



SOMERSET COUNTY

HAZARD MITIGATION PLAN

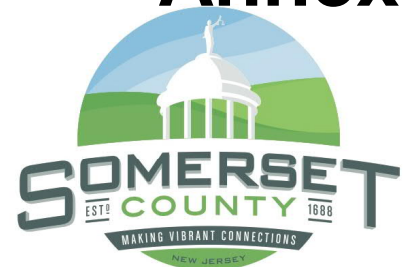
SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.23: North Plainfield Board of Education Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.23 North Plainfield Board of Education

This section presents the jurisdictional annex for the North Plainfield Board of Education (NPBOE).

9.23.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

Hazard Mitigation Plan Points of Contact					
Primary Point of Contact			Alternate Points of Contact		
Name: Milton Mathis, Director of Operations Address: 63 Greenbrook Road, North Plainfield, New Jersey 07060 Phone Number: 908-769-6058 Fax Number: 908-226-0023 E-mail Address: milton_mathis@nplainfield.org			Name: Brian Shanley, Supervisor of Buildings and Grounds Address: 63 Greenbrook Road, North Plainfield, New Jersey 07060 Phone Number: 908-769-6058 Fax Number: 908-226-0023 E-mail Address: brian_shanley@nplainfield.org		
HMP Committee Members					
Local Jurisdiction Role/Position	Name	Email	Phone	Date Notified About Mitigation Plan Development Process	Agreed to participate? (Yes/No)
Land Use/Community Planner	N/A				
Emergency Manager	N/A				
Floodplain Manager/ Floodplain Administrator	N/A				
Public Works Director / City Engineer	N/A				
Building Code Official	N/A				
Fiscal/Budget Officer	N/A				
Manager/Administrator	N/A				
Elected Officials	N/A				
Other 1: Municipal Hazard Mitigation Officer	Mr. Milton Mathis, Director of Operations	milton_mathis@nplainfield.org	908-769-6058	08/01/17	Yes
Other 2: Municipal Hazard Mitigation Officer Alternate	Mr. Brian Shanley, Supervisor of Buildings and Grounds	brian_shanley@nplainfield.org	908-769-6058	08/01/17	Yes
Other 3: Municipal Hazard Mitigation Officer Alternate	Mr. Donald Sternberg, Business Administrator / Board Secretary	don_sternberg@nplainfield.org	908-769-6105	08/01/17	Yes

9.23.2 PROFILE

The North Plainfield Board of Education, located within Somerset County, consists of one High School/Middle School, four Elementary Schools, one Alternative School and an Administration Building. The district serves students from Pre-K through 12.

9.23.2.1 Population

The student population served by the North Plainfield Board of Education is approximately 3,288 pupils.

- Land Area Owned: 48.3 Acres
- List of Critical Infrastructure: Seven (7) sixteen passenger school buses.
- Value of Critical Infrastructure/Equipment: \$315,000.00
- List of Critical Facilities:

Board of Education Facilities	
Adult/Community School	20 Harrison Avenue
East End Elementary School	170 Oneida Avenue
Harrison School	12 Harrison Avenue

North Plainfield High School/Middle School	34 Wilson Avenue
Somerset School	202 Somerset Street
Stony Brook Elementary School	269 Grove Street
West End Elementary School	447 Greenbrook Road

- Value of Critical Facilities: \$59,854,208
- Value of Area Served: \$10,218,600

9.23.2.2 Location

The North Plainfield School District is located in North Plainfield Borough, in northeast Somerset County.

9.23.2.3 Brief History

The school district was incorporated on April 7, 1856. The district currently employs approximately one thousand employees and is governed by the North Plainfield Board of Education.

9.23.2.4 Governing Body Format

The North Plainfield School District is governed by the North Plainfield Board of Education. The Board is elected, and consists of a president, vice president, and five other board members. The responsibilities include establishing policies, setting goal adoption and annual budget for the school district.

9.23.2.5 Growth/Development Trends

North Plainfield Board of Education did not note any major facility infrastructure development planned for the next 5 years (updated in 2018).

New Development/Potential Development, NPBOE Facilities						
Property Name	Type (Residential or Commercial)	No. of Structures	Address	Block and Lot	Known Hazard Zone	Description /Status
N/A	N/A	N/A	N/A	N/A	N/A	N/A

State and local regulations/codes/ordinances already in place would work to protect potential future new development from the effects of natural hazards including but not limited flood regulations, fire suppression, earthquake resistive equipment, erosion control, and storm water runoff.

