



## 2. COUNTY OF HUDSON

This jurisdictional annex to the Hudson County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the County of Hudson with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Hudson, describes who participated in the planning process, assesses Hudson's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

### 2.1 Hazard Mitigation Planning Team

The County of Hudson identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many County departments. The Office of Emergency Management represented the community on the Hudson County HMP Planning Partnership and Steering Committee and supported the local planning process by securing input from Hudson County jurisdictions with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 2-1 summarizes Hudson County officials who participated in the development of the annex and in what capacity. Additional documentation of Hudson County's planning activities through Planning Partnership meetings is included in Volume I.

**Table 2-1. Hazard Mitigation Planning Team**

Primary Point of Contact	Alternate Point of Contact
Name/Title: Jim Woods, OEM Coordinator Address: Juneau Building 110 Hackensack Ave Kearny, NJ Phone Number: 201-369-5200 Email: <a href="mailto:jwoods@hcnj.us">jwoods@hcnj.us</a>	Name/Title: Peter Nevins, OEM Planner Address: Juneau Building 110 Hackensack Ave Kearny, NJ Phone Number: 201-369-5200 Email: <a href="mailto:pnevins@hcnj.us">pnevins@hcnj.us</a>
<b>National Flood Insurance Program Floodplain Administrator</b>	
<i>This is reported at the municipal level.</i>	
<b>Additional Contributors</b>	
Name/Title: Rosa Abrantes Method of Participation: Participated in the planning process.	
Name/Title: Bob Grewe, OEM Emergency Response Specialist Method of Participation: Participated in the planning process.	
Name/Title: Ralph Sax, County Roads and Public Property Deputy Director Method of Participation: Participated in the planning process.	
Name/Title: Sean O'Connor, Hudson County Communications Method of Participation: Participated in the planning process.	



Name/Title: Sam Schroeder, Planner Method of Participation: Participated in the planning process.
Name/Title: Tom Malavasi, County Engineer Method of Participation: Participated in the planning process.
Name/Title: Vincent Viera, GIS Specialist Method of Participation: Participated in the planning process.

## 2.2 Community Profile

### 2.2.1 Brief History

Hudson County is the smallest, most urbanized and most densely populated county in the State of New Jersey. Comparatively, Hudson County is the sixth most densely populated county in the nation.

Residential areas, business districts, commercial and industrial areas, various transportation systems, natural features, waterfront areas, and educational facilities are all located and make up today's Hudson County. This combination of natural and developed features including proximity to water, along with a growing population and being the most densely populated county in New Jersey, lays the foundation for Hudson County's vulnerability to natural hazards and effects of climate change, both in terms of exposure to and the potential impacts from hazard events.

The County's urbanized core is comprised of the Cities of Hoboken and Jersey City. The northern area of the County is made up of five densely populated communities: The Towns of Guttenberg and West New York, Townships of North Bergen and Weehawken, and the City of Union City. The City of Bayonne makes up the County's southern peninsula. Western Hudson County contains smaller, less densely populated areas and includes the Borough of East Newark and the Towns of Harrison and Kearny. The northwestern area of the County consists of the Town of Secaucus.

### 2.2.2 Location

The County is a peninsula located in the northeast section of New Jersey, west of New York City, and located within the New York Metropolitan area. Hudson County is bordered by Newark Bay and the Passaic and Hackensack Rivers to the west, the Hudson River and New York City to the east, the Kill Van Kull to the south and Bergen County to the north. The Hackensack River runs through the center of the County from north to south.

### Governing Body Format

The governing body of Hudson County is the Hudson County Board of County Commissioners. This legislative body is composed of nine commissioners, each elected from a specific district within the county. The Board is responsible for adopting the county budget, enacting ordinances and resolutions, and overseeing a wide range of county services, including public safety, infrastructure, and social services. In addition to the Board of County Commissioners, Hudson County operates under the leadership of a County Executive, who is elected at-large and is responsible for the day-to-day administration of County government. The County Executive implements policies set by the Board and manages the various departments and agencies that deliver services to residents.



## 2.2.3 Population and Social Vulnerability

According to the U.S. Census, the 2020 population for Hudson County was 724,854, a 6.4 percent increase from the 2010 Census.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2020 U.S. Census indicates that 6.5 percent of the population is 5 years of age or younger, 12.0 percent is 65 years of age or older, 12.9 percent is non-English speaking, 8.4 percent is below the poverty threshold, and 13.7 percent is considered disabled.

### 2.2.3.1 ALICE IN HUDSON COUNTY

ALICE is an acronym for Asset Limited, Income Constrained, Employed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the County. While conditions have improved for some households, many continue to struggle, especially as wages fail to keep pace with the rising cost of household essentials (housing, child care, food, transportation, health care, and a basic smartphone plan). Households below the ALICE Threshold – ALICE households plus those in poverty – can't afford the essentials.

According to 2021 Point-in-Time-Data from ALICE, 24 percent of the 292,000 households in Hudson County are ALICE households (compared to the state average of 26 percent). The median household income in Hudson County is \$80,329, and the County sees a labor force participation rate of 69 percent. Hudson County faces low household income compared to the state average of \$89,296 and while the County does carry a 3 percent higher labor participation rate compared to state numbers, 15 percent of Hudson County households live in poverty.

## 2.3 Jurisdictional Capability Assessment and Integration

Hudson County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events



For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Hudson County to identify opportunities for integrating mitigation concepts into ongoing County procedures.

### 2.3.1 Planning and Regulatory Capability and Integration

Table 2-2 summarizes the planning and regulatory tools that are available to Hudson County.

