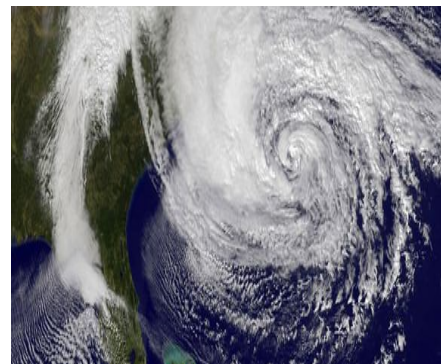


Strategic Recovery Planning Report

Post Sandy Planning Assistance Grant Program



Township of Edison



Strategic Recovery
Planning Report

Community
Development Block
Grant-Disaster
Recovery

Authorization #
SRPR-2013-1205-01

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September 23, 2014

Sean Thompson
Director, Local Planning Assistance
NJ Department of Community Affairs
1010 S. Broad Street, P.O. Box 813
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Re: Township of Edison
Middlesex County
Strategic Recovery Planning Report via
Community Development Block Grant-
Disaster Recovery

INTRODUCTION

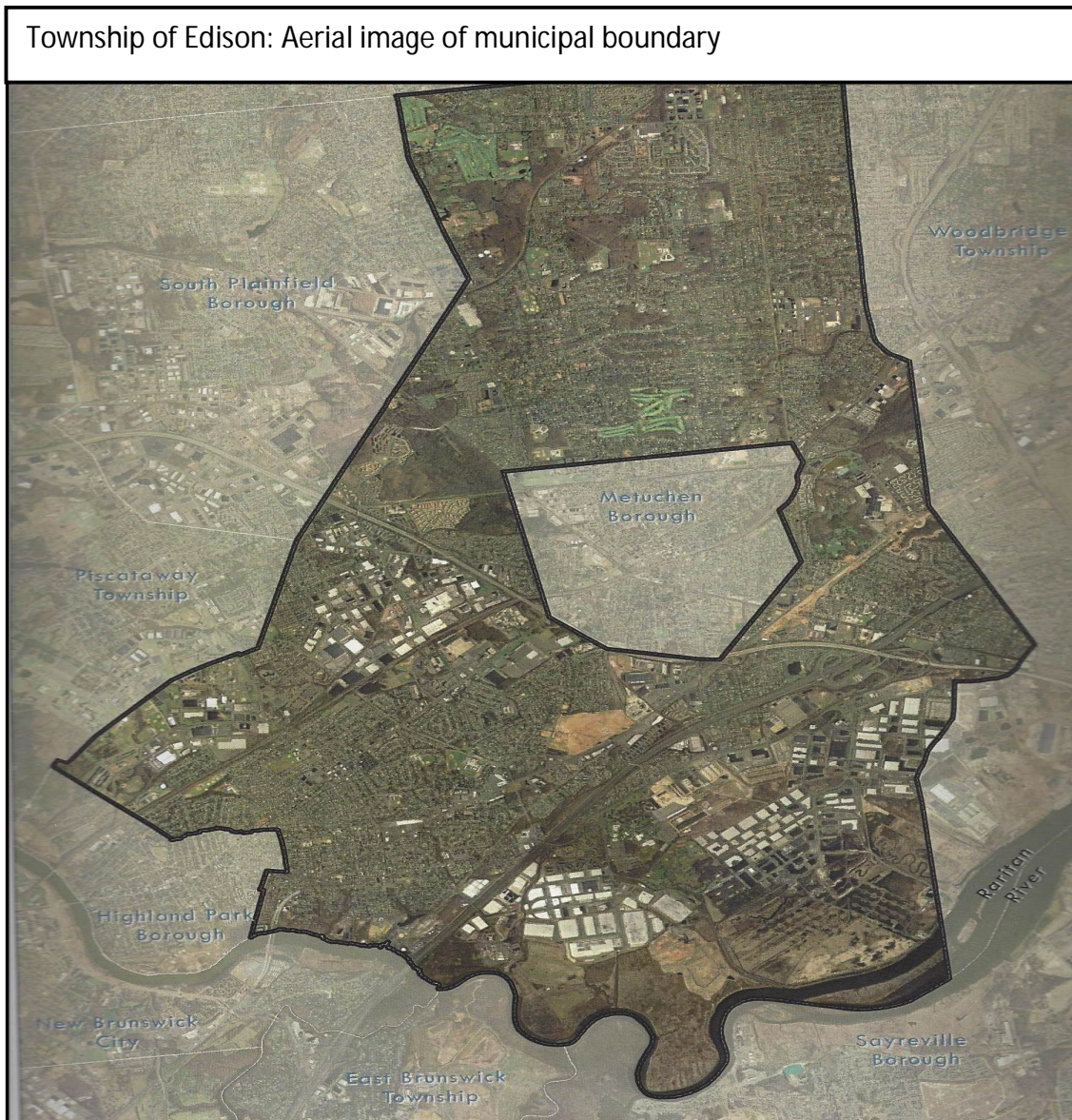
This strategic recovery planning report has been prepared in accordance with the New Jersey Department of Community Affairs' Community Development Block Grant-Disaster Recovery Action Plan (CDBG-DR) and the post-Sandy Planning Assistance Grant Program description and guidelines. The program engages Professional Planners to evaluate the impacts of Superstorm Sandy on the communities they serve. This evaluation focuses on planning goals, strategies, and priorities leading to real world actions that are most urgently needed for public safety and disaster recovery. This Strategic Recovery Planning Report should serve as a guide for future actions-not only to recover from the effects of Superstorm Sandy but also to reduce vulnerabilities to future disasters. This report contains detailed storm impacts, descriptions of the projects proposed, implementation dates and proposed funding sources for those projects.

