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Recovering from Hurricane Sandy: A Municipal Government Archives' Role in Disaster Recovery

Bryan J. Dickerson

Introduction

Hurricane Sandy was the most devastating coastal storm ever to strike New Jersey. Brick Township was among the state's coastal communities which suffered historic destruction from the October 2012 hurricane. In the five years since Hurricane Sandy, the community has made considerable progress in recovering from the storm, but much work remains to be done. Using document digitization, the Township of Brick Archives is assisting in the post-storm recovery and documenting those efforts. The Township's experience offers valuable lessons learned for other communities located in disaster-prone areas of the country.

A Community Vulnerable to Coastal Storms

Established in February 1850, Brick Township is located in northeastern Ocean County. Brick Township lies almost halfway between New York City to the north and Philadelphia to the southwest. Approximately 75,000 year-round residents call Brick Township home and many thousands more vacation here or own seasonal homes. Excluding water areas, the community encompasses 26 square miles of land. This includes a 1.9 mile stretch of barrier island physically separated from the mainland by Barnegat Bay. The community is served by a popularly elected mayor and a seven-member township council elected at large by the voters.

Brick Township is a community dominated by water. In addition to the frontage on the Atlantic Ocean, Brick Township also has waterfront on Barnegat Bay, four rivers and two inland lakes. With over 53 linear miles of waterfront, most of which are located in low-lying areas, Brick Township is very vulnerable to coastal storms. Periodically, Brick Township endures significant weather events, some of which have inflicted serious damage on the community. These storms included the Great Atlantic Hurricane of September 1944, the March 1962 Nor'easter, and the Halloween Nor'easter of 1991. Dubbed the "Perfect Storm," the latter was chronicled in a book and movie of that name.

Hurricane Sandy and Brick Township

The storm that came to be known as Hurricane Sandy developed in the Caribbean Sea in mid-October 2012. It steadily grew in strength and struck Jamaica, Cuba and a number of other Caribbean islands before working its way up the Atlantic Coast of the United States. Hurricane Sandy then turned 90 degrees to its left and came ashore in the vicinity of Brigantine, New Jersey, at 8 p.m. (EST) on October 29, 2012.

Sandy ultimately became a Category 1 hurricane with maximum sustained winds of 85 mph and a nine foot storm surge on top of normal high tides. It was a massive storm with tropical storm winds up to 520 miles from its center and hurricane force winds up to 180 miles from its center. At one point, it was over 1,100 miles in diameter, making it the second largest Atlantic hurricane on record. As a result, the Jersey Shore began suffering from the effects of Hurricane Sandy long before the eye came ashore. “Sandy’s storm surge, in addition to large and battering waves, devastated large portions of the coasts of New Jersey and New York,” the National Hurricane Center stated in a February 2013 report on Hurricane Sandy. “In fact, the extent of catastrophic damage along the New Jersey coast was unprecedented in the state’s history, with the brunt of it occurring in Monmouth and Ocean Counties.”¹

Even though the eye of the hurricane came ashore some 70 miles to the south-southwest, Hurricane Sandy had a devastating effect upon large areas of Brick Township. The barrier island section of the community and the inland low-lying waterfront areas sustained the most damage. Storm surge and successive high tides caused the Atlantic Ocean to over wash the barrier island in several areas. A number of homes were swept into Barnegat Bay by the storm surge. Just to the north of Brick Township’s barrier island section in neighboring Mantoloking Borough, the Atlantic Ocean

¹ Eric S. Blake, Todd B. Kimberlain, Robert J. Berg, John P. Cangialosi and John L. Beven II, “Tropical Cyclone Report Hurricane Sandy,” February 12, 2013, National Hurricane Center, National Weather Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, accessed July 23, 2017, http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf.

actually created a new inlet through the barrier island near the base of the Mantoloking Bridge.²

The Camp Osborn section of seasonal homes suffered catastrophic damage. Storm surge brought down electric utility lines and ruptured natural gas lines servicing these homes. The arcing electricity ignited escaping natural gas, causing a huge conflagration that destroyed or severely damaged 120 homes. Fire crews from the mainland were unable to access the barrier island because of the breach in the barrier island at Mantoloking. As a result, Camp Osborn literally burned down to the sand.³