**Table 2-2. Planning and Regulatory Capability and Integration**

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>CODES, ORDINANCES, &amp; REGULATIONS</b>				
<b>Building Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Zoning/Land Use Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Subdivision Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Site Plan Code</b>	Yes	Hudson County Planning Board	Local and County	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The County's Planning Board, with staff support from the Division of Planning review, reviews all applications for development along County roads that may affect traffic and drainage facilities. The Planning Board promotes sustainability and environmentally friendly development through their Land Development Regulations, which includes refined Green Stormwater Infrastructure (GSI) techniques and design and construction standards, along with descriptive text for techniques.				
<b>Stormwater Management Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Post-Disaster Recovery/ Reconstruction Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Real Estate Disclosure Requirements</b>	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property
<p>How has or will this be integrated with the HMP and how does this reduce risk? For leases, the law amends the New Jersey Truth-in-Renting Act, N.J.S.A. 46:8-43 et seq., to require every landlord to notify in writing each of the landlord's tenants, prior to lease signing or renewal, whether the property is located in the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area ("100-year floodplain") or Moderate Risk Flood Hazard Area ("500-year floodplain") and if the landlord has actual knowledge that the rental premises or any portion of the parking areas of the real property containing the rental premises has been subjected to flooding. The law does not apply to (1) landlords who lease commercial space or residential dwellings for less than one month, (2) residential dwellings in a premises containing not more than two units, (3) owner-occupied premises containing not more than three units, or (4) hotels, motels, or other guest houses serving transient or seasonal guests for a period of less than 120 days.</p> <p>The model notice is to contain the heading "Flood Risk" and questions for the landlord to answer regarding the landlord's actual knowledge of past flooding of the property. The questions regarding the property being in a FEMA Special or Moderate Risk Flood Hazard Area shall not contain the option for "unknown." To determine how the questions are to be answered, FEMA's current flood insurance rate maps for the leased premises area must be consulted. The landlord will be required to answer whether the rental premises or any portions of the parking areas of the real property containing the rental premises ever experienced any flood damage, water seepage, or pooled water due to a natural flood event and, if so, the number of times that has occurred.</p> <p>The notice to residential tenants must also indicate that flood insurance may be available to renters through FEMA's National Flood Insurance Program to cover their personal property and contents in the event of a flood and that standard renter's insurance does not typically cover flood damage.</p> <p>For sales, the law also amends the New Jersey Consumer Fraud Act, N.J.S.A. 56:8-1 et seq., to require sellers of real property to disclose, on the property condition disclosure statement, whether the property is located in the FEMA Special or Moderate Risk Flood Hazard Area and any actual knowledge of the seller concerning flood risks of the property to the purchaser before the purchaser becomes obligated under any contract for the purchase of the property.</p> <p>The disclosure statement must contain the heading "Flood Risk" and ask the seller the following questions:</p> <ul style="list-style-type: none"><li>• Is any or all of the property in the Special Flood Hazard Area ( "100-year floodplain" ) or a Moderate Risk Flood Hazard Area ( "500-year floodplain" ) according to FEMA' s current flood insurance rate maps?</li><li>• Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? Properties in the Special Flood Hazard Area with mortgages from federally regulated or insured lenders are required to obtain and maintain flood insurance.</li><li>• Have you ever received assistance from, or are you aware of any previous owners receiving assistance from FEMA, the U.S. Small Business Administration, or any other federal disaster flood assistance for flood damage on the property? For properties that have received flood disaster assistance, the requirement to obtain flood insurance passes down to all future owners.</li><li>• Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.</li><li>• Is there a FEMA elevation certificate available for the property? If so, it must be shared with the buyer. An elevation certificate is a FEMA form, completed by a licensed surveyor or engineer, that provides critical information about the flood risk of the property and is used by flood insurance providers to determine the appropriate insurance rating for the property.</li><li>• Have you ever filed a claim for flood damage to the property with any insurance provider? If the claim was approved, what was the amount received?</li><li>• Has the property experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall, coastal storm surge, tidal inundation, or river overflow? If so, how many times?</li></ul> <p>Not all provisions of this law have become effective at the time of the writing of this plan.</p>				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Growth Management</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Environmental Protection Ordinance(s)</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Flood Damage Prevention Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Wellhead Protection</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Emergency Management Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Climate Change Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other: Hudson County Complete Streets Policy, 2012</b>	Yes	Hudson County Complete Streets Policy, 2012	County	-
How has or will this be integrated with the HMP and how does this reduce risk? Provides safe and convenient access for all users by designing and operating a comprehensive, integrated, connected, multi-modal network of transportation options. The policy directs Complete Streets practices to be integrated into the planning, design, construction, maintenance and operation of County roads, bridges, parks and building projects funded by the County's Capital Improvement Plan, to the extent possible. Part D of the Policy states that "Complete Street Policies shall support the goals of the Hudson County Master Plan."				
<b>PLANNING DOCUMENTS</b>				
<b>General/Comprehensive/Master Plan</b>	Yes	Hudson County Master Plan 2002; Re-Examination of the Master Plan February 2017	County	Division of Planning
How has or will this be integrated with the HMP and how does this reduce risk? Hudson County Master Plan 2002; Re-Examination of the Master Plan February 2017. Site Plan and Subdivision Regulations pursuant to NJSA 40:27-6 et. seq. The plan summarizes impacts from Superstorm Sandy and displays floodplain and storm surge maps. The plan emphasizes the importance of resiliency planning to mitigate County vulnerability to natural hazards. This plan identifies recommended mitigation and resilience actions that align with the 2015 and 2020 HMPs.				
<b>Capital Improvement Plan</b>	Yes	-	Local	-
How has or will this be integrated with the HMP and how does this reduce risk? Per NJSA 40:55D-29 the governing body is authorized to direct the planning board to prepare a CIP with at least a six-year planning horizon. Capital Improvements are identified within the local budget and administered locally.				
<b>Disaster Debris Management Plan</b>	Yes	Hudson County Disaster Debris Management Plan, adopted in 2017	County	Division of Planning
How has or will this be integrated with the HMP and how does this reduce risk? Addresses the jurisdiction's coordinated response to manage debris following a debris-generating event.				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Floodplain Management or Watershed Plan</b>	Yes	Hackensack Meadowlands Floodplain Management Plan, 2005	Local	-
How has or will this be integrated with the HMP and how does this reduce risk? Discusses flood hazard areas; recommended actions.				
<b>Stormwater Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Open Space Plan</b>	Yes	Open Space Plan, 2013	County	County Parks
How has or will this be integrated with the HMP and how does this reduce risk? The 2013 Open Space Re-examination Report documents Superstorm Sandy damages to Liberty State Park (\$20 million), County Parks (\$500,000) and to municipal parks.				
<b>Urban Water Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Habitat Conservation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Economic Development Plan</b>	Yes	Comprehensive Economic Development Strategy – 5 year plan 2015-2019, updated in 2016	County	County Administration
How has or will this be integrated with the HMP and how does this reduce risk? Comprehensive Economic Development Strategy – 5 year plan 2015-2019, updated in 2016. To be updated in 2020 for the new 5-year CEDS report 2020-2024.				
<b>Community Wildfire Protection Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Community Forest Management Plan</b>	Yes	Hudson County Community Forestry Plan, December 2017	County, Local	County Parks
How has or will this be integrated with the HMP and how does this reduce risk? This plan establishes a plan and guidelines for proper maintenance and expansion of the County's urban forestry program and resources, is in compliance with the NJ Shade Tree and Community Forestry Assistance Act which provides liability protection and affords the County access to the Community Stewardship Incentive Program and associated grant opportunities. This plan and associated initiatives are assist with improving the effect of urban heat islands (extreme temperature hazard in the HMP).				
<b>Transportation Plan</b>	Yes	Circulation Element of the County Master Plan, 2017	County	Transportation
How has or will this be integrated with the HMP and how does this reduce risk? The Circulation Element of the Hudson County Master Plan provides an overview of transportation in Hudson County, sets goals and objectives based on current patterns and potential future trends, and includes recommendations to address the current issues, and improve the safety, mobility, and accessibility of the county's transportation system. The Circulation Element includes a section detailing the damage to the County's transportation network from Hurricane Sandy and other storm events, and the new goals and objectives include resiliency priorities				
<b>Agriculture Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Climate Action/ Resilience/Sustainability Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Tourism Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Business/ Downtown Development Plan</b>	Yes	Comprehensive Economic Development Strategy – 5 year plan 2015-2019, updated in 2016	Federal, State	-
How has or will this be integrated with the HMP and how does this reduce risk? Comprehensive Economic Development Strategy – 5 year plan 2015-2019, updated in 2016. To be updated in 2020 for the new 5-year CEDS report 2020-2024.				
<b>Other:</b>	Yes	Recreational and Open Space Inventory, 2017	County	Parks
• <b>Recreational and Open Space Inventory</b>				Parks
• <b>Parks Master Plan</b>		Hudson County Parks Master Plan, 2016		-
• <b>Wastewater Management Plan</b>		Wastewater Management		
How has or will this be integrated with the HMP and how does this reduce risk?				
The Recreational and Open Space Inventory (2017) lists all Green Acres-funded properties as well as all other lands held for conservation and/or recreation purposes.				
The 2016 Hudson County Parks Master Plan outlines a 5-year plan for capital improvements in the nine County Parks. The Hudson County Master Plan Re-examination Community Facilities element works in conjunction with the Parks Master Plan.				
NJDEP provided planning funding to develop/update the County wastewater management plans with new regulations.				
<b>RESPONSE/RECOVERY PLANNING</b>				
<b>Emergency Operations Plan</b>	Yes	Hudson County EOP	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years.				
ESF #6 (Mass Care) has just been updated in coordination with the American Red Cross, Hudson County Health and Human Services and Hudson County Office of Emergency Management. This document as standard practice for prevention, mitigation, preparedness, response, and recovery during emergency operations. ESF #6 references the Multi-Jurisdictional Hazard Mitigation Plan.				
<b>Continuity of Operations Plan</b>	Yes	Hudson County Continuity of Operations Plan	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The plan provides a guide to assess the impact of a variety of disasters on the County government, and that essential services and facilities remain operational or are recovered as soon as possible.				
<b>Substantial Damage Response Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Threat and Hazard Identification and Risk Assessment</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Post-Disaster Recovery Plan</b>	Yes	Hudson County Strategic Recovery Report, February 2014	County	Division of Planning
How has or will this be integrated with the HMP and how does this reduce risk? Hudson County Strategic Recovery Report (February 2014). Several mitigation actions were identified in VII Action Plan in the report that aligned with the 2015 Hudson County Hazard Mitigation Plan. The Hudson County Division of Planning, in partnership with other County Divisions and Offices, including OEM, will pursue a recovery planning process for the short-term and long-term recovery of the COVID-19 Pandemic.				
<b>Public Health Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other</b>	-	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

### 2.3.2 Development and Permitting Capability

Table 2-3 summarizes the capabilities of Hudson County to oversee and track development.

*Table 2-3. Development and Permitting Capability*

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> <li>If you issue development permits, what department is responsible?</li> <li>If you do not issue development permits, what is your process for tracking new development?</li> </ul>	No	Hudson County Planning Board reviews and approves all developments abutting County roads
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Hudson County Planning Board Application Form requires applicants to identify whether the property for proposed development is located within the flood hazard area. An additional analysis of geographic locations of applications would determine proximity of any other developments to hazards.
Do you have a buildable land inventory? <ul style="list-style-type: none"> <li>If you have a buildable land inventory, please describe</li> </ul>	Yes	Draft NJSEA Master Plan indicates a build-out analysis has been performed Hudson County Division of Planning has prepared a GIS analysis of vacant parcels throughout the county. However, this does not cover redevelopment of existing buildings.
Describe the level of buildout in your jurisdiction.	N/A	

### 2.3.3 Administrative and Technical Capability

Table 2-4 summarizes potential staff and personnel resources available to Hudson County and their current responsibilities that contribute to hazard mitigation.