Edison Township felt the effects of Superstorm Sandy when it hit on October 29, 2012. The major effects of the storm were flooding and heavy winds. The heavy winds caused trees to fall on power lines leaving 80% of the township without power. While flooding was a major concern for most coastal communities affected by the storm, it was not the major issue in Edison Township. The loss of power and the hardship this placed on its residents, businesses and institutions was the major concern. The inability for service stations to pump gas and stores unable to sell goods stretched the patience of its residents. Edison Township is located inland adjacent to the Raritan River. As such, it experienced minimal flooding in areas along the waterway. Probably the limited amount of development in these areas was the main reason

for the limited flooding. These areas have been repaired for the most part and are in operation today.

The major issues after the storm were highlighted by the time it took for the Township to clean-up after the storm and the limits on emergency communications over the weeks that followed. The clean-up was hampered by the lack of heavy equipment needed for tree removal from the streets and power lines, as well as trucks to cart away the debris. The communications were hampered because of the power outage in Town Hall, where the Emergency Command Center was established.

It is the hope of Edison Township that this Strategic Recovery Planning Report will help organize its needs and help identify viable funding available from State or Federal government agencies to assist such emergencies.



AREAS OF NEED

- Continue to identify storm and sanitary sewer damages and areas where back-ups and surcharges are a critical problem during storms.
- Locate areas where power and sewerage substations are most vulnerable from storm flooding.
- With the help of a Capital Improvement Plan identify the proper heavy equipment needed for Storm clean-up.
- Develop back-up plans for emergency communications, including alternate locations with emergency power.
- Develop updated Master Plan land Use ordinance to eliminate development in environmentally sensitive areas.

While the Township of Edison has addressed a majority of its issues as to Superstorm Sandy, it is the hope of this report to prepare for the future with updated planning that shall ensure public safety for years to come when major storms and natural disasters effect the community.