Low-lying inland areas of Brick Township suffered heavy damage as well. Many of these areas were only a few feet above sea level under normal conditions. The combination of heavy rains and storm surge coming across the barrier island and through Barnegat Inlet to the south produced flooding of more than 10 feet. When the Atlantic Ocean breached the barrier island at Mantoloking, a six-foot high wall of water rushed into the upper Barnegat Bay, causing significant flooding inland. The state of New Jersey and Ocean County undertook emergency repairs to seal the breach in the barrier island, but the area was cut off for several days following Sandy.

There was a wide disparity in the damage sustained by township buildings and facilities. The township's municipal building and its archives are located six miles inland and thus did not sustain any damage from the hurricane. The township's three municipally

²The northern barrier island in Ocean County is physically connected to the mainland in Point Pleasant Beach Borough. It runs south from there for twenty miles, ending at Barnegat Inlet. The communities of Bay Head Borough, Mantoloking Borough, Lavallette Borough, Seaside Heights Borough, and Seaside Park Borough are all located on the barrier island. In addition, the inland communities of Brick Township, Toms River Township and Berkeley Township all have sections of their municipalities located on the barrier island. The southern 10 miles of the barrier island is preserved as Island Beach State Park. Brick Township's barrier island section is located between Mantoloking Borough and Toms River's barrier island section. State Highway 35 runs down the center of the barrier island. Two bridges connect the barrier island to the mainland: the Mantoloking Bridge between Mantoloking Borough and Brick Township, and the Thomas A. Mathis Bridge between Seaside Heights and Toms River.

³ As of this writing, Camp Osborn is still mired in the process of rebuilding due to the complexities of land use regulation, and land ownership. In short the situation is complicated by the fact that the home owners owned their homes/structures but not the land beneath their homes/structures.

owned beaches on the barrier island suffered heavy erosion but the concession/restroom buildings were largely protected from the storm surge by sand dunes. The township's Traders Cove Marina Park located at the western end of the Mantoloking Bridge suffered substantial flood damage.

The immediate disaster response required the assistance of the New Jersey National Guard and state police from Pennsylvania, Rhode Island, and Louisiana. Guard members provided disaster recovery assistance and maintained security on the barrier island. They remained in Brick Township until January 2013. Officers from the aforementioned states assisted the Brick Township Police Department in maintaining law and order in the inland sections of the community, especially those sections hit hardest by Sandy.

The response of non-government organizations to Hurricane Sandy was tremendous. Both local and national organizations mobilized their resources to aid and assist those affected by the hurricane. The national organizations included Catholic Charities, Operation Hope, Habitat for Humanity, and the American Red Cross. Local churches, schools, businesses and charitable organizations collected and distributed food, clothing, and other relief supplies. Visitation Roman Catholic Church set up and operated a relief center for many months after Sandy. Over time, the nature of the assistance provided evolved from meeting basic needs to assisting with filing insurance claims and applying for disaster recovery grants to re-build or replace homes.

Hurricane Sandy was the most devastating and costly coastal storm in Brick Township's history. Approximately 10,000 of Brick Township's 26,000 residences sustained wind and/or water damage. Of these, nearly 500 homes were rendered uninhabitable and required demolition. A total of 1,453 homes were substantially damaged, which according to Chapter 196 of the Township Code means that the cost of repairing the home was greater than 50 percent of its pre-storm market value. Damage and destruction from the hurricane caused \$423 million in lost tax ratables. According to figures compiled by the New Jersey Department of Banking and Insurance in March 2013, insurance claims for hurricane damage for the mainland of Brick Township amounted to \$126,354,245 with another \$68,313,636 in claims for Mantoloking Borough and the barrier island section of Brick Township. Sandy also deposited large

amounts of debris which blocked roadways and knocked out utility services for the whole community. The destruction from Hurricane Sandy was compounded by a nor'easter that struck the Jersey Shore a week later.⁴

The Brick Township Archives and the Recovery from Hurricane Sandy

As a result of Hurricane Sandy, the Township Archives is performing tasks beyond its traditional archives and records management tasks. The mission of the archives of the Township of Brick is to manage and preserve municipal government records from creation or receipt to disposition or permanent retention. The Township Archives also conducts the township's document digitization and manages the digital files using OpenText Alchemy document management software.⁵ Our current hardcopy holdings occupy approximately 2,700 cubic feet of archival space. As we are both an archives and a records center, approximately 85 percent of our holdings will be destroyed and/or recycled according to the applicable retention period set forth by the state of New Jersey.

