

## 9.25 TOWN OF ONONDAGA

This section presents the jurisdictional annex for the Town of Onondaga.

### A.) HAZARD MITIGATION PLAN POINT OF CONTACT

| Primary Point of Contact                                                                                                                                                                | Alternate Point of Contact                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ron Ryan, Code Enforcement Officer<br>Town of Onondaga<br>5020 Ball Rd., Syracuse, NY 13215<br>(315) 469-3144<br><a href="mailto:rryan@townofonondaga.com">rryan@townofonondaga.com</a> | Dick Walters; Superintendant, Highway Department<br>5020 Ball Rd., Syracuse, NY 13215<br>(315) 469-1664<br><a href="mailto:dicklwalters@yahoo.com">dicklwalters@yahoo.com</a> |

### B.) TOWN PROFILE

#### *Population*

21,575 (estimated 2007 U.S. Census)

#### *Location*

The Town of Onondaga is located in the central portion of Onondaga County, approximately 3 miles south of the City of Syracuse. 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. The villages and hamlets which make up the town are: Cedarvale, Howlett Hill, Navarino, Nedrow, Onondaga Hill, Sentinel Heights, South Onondaga, Southwood, Split Rock, and Taunton.

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.

According to the U.S. Census Bureau, the town has a total area of 57.8 square miles (149.8 km<sup>2</sup>), with 57.7 square miles (149.5 km<sup>2</sup>) of it land and 0.1 square miles (0.2 km<sup>2</sup>) of it (0.16-percent) water.

#### *Climate*

Onondaga County generally experiences seasonable weather patterns characteristic of the northeastern U.S. Cyclonic systems and cold air masses affect the County's weather, making winters cold with snow. During the summer and parts of spring and autumn, temperatures rise during the daytime and fall rapidly after sunset. Summer temperatures typically range from about 76°F to 81°F (Fahrenheit). Winter high temperatures are usually in the middle to upper 30°F, with minimum temperatures of 14°F expected. Overall, the average high temperature for the County is approximately 57°F and the average low temperature is approximately 37°F. Snow accumulates to an average depth of 121 inches each year.

#### *Brief History*

Before the American Revolution, this town 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.

### ***Governing Body Format***

The Town of Onondaga is governed by a supervisor and four councilors.

### ***Growth/Development Trends***

According to the Syracuse-Onondaga County Planning Agency, as of 2009, the Town of Onondaga will be either in the process of completing or will be in the process of planning to build two residential subdivisions, Tabitha Creek and Shadow Hill at Stonegate H, each with 29 and 17 lots respectively. The locations of these subdivisions are provided in the hazard area map at the end of this annex.

## **C.) NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE TOWN**

| <b>Type of Event</b>                            | <b>FEMA Disaster # (if applicable)</b> | <b>Date</b>     | <b>Preliminary Damage Assessment</b> |
|-------------------------------------------------|----------------------------------------|-----------------|--------------------------------------|
| Snowstorm / Extreme Cold                        | Not applicable                         | February, 1961  | \$80,000 (countywide)                |
| Flood                                           | Not applicable                         | July, 1970      | \$250,000 (countywide)               |
| Snowstorm                                       | Not applicable                         | March, 1971     | \$806,000 (countywide)               |
| Snowstorm / Extreme cold                        | Not applicable                         | February, 1972  | \$803,000 (countywide)               |
| Flood (Tropical Storm Agnes)                    | DR-338                                 | June, 1972      | \$1,600,000 (countywide)             |
| Flood                                           | Not applicable                         | March, 1973     | \$200,000 (countywide)               |
| Snowstorm                                       | Not applicable                         | December, 1973  | \$83,000 (countywide)                |
| Severe Storms and Flooding                      | DR-447                                 | July, 1974      | \$7,200,000 (countywide)             |
| Severe Storms, Heavy Rain, Landslides, Flooding | DR-487                                 | September, 1975 | \$6,300,000 (countywide)             |
| Flood                                           | Not applicable                         | April, 1976     | \$313,000 (countywide)               |
| Blizzard                                        | Not applicable                         | January, 1977   | \$2,100,000 (countywide)             |
| Flood                                           | Not applicable                         | October, 1981   | \$833,000 (countywide)               |
| Tornado (F3)                                    | Not applicable                         | May, 1983       | \$2,500,000 (countywide)             |
| Snowstorm                                       | Not applicable                         | February, 1984  | \$156,000 (countywide)               |
| Tornado (F1)                                    | Not applicable                         | July, 1986      | \$250,000 (countywide)               |
| Blizzard and Extreme Cold                       | EM-3107                                | March, 1993     | \$455,000 (countywide)               |
| Snowstorm                                       | Not applicable                         | April, 1993     | \$100,000 (countywide)               |
| Thunderstorm / Winds                            | Not applicable                         | August, 1993    | \$600,000 (countywide)               |
| Severe Storm and Flooding                       | DR-1095                                | January, 1996   | \$7,600,000 (countywide)             |