BACKGROUND

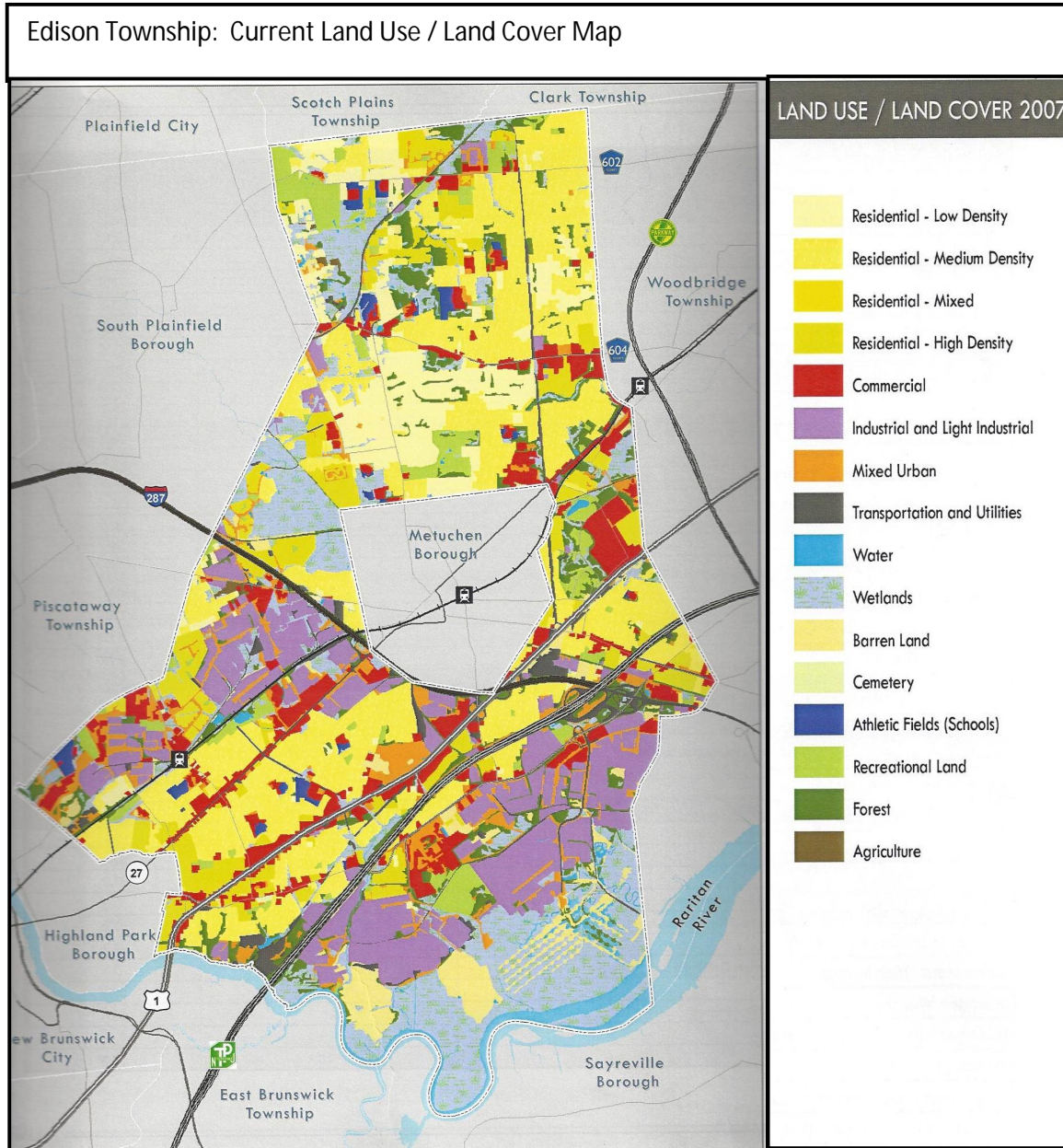
The Township of Edison is located in Middlesex County and encompasses a land area of 30.17 square miles of which 25% is wetlands/undeveloped. Several major road networks including the NJ Turnpike, US Highway Routes 1, 27 and 287 traverse the township. Together they provide the municipality with excellent regional highway access. Edison Township is bordered on the north by Scotch Plains Township and Clark Township, on the west by Piscataway Township and the Borough of South Plainfield, on the southwest by the Borough of Highland Park and completely on the east by Woodbridge Township. The Borough of Metuchen is located in the center of Edison Township. The southern border of the township is the Raritan River.

Since the majority of the property in Edison that is located along the Raritan River is considered wetlands or flood plains, limited development has occurred in its high risk flood hazard area. However; it was the area of the Township which experienced flooding from the surge of Superstorm Sandy. Another small area that experienced flooding from the surge was at the southwestern border of the Township where it abuts the Borough of Highland Park.