9.23.3 NATURAL HAZARD EVENT HISTORY SINCE 2014

Somerset County has a history of natural hazard events as detailed in Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of events that have occurred since the 2014 HMP to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2014, refer to Section 5.0 of this plan.

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Cold/Wind Chill	N/A	N/A	January 4, 2014	No local damage reported
Strong Wind	N/A	N/A	January 6, 2014	No local damage reported
Flood	N/A	N/A	January 6, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 7, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 22, 2014	No local damage reported
Winter Storm	N/A	N/A	February 12, 2014	No local damage reported
Flood	N/A	N/A	February 22, 2014	No local damage reported
Strong Wind	N/A	N/A	March 12, 2014	No local damage reported
Flood	N/A	N/A	March 30, 2014	No local damage reported
Flood	N/A	N/A	April 1, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	April 15, 2014	No local damage reported
Flood	N/A	N/A	April 15, 2014	No local damage reported
Flood	N/A	N/A	April 30, 2014 to May 1, 2014	Very heavy rain caused considerable poor drainage flooding in Somerset County as well as major river flooding. Major flooding occurred along the Millstone and the main stem of the Raritan River, the worst flooding since Tropical Storm Irene on August 28th and 29th in 2011. Flooding forced the closure of westbound U.S. Route 22 at Rock Avenue in North Plainfield. Event precipitation totals were in the 4 to 5 inch range across Somerset County, and two million dollars in damages were reported countywide.
Thunderstorm Wind	N/A	N/A	May 10, 2014	No local damage reported
Earthquake, Magnitude 1.9, 6 km N of Boonton (Montville Twp.)	N/A	N/A	May 31, 2014	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Earthquake, Magnitude 1.0, 13 km SW of Ramblewood, NJ (Laurel Springs Boro.)	N/A	N/A	June 19, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 2, 2014	No local damage reported
Heat	N/A	N/A	July 2, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 3, 2014	No local damage reported
Flash Flood	N/A	N/A	July 3, 2014	No local damage reported
Thunderstorm Wind	N/A	N/A	July 8, 2014	No local damage reported
Earthquake, Magnitude 1.6, 3 km W of Jersey City, NJ (Kearny Town)	N/A	N/A	July 8, 2014	No local damage reported
Flood	N/A	N/A	July 16, 2014	No local damage reported
Earthquake, Magnitude 1.2, 4 km SW of Ringwood, NJ (Ringwood Boro.)	N/A	N/A	July 28, 2014	No local damage reported
Flash Flood	N/A	N/A	August 21, 2014	No local damage reported
Earthquake, Magnitude 1.3, 2 km S of Park Ridge, NJ (Woodcliff Lake Boro.)	N/A	N/A	September 3, 2014	No local damage reported
Flood	N/A	N/A	December 9, 2014	No local damage reported
Earthquake, Magnitude 1.9, 13 km SE of Twin Rivers, NJ (Millstone Twp.)	N/A	N/A	December 13, 2014	No local damage reported
Earthquake, Magnitude 1.5, 2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	December 28, 2014	No local damage reported
Cold/Wind Chill	N/A	N/A	January 7, 2015	No local damage reported
Flood	N/A	N/A	January 18, 2015	No local damage reported
Strong Wind	N/A	N/A	February 2, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 13, 2015	No local damage reported
Strong Wind	N/A	N/A	February 15, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 15, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 16, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 20, 2015	No local damage reported
Cold/Wind Chill	N/A	N/A	February 24, 2015	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flood	N/A	N/A	March 11, 2015	No local damage reported
Flood	N/A	N/A	March 14, 2015	No local damage reported
Earthquake, Magnitude 1.2, 2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	March 27, 2015	No local damage reported
Strong Wind	N/A	N/A	April 4, 2015	No local damage reported
