
Town of Blue Mounds Annex

Community Profile

The Town of Blue Mounds is located in the southwest quadrant of the County, south of the village of Black Earth and Town of Vermont, and completely encompassing the Village of Blue Mounds. Land use is dominated by agriculture and woodlands, and dispersed one- and two-family homes. According to the Dane County Land Information Office, the Town of Blue Mounds has a total area of 32.5 square miles.

As of the 2010 Census, there are 968 people, 353 households, and 287 families residing in the Town of Blue Mounds. The population density is 29.7 per square mile. There are 367 housing units at an average density of 11.3 per square mile. Table 1 shows the population profile by age for the Town of Blue Mounds according to the 2010 Census.

Table 1 Population Profile of Town of Blue Mounds

Category	Number	Percent
Total population	968	100.0
Under 5 years	56	5.8
5 to 9 years	75	7.7
10 to 14 years	86	8.9
15 to 19 years	65	6.7
20 to 24 years	26	2.7
25 to 29 years	44	4.5
30 to 34 years	34	3.5
35 to 39 years	43	4.4
40 to 44 years	76	7.9
45 to 49 years	98	10.1
50 to 54 years	102	10.5
55 to 59 years	74	7.6
60 to 64 years	78	8.1
65 to 69 years	38	3.9
70 to 74 years	32	3.3
75 to 79 years	13	1.3
80 to 84 years	18	1.9
85 years and over	10	1.0

Data Source: 2010 U.S. Census

American Community Survey estimates for 2014 indicate that the median income for a household in the Town of Blue Mounds is \$81,250 and the median income for a family is \$84,167. The per capita income for the Town of Blue Mounds is \$33,628. 96.9% of the population has at least a high school degree, while 34.5% of the population holds at least a bachelor's level degree.

Hazard Identification and Risk Assessment

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 Blue Mounds based on the Data Collection Guide. 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 Blue Mounds' 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 Blue Mounds is most vulnerable to tornadoes, windstorms, and winter storms. 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 Blue Mounds

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)	(0-5)	
Dam/Levee Failure	1	1	1	1	0	0	1	2	0	7
Extreme Cold	3	3	1	3	0	2	1	1	1	17
Extreme Heat	1	1	1	1	0	1	1	2	1	9
Drought	4	3	1	0	0	1	2	4	1	16
Flood	2	1	1	2	2	1	2	2	2	15
Fog	1	1	1	1	1	1	1	1	1	9
Hail Storm	4	2	3	3	1	1	3	4	1	20
Landslide	0	0	0	0	0	0	0	0	0	0
Lightning	2	2	2	2	2	2	2	2	2	18
Tornado	3	2	4	4	2	2	4	4	4	29
Wildfire	0	0	0	0	0	0	0	0	0	0
Windstorm	3	2	4	4	2	2	4	4	4	29
Winter Storm	5	4	2	2	4	2	2	4	4	29

Previous Hazard Events

Through the Data Collection Guide, the Town of Blue Mounds noted specific historic hazard events to include in the community profile. These events have been incorporated into the appropriate hazard chapters in the main mitigation 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. The events noted by this jurisdiction in the Data Collection Guide include:

Winter Storm: February 2008

A large winter storm struck the Town of Blue Mounds causing extensive road closures. The commuters in the Town of Blue Mounds were largely unable to make it to work and there was tree damage throughout the Town. The Town received \$6,400 from the FEMA disaster declaration for road clearing.

Flood: June and July 2008

Flooding in the Town of Blue Mounds caused extensive crop damage and localized road washouts. Trees were also downed as a result of the event.

Winter Storm: February 2011

A brutal winter storm caused extensive road closures for most of two days until the snow could be cleared. Schools closed and commuters could not reach their places of employment. Tree damage was also extensive. The Town received \$6,300 from FEMA as a result of this event.

Asset Inventory

Assets include the people, property, and critical facilities within the Town of Blue Mounds 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	1	0.5
Population 18-64 with a Disability	22	3,7

Disability Status from the 2014 American Community Survey	Number	Percent of Group with Disability
Population Over 65 years old with a Disability	31	26.5
Total Population with Disability	54	5.7

Data Source: 2014 American Community Survey

Other Vulnerable Populations	Estimate	Percentage
Families Below Poverty Level	8	2.8
Individuals Below Poverty Level	25	2.6
Of those poverty: Individuals Under 18	1	.4
Of those poverty: Individuals Over 65	10	8.5
Total Population Over 5 who Speak English less than "very well"	19	2.1
2014 ACS Total Population Estimate	944	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	991	364	77,124,800	38,562,400	115,687,200
Agriculture	598	194	40,401,400	20,200,700	60,602,100
Commercial	8	8	1,726,700	863,350	2,590,050
Industrial	4	3	1,157,600	578,800	1,736,400
Institutional/ Governmental	6	1	1,157,800	578,900	1,736,700
Other	204	10	1,580,500	790,250	2,370,750
Residential	171	148	31,100,800	15,550,400	46,651,200

Data Source: Dane County Land Information Office

Critical Assets

The Town of Blue Mounds has identified the assets important to protect from disaster impacts. These are collected in Table 5, based on the Town of Blue Mounds data collection guide.