Table 2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
<b>ADMINISTRATIVE CAPABILITY</b>		
Planning Board	Yes	Division of Planning manages the County's Planning Board
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	There is no committee outside the HMP update process
Environmental Board/Commission	Yes	Hudson County Economic Development Strategy Committee (CEDS)
Open Space Board/Committee	Yes	Hudson County Open Space Board with local representatives
Economic Development Commission/Committee	Yes	Hudson County CEDS Committee
Public Works/Highway Department	Yes	Division of County Roads and Bridge; Division of Engineering
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	Office of Emergency management
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Tree trimming, sewer and catch basin cleaning
Mutual aid agreements	Yes	With municipal fire and police departments, Port Authority of NY/NJ, FDNY, NYPD and Staten Island
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	Yes	Human Resources
Other	-	-
<b>TECHNICAL/STAFFING CAPABILITY</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Hudson County Planning and Engineering Departments
Engineers or professionals trained in building or infrastructure construction practices	Yes	Hudson County Planning and Engineering Departments
Planners or engineers with an understanding of natural hazards	Yes	Hudson County Planning and Engineering Departments
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Hudson County Planning Department – GIS Section; serves as the data warehouse for municipalities, excluding Jersey City.
Staff that work with socially vulnerable populations or underserved communities	Yes	Division of Social Services, Department of Welfare



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Environmental scientists familiar with natural hazards	No	
Surveyors	No	-
Emergency manager	Yes	Hudson County Office of Emergency Management
Grant writers	Yes	Francesca Giarratana (Planning), Charlene Burke, Millennium Strategies, LLC (under contract)
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)		

### 2.3.4 Fiscal Capability

Table 2-5 summarizes financial resources available to Hudson County.

*Table 2-5. Fiscal Capabilities*

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes - Only county-imposed user fee is for solid waste management
Impact fees for homebuyers or developers of new development/homes	Yes, County Planning Board fee schedule based on increase in impervious coverage and new parking spaces.
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state funding programs	Yes, Shore Protection Fund from DEP, Office of Natural Resource damage funds, Local Aid grants, Environmental Infrastructure Trust fund, NJ EDA grants, NJ DCA grants
Open Space Acquisition funding programs	Open Space, Recreation and Historic Preservation Trust Fund – for partnerships between municipalities and nonprofit groups



Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

### 2.3.5 Education and Outreach Capability

Table 2-6 summarizes the education and outreach resources available to Hudson County.

*Table 2-6. Education and Outreach Capabilities*

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Public Information Officer
Personnel skilled or trained in website development	Yes	IT
Hazard mitigation information available on your website	Yes	Hudson County Office of Emergency Management
Social media for hazard mitigation education and outreach	Yes	Hudson County Office of Emergency Management - various social media outlets are utilized to share information
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Reverse 911, website, social media, etc.
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	Division of Social Services, Department of Welfare
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	Social Media, Reverse 911, website

### 2.3.6 Community Classifications

Table 2-7 summarizes classifications for community programs available to Hudson County.

*Table 2-7. Community Classifications*

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Not applicable	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Not applicable	-	-
National Weather Service StormReady Certification	Not participating	-	-
Firewise Communities classification	Not participating	-	-



Program	Participating? (Yes/No)	Classification	Date Classified
Sustainable Jersey	Not applicable	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	-	-	-

N/A = Not applicable

— = Unavailable

### 2.3.7 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 2-8 summarizes the adaptive capacity for each identified hazard of concern and the County’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

**Table 2-8. Adaptive Capacity**

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam and Levee Failure	Weak
Drought	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geological Hazards	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate
Wildfire	Weak

## 2.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 2-1 is responsible for maintaining this information.

### 2.4.1 NFIP Statistics

Table 2-9 summarizes the NFIP policy and claim statistics for Hudson County.

**Table 2-9. Hudson County NFIP Summary of Policy and Claim Statistics**

# Policies	41,730
# Claims (Losses)	10,586
Total Loss Payments	\$368,462,871
# Repetitive Loss Properties (NFIP definition)	612
# Repetitive Loss Properties (FMA definition)	2
# Severe Repetitive Loss Properties (NFIP definition)	56
# Severe Repetitive Loss Properties (FMA definition)	56

*NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.*

*FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.*

*Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.*

Source: FEMA 2024

## 2.4.2 Flood Vulnerability Summary

Table 2-10 provides a summary of the NFIP program in Hudson County.

**Table 2-10. NFIP Summary**

NFIP Topic	Comments
<i>Floodplain administration is conducted at the municipal level. Refer to the municipal annexes.</i>	

## 2.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 2-11 through Table 2-13.

**Table 2-11. Number of Building Permits for New Construction Issued Since the Previous HMP**

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
<i>Construction permits are issued at the municipal level. Refer to the municipal annexes.</i>				

SFHA = Special Flood Hazard Area (1% flood event)

**Table 2-12. Recent Major Development and Infrastructure from 2019 to Present**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
None Identified					

\* Only location-specific hazard zones or vulnerabilities identified.

**Table 2-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
None Identified					

## 2.6 Jurisdictional Risk Assessment

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Hudson County's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

### 2.6.1 Hazard Area

Hazard area maps are shown in the hazard profiles in Volume 1. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Hudson County has significant exposure. The maps show the

### 2.6.2 Hazard Event History

The history of natural and non-natural hazard events in Hudson County is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 2-14 provides details on loss and damage in Hudson County during hazard events since the last hazard mitigation plan update.



**Table 2-14. Hazard Event History in Hudson County**

<b>Dates of Event</b>	<b>Event Type (Disaster Declaration)</b>	<b>County Designated?</b>	<b>Summary of Event</b>	<b>Summary of Damage and Losses in Hudson County</b>
February 25, 2019	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour.	Damages from these strong, damaging winds totaled over \$50,000 across the County.
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	As of March 4, 2023, Hudson County accounts for 219,191 positive cases of COVID-19 in the State of New Jersey, and 2,671 of the reported deaths. A total of 1,565,233 vaccinations have been delivered in the County to both residents and non-residents.	No recorded damages in County assets.
February 7, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 53 miles per hour.	Damages from these strong, damaging winds totaled over \$50,000 across the County.
April 13, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour.	Damages from these strong, damaging winds totaled over \$50,000 across the County.
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall, flash floods, widespread wind damage, and power outages. There were multiple disruptions to mass transit and road closures due to downed power lines and trees were noted, with numerous water systems having to move to alternate power. One person was injured in Hudson County because of this event.	Damages from flooding in several municipalities and County assets: damage totaled over \$50,000 across the County.
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	Extremely heavy rainfall associated with the remnants of Hurricane Ida overspread northeast New Jersey during the evening of September 1 and continued through the early morning hours of September 2. Rainfall totals ranged from 5-8+ inches across much of the region, with much of that rain falling in just a few hours. This resulted in widespread flash flooding leading to numerous road closures and water rescues in addition to extensive river flooding. One fatality and seven injuries occurred in Hudson County as a result of this storm.	Damages from flooding in several municipalities and County assets: damage totaled over \$50,000 across the County.



Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Hudson County
January 28-29, 2022	Winter Storm	No	A Nor'easter brought snow and gusty winds. Wind gusts of 40 mph were reported. Snow and blowing snow impacted Hudson County, with snow totals amounting to 8.5 inches in Hudson County.	Damages were reported at municipal level and impacted some County assets; damages were less than \$50,000 across the County.

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

## 2.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Hudson County.

### 2.6.3.1 HAZARD RANKING

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Hudson County reviewed the County's hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, Hudson County indicated the following:

- Dam/Levee Failure was ranked Medium in the last plan, Hudson County has ranked this low due to all municipalities ranking this low.
- Extreme temperatures were ranked Medium, Hudson County is ranking this low since conditions have not been observed to warrant a medium ranking.

Table 2-15 shows Hudson County's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

**Table 2-15. Hazard Ranking**

Hazard	Rank
Dam and Levee Failure	Low
Drought	Medium



Hazard	Rank
Extreme Temperatures	Low
Flood	High
Geological Hazards	Medium
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	Low

*Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction*

### 2.6.3.2 CRITICAL FACILITIES

Table 2-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

**Table 2-16. Critical Facilities Flood Vulnerability**

Name	Type	Vulnerability	
		1% Annual Chance Event	0.2% Annual Chance Event
Harold E. ""Buddy"" Demellier Jr. Operations Center	County Building	Y	Y
Hudson County Plaza	County Building	-	Y
Hudson County Public Safety Building	County Building	Y	Y
Hudson County Roads Department	County Building	Y	Y
Hudson County USS Juneau Memorial Building	County Building	Y	Y

*Source: Hudson County; HIFLD; NJGIN*

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in Hudson County:

- Hackensack Res. #2 (Weehawken) Dam in the Township of Weehawken

### 2.6.4 Identified Issues

After review of Hudson County's hazard event history, hazard rankings, hazard location, and current capabilities, Hudson County identified the following vulnerabilities within the community:

- Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:
  - Determine where the damage occurred within the community and if the damaged structures are in an SFHA.



- Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.
- Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value.
- Require permits for floodplain development.

The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.