Flash Flood	N/A	N/A	May 31, 2015	Thunderstorms with heavy downpours caused flash flooding in and around North Plainfield. Vehicles became trapped in high waters on U.S. Route 22 within the township. Five people were trapped in those vehicles, but no serious injuries were reported. Event precipitation totals within Somerset County were generally between 2 and 3 inches in many areas.
Earthquake, Magnitude 1.2, 2 km N of Wanaque, NJ (Ringwood Boro.)	N/A	N/A	July 12, 2015	No local damage reported
Heat	N/A	N/A	July 19, 2015	No local damage reported
Earthquake, Magnitude 2.7, 3.5 km N of Bernardsville, NJ (Bernardsville Boro.)	N/A	N/A	August 14, 2015	No local damage reported
Flash Flood	N/A	N/A	August 19, 2015	No local damage reported
Flood	N/A	N/A	August 19, 2015	No local damage reported
Earthquake, Magnitude 1.4, 5 km WNW of Fairfield, NJ (Fairfield Twp.)	N/A	N/A	August 22, 2015	No local damage reported
Drought and Excessive Heat	N/A	N/A	April 2015 – September 2015	No local damage reported
Combined effects of freeze, excessive heat, and drought	N/A	N/A	April 2016 – September 2016	No local damage reported
Earthquake, Magnitude 2.1, 2.4 km NW of Ringwood, NJ (Ringwood Boro.)	N/A	N/A	January 2, 2016	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4264	Yes	January 22-24, 2016	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Earthquake, Magnitude 1.1, 1.1 km NW of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	February 19, 2016	No local damage reported
Flash Flood	N/A	N/A	February 24, 2016	Strong to severe thunderstorms caused heavy rain and flooding. The stream gage on Stony Brook at North Plainfield reached its flood stage.
Thunderstorm Wind	N/A	N/A	April 2, 2016	No local damage reported
Earthquake, Magnitude 0.8, 4.4 km N of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	May 27, 2016	No local damage reported
Lightning	N/A	N/A	June 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 8, 2016	No local damage reported
Lightning	N/A	N/A	June 28, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	June 28, 2016	No local damage reported
Earthquake, Magnitude 1.1, 1 km NW of Butler, NJ (Butler Boro.)	N/A	N/A	July 4, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 8, 2016	No local damage reported
Flood	N/A	N/A	July 8, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 18, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Thunderstorm Wind	N/A	N/A	July 25, 2016	No local damage reported
Flood	N/A	N/A	July 25, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 30, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Heavy Rain	N/A	N/A	July 31, 2016	No local damage reported
Flash Flood	N/A	N/A	July 31, 2016	No local damage reported
Earthquake, Magnitude 0.8, 2.2 km SW of Clifton, NJ (Bloomfield Twp.)	N/A	N/A	July 31, 2016	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Earthquake, Magnitude 1.0, 2 km N of Wanaque, NJ (Wanaque Boro.)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.5, 1 km N of Butler, NJ (Bloomingdale Boro.)	N/A	N/A	August 9, 2016	No local damage reported
Earthquake, Magnitude 0.6, 5 km NE of Wanaque, NJ (Ringwood Boro.)	N/A	N/A	September 20, 2016	No local damage reported
Earthquake, Magnitude 1.5, 2.6 km W of Bellmar, NJ (Westville Boro.)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 2.0, 16.3 km E of Highlands, NJ (Middletown Twp.)	N/A	N/A	November 6, 2016	No local damage reported
Earthquake, Magnitude 1.31, 1.4 km S Morris Plains, NJ (Morris Plains Boro.)	N/A	N/A	March 25, 2017	No local damage reported
Flood	N/A	N/A	March 31, 2017	No local damage reported
Hail	N/A	N/A	May 14, 2017	No local damage reported
Hail	N/A	N/A	May 31, 2017	No local damage reported
Flood	N/A	N/A	June 24, 2017	No local damage reported
Flood	N/A	N/A	July 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Flood	N/A	N/A	August 22, 2017	No local damage reported
Heavy Rain	N/A	N/A	August 23, 2017	No local damage reported
Earthquake, Magnitude 1.71, 3.7 km SW of Morris Plains, NJ (Morris Twp.)	N/A	N/A	September 25, 2017	No local damage reported
Earthquake, Magnitude 0.98, 2.7 km SW of Morris Plains, NJ (Morris Twp.)	N/A	N/A	September 30, 2017	No local damage reported