| Type of Event                        | FEMA Disaster # (if applicable) | Date                           | Preliminary Damage Assessment                       |
|--------------------------------------|---------------------------------|--------------------------------|-----------------------------------------------------|
| Flood                                | Not applicable                  | November, 1996                 | \$100,000 (countywide)                              |
| Thunderstorm / Winds / Tornado       | Not applicable                  | May, 1998                      | \$200,000 (countywide)                              |
| Thunderstorm / Winds                 | Not applicable                  | August, 1998                   | \$200,000 (countywide)                              |
| Severe Storm                         | DR-1244                         | September, 1998                | \$90,000,000, 3 fatalities, 7 injuries (countywide) |
| Thunderstorm / Winds                 | Not applicable                  | July, 1999                     | \$750,000 (countywide)                              |
| Severe Storms                        | DR-1335                         | May/September, 2000            | Not available                                       |
| Snowstorms                           | Not applicable                  | December, 2002 / January, 2003 | \$353,000 (countywide)                              |
| Flood                                | Not applicable                  | June, 2002                     | \$2,000,000 (countywide)                            |
| Snowstorm (President's Day Storm)    | Not applicable                  | February, 2003                 | \$153,000 (countywide)                              |
| Ice Storm                            | DR-1467                         | April, 2003                    | \$2,900,000 (countywide)                            |
| Severe Storms and Flooding           | DR-1564                         | August / September 2004        | \$2,000,000 (countywide)                            |
| Severe Storm and Flooding            | Not applicable                  | April, 2005                    | \$100,000 (countywide)                              |
| Flood                                | Not applicable                  | July, 2005                     | \$500,000 (countywide)                              |
| Severe Storms and Flooding           | Not applicable                  | June/July, 2006                | \$29,000 (countywide)                               |
| Lake Effect Snowstorm / Extreme Cold | Not applicable                  | February, 2007                 | \$3,000,000 (countywide)                            |

**Number of FEMA Identified Repetitive Flood Loss Properties:** 0

**Number of FEMA Identified Severe Repetitive Flood Loss Properties:** 0

Source: FEMA Region II, 2009

Note: Repetitive loss and severe repetitive loss data as of February 2009.

**D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING**

| Rank # | Hazard type         | Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a,c</sup> | Probability of Occurrence | Risk Ranking Score (Probability x Impact) | Hazard Ranking <sup>b</sup> |
|--------|---------------------|-------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------|-----------------------------|
| 3      | Earthquake          | \$9,089,096 <sup>c,e</sup>                                                                | Rare                      | 16                                        | Low                         |
| 2      | Flood               | \$32,943,000 <sup>c,e</sup>                                                               | Frequent                  | 18                                        | Low                         |
| 4      | Ground Failure      | Not available <sup>f</sup>                                                                | Rare                      | 6                                         | Low                         |
| 1      | Severe Storm        | \$0 <sup>c,d,g</sup>                                                                      | Frequent                  | 48                                        | High                        |
| 1      | Severe Winter Storm | \$86,181,200 <sup>c,d</sup>                                                               | Frequent                  | 48                                        | High                        |