- The County Garage/DPW (24/7 operation) are located in the floodplain and vulnerable to flood impacts.
- Lack of continuous electrical power at critical facilities and lifelines.
- There are three bridges that cross the Passaic River that are owned with Essex County: 1. Clay Street; 2. Jackson Street, 3. Harrison Ave. These bridges serve as evacuation routes and increased capacity is needed in addition to addressing issues with erosion/pilings.
- Erosion and flooding have impacted Laurel Hill County Park.
- The coastal storm and flood evacuation study is not complete and does not include north-south evacuation to Bergen County.
- There is no complete spatial inventory of sewer systems; State has combined sewer overflow locations, but County needs a complete inventory.
- Slope failures along Boulevard East and Manhattan Ave along the Palisades. Slope failures could impact roads along and below the Palisades.
- There is no interactive system to control traffic lights along major roads during evacuation or other emergency situations.
- Insufficient drainage capacity on County Road from Tonnele Ave and County Ave causes roadway flooding.
- There are no generators or battery backups maintained on traffic signals.
- There is no prioritized inventory to address equipment needs and increased drainage needs.
- There are many Hudson County residents that do not own a car and may need to evacuate.

## 2.7 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

### 2.7.1 Past Mitigation Action Status

Table 2-17 indicates progress on the County’s mitigation strategy identified in the 2020 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

### 2.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed in Table 2-17, Hudson identified the following mitigation efforts completed since the last HMP:



- Messages can now be recorded remotely for the AM radio station, so that emergency messaging can be created and broadcast even when access to the studio by staff is not possible.

Since the adoption of the County's first HMP, Hudson County has made significant mitigation progress in the following areas:

- New food pantries – The county is in the process of opening two food distribution sites, one in Kearny (Schuyler Ave) and one in Bayonne (Broadway).



Table 2-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-001	Increase shelter capacity	All hazards	Hudson County OEM	<p>Problem: There is insufficient sheltering capacity in Hudson County.</p> <p>Solution: Expand medical sheltering capacity at the Hudson County VOTECH on Montgomery Street; Purchase additional equipment and PODs to send to shelters with 5 days of supplies to each shelter</p>	<p>1. Complete</p> <p>2. Hudson County OEM has completed this action.</p>	<p>1. Discontinue</p> <p>2.</p> <p>3.</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-002	Relocate the County Garage/DPW and Prosecutor's Office buildings.	Flood	Hudson County Roads and Public Property	<p>Problem: The County Garage/DPW and Prosecutor's Office (24/7 operation) are located in the floodplain and vulnerable to flood impacts.</p> <p>Solution: Relocate the County Garage/DPW and Prosecutor's Office located at the end of Duncan Ave, Jersey City, out of the floodplain. New property needs to be identified for this relocation.</p>	<p>1. No progress</p> <p>2. In planning phase. Architect designing whole facility in same footprint, elevated to meet standards. No final design yet</p>	<p>1. Include</p> <p>2. The Prosecutor's office previously located on the site has been relocated</p> <p>3. N/A</p>





2020- HUDSON COUNTY- 003	Enhance CRS participation	Flood, Coastal Storm	Hudson County Division of Planning	<p>Problem: High flood and storm surge vulnerability in the County</p> <p>Solution: Expand and enhance the County and municipal CRS participation. The following actions have been identified to support this strategy:</p> <p>1.Hold informative CRS workshops to increase municipal participation in the County 2.Build upon the CRS Action Plan developed to support and enhance participation 3.Start a County CRS Users Group; attend other NJ County User Group meetings to assist with this 4.Expand ArcGIS Online services to include high water marks and storm surge inundation</p>	<p>1. No progress 2. No staff support for this program.</p>	<p>1.Discontinue 2.N/A 3. This action has no staff to support.</p>
2020- HUDSON COUNTY- 004	Installation of Generators at Critical Facilities	All hazards	Hudson County OEM	<p>Problem: No backup power at 12 community shelters identified as lifelines.</p>	<p>1. In Progress 2. Hudson County OEM is still working towards this mitigation action; with some generators already in progress but action</p>	<p>1. Include 2.No Change 3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Solution: Apply for FEMA HMA grant funding; purchase and install generators at the following critical facilities: 1.Shelters, six identified to date still need generators installed 2.Bruins Stadium - triage for county-wide coordination and helicopter access.	has been delayed in conceptual design/procurement.	



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- HUDSON COUNTY- 005	Microgrids	All hazards	Hudson County Department of Roads and Private Property; Town of Secaucus; BPU	<p>Problem: Lack of continuous electrical power at critical facilities and lifelines</p> <p>Solution: Establish a Public Private Partnership with BPU and coordinate with the Town of Secaucus to set up a microgrid to ensure continuity of operations at the following critical facilities and lifelines:</p> <ol style="list-style-type: none"><li>1.Meadowview Campus (Hudson County Prosecutors Office; Police and Fire Training Facility; Psychiatric Hospital</li><li>2.Nursing Home</li><li>3.Senior Residents Housing</li><li>4.Town of Secaucus Municipal Hall</li><li>5.Library</li><li>6.Fire Station</li></ol>	<ol style="list-style-type: none"><li>1.In progress</li><li>2. Meadowview campus, Town Hall</li></ol>	<ol style="list-style-type: none"><li>1. Include</li><li>2.No change</li><li>3. N/A</li></ol>



2020- HUDSON COUNTY- 006	Reduce flooding on South Hackensack Road, Kearny	Flood, Coastal Storm	Hudson County OEM; Kearny Point (private developer); Town of Kearny	<p>Problem: Critical facility and lifeline USS Juneau Building which serves as the County Emergency Operations Center (South Hackensack Road in Kearny) is located in the floodplain and vulnerable to storm surge (e.g., impacted by storm surge during Hurricane Sandy).</p> <p>Solution: Hudson County to coordinate with the Town of Kearny and the private developer (Kearny Point). The current proposed solution is a public private partnership, obtain a US EDA grant, elevate the road and increase drainage capacity/address drainage along South Hackensack Road. To date, a \$3 Million grant has been awarded by US EDA.</p>	1.Complete 2. Road improvements are complete	1.Discontinue 2.N/A 3. This action is complete
2020- HUDSON COUNTY- 007	Replace bridges that cross the Passaic River	All hazards	Hudson County Roads and Public property; Essex	Problem: There are three bridges that cross the Passaic River that are owned with Essex County: 1.	1.In progress 2. Clay Street-Preliminary Engineering phase. The estimated cost for the new bridge is \$108 million.	1.Include 2.Amount to replace bridges is now \$108-154 million 3. N/A



			County Engineering	<p>Clay Street; 2. Jackson Street, 3. Harrison Ave. These bridges serve as evacuation routes and increased capacity is needed in addition to addressing issues with erosion/pilings.</p> <p>Solution: Hudson County to work with Essex County to replace these bridges in coordination with the New Jersey Transportation Authority (NJTPA) and U.S. Federal Highway Administration (FHWA). Erosion control and upgrade of pilings is included. To date the local concept development has been completed; design phase is scheduled for the next 6-8 months. \$30-80 Million to replace each bridge. Funded in part by FHWA.</p>	<p>Bridge Street- Preliminary Engineering, lead by Essex Co. the estimated cost for the new bridge is \$154 million.</p> <p>Jackson street – future project. Local concept development (evaluating alternatives).</p>	
2020- HUDSON COUNTY- 008	Streambank restoration at Laurel Hill County Park	Coastal Erosion, Coastal	Hudson County Parks; Hudson County Planning	Problem: Erosion and flooding have impacted Laurel Hill County Park	<p>1.No progress</p> <p>2. Looking at other funding opportunities, not just Green</p>	<p>1. Include</p> <p>2. Expand to other county parks, including Stephen R. Gregg park, Lincoln Park.</p> <p>3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
		Storm, Flood		Solution: Seek NJDEP Green Acres Funding and Hudson County Open Space Trust Fund funding to conduct a multi-phase project to stabilize the shorelines and restore the streambank at Laurel Hill County Park.	Acres and HC Open Space Trust Fund. Include NOAA grants.	
2020-HUDSON COUNTY-009	County Road Drainage Project	Coastal Storm, Flood	Hudson County Roads and Public Property	Problem: Insufficient drainage capacity on County Road from Tonnele Ave and County Ave causes roadway flooding  Solution: Reconstruct County Road and increase drainage capacity, from Tonnele Ave and County Ave	1. In progress 2. Construction late summer/early fall	1. Include 2. Not change 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-010	Evacuation Zones	Coastal Storm, Flood	Hudson County Planning-GIS Division; FEMA; State	<p>Problem: The coastal storm and flood evacuation study is not complete and does not include north-south evacuation to Bergen County.</p> <p>Solution: Finalize the Hudson County emergency evacuation route study in coordination with the State and FEMA. Include additional evacuation routes since this study focused on east/west travel and to Staten Island and need to consider evacuation north to Bergen County. Install updated evacuation signage once study finalized. This study identifies tiered evacuation zones relative to flood and storm surge.</p>	<p>1. In progress</p> <p>2. Finalized, did not include additional routes. FEMA involvement is desirable. State Level plan has conflicting information on some routes including 440, JFK, Montgomery, Grand.</p>	<p>1. Include</p> <p>2. Added signage on applicable county roads (needs to determine who is responsible on non-county roads). Look for funding opportunities.</p> <p>3. N/A</p>