Natural Hazard Event History (2014 to present)				
Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flood	N/A	N/A	October 29, 2017	High winds and heavy rains. Rainfall totals were over 2 inches in every county of New Jersey outside of the New York City area. Flooding was reported on Route 22 in North Plainfield.
Earthquake, Magnitude 1.38, 3.5 km NW of Keansburg, NJ (Keansburg Boro.)	N/A	N/A	November 8, 2017	No local damage reported
Severe Winter Storm and Snowstorm (Blizzard)	DR-4368	Yes	March 6, 2018	Although all portions of the county experienced significant snowfall from this event, the higher amounts (around one and one half feet) occurred in the eastern sections of the county closer to the off shore low pressure system. Thundersnow also occurred in a few locations. In North Plainfield, 8.0 inches of snow was reported.

Note:

DR = Major Disaster Declaration

EM = Emergency Declaration

N/A = Not applicable

Boro. = Borough

Twp. = Township

9.23.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of the North Plainfield Board of Education (updated in 2018).

Natural Hazard Risk/Vulnerability Risk Ranking ^h				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Flood	1% Annual Chance: \$2,495,920 0.2% Annual Chance: \$3,549,355	Frequent	18	High ^g
Severe Storm	100-Year MRP: \$2,753 500-Year MRP: \$22,683	Frequent	48	High
Severe Winter Storm	1% of GBS: \$598,542 5% of GBS: \$2,992,710	Frequent	27	Medium
Earthquake	500-Year MRP: \$5,985 2,500-Year MRP: \$1,137,230	Occasional	12	Low
Drought	Not available	Occasional	12	Low
Extreme Temperature	Not available	Frequent	18	Medium
Wildfire	Not available	Occasional	18	Medium

Note:

- Building damage ratio estimates based on FEMA 386-2 (August 2001)
- The valuation of general building stock and loss estimates was based on custom inventory for Somerset County.
- High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 15-30
Low = Total hazard risk ranking below 15
- Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- Loss estimates for the flood and earthquake hazards represent both structure and contents.
- The HAZUS-MH earthquake model results are reported by Census Tract.
- This rank was adjusted based on qualitative input from county/jurisdictional representatives due to hazard event history and other municipality-specific considerations.
- Vulnerability data and other inputs to complete the hazard ranking for the North Plainfield Board of Education were taken from the Borough of North Plainfield risk ranking for the 2014 HMP. For this plan update, improvements were made to focus upon NPBOE facilities as opposed to presenting information for the community at large. Flood loss estimates are HAZUS-MH 4.0 estimates of percent damage for North Plainfield Borough at the 100-year and 500-year events (4.17% damage and 5.93% damage, respectively), as a percent of NPBOE reported facility value of \$59,854,208. Severe Storm loss estimates are HAZUS-MH 4.0 results for North Plainfield Borough "Education Buildings". Severe Winter Storm loss estimates are calculated based on 1% and 5% of NPBOE reported facility value of \$59,854,208. Earthquake loss estimates are HAZUS-MH 4.0 estimates of percent damage for North Plainfield Borough at the 500-year and 2,500-year events (0.1% damage and 1.9% damage, respectively), as a percent of NPBOE reported facility value of \$59,854,208.

9.23.5 CAPABILITY ASSESSMENT

The North Plainfield Board of Education reviewed its responses from the 2014 HMP and has updated any information that has changed since that time.

The Board reported that it has the following financial resources with regards to its fiscal capabilities:

- Capital Improvements Project Funding
- State mitigation grant programs

The North Plainfield Board of Education's 2018 assessment of its overall capabilities to implement hazard mitigation strategies, in addition to their assessment of how these capabilities could be expanded and/or improved to reduce risk, is presented in the table below.

Overall legal and regulatory capability to implement hazard mitigation strategies	Overall technical capability to implement hazard mitigation strategies	Overall fiscal capability to implement hazard mitigation strategies	Overall administrative capability to implement hazard mitigation strategies	Board of Education's willingness to enact policies and programs that reduce hazard vulnerabilities
High	High	High	High	High
How these capabilities can be expanded and/or improved to reduce risk				
Installation of Emergency Generator at the North Plainfield High School / Middle School to be utilized for emergency rescue shelters.				

9.23.6 MITIGATION STRATEGY

This section discusses past mitigations actions and status, identifies hazard vulnerabilities, and describes proposed hazard mitigation initiatives.

9.23.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the North Plainfield Board of Education in 2018 and is presented in the following table. The Board has indicated that local priorities have not changed since the last version of the plan.