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. High = Total hazard priority risk ranking score of 40 and above  
Medium = Total hazard priority risk ranking of 20 - 39  
Low = Total hazard risk ranking below 20
- c. The valuation of general building stock and loss estimates determined in Onondaga County were based on the default general building stock database provided in HAZUS-MH MR3 (RSMMeans 2006).
- d. Severe storm and severe winter storm hazard 500-year MRP loss estimate is structural value only; does not include the value of contents. For severe winter storm, the loss estimate is 5% of total general building stock value.
- e. Loss estimates for both structure and contents (500-year MRP for the flood hazard and 2,500-year MRP for the earthquake hazard).
- f. Approximately 100% of the Town's general building stock is located within the landslide hazard area.
- g. Potential losses for severe storm are underestimated by HAZUS.

**E.) CAPABILITY ASSESSMENT**

This section identifies the following capabilities of the local jurisdiction:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification.

**E.1) Legal and Regulatory Capability**

| Regulatory Tools<br>(Codes, Ordinances., Plans)                                  | Local Authority<br>(Y or N) | Prohibitions<br>(State or Federal)<br>(Y or N) | Higher<br>Jurisdictional<br>Authority<br>(Y or N) | State<br>Mandated<br>(Y or N) | Code Citation<br>(Section, Paragraph, Page<br>Number, date of adoption) |
|----------------------------------------------------------------------------------|-----------------------------|------------------------------------------------|---------------------------------------------------|-------------------------------|-------------------------------------------------------------------------|
| 1) Building Code                                                                 | Y                           | N                                              | Y                                                 | Y                             | L.L. #3 1989 Chapter 8                                                  |
| 2) Zoning Ordinance                                                              | Y                           | N                                              | N                                                 | N                             | L.L. # 1 1994 Chapter 35                                                |
| 3) Subdivision Ordinance                                                         | Y                           | N                                              | N                                                 | N                             | L.L. # 1 1967 Chapter 30<br>L.L. # 1 1974                               |
| 4) NFIP Flood Damage<br>Prevention Ordinance                                     | Y                           | Y                                              | Y                                                 | Y                             | L.L. # 3 1987 Chapter 16A                                               |
| 5) Growth Management                                                             | Y                           | N                                              | N                                                 | N                             | Master Plan                                                             |
| 6) Floodplain Management / Basin<br>Plan                                         | Y                           | Y                                              | Y                                                 | N                             | L.L. # 3 of 1987 Chapter 16A                                            |
| 7) Stormwater Management<br>Plan/Ordinance                                       | Y                           | N                                              | N                                                 | Y                             | L.L. # 6 of 2008 Chapter 29C                                            |
| 8) Comprehensive Plan / Master<br>Plan/ General Plan                             | Y                           | N                                              | N                                                 | N                             | Master Plan                                                             |
| 9) Capital Improvements Plan                                                     | N                           | N                                              | N                                                 | N                             |                                                                         |
| 10) Site Plan Review<br>Requirements                                             | Y                           | Y                                              | Y                                                 | N                             | L.L. # 1 of 1994 Sec. 35-24                                             |
| 11) Open Space Plan                                                              | N                           | N                                              | N                                                 | N                             |                                                                         |
| 12) Economic Development Plan                                                    | N                           | N                                              | N                                                 | N                             |                                                                         |
| 13) Emergency Response Plan                                                      | Y                           | N                                              | N                                                 | Y                             | Executive Order #1 of 1993                                              |
| 14) Post Disaster Recovery Plan                                                  | N                           | N                                              | N                                                 | N                             |                                                                         |
| 15) Post Disaster Recovery<br>Ordinance                                          | N                           | N                                              | N                                                 | N                             |                                                                         |
| 16) Real Estate Disclosure req.                                                  | N                           | N                                              | Y                                                 | N                             |                                                                         |
| 17) Other [Special Purpose<br>Ordinances (i.e., critical or<br>sensitive areas)] | N                           | N                                              | N                                                 | N                             |                                                                         |

