
Town of Vermont Annex

Community Profile

The Town of Vermont is located in the Northwest quadrant of the County, West of the Village of Cross Plains, South of the Village of Black Earth, East of the Village of Mount Horeb and North of the Town of Blue Mounds. Land use is dominated by agriculture and woodlands, and dispersed one- and two-family homes.

According to the United States Census Bureau, the Town of Vermont has a total area of 35.77 square miles, all of it land.

As of the 2010 Census, there are 819 people, 325 households, and 245 families residing in the Town of Vermont. The population density is 22.9 per square mile. There are 351 housing units at an average density of 9.8 per square mile. The municipality population distributed by Dane County indicates that the 2015 population for Town of Vermont was 821 people. The population age profile for the Town of Vermont is shown in Table 1.

Table 1 Age Profile of Town of Vermont

| Subject | Number | Percent |
|-------------------|--------|---------|
| Total population | 819 | 100.0 |
| Under 5 years | 31 | 3.8 |
| 5 to 9 years | 42 | 5.1 |
| 10 to 14 years | 50 | 6.1 |
| 15 to 19 years | 61 | 7.4 |
| 20 to 24 years | 37 | 4.5 |
| 25 to 29 years | 18 | 2.2 |
| 30 to 34 years | 40 | 4.9 |
| 35 to 39 years | 24 | 2.9 |
| 40 to 44 years | 45 | 5.5 |
| 45 to 49 years | 77 | 9.4 |
| 50 to 54 years | 115 | 14.0 |
| 55 to 59 years | 99 | 12.1 |
| 60 to 64 years | 74 | 9.0 |
| 65 to 69 years | 41 | 5.0 |
| 70 to 74 years | 18 | 2.2 |
| 75 to 79 years | 25 | 3.1 |
| 80 to 84 years | 15 | 1.8 |
| 85 years and over | 7 | 0.9 |

The median income for a household in the Town of Vermont is \$81,071 and the median income for a family is \$91,944. The per capita income for the Town of Vermont is \$40,782. 97.9% of the population has at least a high school degree, while 43.3% the population holds at least a bachelor's level degree.

Hazard Identification and Risk Assessment

A hazard identification and vulnerability analysis was completed for the Town of Vermont using the same methodology in the base plan. The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality to complete.

The first step in a hazard analysis is to identify which hazards the community is vulnerable to. Table 2 outlines the hazard identification for the Town of Vermont based on the Data Collection Guide issued in 2015. The Data Collection Guide listed all of the hazards that could impact anywhere in Dane County. The purpose of this worksheet was to identify and rank the hazards and vulnerabilities specific to the jurisdiction. The Town of Vermont's planning team members were asked to complete the matrix by ranking each category on a scale of 0 to 5 based on the experience and perspective of each planning team member. A ranking of 0 indicated "no concern" while a ranking of 5 indicated "highest concern." This matrix appears as Table 2. This matrix reflects the significance of the hazards relative to one another.

This matrix reflects that the Town of Vermont is most vulnerable to tornadoes, windstorms, and winter storms. Flooding and wildfire were also ranked as hazards of high concern. The vulnerability established here is a qualitative assumption based on the impacts, geographic extent, probability of future occurrence, and magnitude/severity. On the county level, these vulnerabilities were calculated with quantitative data as well.

Table 2 Vulnerability Assessment Matrix for the Town of Vermont

| Hazard | Hazard Attributes | | | Impact Attributes | | | | | | Total |
|--------------|-------------------|--|-------------------------|---|-------------------------------|-------------------------------|--|-----------------|--|-------|
| | Area of Impact | Past History, Probability of Future Occurrence | Short Term Time Factors | Primary Impact (Short Term - Life and Property) | | | Secondary Impact (Long Term – Community Impacts) | | | |
| | | | | Impact on General Structures | Impact on Critical Facilities | Impact on At-Risk Populations | Social Impact | Economic Impact | Severity Of Other Associated Secondary Hazards | |
| | (1-5) | (1-5) | (1-5) | (0-5) | (0-5) | (0-5) | (0-5) | (0-5) | (0-5) | |
| Dam/Levee | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Extreme Cold | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 16 |
| Extreme Heat | 3 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 14 |
| Drought | 3 | 3 | 1 | 0 | 0 | 0 | 2 | 2 | 2 | 13 |
| Expansive | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Flood | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 16 |
| Fog | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 12 |
| Hail Storm | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 15 |
| Landslide | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Lightning | 1 | 3 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 15 |
| Tornado | 1 | 3 | 3 | 2 | 3 | 1 | 2 | 2 | 2 | 19 |
| Wildfire | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 16 |
| Windstorm | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 18 |
| Winter Storm | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 18 |