CURRENT LAND USE

The Township is dominated by urban areas that consist of residential, commercial and industrial uses, which include lands for transportation networks, schools, houses of worship, cemeteries, recreation and former military uses. All of these urban uses amount to approximately 14,300

acres or approximately 73% of the total land mass in Edison. The balance consists of 14.8% wetlands and 7.3% forests. A current Edison Land Use Map is shown below.



BACKGROUND PLANNING DOCUMENTS

The development of the Township of Edison has been guided by the 2003 Master Plan and 2011 Re-examination report. The Master Plan identifies goals and objectives to guide future development in ten plan elements, for example:

•Community Vision

Encourage the preservation of distinct, cohesive neighborhoods (e.g. Clara Barton)

Maintain well-designed, anti-sprawl neighborhoods and preservation of the landscapes that make Edison unique

Capitalize on opportunities for redevelopment, consistent with recommendations in the State Development and Redevelopment Plan

•Land Use

Provide for future growth and development for the Raritan Center Industrial Park

Encourage future developments at appropriate locations and intensity in accordance with transportation and environmental capacities and anti-sprawl Initiatives

•Circulation

Expand "Rails to Trails" program on abandoned con-rail railroad right of way

Develop pedestrian corridors and bikeways linking municipal and county recreation and community facilities

Catalog existing sidewalk network

•Community Facilities

Provide additional recreational facilities and open space to meet needs of expanding population

•Utilities

Upgrade aging infrastructure

Upgrade retention/detention basins and underground systems in older areas

Implement the Storm Water Management Ordinance

•Conservation and Open Space

Preserve approximately 2,000 acres of open space

Limit permitted disturbance of natural features, including tree clearance and vistas along the waterfront

Adopt a Scenic Corridor Ordinance

EDISON TOWNSHIP 2008 STORM WATER MANAGEMENT PLAN

The Storm Water Management Plan affords strategies for Edison Township to apply to development in the Township to reduce storm-water related impacts. The controls outlined in the report reduce the impact of storm-water runoff, help recharge the groundwater and improve the water quality of the downstream runoff. The plan also provides strict measures to maintain the in ground facilities being constructed with current land use development.

EDISON TOWNSHIP REDEVELOPMENT PLANS

The Township has adopted several Redevelopment Plans over the past several years that included the prior Ford Motor manufacturing plant currently known as the Hartz Mountain Redevelopment Plan located along US Route 1 and Old Post Road. The Revlon Redevelopment Site located along Route 27, as well as the Jackson Avenue Redevelopment Plan and Camp Kilmer plan. All of these projects have been approved by the Planning Board with three of the four Redevelopment Plans under construction. None of these projects were adversely affected by Superstorm Sandy. They do not lie in any type of flood hazard zone.

EDISON TOWNSHIP PLANNING PROJECTS

The Planning and Zoning Boards have granted approval to several Land Use Projects in the Township. None of these projects appear to be in any of the flood areas outlined in this report. However, they were not required to provide alternative power sources in case of emergency.

SUPERSTORM SANDY

On October 27, 2012 New Jersey Governor Chris Christie declared a state of emergency for the State of New Jersey in advance of Hurricane Sandy. On October 28, 2012 President Barack Obama issued a Federal Emergency Declaration for the State of New Jersey.

The impact of the storm was almost immediate as the storm-surge traveled up the Raritan River and flooded the low lying areas in Raritan Center as well as a small portion of the Township at its southwestern border with Highland Park. Gale force winds causing trees to fall left 80% of the Edison population without power.

The PSE&G owned power generator trailers, stored in Raritan Center were flooded and rendered unusable by the Township. The Power Substations that went underwater and unable to provide power to the Township pump stations caused backups and surcharges throughout the storm-water and sanitary systems. The Emergency Command Center established in Town

Hall had its own problems from the start due to the lack of electrical power. This made communications difficult for the Mayor and Emergency Management Team.