**E.2) Administrative and Technical Capability**

| Staff/ Personnel Resources                                                                                     | Available (Y or N) | Department/ Agency/Position        |
|----------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------|
| 1) Planner(s) or Engineer(s) with knowledge of land development and land management practices                  | Y                  | By Contract with C&S Companies     |
| 2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure | Y                  | By Contract with C&S Companies     |
| 3) Planners or engineers with an understanding of natural hazards                                              | Y                  | By Contract with C&S Companies     |
| 4) NFIP Floodplain Administrator                                                                               | Y                  | Ron Ryan, Code Enforcement Officer |
| 5) Surveyor(s)                                                                                                 | Y                  | By Contract when needed            |
| 6) Personnel skilled or trained in "GIS" applications                                                          | Y                  | By Contract with C&S Companies     |
| 7) Scientist familiar with natural hazards in the Town of Ashland.                                             | N                  |                                    |
| 8) Emergency Manager                                                                                           | Y                  | Appointed by Town Board            |
| 9) Grant Writer(s)                                                                                             | N                  |                                    |
| 10) Staff with expertise or training in benefit/cost analysis                                                  | Y                  | Hazel Donahue, Director of Finance |

**E.3) Fiscal Capability**

| Financial Resources                                                  | Accessible or Eligible to use (Yes/No/Don't know) |
|----------------------------------------------------------------------|---------------------------------------------------|
| 1) Community development Block Grants (CDBG)                         | Nedrow area only                                  |
| 2) Capital Improvements Project Funding                              | Accessible by Town Board Action                   |
| 3) Authority to Levy Taxes for specific purposes                     | Accessible by Town Board Action                   |
| 4) User fees for water, sewer, gas or electric service               | Sewer only by Town Board Action                   |
| 5) Impact Fees for homebuyers or developers of new development/homes | Accessible by Town Board Action                   |
| 6) Incur debt through general obligation bonds                       | Accessible by Town Board Action                   |
| 7) Incur debt through special tax bonds                              | Don't know                                        |
| 8) Incur debt through private activity bonds                         | Accessible by Town Board Action                   |
| 9) Withhold public expenditures in hazard-prone areas                | By Town Board Action                              |
| 10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)            |                                                   |
| 11) Other                                                            |                                                   |

**E.4) Community Classifications**

| Program                                              | Classification | Date Classified |
|------------------------------------------------------|----------------|-----------------|
| Community Rating System (CRS)                        | NP             | N/A             |
| Building Code Effectiveness Grading Schedule (BCEGS) | ---            | ---             |
| Public Protection                                    | ---            | ---             |
| Storm Ready                                          | NP             | N/A             |
| Firewise                                             | NP             | N/A             |

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

The classifications listed above relate to the community's effectiveness in providing services that may impact its vulnerability to the natural 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 one (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
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

## F.) PROPOSED HAZARD MITIGATION INITIATIVES

| Initiative # | Mitigation Initiative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Goals / Objectives Met                 | Lead Agency                                                 | Estimated Cost | Sources of Funding                             | Time-line |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|----------------------------------------|-------------------------------------------------------------|----------------|------------------------------------------------|-----------|
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                     | Existing                                   | Flood, Severe Storm | 1-1, 1-2, 1-6; 2-5, 2-6; 3-2, 3-5, 6-1 | Municipality (likely through NFIP Floodplain Administrator) | High           | FEMA Mitigation Grant Programs and local match | Long-term |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                            | Existing                                   | Flood, Severe Storm | 1-1, 1-2, 1-6; 2-5, 2-6; 3-2, 3-5; 6-1 | Municipality (likely through NFIP Floodplain Administrator) | High           | FEMA Mitigation Grant Programs and local match | Long-term |
| TON-2        | <p>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:</p> <ul style="list-style-type: none"> <li>Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages.</li> <li>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.</li> <li>Use the village email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant</li> </ul> |                                            |                     |                                        |                                                             |                |                                                |           |