Table 5 Critical Facility Summary/Essential Infrastructure

Facility	Type*	No. of Facilities	Replacement Value (\$)
Churches	VF	3	Unknown
Methodist Church			

Facility	Type*	No. of Facilities	Replacement Value (\$)
New Hope Church			
Life Church			
Cave of the Mounds	NA	1	Unknown
Town Hall and Garage	EI	1	\$1,042,653
Salt Shed	EI	1	Covered in Town Hall Value
Fuel Tank	EI	1	Covered in Town Hall Value
Cemetery Steeple	VF	1	Covered in Town Hall Value
Town Vehicles/Equipment	EI	16	\$469,908
*EI: Essential Infrastructure; VF: Vulnerable Facilities; HM: Hazardous Materials Facilities			

Data Source: 2015 Town of Blue Mounds Data Collection Guide

Other Assets

Other assets help define a community beyond the current composition of the Town of Blue Mounds. 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. It may also include more specific detail on critical facilities. The Town of Blue Mounds has not identified any other assets.

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 Town of Blue Mounds. 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

Hazard	Populations	Structures	Critical Facilities	Future Damage Potential
Hailstorm	Minimal	See Property Exposure table 3	See Critical Facility Inventory Table(s)	Specifics unknown; See hazard profile in County Plan
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 Hazard

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 Blue Mounds. 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	4	4	9.32	4	4	9.32

Source: Analysis based on Dane County Land Information Office Data

Table 8 Properties with Primary Structures in the Floodplain

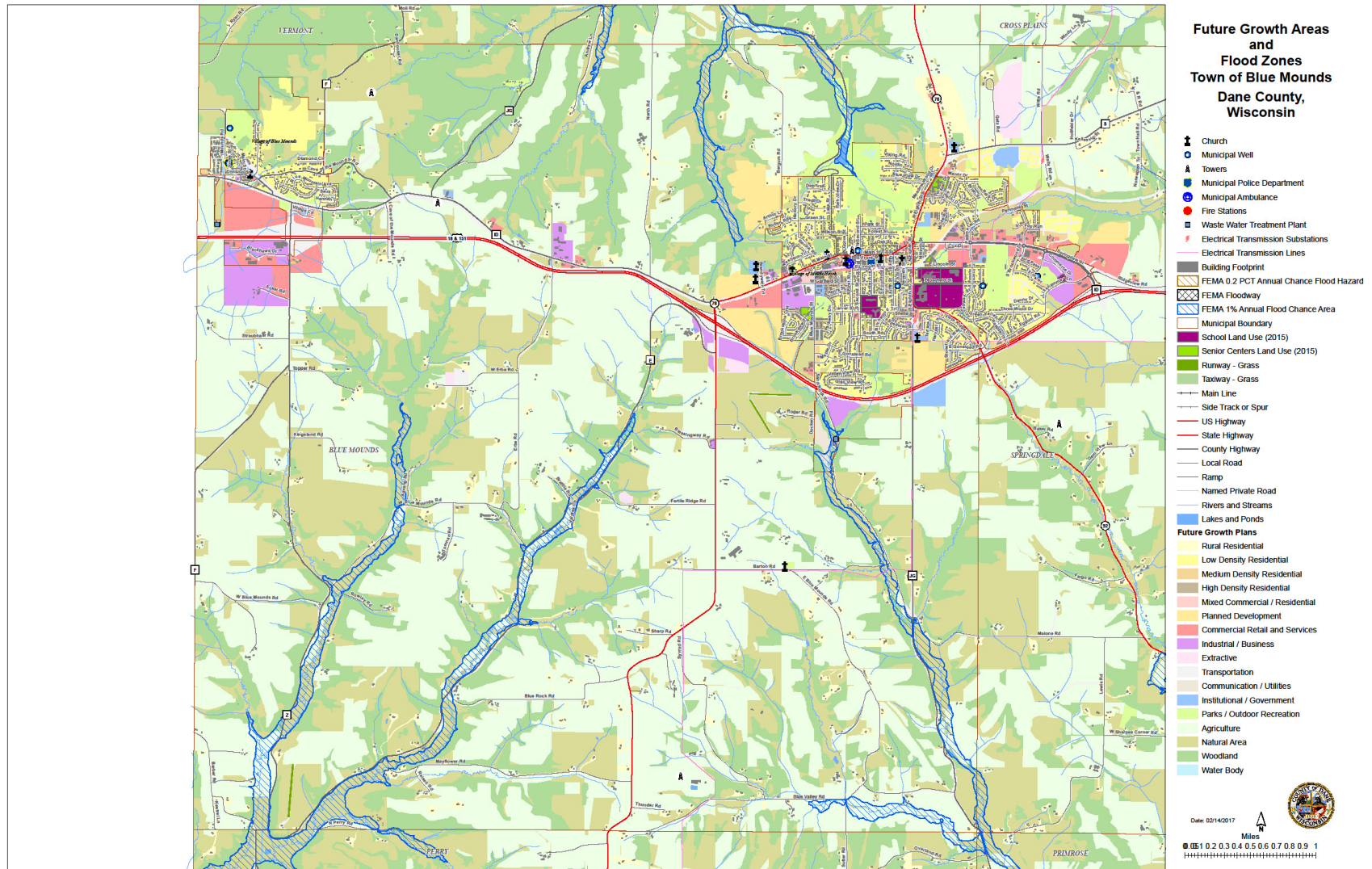
Total Floodway Properties	Floodway Improved Values	Floodway Residential Properties	Total Properties in 100 year Floodplain	Total Improved Value of Properties in 100 year Floodplain	Residential Properties in 100 year Floodplain	Total Properties in 500 year Floodplain	Total Improved Value of Properties in 500 year Floodplain	Residential Properties in 500 year Floodplain
0	\$0	0	4	\$447,900	4	4	\$447,900	4