Source: Town of Vermont Data Collection Guide

Previous Hazard Events

Through the Data Collection Guide, the Town of Vermont noted specific historic hazard events to include in the community profile. These events have been incorporated into the appropriate hazard chapters in the base plan. These events had a particular impact on the community beyond the impacts and events recorded in the Dane County Hazard Mitigation Plan. This is not a comprehensive summary of past incidents, as the hazard profiles collected in the main Mitigation Plan include other events that may have historically impacted the jurisdiction. Recent events noted by this jurisdiction in the Data Collection Guide include:

Flooding: May 2000

Town-wide flooding of roads and right of way properties, crop damage and personal property damage impacted the Town. No injuries or deaths were reported, and losses were reported but are not currently available. The data collection guide indicates the event is likely to occur again.

Flooding: June 2008

Along with many other jurisdictions in Dane County, the Town of Vermont experienced wide-spread flooding during June of 2008. Roads and school closures were minimal, no injuries and deaths were reported, but damages were documented and federal assistance was provided. The event is considered likely to occur again.

Snow Storm: February 2008

Town-wide snow resulted in federal aid provisions to accommodate recovery costs from a region-wide snowstorm in early February of 2008. No injuries or deaths were reported, and no documented damages to property were forwarded, but roads, schools and businesses were closed and/or delayed. The event is considered extremely likely to occur again.

Asset Inventory

Assets include the people, property, and critical facilities within the Town of Vermont that are exposed to hazards in general. Inventories of property, essential infrastructure, and natural, cultural or historic resources help provide a comprehensive picture of the community and provide a method of assessing exposure to hazards by establishing the improved and total values, capacities and populations for these assets. It also forms the basis for estimating potential losses, where possible.

Population

Table 3 Vulnerable Population Summary

| Disability Status from the 2014 American Community Survey | Number | Percent of Group with Disability |
|---|--------|----------------------------------|
| Population Under 5 years old with a Disability | 0 | 0% |
| Population 5-17 years old with a Disability | 7 | 6.1% |
| Population 18-64 with a Disability | 19 | 3.8% |
| Population Over 65 years old with a Disability | 15 | 14.3% |
| Total Population with Disability | 41 | 5.4% |

Data Source: 2014 American Community Survey

| Other Vulnerable Populations | Estimate | Percentage |
|---|----------|------------|
| Families Below Poverty Level | 8 | 3.4% |
| Individuals Below Poverty Level | 28 | 3.7% |
| Of those poverty: Individuals Under 18 | 3 | 2.0% |
| Of those poverty: Individuals Over 65 | 8 | 7.6% |
| Total Population Over 5 who Speak English less than "very well" | 5 | 0.7% |
| 2014 ACS Total Population Estimate | 759 | 100% |

Data Source: 2014 American Community Survey

General Property

Table 4 Property Exposure Summary

| Property Type | Total Parcel Count | Improved Parcel Count | Improved Values (\$) | Content (\$) | Total Value (\$) |
|--------------------------------|--------------------|-----------------------|----------------------|-------------------|--------------------|
| Totals | 1,080 | 380 | 69,332,700 | 34,666,350 | 103,999,050 |
| Agriculture | 528 | 167 | 27,087,100 | 13,543,550 | 40,630,650 |
| Industrial | 2 | 2 | 704,800 | 352,400 | 1,057,200 |
| Institutional/ Governmental | 1 | 0 | 0 | 0 | 0 |
| Other | 303 | 14 | 1,940,200 | 970,100 | 2,910,300 |
| Residential | 246 | 197 | 39,600,600 | 19,800,300 | 59,400,900 |

Data Source: Dane County Land Information Office, December 2008

Critical Facilities

The Town of Vermont has identified the following critical facilities important to protect from disaster impacts. These are collected in Table 5, which is based on GIS data inventories from Dane County.

