

Appendix 14: Borough of Roselle Park

This appendix is part of the 2015 Union County Hazard Mitigation Plan (HMP) update, and only includes jurisdiction-specific information about the Borough of Roselle Park, which is one of the twenty (20) municipalities within Union County that is participating in the plan update.

14.1 Planning Process and Participation

The County formed a Steering Committee, which was responsible for key decisions during the plan update. This committee sent a letter to the Mayor of each municipality within the County. The Mayors and local officials selected a single individual to represent the town in the broader process. This person was the point of contact for the plan update, but worked with other municipal employees, consultants, volunteers, and other stakeholders throughout the planning process. This collection of participants, considered the local planning committee, is listed below. The committee was responsible for various decisions that informed the development of this appendix, including: prioritizing the natural hazards that can affect the community, reviewing and prioritizing the mitigation actions that are included in Table 14-1, and informing community leaders about the status of the County mitigation plan update, including this appendix

The Roselle Park Planning Committee evaluated and identified the hazards of concern, completed the request for information (RFI), reviewed the plan documents and vulnerability assessment, identified local stakeholders for outreach, and worked collectively to update the mitigation strategy. In order to complete the update process, Roselle Park attended the kickoff meeting held by Princeton Hydro in May 2014. To further the plan development, the Roselle Park Planning Committee met with Princeton Hydro to review the plan documents and revise the mitigation strategy in a workshop format on July 24th, 2014 and again on February 23rd, 2015. Local ordinances, site plan requirements, emergency procedures and response plans, and stormwater management plans were reviewed for integration into this plan update. As the plan was developed, the Planning Committee reviewed all of the drafts and provided input on this individual appendix.

Table 14-1
Borough of Roselle Park Planning Committee Members

Name	Title	Organization
Paul Morrison	Police Chief/OEM Coordinator	Roselle Park Police Department
Richard Cocca	Deputy OEM Coordinator	Roselle Park Police Department
Ken Blum	Chief Financial Officer	Borough of Roselle Park
Tom Solfaro	Engineer	Neglia Engineering
Mark Pasquali	DPW Superintendent	Neglia Engineering
Richard Graves	DPW Supervisor	Borough of Roselle Park
Carl Hokanson	Mayor	Borough of Roselle Park



2 Community Profile

The Borough of Roselle Park has a total area of 1.23 square miles and is located in the northern region of Union County, New Jersey.

As of 2010, the population was estimated at 13,297. This is a .12 percent increase from the 2000 population, which was estimated at 13,281. See Section 3 of the 2014 Plan update for a map of Union County.

The first record of settlement in Roselle Park was in 1700, by Samuel Williams and his son Joseph. At this time the present day Roselle Park was part of the Elizabethtown Settlement, and was primarily undeveloped. The community began to grow substantially in response to the establishment of the railroads. In 1839 the Elizabethtown & Somerville Railroad began to run regular routes through the region. The railroad is still an important part of the Borough, which offers a commuter rail stop on the NJ Transit Raritan Valley Line.

The Borough of Roselle Park was formally incorporated on March 22nd, 1901, from portions of Union Township. There had been concern at the time about Union Township being able to provide effective municipal services to the southern part of the township. The Borough is governed by an elected mayor and six councilpersons. One councilperson is elected at-large, while five of the council seats represent each of the five wards within the Borough.

2.1 Land Use and Development

Roselle Park is a densely developed residential community, with nearly 99 percent of its 1.22 square miles of land area classified as urban/developed. Over 89 percent of the parcels within Roselle Park are classified as residential, based on tax assessment data. Between 2004 and 2012, only 46 building permits were issued for residential homes within the Borough. This is 0.56 percent of the total building permits issued for Union County during this time period. Almost 98 percent of these permits were for 1-and 2-family homes.

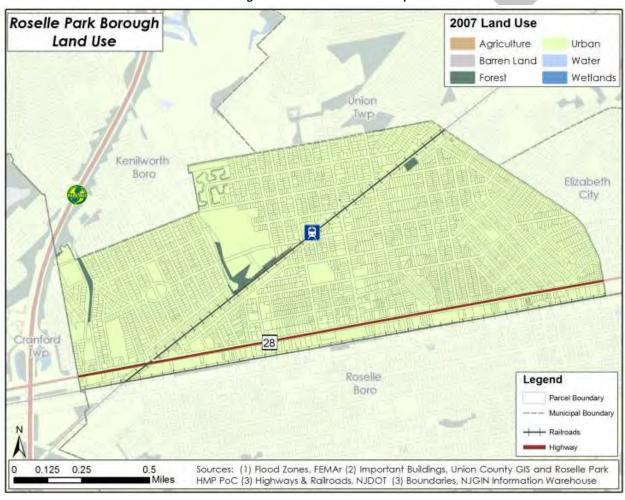
Roselle Park has a population density of 10,899 people per square mile, Union County's densest municipality. The 2010 census estimates that 40.6 percent of the housing within the Borough was renter-occupied, higher than the County average of 30.5 percent renter-occupied properties.



