Hurricane Sandy
Preparation and Response
Performance Review

Report to the Community

Prepared by
Alison Leary
Executive Vice President
NYU Division of Operations

July 1, 2013
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July 1, 2013
Letter to the NYU Community

Following Hurricane Sandy in October, 2012, NYU President John Sexton commended the performance of the University’s response team during the emergency, and he asked me to examine the additional steps the University could take to better prepare the Washington Square campus for – and help campus residents cope more comfortably with -- a similar event in the future.

In the months that have since passed, a team of NYU administrative units in partnership with key service providers have been working to conduct this examination and to implement improvements in preparation for future disruptive events of this type.

This report to the community constitutes a written performance assessment of our team’s efforts before, during and after Hurricane Sandy. It documents the experiences that NYU’s diverse community had most in common, and informs the community of the actions we are taking to respond to these broad concerns.

Our efforts since the hurricane also include many equally important “behind the scenes” initiatives that will better protect valuable research and facilitate our future response efforts; this report does not expound on these for reasons of security and narrow community interest, but they are underway nonetheless.

We welcomed the community’s review of this report to ensure that our performance assessment is as fulsome as possible, and a period of review and comment was provided from April 26 – May 31, 2013. This final report incorporates relevant and noteworthy suggestions and comments received from the community; changes from the draft report are highlighted in yellow for ease of identification.

Thank you,

Alison Leary
Executive Vice President - Operations
Executive Summary

This report to NYU’s Washington Square campus community focuses on three aspects of NYU’s preparation and response to Hurricane Sandy:

- It documents the experiences of the NYU community during and after the hurricane;
- It assesses how the University prepared, responded, and recovered in the days following the storm;
- It identifies explicit improvements and outlines the actions we are taking to improve our preparation and response for future emergencies.

This report does not include the experience of the NYU Langone Medical Center, NYU’s School of Medicine or NYU Poly, each of which is under the direction of its own management team.

Assessment Process
Our performance assessment included thorough review of the feedback we received from the community we serve. Following the University’s return to normal operations, the Hurricane Sandy Feedback Website was established to provide the community with an easy way to anonymously share stories of personal experience and suggestions for improvement. We received hundreds of comments from faculty, students and their parents, administrators, and neighbors; representative comments reflecting a wide range of experiences and perspectives are interspersed throughout this report in bold italics.

We collected additional input through interviews of faculty, deans, undergraduate and graduate students (including students who commute to campus), administrators, staff, and service providers.

The feedback we received mirrors our own assessment of our performance: there were many things that we did very well, and many in our community expressed their appreciation for the outstanding work of the response team; there was also constructive criticism that we take to heart, and we are implementing many improvements as a result.

Improvements
Of primary interest to readers will be the improvements that are already underway; there are many important activities in progress that improve our level of preparedness. The improvements fall primarily in the categories of:

- Communication
- Emergency power
- Emergency lighting
- Special services
- Food services
- Personal preparedness

Each chapter of this report includes a section that outlines the specific improvements that are relevant to the subject of that chapter; additionally, a consolidated summary of all the major improvements is included in the Appendix to facilitate quick review of them in total.
Executive Summary

**Report Structure**
The sections of this report are loosely organized in a sequence that begins by focusing our attention on the people who comprise our community and the services on which they depend.

Communication is the first service we focus on because it is key to everything else we do. Following the chapter on communication, the next few chapters are loosely organized in a sequence that is intended to reflect the University’s academic mission; this sequence does not imply any ranking of relative priority of concern for future response efforts.

We wrap up the report with a review of other important support services, the structure of the University’s Emergency Operations Center, and last but not least, acknowledgment of the many people who played important leadership roles during Hurricane Sandy and who also contributed to this assessment and report.

**Beyond this Report**
At the same time that we have engaged in this review of our own emergency response, the Mayor of New York City has initiated a similar city-wide review, the Special Initiative for Rebuilding and Resiliency (SIRR), to identify ways New York City can become more resilient in the wake of Hurricane Sandy. The focus of the SIRR team is to develop medium- and long-term plans to address the specific consequences the City experienced following Sandy, and to look ahead to proactively consider and address future potential climate-related events.