The township has been using document digitization for its records since 2006. In that year, the township contracted with an outside vendor to digitize its construction records and manage the images using Alchemy. Two years later, the township added its planning board and board of adjustment records to the digitization project. All of this was done as authorized by a micrographics imaging certification issued by the NJ State Records Committee and the NJ Division of Archives and Records Management (DARM).

⁴ Township of Brick, New Jersey, "Code of the Township of Brick, New Jersey Chapter 196: Flood Damage Prevention." See Section 5: Definitions. Statistics on damaged structures was provided by the Township of Brick Engineering Department. Statistics on lost tax ratables was provided by the Office of the Tax Assessor. "Damage from Sandy: More Than \$194 Million in Brick, Mantoloking," in Brick Patch, accessed October 10, 2017, <https://patch.com/new-jersey/brick/damage-from-sandy-more-than-126-million-in-brick>. These insurance claims statistics were compiled by zip code. The barrier island section of Brick Township is included in the Mantoloking Borough zip code, ergo why the claims numbers have been included in this fashion.

⁵ See OpenText's website, accessed October 10, 2017, <http://www.opentext.com/what-we-do/products/opentext-product-offerings-catalog/rebranded-products/captaris-is-now-opentext>.

These efforts were funded in part by DARM's Public Archives and Records Infrastructure Support (PARIS) Grant.

In June 2010, the township began digitizing its records in-house. To do so, we purchased software upgrades, additional software licenses, and scanning equipment. Since the scanning was originally done by an outside vendor, we had to modify our state micrographics imaging certification so that we could perform the scanning ourselves. We are currently utilizing three scanners: a Ricoh W3601 wide format scanner/printer/copier, a Bowe Bell Howe Truper 3600, and a Fujitsu fi7160. Alchemy is backed up nightly by the township's IT department and stored at an offsite location.

Since its inception, we have expanded our Alchemy system from one database for construction records to 15 databases encompassing a wide variety of township operations. These databases include the Township Clerk, the Township Treasurer, the Township Engineer, the Purchasing Division, Township Ordinances and the Police Department. Our 15 Alchemy databases contain over 640,000 individual documents with over 4.5 million individual images, ranging from letter sized multi-page documents to 36 inch x 48 inch plans and drawings. Construction and land use records comprise 80 percent of Alchemy holdings.

The township's Alchemy databases work in tandem with its construction and land use management software, Spatial Data Logic's GeoClient. GeoClient provides real time permit management and tracking for permits and approvals issued by the township's Construction Inspections, Engineering, Code Enforcement, Zoning and Land Use offices and its Planning Board and Board of Adjustment. While not directly linked together, Alchemy and GeoClient are essential for each office. GeoClient tracks and administers permit applications and approvals, while Alchemy stores and preserves digitally the completed records associated with each application and approval. A staff member in the aforementioned office at his or her desktop can research an application or property history in GeoClient, then obtain the supporting documentation for completed projects using Alchemy. While GeoClient captures important permit information such as location, contractor(s), inspection dates, and plan review approvals, the actual permit documents and plans are digitized and stored in Alchemy.

Our Alchemy databases are not directly accessible to the public via the internet or kiosks and never will be made available by these means. Access is restricted to our authorized employees due to privacy issues, proprietary and copyright issues, and security concerns associated with the majority of these documents. In addition, many of these documents contain personally identifiable information and personal financial information. The public can obtain access to these documents by filing requests through the New Jersey Open Public Records Act (OPRA) process or the common law process. Of course, property owners and homeowners readily receive access to the records pertaining to their properties upon request.