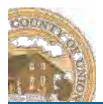
Table 14-1 Land Use Change in the Borough of Roselle Park

Land Cover Class	2002 (acres)	2007 (acres)	Percent Change	Percent of Total Land ¹
Agriculture	0	0	-	-
Barren Land	0	0	-	-
Forest	8.72	7.92	-9.20%	1.01%
Urban	775.00	775.81	0.10%	98.99%
Water	0	0	-	-
Wetlands	0	0	-	A (\-\)

Figure 14-1: Borough of Roselle Park Land Use Map



1 Uses the 2007 land cover values



3 Hazard Identification and Risk Assessment

This section of the Roselle Park mitigation plan appendix describes the natural hazards and risks that can affect the community. It should be noted that -- in accordance with FEMA requirements -- only the hazards with aspects that are unique to the community (versus the County as a whole) are included in detail in this appendix.

3.1 Background and Hazard Rankings

Like all the other jurisdictions in Union County, the Borough of Roselle Park is potentially subject to the effects of all the hazards that are considered in this mitigation plan. However, the majority of these hazards have minimal impacts on the area, and are discussed in detail in the County part of the mitigation plan. FEMA mitigation planning guidance requires that County mitigation plans include a risk assessment section that "assess[es] each jurisdiction's risks where there vary from the risks facing the entire planning area" (44CFR 201.6 (c) (2) (iii). Because the Union County HMP update includes separate appendices for each jurisdiction, this requirement is met in the appendices, while risks that affect the entire County uniformly are discussed in the County part of the HMP.

One of the first steps in developing jurisdictional appendices was for participating municipalities to review and prioritize the hazards that can affect them. This was done based on how often a hazard has occurred, how significant effects have been in the past, the difficulty and cost of recovering from such events. Jurisdictions ranked the list of hazards as either high, medium, low, or no concern.

Table 14-3 shows Roselle Park's hazard rankings. The level of discussion and detail about specific hazards in this section are based on these rankings. Hazards that are ranked high include the most detail, and to the extent possible include probabilistic assessments of risk, i.e. likely future damages in the community based on the likelihood of occurrence. Hazards that are ranked medium have less detail and may in some cases refer to the main part of the county mitigation plan; they usually do not have probabilistic risk assessments, although potential future losses

Table 14-2
Borough of Roselle Park Hazard
Identification and Prioritization

Hazard Flood	Priority High
Hazmat release – fixed site	High
Hazmat release – transportation	High
High wind – straight-line winds	Med
Severe storm – winter weather	Med
Drought	Low
Earthquake / Geological	Low
Erosion	Low
Extreme temperature – cold	Low
Extreme temperature – heat	Low
Hail	Low
High wind – tornado	Low
Ice storm	Low
Landslide (non-seismic)	Low
Severe storm – lightning	Low
Storm surge	Low
Dam failure	None
Wildfire	None

^{*}Only the hazards ranked high and medium are analyzed in this appendix



are discussed based on best available data. Hazards ranked low and none are not addressed in this jurisdictional appendix because they are discussed in the County part of the HMP, and there are no significant differences in risk between the County and the municipality.

3.2 Flood Hazard

3.2.1 Type, Location, and Extent

Flooding in Roselle Park Borough most often occurs during extreme rain events. These can be simply intense inland storms, tropical cyclones (including hurricanes and their remnants), and sometimes "nor'easters". There are two typical modes of flooding — overbank floods from several culverts and stream channels that run generally north to south across the jurisdiction, and (to a lesser extent) sheet flow and ponding in very specific areas. There are three areas of flood concern in Roselle Park, two of which are related to Morses Creek, which meanders along the western border of the jurisdiction. There is also a high water table that exacerbates localized flooding.

One of the best resources for determining flood risk in a jurisdiction is Flood Insurance Rate Maps (FIRMs), which are produced by FEMA. The FIRM is the official map of a community on which FEMA has delineated both the special flood hazard areas (1% annual chance of flooding) and the risk premium zones applicable to the jurisdiction.² The effective FIRM date for Union County is September 20th, 2006. An enhanced version of the FIRM is shown in Figure 14-2.

There are two small areas of Special Flood Hazard Area, as shown in Figure 14-2. There have been a few National Flood Insurance Program claims in these two areas in the past, although these have not been especially significant or repetitive, as depicted on the same map.

The other area where there is some flood risk is in the east-central part of the Borough, where there is some 100-year floodplain and a minor history of flood insurance claims (see map). Again, the flooding is associated with extreme rain events, and is caused by a combination of modes – overbank from culverts, as well as sheet flow and ponding. The flooding can be exacerbated by narrower downstream channels, but these are gradually being corrected through civil works projects and improved maintenance. Over time, the Borough has tried successfully to reduce flooding in this area by carefully maintaining (and occasionally widening) culverts, catch basins and channels. Although this area appears to be flood-prone based on the map, in fact there has not been any significant flooding there in some time, in large measure because of the jurisdiction's commitment to maintenance.

Table 14-3: Flood-prone Properties

Flood hazard area	Number of parcels with at least 60% of parcel in zone
100-year (1%) floodplain	179
500-year (0.2%) floodplain	12

² FEMA online - Floodplain Management. Flood Insurance Rate Map (FIRM) definition



Current FEMA guidance uses the term extent as analogous to potential severity. The extent of the flood hazard in Roselle Park is relatively minor. The areas discussed above have experienced fairly shallow and low-velocity flooding at various times in the past, and in this case this is the best indicator of extent in the future. The most flood-prone areas of the jurisdiction can expect to experience flooding of a foot or two maximum (occasionally), with more frequent rain events causing a few inches of inundation at low spots, and those adjacent to culverts and stream channels. The current engineering design standard for the jurisdiction is a 25-year event (i.e. one with a 4% annual chance of occurring), so events more significant than that have the potential to inundate areas.