| Initiative # | Mitigation Initiative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Goals / Objectives Met   | Lead Agency                                                                                      | Estimated Cost | Sources of Funding                                                          | Time-line |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|--------------------------|--------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------|-----------|
|              | <p>funding, and personal natural hazard risk reduction measures.</p> <ul style="list-style-type: none"> <li>Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.</li> </ul> <p>Municipal outreach activities to be supported by the County, as identified at County initiative OC-0.</p>                                                                                                       |                                            |                     |                          |                                                                                                  |                |                                                                             |           |
|              | See above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N/A                                        | All Hazards         | All Goals                | Municipal officials and floodplain administrators supported by the County (through SOCPA and EM) | Low            | County and Municipal Budgets; grant eligible for a defined outreach program | Short     |
| TON-3        | Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0                                                                                                                                                                                                                                                                                                                                                                                    | New & Existing                             | All Hazards         | All Goals and Objectives | Municipality (through mitigation planning point of contacts)                                     | Low            | Local Budget, possibly FEMA Mitigation Grant Funding for 5-year update      | Ongoing   |
| 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 TNO-1a, 1b, 2, and 8 | New & Existing                             | Flood               | 2-4; 3-5, 3-6            | Municipality (likely through NFIP Floodplain Administrator)                                      | Low            | Local Budget                                                                | Ongoing   |

| Initiative # | Mitigation Initiative                                                                                                                                                       | Applies to New and/or Existing Structures* | Hazard(s) Mitigated  | Goals / Objectives Met                      | Lead Agency                                                       | Estimated Cost | Sources of Funding     | Time-line      |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------|---------------------------------------------|-------------------------------------------------------------------|----------------|------------------------|----------------|
|              | through 11.                                                                                                                                                                 |                                            |                      |                                             |                                                                   |                |                        |                |
| TON-5        | Continue to develop, enhance, and implement existing emergency plans.                                                                                                       | New & Existing                             | All Hazards          | 1-4; 5-5;<br>Goal 6 – All Objectives        | Municipal Emergency Manager with support from County OEM and SEMO | Low - Medium   | Local Budget           | Ongoing        |
| TON-6        | Create/enhance/ maintain mutual aid agreements with neighboring communities.                                                                                                | New & Existing                             | All Hazards          | 3-3; 5-2,<br>5-3, 5-5,<br>5-6; 6-5,<br>6-6  | Local Emergency Management, DPW and Roads                         | Low - Medium   | Local Budget           | Ongoing        |
| TON-7        | Support County-wide initiatives identified in Section 9.1 of the County Annex.                                                                                              | New & Existing                             | All Hazards          | All Goals                                   | Local departments (as applicable for specific initiative)         | Low - Medium   | Local Budget           | Ongoing        |
| 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. | N/A                                        | Flood, Severe Storms | 1-3, 1-7;<br>2-3; 4-1,4-4;<br>5-1, 5-2, 5-3 | County, OCSWCD (Mark Burger)                                      | Medium         | Local Budget           | Short-term     |
| TON-9        | Replace and upgrade existing culverts to increase drainage capacity and mitigate frequent flooding along Kasson Road, Onondaga Boulevard and Harris Road.                   | Existing                                   | Flood, Severe Storms | 1-2, 1-6;<br>3-2, 3-4                       | Town                                                              | Medium to High | Local, FEMA HMA grants | DOF            |
| TON-10       | Cleaning and maintenance of classified streams on private properties to mitigate flooding.                                                                                  | Existing                                   | Flood, Severe Storm  | 1-3; 2-5,<br>2-6; 4-1,<br>4-2; 5-4          | Town; Homeowners                                                  | L-M            | Local                  | DOF            |
| TON-11       | Determine if a Community Assistance Visit (CAV) or Community Assistance Contact                                                                                             | NA                                         | Flood, Severe Storms | All Goals                                   | NFIP Floodplain Administrator,                                    | Low            | Municipal Budget       | Short (year 1) |