Since November 2012, the Township Archives' Alchemy database system is being used on a daily basis to assist in the post-storm recovery efforts and to document those recovery efforts. The archives plays a critical role in the recovery because it holds the community's construction and land use records. Township construction records date back to 1960 and land use records date back to 1888. The archives does not have every record for every property ever created but it does have the vast majority of them.

Many homeowners lost most or all of their personal records during Hurricane Sandy, so the archives records have become invaluable as these homeowners navigate through the complex process of storm damage recovery. We are able to provide homeowners with various records related to their properties, most especially property permit histories, construction plans for original homes and subsequent additions/alterations, plot plans, surveys, Federal Emergency Management Administration (FEMA) elevation certificates, and permits and plans issued by the New Jersey Department of Environmental Protection (NJDEP). In addition to homeowners, these records are being used by the township's construction and engineering officials, insurance adjusters and insurance carriers, disaster recovery grant programs, and FEMA.

When a homeowner, government official, or insurance representative contacts the township for information about a property, staff members are able to rapidly and efficiently search for those records using the Alchemy databases installed on their desktop computers. In nearly all cases, this search can be accomplished in a matter of minutes. The digitized documents can then either be reproduced in hardcopy format or exported as PDFs to be e-mailed to

the requestor or transferred to a flash drive or other storage medium. A similar search using hardcopy records could easily take hours to accomplish.

There are three primary ways that Township Archives records are being used in the post-Sandy recovery process. First, records are being used to document pre-Sandy conditions for properties and structures. Second, records document the hurricane's effect upon the community and the municipal government's immediate response. Third, every day the Township Archives documents the community's recovery from Sandy as we digitize the tens of thousands of records being generated during this process. These records include efforts to prepare the community for the next coastal storm.

Pre-Sandy construction and land use records are especially helpful to homeowners in documenting the conditions of their homes and properties prior to the hurricane. Many homeowners did not have construction records for their homes because they were not the original owner or the owner at the time of a renovation or addition. Digitized construction records can be used by the homeowner for submitting insurance claims, applying for disaster recovery grants and assistance, and applying for NJDEP permits when such permits are needed.⁶ Homeowners can also use the construction plans to repair their storm-damaged homes. They can simply turn these plans over to a contractor to make the repairs and save the expense of hiring an architect or engineer to draft new plans for the repairs.

These same pre-Sandy construction and land use records are also useful for insurance carriers in evaluating claims submitted by owners of storm-damaged and destroyed homes. On a number of occasions, insurance carriers and claims adjusters have contacted us to verify the legitimacy of claims submitted by homeowners. Using Alchemy, we have been able to confirm for the adjusters how homes existed prior to Sandy.

Township Engineer and Floodplain Manager Elissa Commins, P.E., C.F.M., has been heavily involved in the

⁶ NJDEP permits are often required for construction within the coastal zone of New Jersey, and always required for waterfront development such as the construction of docks, bulkheads, and homes. For homes damaged or destroyed by Hurricane Sandy, NJDEP relaxed some of their regulations to assist homeowners in rebuilding. See NJDEP website http://nj.gov/dep/landuse/coastal/cp_main.html for more information.

community's efforts to recover and rebuild from Hurricane Sandy right from the storm's immediate aftermath. "The historic records Alchemy continues to make available to us has enabled us to reconstruct and recover," she said. "Our records enabled us to provide residents with the historic documents for their homes and property, property boundaries and delineations of environmentally sensitive areas, and information to insurance agents." Having such records readily available has been essential for homeowners seeking to rebuild. "When available, a survey from a past project or permit application could help us determine the pre-existing footprint of development of a home as well as the waterward limit of the development," said Commins. "This was crucial in determining if NJDEP permits were going to be required as a prior approval for the reconstruction of a home, or if we could just process the application without requiring a submission to the state."⁷

Township officials and staff have also used database records to rebuild and reconstruct the community's damaged roads and infrastructure. "We accessed old development filed maps to determine which right of ways were private in nature and which were public responsibility," said Elissa Commins. "We also utilized subdivision plans and original construction plans and details to establish how roads were constructed and reconstructed in the past."⁸

Moreover, the Township Archives has documented the Hurricane Sandy storm event and the disaster response efforts undertaken in the immediate and near aftermath of the storm. We have used the Alchemy system to digitize such records as storm damage and storm response reports, official actions of the municipal government including appropriations ordinances, financial records for storm response, and contracts for recovery and debris removal services. These records are being used for insurance matters, legal matters, disaster recovery grants, and historical purposes.