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-011	Geocode storm sewers	Coastal Storm, Flood	Hudson County Engineering; Hudson County Planning – GIS Division	<p>Problem: There is no complete spatial inventory of sewer systems; State has combined sewer overflow locations, but County needs a complete inventory.</p> <p>Solution: Planning/GIS would geocode and may require some investigative field work to determine locations. Planning GIS and Engineering to support this project. Medium priority.</p>	<p>1. In progress</p> <p>2. Updated inventory of visually accessible systems after</p>	<p>1. Include</p> <p>2. Track locations submitted to the planning boards</p> <p>3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-011	Elevate Generators at Hudson County Correctional Center	All hazards	Hudson County Department of Corrections; Hudson County Roads and Public Property	<p>Problem: There are four generators at the Hudson County Correctional Center; only one has been elevated.</p> <p>Solution: Elevate the three generators at the Hudson County Correctional Center (E-Pod and Modular Units)</p>	<p>1. In Progress</p> <p>2. Project is still in conceptual development for Department of Corrections.</p>	<p>1. Include</p> <p>2. Add Naval reserve (cooling/warming center), county owned but privately operated (separate row)</p> <p>3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-012	Mitigate slope failure	Geological	Hudson County Engineering Department	<p>Problem: Slope failures along Boulevard East and Manhattan Ave along the Palisades. Slope failures could impact roads along and below the Palisades.</p> <p>Solution: Hudson County Engineering Department will work with NJTPA to address slope failure areas along Boulevard East along the Palisades.</p> <p>The County will evaluate the preliminary design and alternatives identify, select and implement project on Manhattan Avenue in Union City to address potential collapse.</p>	<p>1. In progress</p> <p>2. Local Concept Development (LCD) put in for analysis of the palisades to determine &amp; prioritize what type of improvements are needed. This will result in improvements projects. Primarily in Weehawken to North Bergen</p>	<p>1. Include</p> <p>2.No change</p> <p>3. N/A</p>



2020- HUDSON COUNTY- 013	Interactive Traffic Signals	All hazards	Hudson County Engineering Department	<p>Problem: There is no interactive system to control traffic lights along major roads during evacuation or other emergency situations</p> <p>Solution: Initiate a program for the county-wide coordination of traffic lights along major roads to facilitate evacuations and other emergency situations. There are some 300 signals in the County. The main traffic route of concern is Kennedy Boulevard. Install “adaptive signal systems” that automatically adjust, or can be remotely adjusted, to better facilitate traffic flow in emergency situations. Example could be the recent completion of interactive system along JFK Boulevard.</p>	<p>1. In progress 2. Categorical Exclusion Document CED review</p> <p>Traffic signal optimization on JFK Blvd from Armstrong Avenue to St. Paul’s Avenue</p> <p>County of Hudson’s NJTPA approval letter for traffic signal optimization on JFK Blvd from Armstrong Avenue to St. Paul’s Avenue</p> <p>Could do evacuation timing schedule</p>	<p>1. Include 2. No change 3. N/A</p>
2020- HUDSON COUNTY- 014	Backup power for traffic signals	All hazards	Hudson County Engineering	<p>Problem: There are no generators or battery backups maintained on traffic signals.</p>	<p>1.No progress 2. New installation will include hook up for future generator install</p>	<p>1.Include 2.in new installations will add hook up for future generator install 3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Solution: As the County retrofits signals, install portable generator back up power for signaling at critical county traffic roadway intersections.		



2020- HUDSON COUNTY- 015	Inventory Drainage Needs and Increase Capacity	Coastal Storm, Flood	Hudson County Roads and Public Property; HC Engineering	<p>Problem: There is no prioritized inventory to address equipment needs and increased drainage needs.</p> <p>Solution: Develop a comprehensive study of all drainage facilities in the County. Evaluate condition and look at the long-term capital and maintenance plan to identify potential projects and prioritize next steps which may include; purchase of equipment (e.g., trucks, pumps), investigate areas for more pump stations, find out where to replace pipes and where repave so it can be done at the same time.</p> <p>Locations to consider:</p> <ul style="list-style-type: none"><li>•Secaucus Road</li><li>•County Road</li><li>•Pump stations</li></ul>	<p>1. In progress</p> <p>2. County Road flood mitigation</p> <p>Blvd East in Guttenberg-Guttenberg RCP resilient communities (DCA) Grant to make improvements. Drainage improvements by Galaxy Towers.</p> <p>Jersey City-Newark Turnpike Improvements – reconstruct road and pump station. Partially funded through congressional &amp; Freight application.</p> <p>Secaucus Road – Penhorn creek pump station 60% design. RCP grant.</p>	<p>1.Include</p> <p>2.No change</p> <p>3. N/A</p>
2020- HUDSON COUNTY- 016	Emergency Radios	All hazards	Hudson County MIS	<p>Problem: Updated technology and increased number of radios are needed to support daily and</p>	<p>1.Complete</p> <p>2. Project completed in 2024</p>	<p>1.Discontinue</p> <p>2. N/A</p> <p>3. This project was completed</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				emergency operations.  Solution: Purchase and obtain a new radio system (Sheriff, Prosecutor's Office and OEM) to support both daily and emergency communication needs.		
2020-HUDSON COUNTY-017	Roc Harbor shoreline stabilization and infrastructure	Coastal Erosion, flood	Hudson County Engineering	Problem: Roc Harbor shoreline is in need of stabilization and installation of a new outfall.  Solution: Stabilize shoreline and install a new outfall.	1.No Progress 2. This project has made no progress since 2006	1.Discontinue 2.N/A 3. This will be discontinued due to no progress since 2006





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-018	Mass Transit Evacuation Plan	All hazards	Hudson County OEM; coordination with transportation sector	<p>Problem: There are many Hudson County residents that do not own and car and may need to evacuate.</p> <p>Solution: Develop a coordinated plan for the use of mass transit to evacuate all, or a significant portion, of the population of Hudson County. This plan would include consideration of: Methods of transportation (ferries, rail including light rail, buses; Assembly points; and Destinations (shelters and sheltering areas)</p>	<p>1.No progress</p> <p>2. Hudson County OEM has had no progress on this project due to limited capacity and capability; the Department has this project in conceptual design determining scope of this proposed study.</p>	<p>1. Include</p> <p>2. No change</p> <p>3. N/A</p>



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-HUDSON COUNTY-019	Emergency Vehicle Auto-Lift	All hazards	Hudson County Department of Corrections	Problem: Emergency vehicles are subject to flood damage  Solution: Emergency Vehicle Auto-Lift: Installation of auto-lift to prevent flood damage to emergency vehicles (identified in HCSRR.).	1. No Progress 2. The Department of Corrections has had no progress on this project due to limited capacity and capability; the Department has this project in conceptual design determining right funding sources for this project.	1.Include 2.No Change 3. N/A



2020- HUDSON COUNTY- 020	County Jail Flood Mitigation	Coastal Storm, Flood	Hudson County Department of Corrections	<p>Problem: County Jail is susceptible to flooding and impacted by storm surge during Hurricane Sandy; houses vulnerable population.</p> <p>Solution: Identify potential mitigation project(s), and work to secure funding for selected project(s) to address the overall flood vulnerability of the County Jail and Juvenile Facility (South Kearny), which had storm surge flooding into the first flood level during Sandy (6-7' of storm surge in this area). This facility has the capability to house more than 2,000 inmates as their census regular fluctuates especially due to recent bail reform law, government contracts to house ICE detainees, and the release of certain prisoners due to the current health emergency.</p>	<p>1. No Progress 2. The Department of Corrections has had no progress on this project due to limited capacity and capability; the Department has this project in conceptual design determining right funding sources for this project.</p>	<p>1. Include 2. No Change 3. N/A</p>
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### 2.7.3 Proposed Hazard Mitigation Actions for the HMP Update

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Hudson County participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 "Selecting Appropriate Mitigation Measures for Floodprone Structures" (March 2007)
- FEMA "Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards" (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Hudson County would like to pursue in the future to reduce the effects of hazards. The actions 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 County priorities.

Table 2-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 2-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

**Table 2-18. Analysis of Mitigation Actions by Hazard and Category**

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam and Levee Failure	X	X			X	X				X
Drought	X	X			X	X				X
Extreme Temperatures	X	X			X	X				X
Flood	X	X		X	X	X	X			X
Geological Hazards	X	X			X	X				X
Severe Weather	X	X		X	X	X	X			X
Severe Winter Weather	X	X			X	X				X
Wildfire	X	X			X	X				X

*Local Plans and Regulations (LPR)*—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

*Structure and Infrastructure Project (SIP)*—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

*Natural Systems Protection (NSP)*—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.

*Education and Awareness Programs (EAP)*—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

*Preventative Measures (PR)*—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.

*Property Protection (PP)*—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.