| Initiative # | Mitigation Initiative                                                                                                                                                                                                                                                                                                                                                        | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Goals / Objectives Met | Lead Agency                          | Estimated Cost | Sources of Funding | Time-line      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|------------------------|--------------------------------------|----------------|--------------------|----------------|
|              | (CAC) is needed, and schedule if needed.                                                                                                                                                                                                                                                                                                                                     |                                            |                     |                        | with support from NYSDEC, SOEM, FEMA |                |                    |                |
| 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 description above                                                                                                                                                                                                                                                                                                                                                        | N/A                                        | All Hazards         | All Goals              | Local project leads                  | M              | Existing Budgets   | Short (year 1) |

Notes: DOF = Depending on Funding. FEMA = Federal Emergency Management Agency. Long = 5 years or greater. N/A = Not applicable. Short = 1 to 5 years. TBD = To be determined

\*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure?

## G.) ANALYSIS OF MITIGATION ACTIONS

This table summarizes the participant's mitigation actions by hazard of concern and the six mitigation types to illustrate that the Town has selected a comprehensive range of actions/projects.

| Hazard of Concern                                                                | Mitigation Type                                     |                                                                     |                                                   |                                          |                                  |                        |
|----------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------|------------------------------------------|----------------------------------|------------------------|
|                                                                                  | 1. Prevention                                       | 2. Property Protection                                              | 3. Public Education and Awareness                 | 4. Natural Resource Protection           | 5. Emergency Services            | 6. Structural Projects |
| Earthquake                                                                       | TON-3, TON-7                                        | TON-3, TON-7,<br>TON-12                                             | TON-2, TON-3,<br>TON-7                            | TON-3, TON-7<br>TON-12                   | TON-3, TON-5,<br>TON-6, TON-7    | TON-3, TON-7 TON-12    |
| Flooding<br>(riverine, flash, coastal<br>and urban flooding)                     | TON-3,<br>TON-4, TON-7,<br>TON-8, TON-10,<br>TON-11 | TON-1a and b,<br>TON-2,<br>TON-3, TON-4,<br>TON-7, TON-9,<br>TON-12 | TON-1a and b,<br>TON-2,<br>TON-3, TON-4,<br>TON-7 | TON-3, TON-7,<br>TON-8, TON-10<br>TON-12 | TON-3,<br>TON-5, TON-6,<br>TON-7 | TON-3, TON-7 TON-12    |
| Ground Failure                                                                   | TON-3, TON-7                                        | TON-3, TON-7<br>TON-12                                              | TON-2, TON-3,<br>TON-7                            | TON-3, TON-7<br>TON-12                   | TON-3, TON-5,<br>TON-6, TON-7    | TON-3, TON-7 TON-12    |
| Severe Storms<br>(windstorms,<br>thunderstorms, hail,<br>lightning and tornados) | TON-3,<br>TON-4, TON-7,<br>TON-8, TON-10,<br>TON-11 | TON-1a and b,<br>TON-2,<br>TON-3, TON-4,<br>TON-7, TON-9<br>TON-12  | TON-1a and b,<br>TON-2,<br>TON-3, TON-4,<br>TON-7 | TON-3, TON-7,<br>TON-8, TON-10<br>TON-12 | TON-3,<br>TON-5, TON-6,<br>TON-7 | TON-3, TON-7 TON-12    |
| Severe Winter Storm<br>(heavy snow, blizzards,<br>ice storms)                    | TON-3, TON-7                                        | TON-3, TON-7<br>TON-12                                              | TON-2, TON-3,<br>TON-7                            | TON-3, TON-7<br>TON-12                   | TON-3, TON-5,<br>TON-6, TON-7    | TON-3, TON-7 TON-12    |

Notes:

- 1. Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- 2. Property Protection:** 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.
- 3. Public Education and Awareness:** 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 school-age and adult education programs.
- 4. Natural Resource Protection:** 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.
- 5. Emergency Services:** 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.
- 6. Structural Projects:** 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.

