate Adaptation Plan/strategy.

Opportunities for Future Integration

Updates to existing plans or new plans could include information on natural hazard risk and refer to the Countywide Hazard Mitigation Plan.

Regulatory and Enforcement (Ordinances)

Existing Integration

The town has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the Establishment of Boards (see Operational and Administration below), Fire Prevention Ordinance, Flood Damage Prevention Ordinance, Environmental Quality Review Ordinance, Stormwater Management Ordinance, Zoning Ordinance, Subdivision of Land Ordinance. The town also adheres to the New York State Fire Prevention and



Building Code. The municipal ordinances are available on the town website: <http://www.townofonondaga.com/>

Zoning Ordinance: The Zoning Ordinance (Ch. 285), most recently updated in 1994, creates general standards that provide regulations and restrictions of locations, construction and use of buildings and the division of districts with overlay requirements. Additionally, the ordinance provides a landscaping plan with buffer requirements as well as regulations for adequate drainage facilities.

The Town of Onondaga’s municipal zoning, subdivision regulations, and site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazard risk.

Opportunities for Future Integration

When ordinances are updated or new ordinances are created, the town will consider natural hazard risk and resilience themes.

Operational and Administration

Existing Integration

Planning Board: The Town of Onondaga Planning Board is comprised of a chairman and four board members. The Board supports land use decisions, public health and safety and assures compliance with regulations, ordinances and the Comprehensive Plan. The Board is responsible for review of applications.

Zoning Board of Appeals: The Town of Onondaga Zoning Board of Appeals is comprised of a chairman and four board members. The Board supports land use decisions, public health and safety and assures compliance with regulations, ordinances and the Comprehensive Plan. The Board is responsible for review of applications.

Mutual Aid Agreements: The Town of Onondaga works to create/enhance/ maintain mutual aid agreements with neighboring communities.

Stream Team Program: The Town of Onondaga supports/participates in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.

The Town of Onondaga has a municipal zoning, planning, and codes department. The town does not have any additional boards or committees that include functions with respect to managing natural hazard risk. NFIP Floodplain Management functions are performed by the Code Enforcement Officer. Stormwater Management functions are performed by Ben Vincent, John Wheatley, Paul Votra, the Codes Department, and the Highway Department. The town engineering firm has experience with developing Benefit-Cost Analysis. The town has staff and uses the engineering firm to perform Substantial Damage Estimates. The town’s staff and legal department have experience in preparing grant applications for mitigation projects. No town staff have job descriptions that involve natural hazard risk. However, staff receive training or continuing professional education which supports natural hazard risk reduction and the Code and Highway Departments participate in associations, organizations, groups or other committees that support natural hazard risk reduction and build hazard management capabilities. It is the Highway Department’s responsibility to maintain catch basins, culverts, pipes and ditches on town owned roads.

Opportunities for Future Integration

Staff could continue to receive training regarding natural hazard mitigation.



Funding

Existing Integration

The Town of Onondaga has a line item for mitigation projects/activities in the municipal budget but does not have a Capital Improvements Budget. The town has pursued and been awarded Community Development Grant funds for mitigation-related projects. The town does not have any other mechanisms to fiscally support hazard mitigation projects.

Pre-disaster mitigation funds will be available upon FEMA approval of this plan, along with other funding available through the state and federal sources, such as the NYS Department of Conservation (Climate Smart Communities Grants, Water Quality Improvements Program, Trees for Tribes), NYS Environmental Facilities Corporation (Wastewater Infrastructure Engineering Planning, Clean Water Revolving Loan Fund, Green Innovation Grant Program), New York State Energy Research and Development Authority (Clean Energy Communities Program), and Empire State Development.

Opportunities for Future Integration

The town could continue apply for grants and allocate funding from the municipal budget to support hazard mitigation projects.

Education and Outreach

Existing Integration

The Town of Onondaga currently does not have any public outreach mechanisms/programs to inform citizens on natural hazards. The town operates a municipal website (<http://townofonondaga.com/>) which includes community news and information. The town's website posts information regarding upcoming community events and important municipal decisions. The website provides information related to safety and hazard mitigation including local emergency response contact information, current project information, Storm Water regulations, and links to related ordinances (see Regulatory and Enforcement).