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
NPSD-1	Raise elevation of the existing retaining wall at the Stony Brook and extend to include the length of the exposed area.	M	Flood	Township DPW; North Plainfield OEM				X	Lack of political support, funding, staff availability, pricing mark up	X		No Change
NPSD-2	Installation of a permanently mounted emergency backup generator to power egress lighting, building systems and food storage equipment including freezers and coolers.	M	All	North Plainfield Board of Ed; Township DPW; North Plainfield OEM				X	Lack of political support, funding, staff availability, pricing mark up	X		No Change

SECTION 9.23: NORTH PLAINFIELD BOARD OF EDUCATION

2014 HMP Initiative #	Mitigation Initiative Description	2014 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
NPSD-3 (NPSD-1)	Provide backup power for the High School/Middle School Building located at 34 Wilson Avenue as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	M	All	North Plainfield Board of Education and the Office of Emergency Management				X	Lack of political support, funding, staff availability, pricing mark up	X		No Change
NPSD-4 (NPSD-2)	Provide backup power for the East End Elementary School Building located at 170 Oneida Avenue as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	M	All	North Plainfield Board of Education and the Office of Emergency Management				X	Lack of political support, funding, staff availability, pricing mark up	X		No Change
NPSD-5 (NPSD-3)	Provide backup power as for the West End Elementary School Building located at 447 Greenbrook Road as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	M	All	North Plainfield Board of Education and the Office of Emergency Management				X	Lack of political support, funding, staff availability, pricing mark up	X		No Change

9.23.6.2 Hazard Vulnerabilities Identified

The Board of Education identifies the track to be a problem area with multiple damage incidents. The Board of Education also identifies the walk in refrigeration units to be a vulnerable area when it comes to power outages.

HAZUS-MH 4.0 critical facility damage estimates for the North Plainfield Board of Education are provided below.

Critical Facility Damage Estimate										
Name	Municipality	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
			1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾
Stony Brook School/Harrison School	North Plainfield (B)	School	x	x	12.5	71.5	630.0	16.2	77.3	720

Source: HAZUS-MH 4.0

Notes:

- = No loss (calculated by HAZUS-MH 4.0)
- X = Facility located within the DFIRM boundary.
- DFIRM = Digital Flood Insurance Rate Map
- NA = Not applicable
- B = Borough

- (1) HAZUS-MH 4.0 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore, this will be an indication of the maximum downtime (HAZUS-MH 4.0 User Manual).
- (2) Please note in some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Please refer to the Hazard Profiles in Section 5.0 of this plan for additional vulnerability information relevant to this jurisdiction.

9.23.7 PROPOSED HAZARD MITIGATION INITIATIVES

The list below represents a summary of mitigation initiatives developed by the Board in 2018 as part of the most recent plan update. The Board has carried forward all of its 2014 HMP initiatives, and has identified no changes in local priorities since the last version of the plan in 2014. Detailed Action Worksheets are included only for NEW Mitigation Actions/Projects. Some of the identified mitigation initiatives in the table below are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Proposed Hazard Mitigation Initiatives														
2019 Initiative Number	Initiative Name	Initiative Description	Applies to New and/or Existing Structures*	New Initiative or Carried Forward	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2018 Action Status
NPSD-1	Elevation of Retaining Wall, Stony Brook Elementary School	Raise elevation of the existing retaining wall at the Stony Brook and extend to include the length of the exposed area.	Both	Carried Forward	Flood	4,6,7	Township DPW; North Plainfield OEM	Medium	Medium	OEM Grant, FMA	DOF	Medium	Mitigation Action/ Project, PP, SP	Not initiated; lack of political support, funding, staff availability, pricing mark up
NPSD-2	Generator Installation - Infrastructure Hardening High School/ Middle School	Installation of a permanently mounted emergency backup generator to power egress lighting, building systems and food storage equipment including freezers and coolers.	Existing	Carried Forward	All	4,6,7	North Plainfield Board of Ed; Township DPW; North Plainfield OEM	High	High	FEMA PDM	Short	Medium	Mitigation Action/ Project, PR,ES	Not initiated; lack of political support, funding, staff availability, pricing mark up
NPSD-3	Backup Power Retrofit - Critical Infrastructure High School/ Middle School	Provide backup power for the High School/Middle School Building located at 34 Wilson Avenue as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	Existing	Carried Forward	All	4,6,7	North Plainfield Board of Education and the Office of Emergency Management.	High	High	OEM Grant, District Capital Improvements Budget	Short	Medium	Mitigation Action/ Project, PR	Not initiated; lack of political support, funding, staff availability, pricing mark up
NPSD-4	Installation of Generator at East End Elementary School	Provide backup power for the East End Elementary School Building located at 170 Oneida Avenue as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	Existing	Carried Forward	All	4,6,7	North Plainfield Board of Education and the Office of Emergency Management.	High	High	OEM Grant, District Capital Improvements Budget	Short	Medium	Mitigation Action/ Project, PR	Not initiated; lack of political support, funding, staff availability, pricing mark up