## H.) PRIORITIZATION OF MITIGATION INITIATIVES

| Initiative # | # of Objectives met | Benefits | Costs | Do Benefits equal or exceed Costs?<br>(Yes or No) | Is project Grant eligible?<br>(Yes or No) | Can Project be funded under existing programs/budgets?<br>(Yes or No) | Priority<br>(High, Med., Low) |
|--------------|---------------------|----------|-------|---------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------|-------------------------------|
| TON-1a       | 8                   | H        | H     | Y                                                 | Y                                         | N                                                                     | M-H*                          |
| TON-1b       | 8                   | H        | H     | Y                                                 | Y                                         | N                                                                     | M-H*                          |
| TON-2        | 38                  | M        | L     | Y                                                 | Y (for defined outreach project)          | Y                                                                     | H                             |
| TON-3        | 38                  | M        | M     | Y                                                 | N (Yes for 5 year update)                 | Y                                                                     | H                             |
| TON-4        | 3                   | H        | L     | Y                                                 | N                                         | Y                                                                     | H                             |
| TON-5        | 8                   | M        | L     | Y                                                 | N                                         | Y                                                                     | H                             |
| TON-6        | 7                   | M        | L     | Y                                                 | N                                         | Y                                                                     | H                             |
| TON-7        | 38                  | M-H      | L-M   | Y                                                 | Dependant on specific initiative          | Dependant on specific initiative                                      | M-H (dependant)               |
| TON-8        | 8                   | H        | L - H | Y                                                 | Y                                         | Dependant on specific initiative                                      | M                             |
| TON-9        | 4                   | H        | M-H   | Y                                                 | Y                                         | Y (local match)                                                       | M                             |
| TON-10       | 6                   | M        | I-M   | Y                                                 | N                                         | TBD                                                                   | M                             |
| TON-11       | 38                  | L        | L     | Y                                                 | N                                         | Y                                                                     | M                             |
| TON-12       | 38                  | M        | L-M   | Y                                                 | N                                         | Y                                                                     | H                             |

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.

\* This initiative has a "Medium" priority based on the prioritization scheme used in this planning process (implementation dependent on grant funding), however it is recognized that addressing repetitive and severe repetitive loss properties is considered a high priority by FEMA and SEMO (as expressed in the State HMP), and thus shall be considered a "High" priority for all participants in this planning process.

### Explanation of Priorities

- High Priority** - A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an on-going project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).

- **Medium Priority** - A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.
- **Low Priority** - Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

Prioritization of initiatives was based on above definitions: Yes

Prioritization of initiatives was based on parameters other than stated above: Not applicable.