Opportunities for Future Integration

The town could include information on natural hazards on the town website and develop outreach programs.

Sheltering, Evacuation, and Temporary Housing

Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Temporary and Permanent Housing

The Town of Onondaga has not identified potential sites for the placement of temporary housing for residents displaced by a disaster or potential sites suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired. For temporary housing locations, the county identified potential locations throughout the county, as shown in Section 4 (County Profile), Table 4-3 and Figure 4-18. To accommodate longer term housing needs of permanently displaced residents, there is an existing supply of vacant housing units within the county which may be able to satisfy and absorb those housing needs. The county also has ample buildable land availability throughout its communities to satisfy construction of new housing units if needed, as mapped in Section 4, figure 4-20 in Volume I of this plan. Of note, given the nature of the hazards of concern to Onondaga County, the extent of housing need is also not likely to exceed currently available housing stock for all but the most extreme and widespread hazard events.



Evacuation and Sheltering Needs

The Town of Onondaga has designated the following emergency shelters:

- Town of Onondaga Town Hall: 5050 Ball Road Syracuse, NY 12315. The Town Hall has backup power
- Local Fire Departments: The town has numerous Local Fire Departments which have backup power. Most are ADA compliant and could make allowances for pets.

The town has not identified evacuation routes or evacuation procedures.

Per the County Emergency Management Plan, in the event of a hazard occurrence, the Department of Emergency Management is tasked with coordinating evacuation procedures with the Sheriff's Department, the On-Scene Commander, the Transportation Coordinator, the ARC, hospitals, special facilities, the fire service and the Health Department. The Sheriff's Department is responsible for implementing traffic control procedures including coordination of vehicular traffic and protection of resources, facilities and services in the affected areas. As noted in Section 4, Figure 4-19 in Volume I of this plan, the primary roads and highways are the evacuation routes for Onondaga County; the county is fortunate to have a variety of well-connected arterial and collector roadways to provide a variety of routing options during times of large-scale evacuation.

The American Red Cross (ARC) has primary contractual responsibility to provide sheltering, including short term housing, for Onondaga County individuals and families during an emergency occurring in Onondaga County. Services of the ARC include emergency sheltering needs, mass care, feeding, information and referral, and special population assistance. A confidential shelters list is maintained by the Department of Emergency Management and the ARC which identifies capacity for 15,000+ residents across Onondaga County. The ARC is responsible for maintaining shelter and temporary housing agreements with selected facilities.

9.25.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.25-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
TON-1a	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.				In Progress	Cost		1. Include in 2019 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
TON-1b	Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.				In Progress	Cost		1. Include in 2019 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
TON-2	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:							
	See above.				In Progress	Cost		1. Include in 2019 HMP





Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Level of Protection	Damages Avoided; Evidence of Success	
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
TON-3	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-4	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives TN0-1a, 1b, 2, and 8 through 11.				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-5	Continue to develop, enhance, and implement existing emergency plans.				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-6	Create/enhance/ maintain mutual aid agreements with neighboring communities.				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.





Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-7	Support County-wide initiatives identified in Section 9.1 of the County Annex.				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-8	Support/Participate in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.				Ongoing capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing capability
TON-9	Replace and upgrade existing culverts to increase drainage capacity and mitigate frequent flooding along Kasson Road, Onondaga Boulevard and Harris Road.				In Progress	Cost		1. Include in 2019 HMP
						Level of Protection		2. Focus on Harris Road
						Damages Avoided; Evidence of Success		3.
TON-10	Cleaning and maintenance of classified streams on private properties to mitigate flooding.				No Progress	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Not within the town's scope
TON-11	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.				In Progress	Cost		1. Include in 2019 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
TON-12	Within the first year of plan implementation, identify order of magnitude costs for structural and infrastructure mitigation projects identified in this municipal annex, and identify the mitigation benefits associated with each of these initiatives. An updated project prioritization for projects shall be provided as part of the 1st year annual review and update.							
	See above.					Cost		1. Discontinue





Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
					Ongoing capability	Level of Protection		2.
					Ongoing capability	Damages Avoided; Evidence of Success		3. Ongoing capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Onondaga has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- Spring of 2018: Drainage on Stevens Road: Town of Onondaga Highway: Mudslide area, Ditching, Piping with rip rap to stop mudslide.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Onondaga participated in a mitigation action workshop on January 14, 2019 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.25-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Onondaga would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.25-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.25-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. Onondaga-1	Backup generator for Highway Department Garage	1, 6	Severe Storm, Severe Winter Storm	Highway Department Garage lacks backup power	A backup generator will be purchased and installed.	Yes	No	1-3 years	Highway Department	\$50,000	No interruption of power	Municipal Budget, HMGP	High	SIP	ES
T. Onondaga-2	Upsizing of the Fox Road Culvert	1	Flood	The Fox Road Cross Culvert regularly clogs with debris and floods.	The current 15" culvert will be replaced with a 24" culvert	No	No	6 months	Highway Department	\$10-15 thousand before engineering study	Reduction in rate and severity of flooding	Municipal Budget, HMGP	High	SIP	SP
T. Onondaga-3	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.	1, 2, 3, 6	All Hazards	Structures located in hazard prone areas are vulnerable to damages.	The town will identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.	No	None	Ongoing	Floodplain Administrator	<\$100	Properties in hazard zones better protected, damages reduced.	FEMA Mitigation Grant Programs and local match	High	SIP	PP
T. Onondaga-4 (former TON-1b)	Where appropriate, support purchase, or relocation of structures located in hazard-prone	1, 2, 3, 6	All Hazards	Structures located in hazard prone areas are vulnerable to damages.	The town will identify facilities that are viable candidates for relocation based on cost-effectiveness	No	None	Ongoing	Floodplain Administrator	<\$100	At risk properties removed from hazard zones.	FEMA Mitigation Grant Programs and local match	High	SIP	PP





Table 9.25-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
	areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.				versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.										
T. Onondaga-5 (former TON-2)	Conduct and facilitate community and public education and outreach for residents and businesses owners and neighborhood associations.	All Goals	All Hazards	<p>Problem: The public lacks education on hazards and hazard mitigation.</p> <p>Solution: Education and outreach will include</p> <ul style="list-style-type: none"> •Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages. •Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. •Use the town email notification systems and newsletters to better educate the public on flood insurance, the availability 		No	None	Ongoing once started	Municipal officials and floodplain administrators supported by the County (through SOCPA and EM)	Staff time	Better educated public leading to better decision making.	County and Municipal Budgets; grant eligible for a defined outreach program	High	EAP	PI



Table 9.25-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				of mitigation grant funding, and personal natural hazard risk reduction measures. •Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. Municipal outreach activities to be supported by the County.											
T. Onondaga-6	Protect the Veterans Memorial Cemetery to the 500-year flood level.	1, 2	Flood	The Cemetery is located in the 100-year floodplain. The town does not have jurisdiction over the facility and cannot mitigate themselves.	The town will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level	Yes 💧	None	Within 6 months	Town Floodplain Administrator working with facility operators / owners	<\$100	Provide outreach to the property owner and informing them of potential flood damage and possible solutions	Municipal budget	Medium	EAP	PI
T. Onondaga-7	Protect the NGRID Tanner Road Substation to the 500-year flood level.	1, 2	Flood	The Substation is located in the 100-year floodplain. The town does not have jurisdiction over the facility and cannot mitigate themselves.	The town will contact the facilities manager and discuss options for protecting the facility to the 500-year flood level	Yes 💧	None	Within 6 months	Town Floodplain Administrator working with facility operators / owners	<\$100	Provide outreach to the property owner and informing them of potential flood damage and possible solutions	Municipal budget	Medium	EAP	PI



Notes:

Not all acronyms and abbreviations defined below are included in the table.