*Public Information (PI)*—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.

*Natural Resource Protection (NR)*—Actions that minimize hazard loss and 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.

*Structural Flood Control Projects (SP)*—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.

*Emergency Services (ES)*—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



Table 2-19. Summary of Prioritization of Actions

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-Hudson County-001	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2025-Hudson County-002	Relocate the County Garage/DPW	1	1	1	1	1	0	0	0	0	1	1	1	1	1	10	Medium
2025-Hudson County-003	Microgrids	1	0	1	1	1	0	0	1	1	1	1	1	1	0	10	Medium
2025-Hudson County-004	Replace Bridges that Cross the Passaic River	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2025-Hudson County-005	Streambank Restoration at Laurel Hill County Park	1	0	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2025-Hudson County-006	Evacuation Zones	1	0	1	1	1	0	0	1	1	1	1	1	1	1	11	High
2025-Hudson County-007	Geocode Storm Sewers	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High



Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-Hudson County-008	Mitigate Slope Failure	1	1	1	1	1	0	1	0	1	0	1	1	1	1	11	High
2025-Hudson County-009	Interactive Traffic Signals	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-Hudson County-010	County Road Drainage Project	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2025-Hudson County-011	Backup Power for Traffic Signals	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-Hudson County-012	Inventory Drainage Needs and Increase Capacity	1	1	1	1	1	0	0	0	1	1	1	1	0	1	10	Medium
2025-Hudson County-013	Mass Transit Evacuation Plan	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2025-Hudson County-014	Emergency Vehicle Auto-Lift	0	1	1	1	1	0	0	0	1	1	1	1	1	1	10	Medium





Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-Hudson County-015	County Jail Flood Mitigation	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High

Note: Volume I, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).

**Action 2025-Hudson County- 001. Substantial Damage Management Plan**

<b>Lead Agency:</b>	Floodplain Administrator
<b>Supporting Agencies:</b>	County OEM
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire
<b>Description of the Problem:</b>	<p>Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"><li>• Determine where the damage occurred within the community and if the damaged structures are in an SFHA.</li><li>• Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.</li><li>• Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value.</li><li>• Require permits for floodplain development.</li></ul> <p>The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.</p>
<b>Description of the Solution:</b>	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 <i>Developing a Substantial Damage Management Plan</i> (<a href="https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf">https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf</a>). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
<b>Estimated Cost:</b>	Low
<b>Potential Funding Sources:</b>	Municipal budget
<b>Implementation Timeline:</b>	Within 5 years to develop the plan; ongoing to maintain and update the plan
<b>Goals Met:</b>	3, 6
<b>Benefits:</b>	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.
<b>Impact on Socially Vulnerable Populations:</b>	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.
<b>Impact on Future Development:</b>	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.
<b>Impact on Critical Facilities/Lifelines:</b>	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.
<b>Impact on Capabilities:</b>	This action improves disaster recovery capabilities.
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.
<b>Mitigation Category</b>	Local Plans and Regulations



CRS Category	Emergency Services, Preventative Measure	
Priority	High	
Alternatives	Action	Action
	No Action	No Action
	Rely on state or federal resources following disaster events	Rely on state or federal resources following disaster events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	Establish MOUs with outside agencies to conduct Substantial Damage Determinations





**Action 2025-Hudson County-002. Relocate the County Garage/DPW**

<b>Lead Agency:</b>	County Roads and Public Property	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	The County Garage/DPW (24/7 operation) are located in the floodplain and vulnerable to flood impacts.	
<b>Description of the Solution:</b>	Relocate the County Garage/DPW located at the end of Duncan Ave, Jersey City, out of the floodplain. New property needs to be identified for this relocation. Currently, this project is in the planning phase. Architect designing whole facility in same footprint, elevated to meet standards. No final design yet.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	FEMA HMA	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,6	
<b>Benefits:</b>	Ensures continuity of operations of County Garage/DPW.	
<b>Impact on Socially Vulnerable Populations:</b>	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on.	
<b>Impact on Future Development:</b>	The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area.	
<b>Impact on Critical Facilities/Lifelines:</b>	This action will protect the County Garage/DPW which is a critical facility, maintaining the critical services that it provides.	
<b>Impact on Capabilities:</b>	This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities.	
<b>Climate Change Considerations:</b>	This action addresses anticipated increases in flooding frequency and severity through protection to the 500-year (0.2-percent annual chance) flood level.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	Medium	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Construct a secondary satellite facility outside the floodplain	Cost inefficiency, logistical complexity
	Establish plans to enter into MOU with neighboring critical facilities to provide service during flood events	Reduction in response times and delay of critical services in the immediate area.

**Action 2025-Hudson County-003. Microgrids**

<b>Lead Agency:</b>	County Department of Roads and Private Property	
<b>Supporting Agencies:</b>	Town of Secaucus; BCU	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	Lack of continuous electrical power at critical facilities and lifelines.	
<b>Description of the Solution:</b>	<p>Establish a Public Private Partnership with BPU and coordinate with the Town of Secaucus to set up a microgrid to ensure continuity of operations at the following critical facilities and lifelines:</p> <ol style="list-style-type: none"> <li>1. Meadowview Campus (Hudson County Prosecutors Office; Police and Fire Training Facility; Psychiatric Hospital)</li> <li>2. Nursing Home</li> <li>3. Senior Residents Housing</li> <li>4. Town of Secaucus Municipal Hall</li> <li>5. Library</li> <li>6. Fire Station</li> </ol>	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	BPU – Greener by Design Grants	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,6	
<b>Benefits:</b>	Ensures uninterrupted power supply to critical facilities during grid outages.	
<b>Impact on Socially Vulnerable Populations:</b>	Ensures continuous care for residents in the nursing home, psychiatric hospital, and senior housing, who are especially vulnerable during power outages.	
<b>Impact on Future Development:</b>	Reliable infrastructure can attract new businesses and residential developments.	
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures uninterrupted care at critical facilities.	
<b>Impact on Capabilities:</b>	Builds local capacity in managing distributed energy resources and microgrid operations.	
<b>Climate Change Considerations:</b>	Microgrids provide resilience against climate-induced extreme weather events (e.g., hurricanes, heatwaves).	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	Medium	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Back up generators at each facility	Requires regular maintenance
	Use mobile power units	Deployment delays, limited capacity

**Action 2025-Hudson County-004. Replace Bridges that Cross the Passaic River**

<b>Lead Agency:</b>	County Roads and Public Property	
<b>Supporting Agencies:</b>	Essex County Engineering	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	There are three bridges that cross the Passaic River that are owned with Essex County: 1. Clay Street; 2. Jackson Street, 3. Harrison Ave. These bridges serve as evacuation routes and increased capacity is needed in addition to addressing issues with erosion/pilings.	
<b>Description of the Solution:</b>	Hudson County to work with Essex County to replace these bridges in coordination with the New Jersey Transportation Authority (NJTPA) and U.S. Federal Highway Administration (FHWA). Erosion control and upgrade of pilings is included. To date the local concept development has been completed; design phase is scheduled for the next 6-8 months. \$108 to 154 million to replace each bridge. Funded in part by FHWA.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	FHWA; County Budget	
<b>Implementation Timeline:</b>	High	
<b>Goals Met:</b>	1,2,6	
<b>Benefits:</b>	Replacing the bridges enhances their structural integrity and increases capacity, ensuring reliable evacuation routes during emergencies.	
<b>Impact on Socially Vulnerable Populations:</b>	Maintains connectivity for communities that may otherwise be cut off during flooding or bridge closures.	
<b>Impact on Future Development:</b>	Improved infrastructure can lead to higher property values and increased tax revenue.	
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures uninterrupted access for emergency responders, utility crews, and supply chains.	
<b>Impact on Capabilities:</b>	Builds local capacity in managing large-scale infrastructure projects and intergovernmental coordination.	
<b>Climate Change Considerations:</b>	New bridge designs can incorporate higher elevation and improved drainage to withstand future flood levels.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Construct New Bridges Adjacent to Existing Ones and Decommission Old Structures Later	Limited space, high cost and complexity
	Rely on Alternative Evacuation Routes	Other routes may not have the capacity to handle the volume of traffic during emergencies

**Action 2025-Hudson County-005. Streambank Restoration at Laurel Hill County Park**

<b>Lead Agency:</b>	County Parks	
<b>Supporting Agencies:</b>	County Planning	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	Erosion and flooding have impacted Laurel Hill County Park.	
<b>Description of the Solution:</b>	NJDEP Green Acres Funding and Hudson County Open Space Trust Fund funding to conduct a multi-phase project to stabilize the shorelines and restore the streambank at Laurel Hill County Park, Stephen R. Gregg Park, and Lincoln Park.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	NJDEP Green Acres; Hudson County Open Space Trust Fund	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	4	
<b>Benefits:</b>	Restored streambanks improve water absorption and reduce flood risk.	
<b>Impact on Socially Vulnerable Populations:</b>	Enhances the ability of vulnerable populations to withstand and recover from environmental stressors.	
<b>Impact on Future Development:</b>	Stabilized and restored areas are more suitable for long-term recreational and community use.	
<b>Impact on Critical Facilities/Lifelines:</b>	Improved natural drainage reduces strain on municipal stormwater systems.	
<b>Impact on Capabilities:</b>	Offers opportunities for community involvement in planning and stewardship.	
<b>Climate Change Considerations:</b>	Restored ecosystems are more resilient to extreme weather, sea level rise, and increased rainfall.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Install hard infrastructure	Short-term fix, disrupt natural habitats
	Relying solely on routine maintenance and minor repairs	Lack of resilience, funding limitations