#### **I.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY**

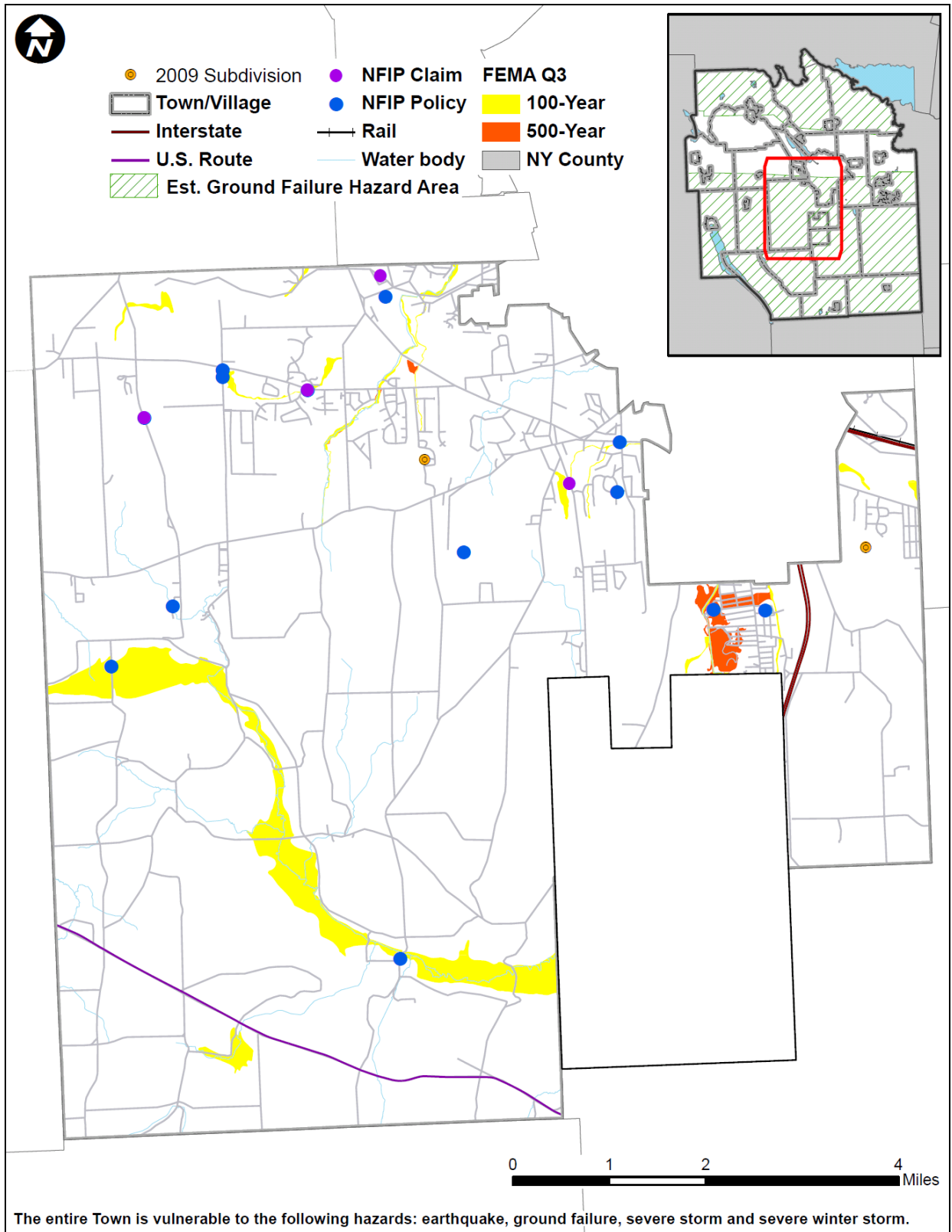
None at this time.

#### **J.) HAZARD AREA EXTENT AND LOCATION**

A hazard area extent and location map has been generated and is provided below for the Town of Onondaga to illustrate the probable areas impacted within the Town. This map is based on the best available data at the time of the preparation of this Plan, and is 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. The County maps are provided in the hazard profiles within Section 5.4, Volume I of this Plan.

#### **K.) ADDITIONAL COMMENTS**

No additional comments at this time.



The entire Town is vulnerable to the following hazards: earthquake, ground failure, severe storm and severe winter storm.

Sources: FEMA Q3; FEMA Region II, 2008; HAZUS-MH MR3; NYS DPC, 2008; Syracuse-Onondaga County Planning Agency, 2009

Notes: Est. = Estimated; NFIP = National Flood Insurance Program

The entire municipality is vulnerable to the following hazards: earthquake, ground failure, severe storm, and severe winter storm.