SECTION 9.23: NORTH PLAINFIELD BOARD OF EDUCATION

Proposed Hazard Mitigation Initiatives														
2019 Initiative Number	Initiative Name	Initiative Description	Applies to New and/or Existing Structures*	New Initiative or Carried Forward	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	2018 Action Status
NPSD-5	Installation of Generator at West End Elementary School	Provide backup power as for the West End Elementary School Building located at 447 Greenbrook Road as part of retrofit at vital critical facilities identified as vulnerable to impacts from natural hazards.	Existing	Carried Forward	All	4,6,7	North Plainfield Board of Education and the Office of Emergency Management.	High	High	OEM Grant, District Capital Improvements Budget	Short	Medium	Mitigation Action/Project, PR	Not initiated; lack of political support, funding, staff availability, pricing mark up
NPSD-6	Installation of micro grids for emergency generator at High School/ Middle School	Additional power supply for generator (solar)	Existing	New	All	4,6,7	North Plainfield Board of Education	High	High	Grant Funding	DOF	High	Mitigation Action/Project, PR	New Action
NPSD-7	Installation of micro grids for emergency generator at East End School	Additional power supply for generator (solar)	Existing	New	All	4,6,7	North Plainfield Board of Education	High	High	Grant Funding	DOF	High	Mitigation Action/Project, PR	New Action
NPSD-8	Installation of micro grids for emergency generator at West End School	Additional power supply for generator (solar)	Existing	New	All	4,6,7	North Plainfield Board of Education	High	High	Grant Funding	DOF	High	Mitigation Action/Project, PR	New Action

Notes:

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

Potential FEMA HMA Funding Sources:

FMA = Flood Mitigation Assistance Grant Program
 HMGP = Hazard Mitigation Grant Program
 PDM = Pre-Disaster Mitigation Grant Program
 RFC = Repetitive Flood Claims Grant Program
 SRL = Severe Repetitive Loss Grant Program

Acronyms and Abbreviations:

ARC American Red Cross
 DPW Department of Public Works
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance
 HMP Hazard Mitigation Proposal
 N/A Not applicable
 NFIP National Flood Insurance Program
 NJOEM New Jersey Office of Emergency Management
 NOAA National Oceanic and Atmospheric Administration

Timeline:

Short Term= 1 to 5 years
 Long Term = 5 years or greater
 OG = On-going program
 DOF = Depending on funding



SCPD Somerset County Planning Department
 USACE U.S Army Corp of Engineers
 USGS U.S. Geological Survey

Costs:

Where actual project costs have been reasonably estimated:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

Where actual project costs cannot reasonably be established at this time:

Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low = Long-term benefits of the project are difficult to quantify in the short term.

Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.

High = Project will have an immediate impact on the reduction of risk exposure to life and property.

Notes (for Mitigation Type):

1. PR = Prevention: Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. PP = Property Protection: These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. PE = 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 educational programs for school-age children and adults.
4. NR = 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. SP = 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.
6. ES = 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.
7. Initiative= Initiatives are comprised of EVERYTHING your community wants to do or is doing in order to meet its mitigation goals. Initiatives include Capabilities, Actions and Projects.
8. Capability= Regulatory, administrative, technical, and fiscal staffing, tools and/or resources. Capabilities can be existing, or in need of further development/expansion.
8. Action/Project= Specific activities or projects that your community plans to undertake or is currently completing in order to achieve its long term mitigation goals. Actions/Projects can include, but are not limited to: structural projects, infrastructure projects, natural systems protection projects, or education and awareness programs.

9.23.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number.