NYU is participating in the City’s SIRR effort; we are working with the City to ensure NYU’s plans and response efforts are coordinated with and supported by the City’s agencies. Additionally, as we complete the implementation of the Sandy-specific improvements outlined in this report, like the City, we are broadening our attention to other types of possible emergencies to ensure a high level of preparedness for any event that has the potential to disrupt the University’s academic mission and the lives of our community’s residents.

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Introduction

When Hurricane Sandy hit New York City on Monday, October 29, 2012, a set of unprecedented operational challenges impacted NYU’s Washington Square Campus. The storm affected almost every University building from as far south as our residence hall at 80 Lafayette Street to as far north as the College of Dentistry at 26th Street; this impact lasted one full week from the onset of the storm until normal operations were fully restored and classes resumed on Monday, November 5, 2013.

By contrast, the far more devastating terrorist attacks of September 11, 2001, affected only a few of NYU’s buildings and student residences, and the more widespread regional blackout in 2003 occurred during the summer -- a period of low campus occupancy -- and lasted just two days. Hurricane Sandy hit at a time when the campus was in peak academic activity, and the University’s 2000 apartments and 11,000 student beds were occupied at full capacity.

The storm did not cause direct damage of any significance to NYU’s Washington Square buildings; following Hurricane Irene just one year earlier, repairs that had been necessitated by that storm had been completed, and they stood up well to Sandy’s force. But while the lights never flickered during Hurricane Irene, Hurricane Sandy led to a loss of utility power spanning most of lower Manhattan and lasting five days. This presented an unexpected and unprecedented challenge for NYU’s Washington Square campus and our neighboring community.

Immediately, the loss of utility power caused the cessation of academic activities and other signs of normal campus life. By Tuesday afternoon, upon learning from the local utility that power would not be restored before the weekend, the University announced that classes would be cancelled for the rest of the week. This enabled many members of the community to make alternate plans or head to locations not affected by the storm until power was restored over the weekend.

The University operates its own power generation plant -- known as the “cogeneration plant” for its highly efficient and environmentally-friendly operation -- which supplies electricity to many of our academic and some residential buildings independently of the local utility power grid. The cogeneration plant continued to operate throughout the storm and the ensuing days, enabling certain critical operations to continue -- such as safely housing and feeding residential students who remained on campus, for example -- however, its coverage was insufficient to fully mitigate the loss of utility power. Notably, the power loss acutely affected people’s ability to receive electronic communications, hampering our ability to quickly disseminate information and people’s ability to easily communicate their needs to us in return.

Within 90 minutes of losing utility power, the batteries in emergency lighting fixtures in building corridors and stairways were depleted, and adverse impacts intensified each day as the utility power outage wore on. Students had to be relocated to residence halls or other buildings backed up by the cogeneration plant or their own local generators. Loss of power to building water pumps and loss of city water pressure meant that water, particularly at higher floors, was not available for drinking, bathing, or flushing of toilets. Losing power also meant losing refrigeration, depleting residents’ personal fresh food supplies after the first couple of days.

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An immediate concern was the safety and welfare of students in University residence halls that had lost power, and even seriously disadvantaged faculty in NYU housing recognized the imperative of addressing student needs. Additionally, the extent and duration of the storm’s impact revealed new constituencies that garnered our concern beyond our customary focus of students and faculty. Residents in University housing who could not easily navigate stairs or who did not have any means of receiving electronic communications were of particular concern, requiring us to modify our methods of outreach.

While academic activities were suspended during the emergency, the needs of researchers to ensure their life’s work was protected intensified. Freezers that protect research specimens require power, and many laboratories are dependent on building systems such as HVAC to ensure their environments are properly maintained. While most of these critical facilities are on some form of back-up power – the University’s cogeneration plant or a local generator – this event revealed new equipment or areas that did not have the desired level of power redundancy and were suddenly and unexpectedly at risk.