Table 14-4 shows the number of parcels in Roselle Park Borough with at least 60% of their area in the 100-year (1% annual) and 500-year (0.2% annual) floodplain. Although these figures offer some insight into the flood hazard in this jurisdiction, they are not particularly reliable as a risk indicator because in many cases structures and infrastructure (where the risk-producing impacts occur) are not located in the specific areas that are in the floodplain.

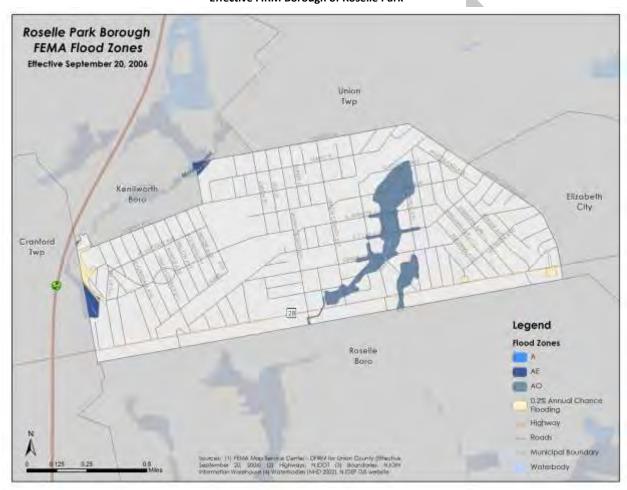
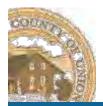


Figure 14-3: Effective FIRM Borough of Roselle Park



3.2.2 Previous Occurrences and the Probability of Future Floods

Minor flooding occurs in Roselle Park at least annually, although the severity of these frequent events is minimal. As discussed in the main (County) section of the mitigation plan, more significant events like tropical cyclones and nor'easters occur every few years (section citation to main plan), and can result in significant flooding. Notwithstanding the potential effects of climate change on weather patterns, the Borough can probably expect to experience some level of flooding every year or two, with more significant events happening every five to ten years on average. The main (County) part of this HMP discusses past occurrences in detail, and that history and statistics are generally the same as for Roselle Park.

3.2.3 Flood Impacts and Vulnerabilities to Flooding

As discussed elsewhere, flood impacts in Roselle Park Borough are relatively minor based on various metrics such as NFIP claims, FEMA PA Program Project Worksheets, and the known history of flooding. There is no significant history of flood damage to critical facilities or populations in the jurisdiction.

Only the area at the southern end of the jurisdiction (near Dalton Street and Union Road) appears to have any special flood vulnerability. There is also routinely flooding on East Lincoln Avenue, Clay Avenue, Spruce Street, Walnut Street, and Grant Avenue. This is street flooding due to drainage problems.

3.2.4 National Flood Insurance Program and Repetitive Loss Properties

To provide a sense of the flood risk in a community it is also beneficial to summarize the policies in force and claims statistics from the National Flood Insurance Program (NFIP). The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the federal government will make flood insurance available within the community as a financial protection against flood losses. Roselle Park Borough has been a member of the NFIP since 1971. The flood risk assessment method is based on analysis of NFIP data on repetitive flood loss properties.

The NFIP defines repetitive loss (RL) properties as those that have received at least two NFIP insurance payments of more than \$1,000 each in any rolling ten-year period. As of February 2014, Union County had 729 such properties based on a query of the FEMA BureauNet NFIP interface. Of this total, two repetitive loss properties were located within Roselle Park; this comprises less than one percent of the County total. Table 14-4 provides a comparison of the residential repetitive loss claims for Union County and Roselle Park. The table below includes the number of repetitive loss properties, building and contents damages, the total number of claims, and the average claim amounts.



Table 14-4 NFIP Policies and Claims

Number of Parcels:

Roselle Park: 3,680
Union County: 199,489
Number of Policies In-Force:
Roselle Park: 386

Union County: Number of Claims:

Roselle Park: 68 Union County: 5,560

6,055

Total Paid Claims

Roselle Park: \$258,051 Union County: \$96,782,279

Repetitive Loss Properties:

Roselle Park: 2 Union County: 729

Total Building

Roselle Park: \$47,870 Union County: \$46,560,646

Total Contents

Roselle Park: \$47,870 Union County: \$46,560,646

Number of Claims

Roselle Park: 5 Union County: 2,115

Average Claim

Roselle Park: \$9,574 Union County: \$18,759,126 FEMA NFIP statistics indicate that as of February 2014, federal flood insurance policies were in-force on 386 buildings in Roselle Park Borough. This represents a dollar value of property and contents coverage totaling \$14,320,600. Between 1978 and 2014, there have been a total of 68 NFIP insurance claims in Roselle Park with a total claims value of \$258,051.³ Table 14-5 compares the number of policies in-force and paid claims in the Borough. The table shows that Roselle Park comprises 6.3% of the NFIP policies in-force in Union County.