Table 5 Critical Facility Summary/Essential Infrastructure

| Facility | Type* | No. of Facilities | Replacement Value (\$) |
|--|-------|-------------------|------------------------|
| Town Hall | EI | 1 | 201,000 |
| Town Garage | EI | 1 | 313,700 |
| Municipal Hall, Salt Shed | EI | 1 | 100,800 |
| TOTAL | | 3 | 615,500 |
| *EI: Essential Infrastructure; VF: Vulnerable Facilities; HM: Hazardous Materials Facilities | | | |

Data Source: Town of Vermont Data Collection Guide

Other Assets

Other assets help define a community beyond the current composition of the Town of Vermont. These assets may provide economic benefit to the community, in addition to preserving the heritage and diversity of the community and may include natural, cultural and historic assets or economic assets such as major employers.

Vulnerability to Specific Hazards

This section details vulnerability to specific hazards, where quantifiable, and where it differs from that of the overall County. The previous inventory tables quantify what is exposed to the various hazards within the Town of Vermont. Table 6 cross-references the hazards with the various tables where exposure or vulnerability specifics are found. The intent of Table 6 is to quantify, where possible, future impacts of each hazard on the jurisdiction. In many cases it is difficult to estimate potential losses, so the overall exposure of populations, structures, and critical facilities is referenced.

Table 6 Hazard Vulnerability Specifics

| Hazard | Populations | Structures | Critical Facilities | Future Damage Potential |
|-------------|-------------------|-------------------------------|--|--|
| Dam Failure | None | None | None | Specifics unknown; See hazard profile in County Plan |
| Drought | Minimal | None | Minimal | Specifics unknown; See hazard profile in County Plan |
| Flooding | See section below | See section below | See section below | See section below |
| Fog | Minimal | None | None | Specifics unknown; See hazard profile in County Plan |
| Hailstorm | Minimal | See Property Exposure table 3 | See Critical Facility Inventory Table(s) | Specifics unknown; See hazard profile in County Plan |

| Hazard | Populations | Structures | Critical Facilities | Future Damage Potential |
|-------------------------------------|---------------------------|----------------------------------|--|--|
| Landslide/ Sinkholes/ Erosion | Minimal | Minimal | Minimal | Specifics unknown; See hazard profile in County Plan |
| Lightning | See Table 2 Population | See Table 3 Property Exposure | See Critical Facility Inventory Table(s) | Specifics unknown; See hazard profile in County Plan |
| Severe Cold | See Table 2 Population | See Table 3 Property Exposure | See Critical Facility Inventory Table(s) | Specifics unknown; See hazard profile in County Plan |
| Severe Heat | See Table 2 Population | None | Minimal | Specifics unknown; See hazard profile in County Plan |
| Severe Winter Storm | See Table 2 Population | See Table 3 Property Exposure | See Critical Facility Inventory Table(s) | Specifics unknown; See hazard profile in County Plan |
| Tornado | See Table 2 Population | See section below | See Critical Facility Inventory Table(s) | See section below |
| Wildfire | Minimal | Minimal | Minimal | Specifics unknown; See hazard profile in County Plan |
| Windstorm | See Table 2 Population | See Table 3 Property Exposure | See Critical Facility Inventory Table(s) | Specifics unknown; See hazard profile in County Plan |

Flood

Structures and Properties in the Floodplain

Refer to the flood profile in the mitigation plan for a description of the methodology used to identify potentially flood-prone properties. Figure 1 shows mapped floodplains, future growth areas, and critical or vulnerable facilities. Tables 7 and 8 outline the primary structures and properties with primary structures on them within the Town of Vermont. Potential number of individuals at risk figures are based on primary residential structures and the average household size within Dane County.

Table 7 Primary Structures in the Floodplain

| Total Floodway Structures | Floodway Residential Structures | Total Structures in 100 year Floodplain | Residential Structures in 100 year Floodplain | Potential Number of Individuals at Risk in 100 year Flood | Total Structures in 500 year Floodplain | Residential Structures in 500 year Floodplain | Potential Number of Individuals at Risk in 500 year Flood |
|---------------------------|---------------------------------|---|---|---|---|---|---|
| 0 | 0 | 16 | 15 | 34.95 | 16 | 15 | 34.95 |

Source: Analysis based on Dane County Land Information Office Data

Table 8 Properties with Primary Structures in the Floodplain

| Total Floodway | Floodway Improved | Floodway Residential | Total Properties | Total Improved | Residential Properties | Total Properties | Total Improved | Residential Properties |
|----------------|-------------------|----------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|
|----------------|-------------------|----------------------|------------------|----------------|------------------------|------------------|----------------|------------------------|