The emergency response team’s ability to muster full strength to meet all these challenges was impeded by the loss of public transportation (subway and rail service shut down the day before the storm as a pre-emptive measure, and much of it remained out of service throughout the week), and as the days wore on, by gas shortages and vehicle travel restrictions that made it difficult for staff to reach campus. For those that were on campus, round-the-clock efforts were required from the onset of the storm until commercial power was fully restored and all buildings had been cleared for re-entry. NYU declared a return to normal operations fully one week after the storm first hit, on Monday, November 5, 2012.

The magnitude of this event and the personal challenges that responding administrators and staff had to overcome – many of whom suffered devastating losses at their own homes – make all the more remarkable this team’s response during and after the storm. Building on the strong working relationships and sense of community that were already in place, there was extraordinary collaboration from across the spectrum of the University community: administrators and students, management and labor, consultants, contractors, and vendors from all departments, all of whom worked together in an exemplary way to meet the most critical needs of NYU and its neighboring community, rightfully earning acclaim from many quarters.

As solid as our team’s response may have been, it certainly was not perfect, and we recognize the need to learn from this experience and improve for the future. The same team of NYU employees and service providers that showed such remarkable dedication to duty in the aftermath of Hurricane Sandy is now working to implement important improvements that will ensure NYU will be stronger and better prepared than ever before.

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The NYU community is as diverse as New York City; these myriad constituencies increase the complexity of an emergency response as we endeavor to meet the unique needs of each. Our examination of NYU’s state of emergency preparedness and assessment of our response following Hurricane Sandy began with a thorough identification of the many populations that comprise our community. These include the following primary populations along with a description of the many variables that further delineate unique needs within each group:

**Students and their Parents**
We assessed the needs and expectations of undergraduate and graduate students, both residing on campus and those that commute. We also assessed the expectations of their parents and other family members for keeping them informed and ensuring the safety of their children.

**Faculty**
We examined the feedback of faculty from several points of view: those who reside in University housing and those who do not; faculty with special facility requirements to ensure precious research is protected; and faculty with young families.

**Administrators and Staff**
Many administrators and staff were required to report to work before the storm and throughout the duration of the emergency. Many more administrators and staff volunteered to work as the emergency wore on to relieve those that had been working around the clock, and there were administrators and staff who were not required to report to work until the University resumed normal operations.

**Non-affiliates and Neighbors**
We looked at the special needs and expectations of non-affiliates residing in University housing and our neighbors in the community.

**University Leadership Team and Board of Trustees**
We reviewed the needs of the University’s leaders as they endeavored to manage their responsibilities to their respective schools and units.

**Consultants, Contractors, and Vendors**
We are dependent on the products and services of others to meet the daily needs of the University. Maintaining open supply lines with these entities became even more important following Hurricane Sandy as travel restrictions were imposed and gas shortages occurred.

**Campus Visitors**
There are hundreds, if not thousands, of visitors to campus every day for campus tours, academic and cultural events, job interviews, etc. Ensuring that they are informed of University closures and cancellations is an important aspect of our emergency management responsibilities.

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Our Services

Our examination of NYU’s state of emergency preparedness and assessment of our response following Hurricane Sandy included thorough identification of the services our community may need during and following an emergency. The services we examined include:

Communication
Our goal is to provide information proactively in anticipation of questions and concerns, and to respond quickly and accurately when questions arise. Our electronic communications during Hurricane Sandy were effective in reaching a wide segment of the NYU community, and were reassuring to parents in particular. However, expanding ways of communicating in an effort to reach people when they are not able to receive electronic messages is an important area of improvement.

Facilities
Ensuring the safe, reliable operation of our facilities during and after an emergency is essential to meeting our community’s needs for shelter, as well as ensuring critical research and other faculty endeavors are protected. Our improvement initiatives following Hurricane Sandy are initially focused on (but not limited to) the loss of utility power to our residential and critical research buildings.

Food Services
Ensuring uninterrupted food supplies to meet the needs of our student residential community is a critical effort. As the emergency wore on, other residents of University housing depleted their own food supplies and were unable to secure fresh food in the immediate neighborhood, which was also affected by the power outage; meeting this need became an increasing challenge following Hurricane Sandy and is an area of concern for future events.