Roselle Park was accepted into the Community Rating System (CRS) in 2014. (CRS) is a voluntary program for communities participating in the NFIP. The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. For CRS participating communities, flood insurance premium rates are discounted in increments of 5% based on creditable activities.⁴ CRS communities are ranked between 1 and 10, with Class 1 communities receiving a 45% premium discount.

It should be noted that NFIP claims are not a direct or completely accurate proxy for flood risk in a community. The data does not include flood damages to structures that had no flood insurance. Also, in some cases, structures or contents may have been underinsured. The NFIP claims data also does not include any damages to public facilities, which may be insured via other means (such as self-insurance or non-FEMA policies); such damages may also be addressed through other federal programs such as FEMA's Public Assistance Program. Figure 14-3 shows all NFIP claims in Roselle Park between 1978 and 2014.

FEMA requires a discussion of NFIP Repetitive Loss and Severe Repetitive flood loss statistics in hazard mitigation plans. The NFIP defines repetitive loss properties as those with two or more claims of more than \$1,000 each during any rolling ten year period. Roselle Park has only two such properties, and the total of claims on them is relatively small, as shown in Table 14-5. These properties are also shown in Figure 14-3.

The RL claims can be broken down by focusing on individual property level data. Table 14-6 provides a summary of residential RL claims for the two individual properties within Roselle Park. The table includes the building, contents, and total claims data for repetitive loss properties in this jurisdiction.

³ FEMA – Policy and Claim Statistics for Flood Insurance

⁴ FEMA – Community Rating System (CRS).

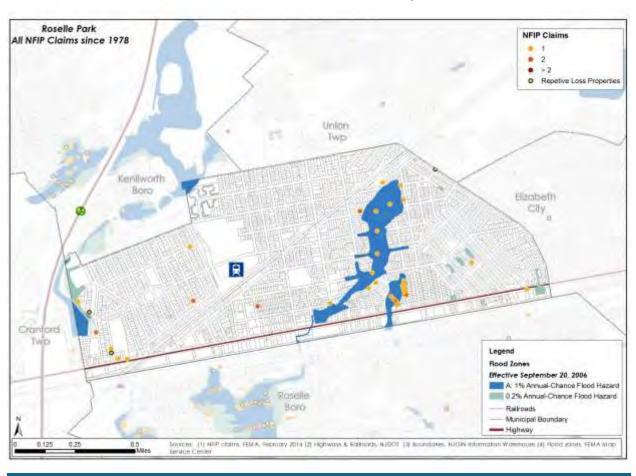


Address data about individual sites is omitted for reasons of confidentiality. Pinewood Avenue, on the western border, is affected by flooding in a retaining basin adjacent to Carpenter Place in Cranford.

Table 14-5 Flood-Prone Properties

Street Name	Building	Contents	Total	# Claims	Average
Pinewood Avenue	\$24,284	\$0	\$24,284	3	\$8,095
Jerome Street	\$23,586	\$0	\$23,586	2	\$11,793
	\$47,870	\$0	\$47,870	5	

Figure 14-3
NFIP Claims in Roselle Park Borough





3.2.5 Flood Risk to Repetitive Loss Properties in Roselle Park

Residential flood risk is calculated by a simple methodology that uses the FEMA default present-value coefficients from the benefit-cost analysis software modules. To perform this calculation, the flood insurance claims data were reviewed to determine an approximate period over which the claims occurred. This method should be used only for very general estimates of flood risk because the NFIP data represents only part of the flood losses in any jurisdiction. This is because there are always properties that are uninsured or under-insured. Most of the flood claims in the most recent query occurred between 1979 and the present, a period of 35 years.

As shown in Table 14-7, there have been 68 NFIP insurance claims in the 35-year period, for an average number of claims per year of 1.49. Based on a 100-year horizon and a present value coefficient of 14.27 (the coefficient for 100 years using the mandatory OMB discount rate of 7.0 percent), the projected flood risk to these properties is \$5,838,713. It must be understood that individuals can obtain and cancel flood insurance policies, and the flood hazard depends on many variables, including the weather, so this projection is simply an estimate of potential damages. Nevertheless, it offers a useful metric that can be used in assessing the potential cost effectiveness of mitigation actions, although in this case, site-specific loss estimates are fairly small, meaning that the amount of grant funds that could be expended on projects will probably be limited.

3.2.6 Flood Risk to Severe Repetitive Loss Properties in Roselle Park

The definition of Severe Repetitive Flood Loss is included in the County portion of this mitigation plan. As of February 2014, Roselle Park had no NFIP severe repetitive flood loss properties.

Table 14-7: Projected 100-year Flood, Based on Past Flood Insurance Claims (Source: FEMA NFIP query February 2014)

Data	Value
Period in years	35
Number of claims	68
Average claims per year	2
Total value of claims	\$14,320,600
Average value of claims per year	\$409,160
Projected risk, 100-year horizon	\$5,838,713



3.3 Hazardous Materials Releases – Fixed Sites and Transportation

The main section of this hazard mitigation plan includes more details about the hazardous materials hazards in the County as a whole, although by their nature such events are non-probabilistic. As such, it is impossible to estimate risk with any accuracy whatsoever. Hazardous materials releases are included in this appendix because the County required that it remain on the list of hazards, and Roselle Park indicated it has a hazard of high or medium concern. However, for reasons of security and a lack of open-source information, this subsection is necessarily short and very general.