Prioritization of Mitigation Initiatives							
Initiative #	# of Objectives Met	Benefits	Costs	Do benefits equal or exceed costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
NPSD-1	3	M	M	Y	Y	N	M
NPSD-2	3	H	H	Y	Y	N	M
NPSD-3	3	H	H	Y	Y	N	M
NPSD-4	3	H	H	Y	Y	N	M
NPSD-5	3	H	H	Y	Y	N	M
NPSD-6	3	H	H	Y	Y	N	H
NPSD-7	3	H	H	Y	Y	N	H
NPSD-8	3	H	H	Y	Y	N	H

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

9.23.8.1 Explanation of Priorities

Explanations of priority classifications used to assess the mitigation initiatives described in this annex are presented below:

High Priority = A project that meets multiple objectives (i.e., multiple hazards), where potential benefits exceed the costs. High-priority projects have funding secured or are on-going projects that meet eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation (PDM) Grant Program. High-priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, where the potential benefits outweigh the costs. Funding for medium-priority projects has not been secured but these projects are eligible for grants under HMGP, PDM, or other grant programs. These projects 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 = A project that will mitigate the risk of a hazard, where the potential benefits do not exceed the costs or have benefits that are difficult to quantify. Funding for low-priority projects has not been secured and these projects are not eligible for HMGP or PDM grant funding. The timeline 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.

Was prioritization of initiatives based on the above definitions? Yes

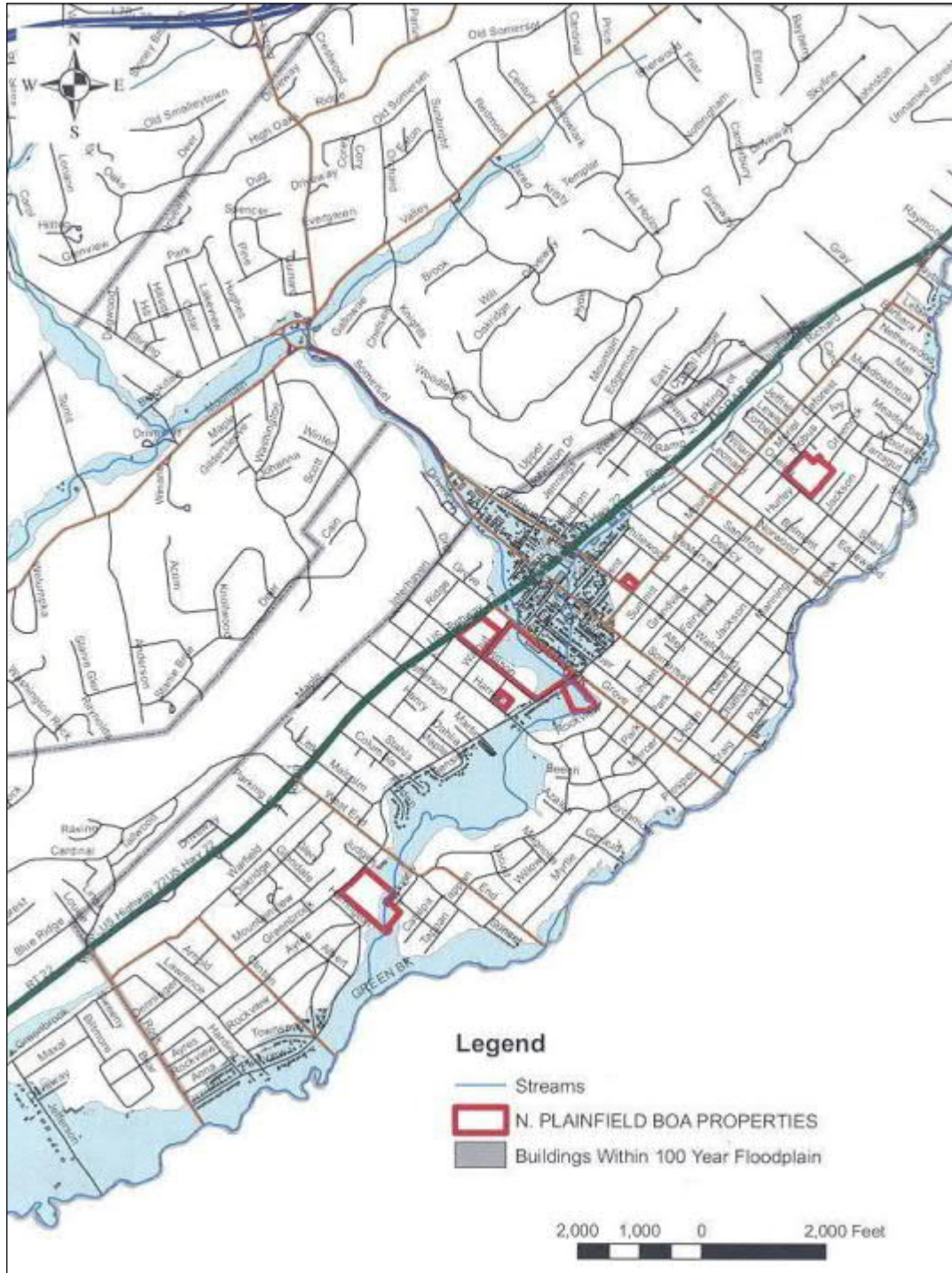
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.23.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The North Plainfield Board of Education has identified no additional risk vulnerabilities that need to be addressed at this time.