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
PDM	Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Critical Facility:

Yes Critical Facility located in 1% floodplain





Table 9.25-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
T. Onondaga-1	Upsizing of the Fox Road Culvert	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
T. Onondaga-2	Backup generator for Highway Department Garage	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
T. Onondaga-3 (former TON-1a)	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.	1	1	1	0	1	1	0	1	1	1	1	0	1	1	11	High
T. Onondaga-4 (former TON-1b)	Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
T. Onondaga-5 (former TON-2)	Conduct and facilitate community and public education and outreach for residents and businesses owners and neighborhood associations.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
T. Onondaga-6	Protect the Veterans Memorial Cemetery to the 500-year flood level.	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium
T. Onondaga-7	Protect the NGRID Tanner Road Substation to the 500-year flood level.	0	1	0	1	1	0	1	1	1	0	0	0	1	1	8	Medium

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).





9.25.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.25.8 Staff and Local Stakeholder Involvement in Annex Development

The Town of Onondaga followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: the Codes Office, Town Board, and Town Highway Department. The Code Enforcement Officer represented the community on the Onondaga County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

9.25.9 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Onondaga that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Onondaga has significant exposure. A map of the Town of Onondaga hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain as well as identified critical facilities within the municipality.



Town of Onondaga Action Worksheet			
Project Name:	Backup generator for Highway Department Garage		
Project Number:	T. Onondaga-1		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm		
Description of the Problem:	The Highway Department Garage lacks a backup power source. In the event of a power outage, the department cannot fully function and provide essential services to the community.		
Action or Project Intended for Implementation			
Description of the Solution:	Purchase and install a 100kw generator at the town's highway garage located at 4478 W Seneca Turnpike, Syracuse, NY. By installing a backup generator, this will allow the department to fully function during power outages. The highway department provides essential services to the Town of Onondaga and needs to be fully operational during emergencies. A backup generator will allow for continuity of operations.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	To be determined: Power maintained	Estimated Benefits (losses avoided):	No loss of power at critical facility; continuity of operations
Useful Life:	30 years	Goals Met:	1, 6
Estimated Cost:	\$50,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 6 months of receiving funds
Estimated Time Required for Project Implementation:	1-3 years	Potential Funding Sources:	Municipal Budget, FEMA HMGP
Responsible Organization:	Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Solar Panels	\$100,000	Weather dependent; requires large amount of area to install; initial cost and maintenance is expensive
	Wind turbines	\$100,000	Weather dependent; rotor of blades can be loud; visual impacts; avian/bat mortality
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Backup generator for Highway Department Garage	
Project Number:	T. Onondaga-1	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Maintains critical function
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	Highway Department Garage is under the town's jurisdiction.
Fiscal	0	Require supplemented funding
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe storm, severe winter storm, geologic
Timeline	1	
Agency Champion	1	Department of Public Works
Other Community Objectives	1	Maintaining power at critical facilities
Total	12	
Priority (High/Med/Low)	High	



Town of Onondaga Action Worksheet			
Project Name:	Upsizing Fox Road Culvert		
Project Number:	T. Onondaga-2		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Due to being undersized, the Fox Road cross culvert regularly clogs with debris, which has led to flooding on occasion. Multiple areas drain through this culvert. Flooding can lead to road closures and Fox Road becomes inaccessible to residents and emergency personnel.		
Action or Project Intended for Implementation			
Description of the Solution:	The current 15" culvert will be replaced with a 24" culvert. The increased size will result in greater carrying capacity and reduce the frequency of clogging of the culvert. It will also reduce or eliminate flooding in this area of the town.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	1% storm event	Estimated Benefits (losses avoided):	Reduction in flooding; increased carrying capacity; less clogging of culvert
Useful Life:	30 years	Goals Met:	1
Estimated Cost:	\$10-15 thousand, before engineering costs	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Short Term
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	Municipal Budget, FEMA HMGP and FMA, BRIDGE NY
Responsible Organization:	Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	Capital Improvements, Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Move Roadway	N/A	Roadway cannot be moved
	Elevate Entire Roadway	\$20,000 - \$30,000	Cost of raising roadway exceeds cost of the selected project
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Upsizing Fox Road Culvert	
Project Number:	T. Onondaga-2	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Reduces likelihood of Stormwater flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	Fox Road is under the town's jurisdiction
Fiscal	1	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	Department of Public Works
Other Community Objectives	1	The town has identified this action as a necessity
Total	12	
Priority (High/Med/Low)	High	