SUPERSTORM SANDY DAMAGE ASSESSMENT

Like many other communities in Central New Jersey and the Jersey Shore, the Township of Edison in Middlesex County continues to recover from Superstorm Sandy. Much of the notable damage in Edison from the Superstorm occurred along the shoreline of the Raritan River. The surge from the storm created heavy flooding. Edison Township experienced significant ratable loss because of this flooding. According to the tax assessor’s records, the Township of Edison experienced an assessment reduction of approximately \$1,139,400.00. All of the storm surge flooding occurred at the most southern end of industrial development in Raritan center and the low lying residential area east of the Townships’ border with Highland Park.

Edison Township: Residential Storm Damage Assessment from Superstorm Sandy						
Address	Block	Lot	Assessment Description	Date Inspected:	Notes:	Assessment Reduction
85 Newfield Avenue	395A	18	Significant 1 st Floor Flooding	12/28/2012	30% reduction to improvement Assessment	-\$100,000
107 Sunfield Avenue	395	31.04	Significant 1 st Floor Flooding	12/28/2012	30% reduction to Improvement Assessment	-\$493,100
33 Fieldcrest Avenue	161 E	2	Significant Structural Damage	12/20/2012	60% reduction to Improvement Assessment	-\$23,800
87 Sunfield Avenue	395	31.03	Significant 1 st Floor Flooding	12/28/2012	30% reduction to Improvement Assessment	-\$522,500
<i>Source: Edison Township Tax Assessor’s Office, 2014</i>					Total:	\$1,139,400

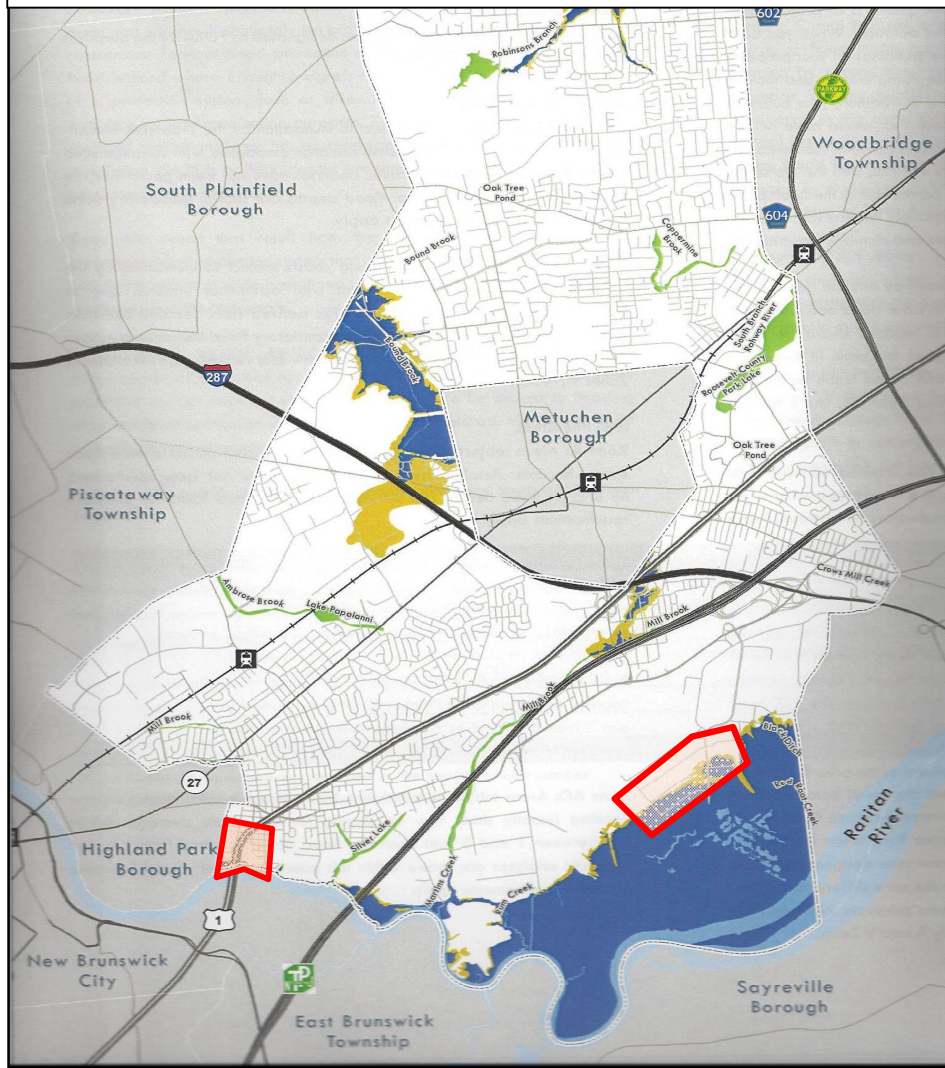
COMMUNITY, ECONOMIC AND PUBLIC SAFETY NEED