Health, Welfare and Safety
This category encompasses a wide range of services to ensure the general safety of our community, ranging from maintaining building security, to ensuring access to and continuity of student wellness services, to calling on the elderly or disabled residents in University housing.

Technology
Ensuring that the University’s technology systems are available to the greatest extent possible to ensure the University’s ability to function during and following an emergency is vital. Of particular importance is how to operate when power failures render our technology and communication systems inoperable. Following Sandy, members of the University community and local residents presented another key need: a place to charge mobile phones, laptops, and other electronic devices.

Transportation
The ability of staff to reach campus during the emergency, ensuring timely supplies of food, fuel and other critical products and services, and enabling our residents to replenish their personal supplies were
all challenged by transportation restrictions that started even before the storm hit and for the week thereafter.

Water
Meeting the many different needs for water became an increasing problem as the emergency wore on. Most residential buildings lost water pressure, especially at the higher floors in taller buildings. Water is needed to meet many basic needs: drinking, food preparation and clean-up, bathing and flushing.

Community Services Following Hurricane Sandy
At the peak of our academic year, the NYU community population numbers upwards of 42,000; of these, as many as 16,000 reside in University buildings (faculty apartments and student residence halls). Under normal conditions, providing the full range of University services to this city-sized community is no small feat; our ability to do so vitally depends on the following City and utility services and other important factors:

- **Public transportation**: Many NYU staff and workers of contracted service providers rely on public transportation to get to and from work. When public transportation is not available, as was the case starting the day before Hurricane Sandy hit and following for the balance of the week, our ability to ensure adequate staffing to meet community needs is severely diminished. The challenge posed by lack of public transportation was exacerbated in the days following the storm when personal vehicle travel restrictions into the City were imposed and gas shortages began.

- **Utility power**: NYU owns and operates its own cogeneration plant that supplies electricity to many of its academic buildings, two faculty residential buildings, two student residence halls, and two dining halls around the Washington Square Campus. However, the vast majority of our residential buildings and dining halls receive their electricity from the local power provider; when it lost the ability to generate power, this severely affected the majority of our residents.

- **Food supply**: As the majority of our dining halls and refrigeration equipment lost utility power, we also lost our ability to store the quantities of fresh food that are normally required to feed our residential students. Our ability to replenish fresh food supplies depends on our suppliers’ ability to operate and make daily deliveries. Travel restrictions and gas shortages during Hurricane Sandy presented risks to our ability to maintain daily deliveries.

- **Fuel deliveries**: Similarly, our ability to operate our cogeneration plant and local emergency generators in buildings where they are installed depends on regular fuel deliveries, which may also be put at risk by travel restrictions and gas shortages. We maintain onsite fuel storage that ranges from two to seven days to lessen the need for daily deliveries.

- **Communication**: We normally rely on electronic communications and cell phones to communicate with our employees, both of which are vulnerable in power outages. When staff
are on campus, they have radios that enable team communication, and these continued to work in the wake of Hurricane Sandy.

- **Staffing:** Over a typical 24-hour day at NYU, there are more than 1000 service staff on campus: 250 Public Safety officers, 110 building and 104 technical services staff, 640 custodial staff, 242 food preparers and servers, and countless others on whom we depend to meet the normal daily needs of our community.

It is evident from this list that the scope of services the University is able to provide in an emergency depends on our ability to communicate with and get staff to and from campus (or house and feed them in case they can’t get home), the extent to which we have utility power, and our ability to replenish many different consumable supplies.

*Please note: the extent of services the University is able to provide in an emergency will vary from one emergency situation to another based on the nature of the emergency and its impact on the City, utility and other services we depend on in order to operate.*

It is further important to note that for the purposes of this report we are defining an emergency situation that would trigger the full weight of a University-wide response, such as was required for Hurricane Sandy, as any event that has broad impact across a majority of the University community with the potential to last longer than 24 hours.