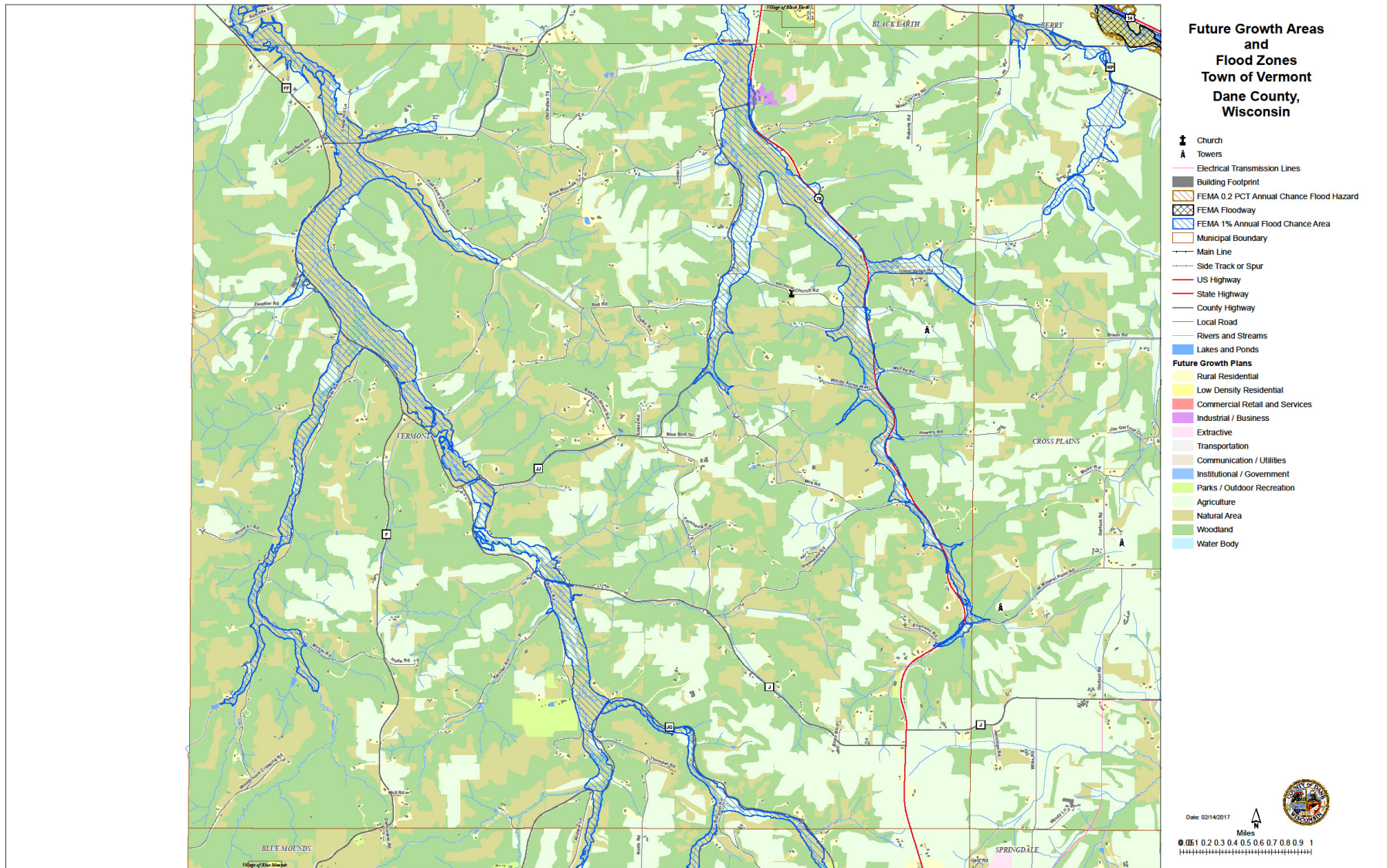
| Properties | Values | Properties | in 100 year Floodplain | Value of Properties in 100 year Floodplain | in 100 year Floodplain | in 500 year Floodplain | Value of Properties in 500 year Floodplain | in 500 year Floodplain |
|------------|--------|------------|------------------------|--|------------------------|------------------------|--|------------------------|
| 0 | \$0 | 0 | 16 | \$1,851,200 | 15 | 16 | \$1,851,200 | 15 |

Source: Analysis based on Dane County Land Information Office Data

Repetitive Loss Properties and Flood Insurance Policies

No repetitive losses have been reported. Flood insurance policies and loss statistics are included as part of the County plan.