The township's Alchemy databases are playing a major role in the township's efforts to obtain grants and reimbursements for post-Sandy recovery efforts and for complying with the administrative requirements associated with these grants and

⁷ Elissa Commins, P.E., C.F.M. (municipal engineer, department of engineering, Township of Brick, New Jersey), interview with the author, August 4, 2017. [Hereafter cited as "Commins interview."]

⁸ Commins.

reimbursements. “From requisition to cancelled check, Alchemy is used to document grant projects, including FEMA public works projects. It is also used to track permits, construction projects, and type of work completed to report progress and recovery,” said the Township’s Assistant Planner/Grants Administrator Tara B. Paxton, MPA, P.P., AICP. “Without having these records available to us in Alchemy to support our grant applications, the amount of funds that would have been spent, both publically and privately, to reestablish our infrastructure and developments would have been staggering,” said Elissa Commins. “In particular, these records were useful in working with FEMA to document what previously existed where we were entitled to recapture funds for reconstruction.”⁹ To date, the township has received over \$1.5 million in U.S. Department of Housing and Urban Development grants, \$1.1 million in N.J. Emergency Management reimbursements, and another \$11.9 million in FEMA reimbursements and grants.¹⁰ Much of the documentation required for obtaining these funds and accounting for their expenditure is managed using Alchemy.

Lastly, the Township Archives is documenting the community’s recovery from Hurricane Sandy on a daily basis and will likely continue to do so for the next several years. Examples of records that document the storm recovery include construction permits and plans, deeds and easements for storm-damage mitigation efforts, and planning documents for post-storm recovery. These records will be used for insurance matters, legal matters, disaster recovery grants, and historical purposes. While construction records were being digitized before Sandy and would have continued irrespective of the storm, the township is now realizing additional benefits from its document digitization efforts.

Thousands of homes and businesses were damaged, destroyed, or required demolition as a result of Hurricane Sandy. Repairing or replacing storm-affected structures requires construction permits issued by the township’s Construction Division.

⁹ Tara B. Paxton, MPA, P.P., AICP (assistant township planner, office of land use management, Township of Brick, New Jersey), interview with the author, July 28, 2017.; Commins.

¹⁰ Financial statistics provided by the Brick Township Office of Land Use Management and the Office of the Chief Financial Officer. The HUD grant is administered cooperatively through the NJ Department of Community Affairs.

After each of these permits is completed, the file is transferred to the archives for digitization and inclusion in Alchemy. With some 10,000 homes damaged by the hurricane, including nearly 500 homes which required demolition and replacement, the number of Sandy-related construction permits being digitized by the archives is substantial. The volume of Sandy-related records is so large that the township archives contracted in late 2016 to have some 150 cubic feet of its older pre-Sandy construction records digitized and indexed by an outside vendor.

Another long-term impact of Hurricane Sandy relates to FEMA flood zones. Many of the houses in Brick Township were erected prior to the implementation of the National Flood Insurance Program (NFIP) and did not meet their elevation requirements. The NFIP documented 655 structures that were in default of meeting flood elevation requirements, and that only reflects the homes for which they had records. As a result of Hurricane Sandy, significant changes were made in the FEMA flood zone requirements. Under the new standards with higher flood elevation requirements, even more structures were affected. As a result, over 3,500 homes in Brick Township will have to be raised, in many cases upwards of 10 feet or more above their current elevation. As of fall 2017, only half of those 3,500-plus homes have been raised. Every day, the Township Archives is digitizing the construction records for homes that are being elevated due to Hurricane Sandy. To date, we have digitized over 2,000 records related to house raisings.¹¹