The retention of viable commercial, residential and industrial properties is critical for the residents and the economy of the Township. Edison Township has limited growth in the

floodplain areas next to the Raritan River, as such spared the residents from what could have been many more weeks of anguish in its recovery from the storm. Even with this approach to development. There are constant concerns by Municipal Officials to ensure limited public safety risks associated with development in floodplain areas, as well as and areas prone to flooding. The Township of Edison intends to use all available planning efforts to improve Community Resilience and Economic Vitality by protecting these areas from over development. The Township's floodplain map is shown below with the flood damage areas highlighted in red.

Edison Township: Flood Plain Map 2010:

Flood impacted areas are highlighted below in red.



EVEN WITH THIS APPROACH TO DEVELOPMENT, THE STORM HIGHLIGHTED SEVERAL VULNERABILITIES EXPERIENCED BY THE TOWNSHIP

- Flooding along the Raritan River-Raritan Center
- Loss of electrical power in 80% of the Township
- Damage to substations with loss of power
- Pump station backup and surcharge due to lack of power
- Damaged power lines
- Damaged sanitary and storm sewer infrastructure
- Need for satellite locations for emergency management communication
- Lack of heavy equipment for clean-up and removal of fallen trees
- Loss of backup generator power due to flooding, including power generation at municipal and commercial gasoline stations, as shown below in the image from nj.com/Starledger



PRIORITIES FOR FUTURE ACTION PLAN

The Township of Edison continues to develop plans to address the existing vulnerabilities and mitigate future flooding and disaster events. Any and all of these forthcoming initiatives can be anticipated to be the subject of planning grant application(s).

- 1. CREATE A HARDENING PLAN FOR CRITICAL COMMUNITY FACILITIES INCLUDING MUNICIPAL UTILITIES AND INFRASTRUCTURE**

In conjunction with PSE&G's "Energy Strong" program and the availability of funding, the Township of Edison desires to harden, and/or relocate critical community facilities to deliver un-interrupted emergency management services during disaster events. The Township Planning Board has already granted site plan approval for upgrades to the Pierson Avenue power substation.

First Priority Critical Community Facilities should include the Police Headquarters, Fire Stations, Public Works Facilities and all of the Township's Water, Storm-Water and Sanitary Sewerage pumping substations. These facilities have been determined to be especially susceptible or extremely critical in emergency operations. Second-Priority Facilities include all facilities used as shelters, food stores, fueling stations, banking institutions, hospitals as well as residential buildings with large at-risk populations including seniors and the disabled.

This goal should include an application to the State of New Jersey's Hazard Mitigation Grant Program for funding to purchase and install natural gas-powered emergency back-up generators for such critical community facilities as listed above. Damage to the above critical Community Facilities and Municipal Infrastructure highlights the need for a rational Municipal Facilities Plan and Investment Strategy. The Township should consider submitting an application to the NJ Department of Community Affairs ("NJCA") for Community Development Block Grant Disaster Recovery ("CDBG-DR") funding to prepare a Municipal Hazard Mitigation Plan or a 5-Year Capital Improvement Plan. If funded, these plans will be completed within one year.

2. CONTINUE IMPROVED PUBLIC COMMUNICATION AND EMERGENCY NOTIFICATION

The Township of Edison's Office of Emergency Management should consider an application to the State of New Jersey for Hazard Mitigation Grant funding program to engage in a public information and awareness campaign to advise residents of natural and man-made hazards. What to do in future disaster situations and recommend that citizens develop Preparedness Plans or Emergency Kits. Awareness campaign materials may be considered for several languages. Below, storm victims recharge cellular phones in an image from nj.com/Starledger.