Figure 1 Flood Hazards and Future Land Use Map



Tornado

While it is difficult to estimate specific losses to a tornado due to the random nature of the event, a methodology was developed that was applied to each jurisdiction during the 2009 update. The table below estimates the percent area of the jurisdiction that could be impacted based on the average sized tornado (F2) in Dane County. High value exposure is based on 100% loss, medium 50% loss, and low is 25% loss to the property potentially impacted. The loss ratio, which is the ratio of the damaged building value to total exposed building value, is a measure of the impact to the jurisdiction as a whole. Communities with loss ratios 10% or more may have difficulty recovering from a disaster. Refer to the tornado hazard profile in the main mitigation plan for more details on this methodology.

Table 9 Tornado Loss Estimate

| % Area of Impact | Improved Parcel Count | Affected Structure Estimate | Total Exposed Value | Estimated Loss \$ - High Damage Range | Estimated Loss \$ -Moderate Damage Range | Estimated Loss \$ - Low Damage Range | Loss Ratio for Moderate Damage Range |
|------------------|-----------------------|-----------------------------|---------------------|---------------------------------------|--|--------------------------------------|--------------------------------------|
| 2.35% | 415 | 10 | \$113,484,000 | \$2,671,383 | \$1,335,691.30 | \$667,845.65 | 1.2% |

Data Source: Analysis Based on Dane County Land Information Office's data

Growth and Development Trends

Planned land use is shown in Figure 1, in relation to the flood hazard. Table 10 illustrates how the Town of Vermont has grown in terms of population and number of housing units between 2000 and 2008. Table 11 shows population projections through 2025.

Table 10 Town of Vermont Change in Population and Housing Units, 2010-2014/15

| 2010 Population | 2015 Population | Percent Change (%) 2010-2015 | Housing Units 2010 | Housing Unit Permits Issued 2010-2015 |
|-----------------|-----------------|------------------------------|--------------------|---------------------------------------|
| 1,081 | 1,092 | 0.05% | 351 | 11 |

Data Source: Dane County Planning and Development, Wisconsin Department of Administration, and Capitol Area Regional Planning Commission (CARPC), 2015

Table 11 Town of Vermont Population Projections, 2015-2035

| Population Projection | 2015 | 2020 | 2025 | 2030 | 2035 |
|---------------------------------------|------|------|------|------|------|
| Increase by same percentage each year | 821 | 823 | 823 | 825 | 826 |

Data Source: Demographic Services Center, Wisconsin Department of Administration

Problems or Additional Vulnerability Issues

The Data Collection Guide provided the following additional vulnerability or problem issues for the Town of Vermont:

- As noted elsewhere, standing water is usually only an issue for some cropland. Structures are seldom affected; roads impacted by flowing water.
- Ryan Road is susceptible to flooding

- There is a potential for Town of Vermont to have an increase in high-elevation building which could reduce the impact to homes from flood conditions but possibly increasing the risk of driveway/road washouts due to flooding. Homes at higher elevations may also increase the impact on residents from snowstorms.

Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment summarizes regulatory mitigation capabilities, administrative and technical mitigation capabilities, and fiscal mitigation capabilities for the Town of Vermont.

Mitigation Capabilities Summary

Table 12 lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities, or by themselves contribute to reducing hazard losses. The table also indicates which of these tools are currently utilized in the Town of Vermont.

Table 12 Town of Vermont Regulatory Mitigation Capabilities

| Regulatory Tool (ordinances, codes, plans) | Yes/No | Comments |
|--|---------------|---|
| General or Comprehensive plan | Yes | http://www.vermonttownship.com/land-use/comprehensive-plan |
| Zoning ordinance | Yes | http://www.vermonttownship.com/ordinances/land-division |
| Subdivision ordinance | NA | http://www.vermonttownship.com/ordinances/land-division |
| Growth management ordinance | Yes | http://www.vermonttownship.com/ordinances/land-division |
| Floodplain ordinance | Yes | http://www.vermonttownship.com/ordinances/land-division |
| Other special purpose ordinance (stormwater, steep slope, wildfire) | Yes | http://www.vermonttownship.com/ordinances/roads-driveways |
| Building code | Yes | http://www.vermonttownship.com/ordinances/buildings |
| Erosion or sediment control program | Yes | Dane County |
| Storm water management program | Yes | Dane County |
| Site plan review requirements | Yes | Town Plan Commission |
| Capital improvements plan | No | Road Primarily |
| Economic development plan | No | |
| Local emergency operations plan | No | Currently only for elections |
| Other special plans | No | |
| Flood insurance study or other engineering study for streams | No | |

Data Source: Data Collection Guide for the Town of Vermont, 2015

Table 13 identifies the personnel responsible for mitigation and loss prevention activities as well as related data and systems in the Town of Vermont.