A major component of preparing Brick Township and nearby Mantoloking for future coastal storms has been the construction of a storm mitigation barrier along the dune line of the northern barrier island and the expansion of the ocean beaches. Forty-five foot high sections of steel sheeting were driven into the sand along the dune line, and then covered with sand. The U.S. Army Corps of Engineers will be expanding the ocean beaches to provide further protection for the barrier island. Both projects will provide greater shore protection for local infrastructure, public and government facilities, State Route 35, and homes and businesses located on the barrier island. Both projects are generating a large volume of records, particularly related

¹¹ These statistics were provided by the Township of Brick Engineering Department.

to land ownership records. The Township Archives is digitizing these records, especially those relating to deeds of easements and eminent domain filings associated with privately owned lands affected by the two projects.¹²

Going forward, digitizing post-Sandy recovery documents will provide additional benefits for future owners of homes/properties affected by the hurricane. Twenty-plus years from now, when a Sandy-affected property is sold, the Township Archives will be able to provide the buyer with the records that document what happened to that property during Sandy and what actions were taken to repair or rebuild the damage.

Key Takeaways

The professional literature regarding archives and disasters is substantial and tends to focus on preparing for disasters and how to recover from them. On its website, the Northeast Document Conservation Center has free informational pamphlets on planning for and recovering from disasters, including an online version of their 2003 *Preservation of Library and Archival Materials: A Manual*. An updated version of the 2006 *Field Guide to Emergency Response: A Vital Tool for Cultural Institutions* is now available from the Foundation of the American Institute for Conservation. This handy manual provides checklists and techniques for handling a variety of disasters along with sections where the user can input his or her own relevant disaster recovery information, such as contacts for insurance carriers and recovery services vendors. Ann Marie Przybyla and Geof Huth's "Preparing for the Worst: Managing Records Disasters" published by the New York State Archives and

¹² State of New Jersey, Department of Environmental Protection, "Milestones Reached in Christie Administration's Protective Sheet Pile Beach Project in Mantoloking and Brick," October 24, 2014, accessed July 24, 2017, http://www.nj.gov/dep/newsrel/2014/14_0116.htm.; U.S. Department of the Army, Army Corps of Engineers, Philadelphia District, "New Jersey Shore Protection, Manasquan Inlet to Barnegat Inlet: Coastal Storm Damage Reduction Project," accessed July 24, 2017, <http://www.nap.usace.army.mil/Missions/Factsheets/Fact-Sheet-Article-View/Article/490786/new-jersey-shore-protection-manasquan-inlet-to-barnegat-inlet-nj/>. This project covers 14 miles of the northern Ocean County barrier island from Point Pleasant Beach (Manasquan Inlet) to Island Beach State Park (Barnegat Inlet).

the University of the State of New York, is just one of many publications which offer a guide through the planning, response, and recovery process. Some of these resources deal with specific archival materials such as *A Primer on Disaster Preparedness, Management and Response: Paper-Based Materials*, which was published jointly by the Smithsonian Institution, National Archives, Library of Congress, and National Park Service in 1993.¹³

Other published works discuss disaster recovery experiences of archives and cultural institutions. George Eberhart's article "Katrina's Terrible Toll," published in the October 2005 edition of *American Libraries* discussed the impact of that devastating hurricane on archives, libraries and other cultural institutions in Louisiana, Mississippi, and Alabama. In "After a Disaster: the National Archives as a 'First Preserver,'" published in the Spring 2006 edition of *Prologue*, Archivist of the United States Allen Weinstein highlighted the various ways that the National Archives and Records Administration was assisting federal, state and local agencies in salvaging their records damaged by Hurricanes Katrina and Rita.¹⁴

However, the Township Archives has had a somewhat different experience from what is related in the professional literature

¹³ See the Northeast Document Conservation Center website at <https://www.nedcc.org/free-resources/preservation-leaflets/overview.>; *The Field Guide to Emergency Response* was originally published by Heritage Preservation. After Heritage Preservation dissolved in 2015, many of its programs and publications were absorbed by the Foundation of the American Institute for Conservation. See their website at [http://www.conservation-us.org/our-organizations/foundation-\(faic\)/initiatives/heritagepreservation#.Wd9mAWaWwdV.](http://www.conservation-us.org/our-organizations/foundation-(faic)/initiatives/heritagepreservation#.Wd9mAWaWwdV.); *A Primer on Disaster Preparedness, Management and Response: Paper-Based Materials* (Washington, D.C.: Smithsonian Institution, National Archives and Records Administration, Library of Congress, and National Park Service, 1993), accessed October 12, 2017, <https://www.archives.gov/files/preservation/emergency-prep/disaster-prep-primer.pdf>.