**Action 2025-Hudson County-006. Evacuation Zones**

<b>Lead Agency:</b>	County Planning – GIS Division	
<b>Supporting Agencies:</b>	FEMA, State	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	The coastal storm and flood evacuation study is not complete and does not include north-south evacuation to Bergen County.	
<b>Description of the Solution:</b>	Finalize the Hudson County emergency evacuation route study in coordination with the State and FEMA. Include additional evacuation routes since this study focused on east/west travel and to Staten Island and need to consider evacuation north to Bergen County. Install updated evacuation signage once study finalized. This study identifies tiered evacuation zones relative to flood and storm surge.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	County Budget, FEMA EMGP	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,	
<b>Benefits:</b>	Evaluating evacuation routes with surrounding jurisdictions ensures continuity during implementation. Furthermore, identifying routes which are not impacted, or have limited impact, to hazards, such as flood, prevent additional loss or damages.	
<b>Impact on Socially Vulnerable Populations:</b>	Having pre-determined evacuation routes can assist socially vulnerable populations in preparing themselves and those within their community to evacuate in a safe, timely fashion.	
<b>Impact on Future Development:</b>	Future development would need to be built with access to the identified evacuation routes.	
<b>Impact on Critical Facilities/Lifelines:</b>	Identifying evacuation routes can assist in smooth transportation operations across multiple jurisdictions.	
<b>Impact on Capabilities:</b>	This action will produce a planning capability for the County, making it more resilient.	
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Sea level rise associated with climate change may cause bay and river water levels to increase. This action helps to plan for future hazard events.	
<b>Mitigation Category</b>	Education and Awareness Program	
<b>CRS Category</b>	Preventative Measures, Public Information, Emergency Services	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Do not consult surrounding municipalities	Evacuation routes may go against one another
	Do not publicize routes	Residents will not be aware of the evacuation routes



**Action 2025-Hudson County-007. Geocode Storm Sewers**

<b>Lead Agency:</b>	County Engineering	
<b>Supporting Agencies:</b>	County Planning – GIS Division	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	There is no complete spatial inventory of sewer systems; State has combined sewer overflow locations, but County needs a complete inventory.	
<b>Description of the Solution:</b>	Planning/GIS would geocode and may require some investigative field work to determine locations. Planning GIS and Engineering to support this project. Medium priority.	
<b>Estimated Cost:</b>	Low	
<b>Potential Funding Sources:</b>	County Budget	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,3,4,5,6,7	
<b>Benefits:</b>	Provides a comprehensive understanding of the sewer network, including unknown or undocumented segments.	
<b>Impact on Socially Vulnerable Populations:</b>	Reduces the risk of sewer overflows and backups in low-income or underserved neighborhoods, which often face disproportionate environmental burdens.	
<b>Impact on Future Development:</b>	Accurate sewer data is essential for evaluating development feasibility and ensuring infrastructure can support new growth.	
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures that critical facilities (e.g., hospitals, fire stations) are supported by reliable sewer infrastructure.	
<b>Impact on Capabilities:</b>	Builds internal capacity in geospatial analysis and infrastructure mapping	
<b>Climate Change Considerations:</b>	Helps identify sewer segments vulnerable to flooding or sea level rise, enabling targeted adaptation.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Rely on existing state and municipal records	Outdated and may not reflect conditions or recent upgrades
	Wait for Statewide or Federal Mapping Initiatives	May not align with local priorities

**Action 2025-Hudson County-008.Mitigate Slope Failure**

<b>Lead Agency:</b>	County Engineering Department	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Geological Hazards	
<b>Description of the Problem:</b>	Slope failures along Boulevard East and Manhattan Ave along the Palisades. Slope failures could impact roads along and below the Palisades.	
<b>Description of the Solution:</b>	Hudson County Engineering Department will work with NJTPA to address slope failure areas along Boulevard East along the Palisades.  The County will evaluate the preliminary design and alternatives identify, select and implement project on Manhattan Avenue in Union City to address potential collapse.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	NJTPA, County Budget	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,3,4,6,7	
<b>Benefits:</b>	Preserves the integrity of roads, utilities, and structures located along and below the Palisades.	
<b>Impact on Socially Vulnerable Populations:</b>	Many vulnerable populations live in high-density housing near or below the Palisades; slope failure could disproportionately affect them.	
<b>Impact on Future Development:</b>	Stabilized slopes reduce risk for developers and encourage investment in adjacent areas.	
<b>Impact on Critical Facilities/Lifelines:</b>	These roads serve as key connectors between neighborhoods and essential services like hospitals, fire stations, and municipal buildings, reinforcing the continuity of operations across the County.	
<b>Impact on Capabilities:</b>	Strengthens collaboration between Hudson County, NJTPA, and local municipalities.	
<b>Climate Change Considerations:</b>	Climate change is expected to increase the frequency of heavy rain events, which can trigger slope failures.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Install temporary barriers or netting to catch debris	Short-term fix
	Restrict access or close affected road segments	Closures would cause major disruptions



### ***Action 2025-Hudson County-009.Interactive Traffic Signals***

<b>Lead Agency:</b>	County Engineering	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	There is no interactive system to control traffic lights along major roads during evacuation or other emergency situations.	
<b>Description of the Solution:</b>	Initiate a program for the county-wide coordination of traffic lights along major roads to facilitate evacuations and other emergency situations. There are some 300 signals in the County. The main traffic route of concern is Kennedy Boulevard. Install “adaptive signal systems” that automatically adjust, or can be remotely adjusted, to better facilitate traffic flow in emergency situations. Example could be the recent completion of interactive system along JFK Boulevard.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	FHWA, CMAQ (Congestion Mitigation and Air Quality Program) funding	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,3,5,6,7	
<b>Benefits:</b>	Real-time traffic adjustments improve daily traffic flow and reduce delays.	
<b>Impact on Socially Vulnerable Populations:</b>	Ensures that residents in high-density, transit-dependent, or underserved neighborhoods can evacuate safely and efficiently.	
<b>Impact on Future Development:</b>	Improved traffic management can accommodate increased population and development without overwhelming road networks.	
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures that hospitals, fire stations, and emergency shelters remain accessible during disasters.	
<b>Impact on Capabilities:</b>	Encourages collaboration between transportation, emergency management, and public safety departments.	
<b>Climate Change Considerations:</b>	Adaptive systems can respond to climate-related events like flash floods or heatwaves by adjusting traffic flow in real time.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Emergency Services	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Manual traffic control by LE during emergencies	Personnel may not be available during widespread emergencies
	Pre-programmed signal timing plans for emergencies	Pre-set plans are not adaptable



### ***Action 2025-Hudson County-010. County Road Drainage Project***

<b>Lead Agency:</b>	County Roads and Public Property	
<b>Supporting Agencies:</b>	--	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	Insufficient drainage capacity on County Road from Tonnele Ave and County Ave causes roadway flooding.	
<b>Description of the Solution:</b>	Reconstruct County Road and increase drainage capacity, from Tonnele Ave and County Ave.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	NJDOT Local Freight Impact Fund, HMGP, County Budget	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2,6	
<b>Benefits:</b>	Risk of flooding will be reduced.	
<b>Impact on Socially Vulnerable Populations:</b>	Emergency vehicles will have the ability to assist residents during a flood event.	
<b>Impact on Future Development:</b>	Not applicable	
<b>Impact on Critical Facilities/Lifelines:</b>	Roadway will be less likely to incur damage from floodwaters and be able to remain open for travel.	
<b>Impact on Capabilities:</b>	Economic resiliency is increased by reducing the time needed for businesses to access facilities to reopen following a flood.	
<b>Climate Change Considerations:</b>	Consideration should be taken for more frequent flood events as a result of increases in rainfall frequency and severity.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Property Protection	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Raise roadway without upgrading drainage	Changing elevation can create problems for adjacent properties on lower areas.
	Rely on green infrastructure	Effective from small to moderate rainfall.