While an important purpose of this assessment is to identify these risks and develop and implement appropriate contingency plans, the definition of “emergency” precludes our ability to guarantee specific results; *we encourage everyone in our community to do their own assessment of their personal emergency preparedness and take steps to implement the improvements that may benefit them in future emergencies.*

In situations that diminish our normal service capacity, our first obligation is to ensure the safety and welfare of the undergraduate students whose families have entrusted them to our care. Following Hurricane Sandy, after assuring ourselves that we had met the priority needs of our undergraduate students who reside on campus, we turned our attention to the rest of the NYU community and our neighbors in Greenwich Village who also looked to us for support and assistance.

**Mitigation Efforts During and After the Storm**
The University launched a number of efforts in the days following Hurricane Sandy to mitigate the concerns and discomforts of our residential students and faculty; these are described in detail in the “University Housing” and “Student in Residence Halls” chapters of this report. We made many additional efforts that extended beyond faculty and students on campus to assist the larger NYU community and our neighbors.
The services that we made available to the general public include:

- Bobst Library was open to the public from 9:00 a.m. to 4:00 p.m. daily, beginning Wednesday, October 31. Anyone could enter to recharge their cell phones and other electronic devices, get internet access, refill water containers, use clean restrooms, or just enjoy a warm, lighted place to read or study.

- Daily transportation from Bobst Library to the nearest available City shelter was available for anyone wishing to go.

Members of the broader NYU community, including non-affiliates residing in faculty housing, were able to avail themselves of the services above and also:

- Special bus service was provided beginning Thursday, November 1 for anyone who needed to go to midtown Manhattan to replenish food supplies, refill prescriptions and the like. We contacted stores to ensure they had adequate inventory and provided this information to bus passengers to facilitate their ability to stock up.

- Students in NYU’s College of Nursing partnered with Visiting Nurse Services of New York and began calling on residents in faculty housing to check on those that might need special assistance; they visited our neighbors at 505 LaGuardia as well.

- Starting on Thursday, November 1, student and staff volunteers (organized by NYU’s Offices of Civic Engagement, and Student Activities & Leadership) delivered food, water, flashlights and batteries to tenants who were not able to easily leave their homes.

- Tisch Hall and Hemmerdinger Lounge were opened to residents of faculty housing and their families to provide them with the option of evening locations with lights and wi-fi access.

Efforts in addition to those listed above that were also available to NYU affiliates include:

- The two operating food service locations (Kimmel Center and Weinstein Hall) were open to anyone with an NYU ID card.

- After the University established temporary emergency power in the Coles Athletic Center, Coles was opened to NYU affiliates and their families for hot showers.

Many of these ameliorations came as a result of University reactions to needs as they were identified; going forward, our plans include proactively establishing these services as our resources (as explained earlier in this section) permit; please note that it is not possible to guarantee these services will be available in a future emergency without knowing how our resources will be impacted by its unique circumstances.

There were other services that would have been helpful during the week following Hurricane Sandy that we did not offer, such as providing ice for food storage that will also become part of our standard response protocol going forward.
Representative Feedback on Our Services (submitted via the Hurricane Sandy Feedback Website):

"Thank you for extending your hospitality to your neighbors in and around the campus and Washington Square Park during the week of the hurricane. I am sure that there are many others who share my feelings."

“I was able to come to a heated office with electricity, running water, and internet throughout the storm. The meals provided by NYU Dining Services were unbelievably good and bountiful given the extreme circumstances caused by the storm. I realize that NYU’s community is strongly connected through its incredible support for students and dedicated staff. P.S. I’m sure you already know this, but next time the flags need to be taken down before the storm.”

“It would be great if buildings with power had been open to faculty on Tuesday; why not use them ASAP to provide more facilities to more people?”

“Better prep communications are needed regarding filling bathtubs and have flashlights and batteries. Provide back-up generators for hallways and one elevator, and water. Provide better support for elderly and disabled residents. NYU should have encouraged the faculty at Silver Towers to reach out to their colleagues in Washington Square Village. Provide ice to keep food cold for a few days. Have a robust volunteer program in place. Students could be a large part of that effort.”