This mitigation plan is a public document, and as such does not include any descriptions specific enough that they could be used for malicious purposes. As part of this HMP update, the planning team queried the New Jersey Department of Environmental Protection Right to Know database. The database includes reports of hazardous materials spills, listing their location, date of occurrence and the type of material. The database was queried from January, 2000 to the present day. Results are a combination of occurrences on fixed sites and those related to transportation. For Roselle Park, these tended to be in five categories: soil contamination, underground tanks (presumably leakage), illegal dumping, improper storage/disposal, and abandoned containers.

3.3.1 Fixed Sites

The US Environmental Protection Agency maintains a database of toxic releases by site. The database is known as the Toxic Release Inventory (TRI), and provides basic information about the locations, types and amounts of releases of hazardous materials. This is explained in detail in the County section of this mitigation plan. Union County has 138 such sites, 3 of which are in Roselle Park. The following graphic shows the TRI sites around Roselle Park, with a half mile buffer depicted. This does not suggest a specific level of increased risk within the buffer, however, as the potential for exposure and possible effects are dependent on many factors, most of which are not explained in this appendix.

3.3.2 Transportation

Because of the large presence of the chemical and oil industries in eastern New Jersey, many major transportation routes and rail lines carry a high volume of hazardous materials, many of which could cause damage, death and injury to Union County under some circumstances. As noted, there are few open sources of information about the materials that are transported on these routes, the routes themselves, or the carriers' schedules. For more information contact the New Jersey State Department of Environmental Protection or local Emergency Management offices.



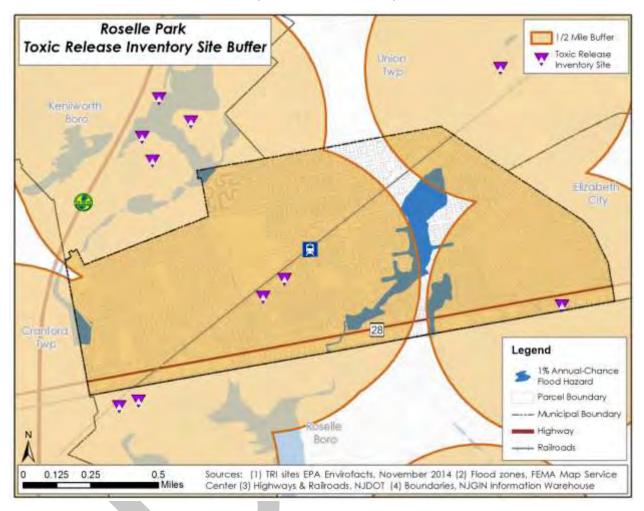


Figure 14-4
Map of Toxic Release Inventory Sites

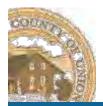
3.4. Straight Line Wind Hazard

3.4.1 Type, Location and Extent

The high wind – straight line wind hazard is uniform across Union County, and is discussed in detail in the County portion of this mitigation plan (see Section 4). For reasons of brevity these details are not repeated here. There are no wind hazards that are unique to Roselle Park.

3.4.2 Previous Occurrences and the Probability of Future Occurrences

Previously occurrences and the probability of future events are the same for Roselle Park as for Union County. Refer to Section 4 for that information at a County level.



3.4.3 Straight Line Wind Impacts and Vulnerabilities to the Hazard

Roselle Park is a typical residential community, predominated by balloon-frame and unreinforced masonry residential structures, the majority of which have gable or hip roofs. As discussed in the County part of the plan, wind profiles in this area of the country indicate a relatively low potential for severe events, and adequate construction techniques and building codes have generally sufficed to keep risks low. There are two main sources of potential wind damage in such communities: (1) structural damage to residential and non-residential buildings, and (2) power losses, mainly due to trees falling on aboveground lines. There are established methodologies for completing general risk assessments for these hazards. These are explained in detail in the County portion of the plan (see Section 4). Table 14-10 below summarizes annual straight-line wind risks and cumulative risks over 50- and 100-year planning horizons in Roselle Park. Risks are in seven discreet categories: building damages, contents damages, inventory loss, relocation costs, business income lost, rental income lost and wages lost.

Table 14-8:
Straight-line Wind Risks for Range of Loss Types, Borough of Roselle Park
Annualized and 50- and 100-year Planning Horizons

Occupancy Class	Total SF	Total Annualized Damages	50-year Risk	100-year Risk
Residential	6,301,312	\$164,532	\$2,270,700	\$2,347,701
Commercial	1,296,530	\$18,504	\$255,374	\$264,034
Industrial	385,826	\$4,937	\$68,140	\$70,450
Agricultural	116,806	\$1,638	\$22,608	\$23,374
Religious	44,370	\$661	\$9,126	\$9,435
Government	22,594	\$310	\$4,277	\$4,422
Education	81,910	\$1,016	\$14,028	\$14,503
Total	8,249,347	\$191,599	\$2,644,251	\$2,733,919

The next table shows power loss risks in Roselle Park, again annualized and for 50- and 100-year planning horizons. The methodology for these calculations (and additional jurisdiction-level data) can be found in Section 4 of the County plan.