### ***Action 2025-Hudson County-011. Backup Power for Traffic Signals***

<b>Lead Agency:</b>	County Engineer	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	There are no generators or battery backups maintained on traffic signals.	
<b>Description of the Solution:</b>	As the County retrofits signals, install portable generator back up power for signaling at critical county traffic roadway intersections.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	County Budget	
<b>Implementation Timeline:</b>	Short	
<b>Goals Met:</b>	1,2,6	
<b>Benefits:</b>	Keeps traffic signals operational during power failures, reducing the risk of accidents and confusion at intersections.	
<b>Impact on Socially Vulnerable Populations:</b>	Maintains safe and orderly traffic flow for residents who may not have access to private transportation or rely on paratransit.	
<b>Impact on Future Development:</b>	Enhances the resilience of transportation infrastructure, making the area more attractive for residential and commercial development.	
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures that routes to hospitals, fire stations, and emergency shelters remain navigable during outages.	
<b>Impact on Capabilities:</b>	Portable generators can be deployed where needed most, allowing for dynamic response to evolving threats.	
<b>Climate Change Considerations:</b>	Ensures traffic control during climate-driven emergencies like hurricanes or flash floods.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Emergency Services	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Install permanent battery backup	High upfront cost, regular maintenance required
	Use LE or Traffic personnel to manually direct traffic	Labor intensive, exposure to hazardous conditions



### ***Action 2025-Hudson County-012. Inventory Drainage Needs and Increase Capacity***

<b>Lead Agency:</b>	County Roads and Public Property
<b>Supporting Agencies:</b>	County Engineering
<b>Hazards of Concern:</b>	Flood, Severe Weather
<b>Description of the Problem:</b>	There is no prioritized inventory to address equipment needs and increased drainage needs.
<b>Description of the Solution:</b>	<p>Hudson County seeks to undertake a comprehensive assessment of all drainage infrastructure across the county to support long-term resilience and capital planning. This study will evaluate the current condition of drainage facilities, identify critical maintenance and upgrade needs, and develop a prioritized roadmap for future investments. The plan will also explore opportunities to coordinate drainage improvements with road reconstruction, optimize the placement of new pump stations, and assess the need for new equipment such as pumps and maintenance vehicles.</p> <p>The study will focus on key corridors and infrastructure assets, including:</p> <ul style="list-style-type: none"> <li>• Secaucus Road – including the Penhorn Creek Pump Station (currently at 60% design, supported by an RCP grant)</li> <li>• County Road – with ongoing flood mitigation efforts</li> <li>• Boulevard East in Guttenberg – supported by the DCA Resilient Communities Grant and drainage improvements near Galaxy Towers</li> <li>• Jersey City–Newark Turnpike – reconstruction of the roadway and pump station, partially funded through congressional and freight infrastructure grants</li> </ul>
<b>Estimated Cost:</b>	High
<b>Potential Funding Sources:</b>	NJDOT, FEMA HMA, County Budget
<b>Implementation Timeline:</b>	1-5 years
<b>Goals Met:</b>	1,2
<b>Benefits:</b>	Provides a data-driven foundation for prioritizing drainage upgrades and coordinating with road reconstruction projects.
<b>Impact on Socially Vulnerable Populations:</b>	Reduces exposure to flood-related hazards such as contaminated water, mold, and property damage, which disproportionately affect low-income residents.
<b>Impact on Future Development:</b>	Reliable drainage infrastructure is essential for sustainable residential and commercial development.
<b>Impact on Critical Facilities/Lifelines:</b>	Ensures that critical routes remain passable during and after storm events, supporting emergency response and supply chains.
<b>Impact on Capabilities:</b>	Establishes a GIS-based inventory and condition assessment that supports ongoing infrastructure management.
<b>Climate Change Considerations:</b>	Prepares the county for more frequent and intense rainfall events by identifying vulnerable drainage areas
<b>Mitigation Category</b>	Structure and Infrastructure Project
<b>CRS Category</b>	Property Protection
<b>Priority</b>	Medium



Alternatives	Action	Evaluation
	No Action	-
	Relying Solely on Municipal-Level Drainage Data and Plans	Inconsistent data, limited scope
	Focus Only on High-Risk Areas Identified in Past Flood Events	New vulnerabilities may not be captured in past events



**Action 2025-Hudson County-013. Mass Transit Evacuation Plan**

<b>Lead Agency:</b>	County OEM	
<b>Supporting Agencies:</b>	Transportation Section	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	There are many Hudson County residents that do not own and car and may need to evacuate.	
<b>Description of the Solution:</b>	Develop a coordinated plan for the use of mass transit to evacuate all, or a significant portion, of the population of Hudson County. This plan would include consideration of: Methods of transportation (ferries, rail including light rail, buses; Assembly points; and Destinations (shelters and sheltering areas).	
<b>Estimated Cost:</b>	Low	
<b>Potential Funding Sources:</b>	County Budget	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1	
<b>Benefits:</b>	This action ensures that all residents, especially those without cars, have a safe and reliable way to evacuate during emergencies.	
<b>Impact on Socially Vulnerable Populations:</b>	Many residents in Hudson County, particularly in urban and low-income areas, do not own cars. A mass transit evacuation plan ensures they are not left behind during emergencies.	
<b>Impact on Future Development:</b>	Reinforces the value of building near transit hubs, encouraging sustainable and resilient urban growth.	
<b>Impact on Critical Facilities/Lifelines:</b>	Keeps essential workers and emergency personnel mobile during crises.	
<b>Impact on Capabilities:</b>	Establishes clear protocols for mobilizing transit assets, managing assembly points, and directing evacuees.	
<b>Climate Change Considerations:</b>	Highlights the need to harden transit systems against climate impacts.	
<b>Mitigation Category</b>	Local Plans and Regulations	
<b>CRS Category</b>	Preventative Measures	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Use Ad Hoc Transit Arrangements During Emergencies	Lack of preparedness and delayed response
	Encourage shelter-in-place	Not always the safest option





***Action 2025-Hudson County-014. Emergency Vehicle Auto-Lift***

<b>Lead Agency:</b>	County Department of Corrections	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
<b>Description of the Problem:</b>	Emergency vehicles are subject to flood damage	
<b>Description of the Solution:</b>	Emergency Vehicle Auto-Lift: Installation of auto-lift to prevent flood damage to emergency vehicles (identified in HCSRR.).	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	County Budget, FEMA HMGP	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2	
<b>Benefits:</b>	Protects emergency vehicles from flood damage.	
<b>Impact on Socially Vulnerable Populations:</b>	Improves emergency response capabilities in underserved or high-risk communities by ensuring vehicle availability during disasters.	
<b>Impact on Future Development:</b>	Encourages resilient infrastructure planning for future emergency service facilities.	
<b>Impact on Critical Facilities/Lifelines:</b>	Enhances the resilience of emergency services, a critical lifeline, by safeguarding essential response equipment.	
<b>Impact on Capabilities:</b>	Strengthens the County's emergency preparedness and response capabilities, particularly during flood events.	
<b>Climate Change Considerations:</b>	Addresses increased flood risk due to more frequent and intense storm events associated with climate change.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Preventative Measures, Property Protection, Emergency Services	
<b>Priority</b>	Medium	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Move vehicles to higher ground	May not be feasible due to limited space or proximity to area



### ***Action 2025-Hudson County-015. County Jail Flood Mitigation***

<b>Lead Agency:</b>	County Department of Corrections	
<b>Supporting Agencies:</b>	-	
<b>Hazards of Concern:</b>	Flood, Severe Weather	
<b>Description of the Problem:</b>	County Jail is susceptible to flooding and impacted by storm surge during Hurricane Sandy; houses vulnerable population.	
<b>Description of the Solution:</b>	Identify potential mitigation project(s), and work to secure funding for selected project(s) to address the overall flood vulnerability of the County Jail and Juvenile Facility (South Kearny), which had storm surge flooding into the first flood level during Sandy (6-7' of storm surge in this area). This facility has the capability to house more than 2,000 inmates as their census regular fluctuates especially due to recent bail reform law, government contracts to house ICE detainees, and the release of certain prisoners due to the current health emergency.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	County Budget, FEMA HMGP	
<b>Implementation Timeline:</b>	1-5 years	
<b>Goals Met:</b>	1,2	
<b>Benefits:</b>	Protects the lives and safety of inmates and staff.	
<b>Impact on Socially Vulnerable Populations:</b>	Provides enhanced protection for incarcerated individuals, a highly vulnerable population with limited ability to self-evacuate or access emergency services.	
<b>Impact on Future Development:</b>	Encourages resilient design and planning for future correctional and public safety facilities in flood-prone areas.	
<b>Impact on Critical Facilities/Lifelines:</b>	Strengthens the resilience of a critical public safety facility, ensuring it remains operational during and after flood events.	
<b>Impact on Capabilities:</b>	Improves emergency preparedness and response capabilities by reducing the likelihood of facility shutdowns or evacuations due to flooding.	
<b>Climate Change Considerations:</b>	Addresses increased flood risk due to sea level rise and more frequent/intense storm events associated with climate change.	
<b>Mitigation Category</b>	Structure and Infrastructure Project	
<b>CRS Category</b>	Preventative Measures, Property Protection, Emergency Services	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No Action	-
	Temporary flood barriers	Limited protection; not reliable for major storm events
	Relocate Facility	Extremely high cost; logistical complexity