“We absolutely should have done more for the community in Washington Square. Letting people charge phones and/or other electronic is not enough in this crisis. Did the elderly in the neighborhood have water? Food? Flashlights? There is so much more we could have done as a university.”

"It certainly was difficult to live without power/water, but it would have been impossible without the NYU Washington Square campus. I was able to shower at Palladium, eat at Weinstein, and study at Bobst. I was deeply grateful for all of these services and all the effort your team brought to the recovery process. So thank you again for everything, and for making me proud.”

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Communication

Communication before, during and after an event is perhaps the single most important service that ensures a high level of community preparedness, swift identification and resolution of emerging needs, and an effective response. Frequent, accurate and timely communication helps to reassure the community and connect them with the team guiding them through the emergency.

The majority of feedback we received regarding our communication efforts was positive and constructive. Parents in particular were reassured by the steady stream of communications.

While emails to NYU community members’ email accounts remains the official way that we communicate about University business, Facebook emerged as a particularly effective way for us to know quickly what types of questions and concerns were developing and for us to quickly post information in response. Twitter is also an effective tool for similar reasons, and both of these social media will factor more heavily into our communication strategy for future events. The proliferation of mobile smart devices also enabled students, faculty, and staff to stay in touch when they otherwise might not have been able to do so; we noted a significant increase in mobile traffic to NYU’s website in the days after the storm.

But because Hurricane Sandy knocked out utility power and also affected some telecommunications service providers’ ability to operate their networks, our dominant reliance on electronic communication proved inadequate to reach every part of our community easily and quickly with important information, even those who lived nearby in Washington Square. As a result, we are expanding our communication strategy to include other ways to be in touch with the community and for them to be in touch with us in future emergency situations.

The full communication strategy outlined below will be maintained on the NYU website for community reference, re-published in advance of foreseeable events such as storms, and will also be communicated at regular intervals throughout the year to ensure broad awareness in case an unforeseeable emergency strikes. The same information will be provided to our community as a hard-copy information card that will be distributed in conjunction with the start of hurricane season each year; it will also be provided to students as they check in to residence halls, and to new faculty and others who move into University housing.

The University will continue to communicate primarily via electronic media, including:

- Direct email
- Facebook postings (please follow us at http://www.facebook.com/103256838688)
- Twitter @nyuinfoalert (http://twitter.com/nyuinfoalert/)
- NYU Info Alerts at www.nyu.edu/info.alert

Text alerts will be used to advise members of the community of time-sensitive information. We encourage our community to register for text alerts by visiting http://www.nyu.edu/life/safety-health-wellness/public-safety/emergency-procedures.html.
In the event of power or network outages during an emergency, the University will augment its electronic communication for people who live on campus and for near-by residents in the following ways:

- We will post hard-copies of electronic announcements in every faculty residential building on every floor near each exit stair; special display frames are being installed along with battery-powered lighting in all faculty residential buildings over this summer.

- Hard-copy announcements will also be posted in the lobbies of faculty residential buildings, and will be provided to building staff and doormen to ensure they are up-to-date on information as well. Public Safety officers posted in other buildings will also receive the same information.

- In the event of an extended emergency (longer than 24 hours), there will be “information centers” for walk-in inquiries established in Bobst Library, the Kimmel Center, Silver Towers, and the Palladium Residence Hall.

- The Student Affairs Resident Assistant team will continue to be the primary source of non-electronic information for students in residence halls.

Additional means of communicating with members of our community beyond our campus in the tri-state area will include informing radio station 1010WINS of University closures; we will remind residents to include a battery-powered or other non-electric radio in their personal emergency supplies.

For people around the country and around the world who may want to know what is happening on our campus, we assume that electronic media will usually meet this need. In case it does not, and for people on our campus for whom it may be difficult to access the information sources listed above, the University’s recorded status message will be available; anyone can call NYU’s emergency hotline, established some years ago, at 212-998-1220 (a land-line number that is less prone to failure) to get recorded University status information. In an extended emergency (longer than 24 hours), this same number will be answered by a live body posted in NYU’s Emergency Operations Center (which is only activated in an emergency situation); when activated, the Emergency Operations Center is staffed 24 hours per day until the emergency is over.