9.23.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within the North Plainfield Board of Education is provided on the following page. This map is based on the best data available at the time of the preparation of this plan, and is considered to be adequate for planning purposes. Maps have only been generated for hazards that can be clearly identified using mapping techniques and technologies, and for which the North Plainfield Board of Education has significant exposure. The planning area maps are provided in the hazard profiles within Section 5.4 of this plan.



9.23.11 STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of the North Plainfield Board of Education to incorporate mitigation planning as an integral component of daily municipal operations. The following table contains a list of planning mechanisms that have been utilized during prior plan maintenance cycles, and those that will be incorporated into municipal procedures during the upcoming plan maintenance cycle (2019-2024).

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2024)
Operating Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	-	X	-	X
Capital Improvement Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.	-	X	-	X
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.	-	X	-	X
Building and Zoning Ordinances Prior to land use, zoning changes, or development permitting, the municipality will review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use.	-	-	-	-
Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.	-	-	-	-
Grant Applications Data and maps will be used as supporting documentation in grant applications.	-	X	-	X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.	-	-	-	-
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.	-	-	-	-
Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The municipality will incorporate hazard-resistant construction standards into the design and location of projects.	-	-	-	-
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects.	-	-	-	-

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms				
Planning Mechanisms	Reported Utilization (2009-2014)	Planned Utilization (2014-2019)	Reported Utilization (2014-2019)	Planned Utilization (2019-2024)
Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district.	-	X	-	X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.	-	-	-	-
Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.	-	-	-	-

9.23.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.23.12 NFIP ADMINISTRATOR INPUT

The North Plainfield Board of Education is not an eligible direct participant in FEMA’s National Flood Insurance Program. The Borough of North Plainfield, however, does participate in the program and the Borough’s NFIP Administrator has offered the below input.

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	Position or Title of Your Jurisdiction’s Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person is a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
07/23/2007	08/20/1971	David Testa, Grotto Engineering Providing support on behalf of Borough Zoning Officer		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Permit Review, Inspections, Engineering Capabilities							
Describe barriers to running an effective NFIP program in the community (if applicable):							
None							
When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?*	Is a CAV or CAC scheduled or needed?	Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how.	Is training of staff regarding NFIP issues planned?	Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)?	Does your community participate in the CRS? If so, state your Class.	Does your community intend to continue its participation in the CRS program?	If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle?
09/06/2017	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes* <input type="checkbox"/> No * Class 8__	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
*Describe any outstanding compliance issues (i.e., current violations):							

Provide an explanation of your local floodplain permitting process:								
See Ord 20-1.3								
Does your community intend to continue floodplain identification and mapping services including any local requests for map updates?	Does your community intend to initiate/continue the buyouts of repetitive loss properties?	Does your community intend to commit staff or resources to improve local mapping and code administration in the future?	Does your community intend to provide local outreach to promote the sale of flood insurance?	Does your community intend to participate in RiskMAP meetings and planning initiatives?	Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.?	Does your community intend to continue to implement home improvement programs designed to minimize basement flooding?	Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events?	Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does your community intend to adopt the new FEMA Advisory Base Flood Elevations?	As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan?		As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update?		Have there been any changes to your community’s local floodplain management program since the last version of the plan in 2014?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes * <input checked="" type="checkbox"/> No			
* If you answered “yes”, that there have been changes to your local program since 2009, please describe:								
Provide a description of your community assistance and monitoring activities:								
North Plainfield provides community outreach by way of yearly mailings, providing access to FEMA prevention, elevation and preparedness literature at the municipal library.								
NFIP participating communities are required to update/revise their floodplain management ordinance to ensure that it complies with the latest FEMA regulations. Will your community continue to commit to this program requirement?				NFIP participating communities are also required to update/revise their floodplain management ordinance to be consistent with the latest FIRMS. Will your community continue to commit to this program requirement?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				