Table 14-9
Power Loss Horizons

Period	Risk Value
Annual	\$159,174
50-year planning horizon	\$2,196,720
100-year planning horizon	\$2,271,294



3.5 Winter Weather Hazard in the Community

Severe storms and winter weather risks are discussed in detail in Section 4 of the County portion of this mitigation plan. There are no significant differences in the type, location or extent of this hazard between the County and Roselle Park, and there are no aspects of the hazard that are unique to this jurisdiction.

3.5.1 Previous Occurrences and the Probability of Future Occurrences

Previous occurrences of the severe storm-winter weather hazard are discussed in detail in the County portion of this hazard mitigation plan (see Section 4), and for reasons of brevity are not repeated here. There are no meaningful differences between the County as a whole versus Roselle Park with regard to occurrences or the future probability of this hazard.

3.5.2 Severe Storm – Winter Weather Impacts and Vulnerabilities to the Hazard

Winter weather impacts in Roselle Park are substantially similar to the County as a whole, and include lost productivity, traffic accidents, downed trees, medical events (such as heart attacks), and hypothermia (which rarely causes any significant or long-term problems). The community has no unique or pronounced vulnerabilities to this hazard. Like most established communities, over time Roselle Park has adapted its systems and infrastructure to minimize the effects of cold weather and associated meteorological effects. In rare cases, buildings may experience structural problems due to snow loads, and public or private infrastructure may fail due to freezing. However, these problems are usually minor and are addressed by private citizens (through their own work, or via insurance proceeds) or by the government in the case of infrastructure.

Perhaps the most significant potential impact of winter weather is traffic accidents and related injuries and fatalities. For the most part, damage to vehicles is addressed via private insurance, records of which are proprietary. However, there are national statistics regarding injuries and deaths related to such weather. Local values for injuries and deaths can be deduced from national statistics. Figures for Roselle Park are displayed in the table below. Refer to the County portion of this mitigation plan for source citations and an explanation of the methodology.

Table 14-10:
Winter Storm-related Risks (traffic injuries and fatalities),
Roselle Park Borough 50- and 100year Planning Horizons

	Injuries (combined)	Deaths
Snow/sleet	\$1,826,287	\$207,396
Icy pavement	\$1,420,865	\$156,423
Snow/sleet	\$1,369,550	\$137,814
Total annual risk (all hazards)	\$4,616,701	\$501,633
50-year risk	\$63,710,480	\$6,922,538
100-year risk	\$65,880,329	\$7,158,306

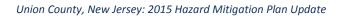


3.6 Critical Facilities

Roselle Park does not currently have any critical facilities in the Special Flood Hazard Area. They have no record of flood damage in any of the facilities.

Facility Name	Street Address	Square Footage	Replacement Value		
Sherman Sch.	375 E. Grant Ave.	11,206	\$1,950,600		
Roselle Park Train Station*.		1,713	\$0		
Roselle Park H.S.	185 Webster Ave	87,092	\$7,698,200		
R. Gordon Sch.	59 W. Grant Ave.	11,151	\$8,696,200		
Pub. Lib.		5,533	\$427,700		
Police H.Q.	110 E. Westfield Ave.	4,982	\$498,400		
Roselle Park M.S.	57 W. Grant Ave.	21,603	\$8,696,200		
Fire Sta. #1	105 Sherman Ave	3,351	\$114,100		
Fire Sta. #3	545 Laurel Ave.	5,138	\$313,600		
Fire Sta. #2	605 Chestnut	2,215	\$125,000		
EJF-Aldene Sch.	339 W. Webster Ave.	16,995	\$2,280,900		
Boro Hall	110 E. Westfield Ave.	5,022	\$498,400		
P.O. 07204	290 Chestnut Ave.	4,429	\$39,900		

^{*} This facility is not maintained by the Borough, it is the responsibility of NJ Transit.





4 Borough of Roselle Park Mitigation Strategy

This section contains goals, objectives, and action items for the Borough of Roselle Park, as part of the Union County Plan Update. The goals are similar to the goals outlined in the County plan, but the objectives are adjusted for the jurisdiction. The definitions for these terms can be found in Section 5 of the Union County Plan Update.

4.1 Goals

- Goal 1: Improve LOCAL KNOWLEDGE about the potential impacts of hazards, and the identification of specific measures that can be taken to reduce their impacts
- Goal 2: Improve DATA COLLECTION, USE, AND SHARING to reduce the impacts of hazards
- Goal 3: Improve CAPABILITIES, COORDINATION, AND OPPORTUNITIES to plan and implement risk reduction projects, programs, and activities
- Goal 4: Pursue a range of MITIGATION OPPORTUNITIES, including addressing NFIP repetitive and severe repetitive loss properties, and reducing risk to public properties and infrastructure