3. CONTINUE TO IMPLEMENT REDEVELOPMENT AND REHABILITATION PLANS

The Township should consider the use of Redevelopment and Rehabilitation Plans when planning for development in flood prone areas. Recent changes to the Redevelopment Law now include a **NON-CONDEMNATION OPTION** for the Township. The areas undeveloped in the Raritan Center area could be considered as part of the planning process.

PLAN FOR FUTURE PROPOSALS

To facilitate the above policy changes, the township intends to submit grant applications to the NJ DCA for the CDBG-DR funding to prepare a series of planning elements to create and address the comments of this strategic recovery planning report. They are as follows:

1. A Post Sandy Neighborhood Proposed Land Use Element, which would be adopted as an amendment to the 2011 re-examination of the master plan. The proposed Master Plan amendment would recognize modified land use goals and objectives as they relate to sustainability and open space for areas of the Township affected by the storm. Project grant amount: \$10,000.00 to be completed within six months of the grant approval date.
2. Create Zoning Ordinance revisions that would reconcile the above Master Plan amendments with the Township's Land Use and Development Ordinance. The Ordinance would include sustainable design practices that provide for back-up power systems, creating and locating critical systems such as substations out of flood areas, etc., as well as changes to the official zoning map. Project grant amount: \$20,000.00 to be completed within one year of the grant approval date.
3. Create a Capital Improvement Plan which would allow the Township to set priorities in the purchase of necessary equipment to insure the safety of its Residents during major storm events. Included in the Plan would be an inventory of all existing municipal equipment and location of all Township-owned lands used to provide municipal services to its Residents. Project grant amount: \$30,000.00 to be completed within 18 months of the grant approval date.
4. Create an Emergency Communications Plan with mapping for all Township Emergency Personnel with established satellite locations in case of major power outages. Also included would be the Public Information and Awareness Campaign to advise residents of natural disasters. What to do in future disaster

situations with recommendations for Family Preparedness Plans and Emergency Kits. Awareness campaign materials may be created in the Townships several spoken languages possibly including: Taiwanese, Mandarin, Cantonese, Hindi, Urdu, Pakistani and Spanish. Project grant amount: \$20,000.00 to be completed within 24 months of the grant approval dated.

PUBLIC PARTICIPATION AND COMMENT

This strategic recovery planning report has been prepared in accordance with the regulations governing the CDBG-R and NJDCA SRPR process. Independent of these requirements, it is a well-established principal of participatory democracy and community planning that significant changes in land use policy be made available for public comment and be informed by public participation in the final decision-making process. As such, this report was made publically available on the Township Website and subject of a Public Hearing before the Edison Planning Board. (July 2014) Although not proposed as a formal Master Plan Amendment at this time, the Planning Board may wish to make specific recommendations to the Township Council relative to the findings of this report. Comments should also be solicited relative to rebuilding strategies, code and ordinance solutions, green building and environmental sustainability options, as well as long-term viability of Township-wide infrastructure. Following public comments, the Township Council may consider revising this report, to be adopted as a framework document.

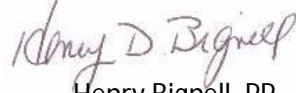
COMPARISON WITH OTHER PLANS

This Strategic Recovery Planning Report has been prepared in accordance and is consistent with the New Jersey State Development and Redevelopment Plan, the New Jersey Department of Community Affairs 2013 Community Development Block Grant Disaster Recover Action Plan, the Township of Edison 2011 Master Plan Re-examination, the Township of Edison 2011 Environmental Resource Inventory and the Township of Edison 2008 Floodplain Management Plan.

CERTIFICATION

The original of this report was signed and sealed in accordance with N.J.S.A. 45:14A-1, et seq. and N.J.A.C. 13:41-1.1, et seq.

Respectfully submitted,



Henry Bignell, PP

For the Firm

HB/hb

cc: All Board & Staff Members

File #8009/13-1153