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 2015 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
2.60%	395	10	\$146,726,550	\$3,809,736	\$1,904,867.96	\$952,433.98	1.3%

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 Blue Mounds has grown in terms of population and number of housing units between 2010 and 2014-15. Housing data is to 2014 due to data availability. Table 11, drawn from the Demographics Services Center at the Wisconsin Department of Administration, shows population projections through 2035.

Table 10 Town of Blue Mounds Change in Population and Housing Units, 2000-2014/15

2010 Population	2015 Population	Percent Change (%) 2010-2015	2010 # of Housing Units	2014 # of Housing Units	Percent Change (%) 2000-2014
968	989	2.17%	367	339	-7.6%

Source: Dane County

Table 11 Town of Blue Mounds Population Projections, 2005-2035

Population Projection	2015	2020	2025	2030	2035
Increase by same percentage each year (.43%)	989	1,010	1,032	1,054	1,077

Data Source: Demographic Services Center, Wisconsin Department of Administration

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 Blue Mounds.

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 Blue Mounds.

Table 12 Town of Blue Mounds Regulatory Mitigation Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General or Comprehensive plan	Yes	
Zoning ordinance	No	Dane County Zoning
Subdivision ordinance	No	Dane County
Growth management ordinance	Yes	LUP
Floodplain ordinance	No	Dane County Zoning
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	Dane County Zoning
Building code	Yes	
Fire department ISO rating	Yes	Mount Horeb
Erosion or sediment control program	No	Dane County
Storm water management program	No	Dane County
Site plan review requirements	Yes	
Capital improvements plan	No	
Economic development plan	No	
Local emergency operations plan	No	
Flood insurance study or other engineering study for streams	No	Dane County
Elevation certificates (for floodplain development)	No	Dane County

Data Source: Town of Blue Mounds Data Collection Guide, 2015

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

Table 13 Responsible Personnel and Departments for the Town of Blue Mounds

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

Data Source: Town of Blue Mounds Data Collection Guide, 2015

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

Table 14 Financial Resources for the Town of Blue Mounds

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

Source: Town of Blue Mounds Data Collection Guide, 2015

Additional Capabilities

The Town of Blue Mounds has an email newsletter that is sent out to residents. This can contain hazard mitigation information when necessary.

National Flood Insurance Program Participation

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

Public Involvement Activities

The Town of Blue Mounds 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

Objective #1: Continue to replace culverts in frequently washed out areas.

Steps:

1. Identify areas of frequent road washouts and determine if culvert replacement is proper course of action to mitigate this problem.
2. Prioritize and conduct culvert replacements as budgets allow.

Lead Implementing Agency: Town of Blue Mounds

Possible Funding and Technical Assistance: Staff time, Town Budget

Timeline: Ongoing

Priority: Medium

Estimated Costs: Variable