4.2 Objectives

- Objective 1.A: Increase risk awareness among officials and citizens.
- Objective 1.B: Maintain and improve jurisdiction-level awareness regarding funding opportunities for mitigation, including that provided by FEMA and other federal and State agencies.
- Objective 2.A: Improve the availability and accuracy of risk- and mitigation-related data at the local level, as the basis for planning and development of risk-reduction activities.
- Objective 2.B: Ensure that government officials and local practitioners have accurate and current information about best practices for hazard mitigation planning, project identification, and implementation.
- Objective 2.C: Develop and maintain detailed data about critical facilities, as the basis for risk assessment and development of mitigation options.
- Objective 3.A: Continue support of hazard mitigation planning, project identification, and implementation at the municipal level.
- Objective 3.B: Continue close coordination with the County in a range of risk-related areas, such as FEMA programs, mitigation planning, development of hazard mitigation projects, etc.
- Objective 3.C: Increase property owner participation in the National Flood Insurance Program.
- Objective 3.D: Implement activities to improve the community's CRS rating.
- Objective 3.E: Work towards increasing the integration of mitigation principles and activities in a range of local regulations, plans, ordinances and activities.
- Objective 3.F: Maintain and improve coordination with surrounding communities with regard to understanding and reducing risks.
- Objective 4.A: Facilitate development and timely submittal of project applications meeting state and federal guidelines for funding (1) for RL and SRL properties and (2) for hardening/retrofitting infrastructure that is at the highest risk.
- Objective 4.B: Maintain and enhance local planning and regulatory standards related to future development and investments.



4.3 Mitigation Strategy

The tables below list prioritized mitigation projects and actions identified by the Borough of Roselle Park.

4.3.1 Existing Mitigation Actions

Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost	Current Status
Retrofit roof to meet current standards on municipal building that houses the local police department and OEM	Wind	High	Funded by FEMA grant and Insurance	Roselle Park Administrator	2016	5-years	\$250,000	Partially complete (OEM portion complete)
Flood proofing of the Chestnut Street fire station	Flood	High	Floodplain Management	Roselle Park Fire Chief	2016	2-5 Years	\$125,000	Not started
Flood proofing of the Lorane Fire House	Flood	High	Floodplain Management	Roselle Park Fire Chief	2016	2-5 Years	\$125,000	Not started
Flood proofing and backup generator for the Faitoute Fire House	Flood/Severe Weather	High	Floodplain Management	Roselle Park	2016	2-5 Years	\$300,000	Generator portion Complete
Retrofit roof to meet current high wind standards on the Faitoute Fire House	High Wind	High	Floodplain Management	Roselle Park	2016	2-5 Years	\$250,000	Not started
Mitigation of Flood/High Winds affecting the first aid house on Laurel Avenue	Flood/High Wind	High	Floodplain Management	Roselle Park Fire Chief	2016	2-5 Years	\$45,000	Not started
Mitigate flooding of the Sherman School	Flood	High	Floodplain Management	Roselle Park OEM	2016	One Year	\$25,000	Not started
Backup power to the Roselle Parks Middles School	Wind/Severe Weather	High	Capital Improvement	Roselle Park OEM	2016	1-5 Years	\$100,000	Not started
Increase holding capacity to Basin along Meadow Street (East Grant Ave and Walnut Street)	Flood	High	Floodplain Management	Roselle Park OEM	2016	1-5 Years	\$130,000	Split into two projects (Listed under new Projects)



Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost	Current Status
Backup power/retrofitting of the Aldine School	Power/Wind	High	Capital Improvement	Roselle Park OEM	2016	1-2 Years	\$125,000	Not started
Backup power/retrofitting of Roselle Park High School	Power/Wind	High	Capital Improvement	Roselle Park OEM	2016	1-2 Years	\$125,000	Not started
Flood proofing of the Department of Public Works	Flood/Wind	High	Floodplain Management	Roselle Park DPW		1-Year	\$150,000	No longer active. New DPW building under construction
Upgrade and improvement of the drainage system for the Tributary to the West Brook in Grant Avenue Area	Flood	Low	Floodplain Management	Roselle Park DPW	2016	1- Year	\$350,000	Not Started
Impact Harden and retrofit roofs on 4 schools located on West Grant Ave (2 facilities), Laurel Ave, and Chestnut Ave.	Wind	Mediu m	Capital Improvement	Roselle Park OEM		1-2 Years	\$750,000	No longer active.
Covered culvert upgrade along West Westfield Ave	Flood	High	Capital Improvement	Roselle Park OEM	2016	1-2 Years	\$1.2 million	Not Started
Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	All	High	Emergency Management	OEM Coordinator, in coordination with NJOEM		One Year	Staff Time	Distributed Roselle Park Flood Hazard Map brochure in 2014 (3,700 residents)



4.3.1 New Mitigation Actions

Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost	Current Status
Hawthorne Basin (Between Hawthorne St. /Meadow) Reinforce the berm surrounding the basin	Flood							
Walnut St Basin (Rebuild trash racks with stronger material to prevent debris from clogging drains.	Flood							
Tree Management Program with Right of Way survey to identify high risk trees	High wind / ice storm		Green Communities Grant Agreement \$3,000 grant from State (\$3,000 town match)			2014	\$6,000	Complete in summer, 2014
Join CRS Program	Flood							Currently in process of joining.