¹⁴ George Eberhart, "Katrina's Terrible Toll." *American Libraries* (October 2005): 14-24.; Allen Weinstein, "After a Disaster: The National Archives as a 'First Preserver,'" *Prologue* (Spring 2006), accessed October 12, 2017, <https://www.archives.gov/publications/prologue/2006/spring/first-preserver.html.>; Ann Marie Przybyla and Geof Huth, "Preparing for the Worst: Managing Records Disasters," (New York: New York State Archives and the University of the State of New York, 2004), accessed October 12, 2017 http://www.archives.nysed.gov/common/archives/files/mr_pub82.pdf.

on disaster recovery. We have a disaster recovery plan in place, participate in disaster recovery training classes, and are members of the New Jersey Cultural Alliance for Response.¹⁵ The archives did not sustain any damage from Hurricane Sandy. Accordingly, because our records and our archival infrastructure were not damaged in any way, we have been able to use our resources to assist township staff, private citizens and business owners in their efforts to recover from the hurricane.

Hurricane Sandy provided many valuable lessons for the municipal government and the Township Archives in responding to and recovering from a natural disaster. These are lessons that are applicable to other communities, not only at the Jersey Shore, but any areas prone to a wide range of natural disasters.

1. Digitized records enable the archives to rapidly search hundreds of thousands of records for a requestor, and quickly provide the requestor with hardcopies or digital copies. This capability proved invaluable when homeowners came to us seeking records for their storm-damaged properties.
2. Using digitized records for disaster recovery was not the township's original intention for digitizing its records, but it has proven to be an invaluable added benefit for our community.
3. Digitized land use records are highly beneficial for residents and property owners, insurance claims adjusters, construction contractors and Federal and state grants and disaster relief agencies involved in post-disaster recovery.
4. Digitized records play an important role in not only obtaining storm recovery grants and reimbursements, but also in providing documentation for accounting and financial compliance associated with the administration of these programs.

¹⁵ The New Jersey Cultural Alliance for Response was formed after Hurricane Sandy to assist public and private archives, libraries and other cultural institutions in preparing for potential natural and manmade disasters. Similar alliance for response organizations exist in 17 other states. NJCAR is coordinated by the NJ State Library. See their website for more information at <http://njculturalalliance.wixsite.com/njcar>.

5. Digitized records must be backed up daily at a secure off-site location. Our archives and our Alchemy system did not sustain any damage during Hurricane Sandy but if they had, we had a complete backup of our Alchemy databases available to use if we needed it.

The most important takeaway from our experience with digitized records and Hurricane Sandy is applicable to all local governments which are located in areas prone to disasters. Right now, there are tens of thousands of communities located across the country that are located in areas prone to floods, earthquakes, hurricanes and coastal storms, wildland fires, and tornadoes. Every year, hundreds of communities experience natural disasters which damage and destroy homes, businesses, and other structures. Government agencies which have land use records for areas that are vulnerable to natural disasters ought to be digitizing those records *now* to create an invaluable resource for post-disaster recovery.

Bryan J. Dickerson, CA, CMR has served as the Township Archivist of the Township of Brick since January 2007. He is a member of the Academy of Certified Archivists, the Mid-Atlantic Regional Archives and Records Conference, and the New Jersey Cultural Alliance for Response. He earned his BA in History from Rowan University (NJ) and his MA in American History from Monmouth University (NJ). Dickerson served in the Navy Reserve for eight years as a Religious Program Specialist (Fleet Marine Force) and deployed twice to Iraq for Operation Iraqi Freedom.