Table 13 Responsible Personnel and Departments for the Town of Vermont

| Personnel Resources | Yes/No | Department/Position | Comments |
|--|--------|---------------------|------------------------|
| Planner/engineer with knowledge of land development/land management practices | No | Dane County | |
| Engineer/professional trained in construction practices related to buildings and/or infrastructure | No | Contract | Johnson Inspection LLC |
| Planner/engineer/scientist with an understanding of natural hazards | No | | |
| Personnel skilled in GIS | No | Dane County | |
| Full-time Building Official | Yes | Town Patrolman | |
| Floodplain Manager | No | | |
| Emergency Manager | No | | |
| Grant Writer | No | | |
| Other Personnel | No | | |
| GIS Data Resources – (land use, building footprints, etc.) | No | | |
| Warning systems/services (Reverse 9-11, cable override, outdoor warning signals) | No | | |

Data Source: Data Collection Guide for the Town of Vermont, 2015

Table 14 identifies financial tools or resources that the Town of Vermont could potentially use to help fund mitigation activities.

Table 14 Financial Resources for the Town of Vermont

| Financial Resources | Accessible/Eligible to Use (Yes/No) |
|--|-------------------------------------|
| Community Development Block Grants | No |
| Capital improvements project funding | No |
| Authority to levy taxes for specific purposes | Yes |
| Fees for water, sewer, gas, or electric services | No |
| Impact fees for new development | Yes |
| Incur debt through general obligation bonds | Yes |
| Incur debt through special tax bonds | Yes |

| Financial Resources | Accessible/Eligible to Use (Yes/No) |
|---------------------------------------|-------------------------------------|
| Incur debt through private activities | Yes |

Data Source: Data Collection Guide for the Town of Vermont, 2015

National Flood Insurance Program Participation

The Town of Vermont does not participate in the National Flood Insurance Program as a stand-alone entity, but is covered by the County's participation.

Public Involvement Activities

The Town of Vermont community participated in the County public outreach process. This was a series of public workshops held around the County in which an overview of natural hazard mitigation was given and the County plan was discussed. Residents were then given the opportunity to give their input on mitigation actions that could be taken, and filled out informational surveys that assessed the level of risk the perceived within their own community. More information on these meetings can be found in the County base plan.

Mitigation Actions

Mitigation Activities Since 2010 Plan

The Town of Vermont has completed or is in the process of completing several mitigation activities since the 2009 plan was complete. As reported by the Town, they are:

- An addition was completed to the salt shed
- The Bergum Road culvert and the Vermont Church Road culvert have been replaced.

2015 Mitigation Actions

Objective 1: Continue focus on monitoring and roads and culverts for flooding issues and take action when needed. Continue adherence to the Town of Vermont's tree maintenance policy for mitigating potential wind/ice falls.

Lead Implementing Agency: The Town of Vermont will act as the general contractor.

Supporting Agencies: Town of Vermont

Possible Funding and Technical Assistance: Staff Time

Priority: High

Estimated Costs: Staff Time

Objective 2: Create a page on Town of Vermont website with educational information related to hazard mitigation

Steps:

- Create page on Town website.
- Disseminate information regarding steps residents can take to mitigate natural hazards and highlight Town's efforts.

Lead Implementing Agency: Town of Vermont

Supporting Agencies: Dane County Emergency Management

Timeline: 1 year

Priority: Medium

Estimated Cost: Staff Time

Objective 3: Formally designate and communicate the use of Vermont Luthern Church as an emergency shelter for the municipality

Steps:

- Red Cross and Vermont Luthern Church have already completed the agreement
- Communicate via Town website and Town Newsletter that nature of the church as an emergency shelter

Lead Implementing Agency: Town of Vermont

Supporting Agencies: Vermont Luthern Church

Timeline: 2 months

Priority: Medium

Estimated Cost: Staff Time