4.4 Capability Assessment

4.4.1 Planning and Regulatory

Tool	Borough Has (y/n)
Zoning Ordinance	Y
Subdivision Ordinance	Y
Flood Damage Prevention Ordinance (per NFIP)	Y
Special Purpose Ordinances (e.g. wetlands, critical or sensitive area	as)
Stormwater Management Plan/Ordinance	Y
Comprehensive Plan / Master Plan	Y
Capital Improvements Plan	
Site Plan Review Requirements	Y
Habitat Conservation Plan	
Economic Development Plan	Y
Local EOP	Y
Continuity of Operations Plan	
Post Disaster Recovery Plan or Ordinance	
Wildfire Protection Plan	
Real Estate Disclosure req.	
Other (e.g. steep slope ordinance, local waterfront revitalization pl	lan)
Freeboard	Y
Cumulative Substantial Damages	
Shoreline Management Plan	

4.4.2 Communication and Emergency Response

	Does the Borough have this (y/n)
Outdoor warning system	
Nixle	Υ
Auto-Dialer/Reverse 911/Emailer	
Social Media	Υ
Website Updates	Υ
Other Emergency Communications	Υ
Mutual Aid Agreements	Υ
Emergency Operations Center	Υ
Evacuation Vehicles	Υ
Swift-water rescue	
Shallow water boats	



Staff/Personnel

	Does this Borough have this expertise on staff?
Staff with expertise or training in benefit/cost analysis	
Grant Writer(s)	Υ
Emergency Manager	Υ
Professionals trained in conducting damage assessments	Y
Scientist familiar with natural hazards in the municipality.	
Personnel skilled or trained in "GIS" applications	Υ
Surveyor(s)	
NFIP Floodplain Administrator	Y
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y
4.4.5 Fiscal Capabilities	

4.4.5 Fiscal Capabilities

Fiscal Mechanism	Does the Borough have this capability?
Community development Block Grants (CDBG)	Υ
Capital Improvements Project Funding	Υ
Authority to Levy Taxes for specific purposes	Υ
User fees for water, sewer, gas or electric service	
Impact Fees for homebuyers or developers of new development/homes	-
Incur debt through general obligation bonds	Υ
Incur debt through special tax bonds	
Incur debt through private activity bonds	
Withhold public expenditures in hazard-prone areas mitigation grant programs	



5. Plan Maintenance and Adoption

5.1 Plan Maintenance

The Borough of Roselle Park will review this Appendix of the County's hazard mitigation plan appendix each year and give the County's HMP Coordinator an annual progress report. The Deputy OEM Coordinator is responsible for convening the LPC, initiating the plan review, and submitting the annual progress report. The LPC may use worksheets #1 and #3 in the FEMA 386-4 guidance document, to facilitate the review and progress report. FEMA guidance worksheets are provided in Appendix G. Local progress reports shall be provided to the County HMP Coordinator at least two weeks prior to the annual plan review meeting.

Additionally, the LPC will convene and review the plan when major hazard events impact the jurisdiction, potentially yielding opportunities for mitigation grant funding, or when new information suggests that plan elements do not accurately reflect the community's risk or its mitigation priorities.

If necessary, the Deputy OEM Coordinator will convene a meeting of the LPC to review and approve all changes. The Borough retains the discretion to implement minor changes to the document without formal procedures involving the Borough Council subject to local policies and regulations.

In addition to the annual progress report, the Borough of Roselle Park will provide Union County with a copy of the written notice of any changes to the jurisdictional appendix at the time such changes are implemented.

The LPC shall document, as needed and appropriate:

- Hazard events and losses in Roselle Park Borough and the effects that mitigation actions have had on impacts and losses,
- Progress on the implementation of mitigation actions, including efforts to obtain outside funding for projects,
- Any obstacles or impediments to the implementation of actions,
- Additional mitigation actions believed to be appropriate and feasible,
- All public and stakeholder input and comment on the Plan that has been received by the Borough.
- Copies of any grant applications filed on behalf of the Borough

5.1.2 Continued Public Input

The Borough of Roselle Park is committed to incorporating public input into its ongoing hazard mitigation planning. The public will have an opportunity to comment on the Plan prior to any changes and during the 5-year plan update. The annual progress reports will be posted on the County mitigation website in addition to the adopted Plan.



All public comments and input on the plan will be recorded and addressed, as appropriate. Opportunity to comment on the plan will be provided directly through the County's website. Public comments can also be submitted in writing to the County's HMP Coordinator. All public comments shall be addressed to: Union County Office of Emergency Management c/o All Hazards Pre-disaster Mitigation Plan Coordinator 300 North Ave East, Westfield, NJ 07090.

The Borough of Roselle Park's LPC shall ensure that:

- Copies of the latest approved Plan are available for review at Borough Hall along with instructions to facilitate public input and comment on the Plan.
- Public notices are made as appropriate to inform the public of the availability of the Plan, particularly during Plan update cycles.
- For minor changes to this appendix, the Borough of Roselle Park will post a notice on the Borough's website and invite the public to review and comment.
- For major changes involving Borough Council approval, the Borough will use its standard public notice procedures inviting the public to review the document and provide feedback.

5.2 Plan Adoption

On [insert date] Union County submitted the initial draft of the 2015 Plan Update to NJOEM for review and comment. After addressing NJOEM comments in the document, the HMP was resubmitted for final consideration and approval by NJOEM and FEMA. FEMA approved the plan on [insert date], and the Plan update was forwarded to the Union County Board of Chosen Freeholders for adoption, which occurred on [insert date].

The Borough Council approved the plan on [insert date]. The Borough's resolution for adoption and the County's adoption resolution are provided as Appendix E of the 2015 HMP update. Following adoption, the plan update was resubmitted to FEMA for final approval, which occurred on [insert date]. The FEMA approval letter is included as Appendix D.