**Representative Feedback on Our Communications (submitted via the Hurricane Sandy Feedback Website):**

“I felt very reassured with the communications NYU provided. I greatly appreciated it.”

“The Information Alert phone number only stated that NYU was closed, and directed callers to their website for more information. Many of us were without internet access and could have used more information from calling the phone number. Users shouldn’t have to depend on more than one technology at a time to get the information they need.”
“The communications were detailed, yet precise, and kept us fully informed.”

“All the communication from NYU was via email and the NYU website, which we did not have access to because we had no power. Text messages or even signs on some of the campus buildings would have been really helpful.”

“NYU did a great job keeping us informed and providing resources to meet our needs in the midst of a trying time.”

“My only request would be increased use of text messages to alert employees/students/staff to closings; or, as an alternative, an emergency phone number that employees can call to hear a message about closing info. I live in New Jersey and had no electricity or internet all week, so getting email and website updates was a real challenge.”

“The numerous update emails throughout the storm and during the aftermath were invaluable.”

“From the point of view of a faculty member living in faculty housing, it seems to me that some alternative should be in place, relatively low tech, just to make sure that those without cell or internet access will have some idea what NYU is doing and what services are available.”

“I am a junior living in student housing and my RA was very good at relaying important information to us by coming to our doors or leaving notice slips on our doors. It was very helpful to receive email updates several times throughout each day informing us about Sandy’s impacts on our academics, the power, and other services.”

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Decision to Close the University

As a world-class research university with one of the largest student bodies of any private university, NYU does not contemplate closing and interrupting its academic programs lightly. Out of concern for the safety of our community in light of the predictions of Hurricane Sandy’s ferocity, NYU announced on Sunday, October 28, 2012, that it would be closed the next day in preparation for the storm’s onset. By afternoon that Monday, as the strength of the anticipated storm became more evident and concerns for its adverse impact intensified, NYU announced it would be closed again on Tuesday. After utility power was lost Monday night and we learned on Tuesday that power would not be restored before the weekend, NYU announced that it would be closed through the rest of the week, effectively putting the vast majority of academic pursuits on hold, and most academic buildings were closed as a result.

It is interesting to note that NYU’s buildings held up very well through the storm itself. The building problems experienced during Hurricane Irene just a year before had been corrected, and Hurricane Sandy did not inflict any substantial leaks or flooding; only a few broken windows (and no injuries) from the strength of the winds served as evidence that a storm had even occurred. It was the loss of utility power that impaired normal campus life, forcing the University’s extended closure and creating an emergency situation.

Impact on University Life

Many of the academic and other buildings around Washington Square are powered by the University’s cogeneration plant, which continued to operate without interruption throughout the storm and its aftermath, thanks in large part to the dedicated, expert team of plant operators and maintenance mechanics who are on-site 24 hours a day, seven days a week year-round. Additional buildings have local emergency generators to meet code-mandated life safety and other critical needs. Many of these buildings, most notably Bobst Library, the Kimmel Center and the Palladium Residence Hall, were immediately pressed into emergency service, and they were thus not available to support academic continuity even though their operations were not impacted by the loss of utility power. Other buildings, such as Tisch Hall and Coles Sports Center, were also incorporated into the emergency response as new needs emerged and back-up power (in the case of Coles) could be established.

Bobst Library housed the Emergency Operations team that was directing the University’s response. It also became a haven during the day for the NYU and larger Greenwich Village community seeking to power their cell phones; at night, students sought the Library’s lights to continue their studies. The Kimmel Center housed students who were displaced from the residence halls that were without utility power. The athletic center in the Palladium Residence Hall housed many of the NYU staff and contract workers who were unable to go home during the emergency.

Impact on Dental & Research Facilities

The College of Dentistry normally has more than 1000 patient visits each day. The College’s 500 dental and operatory chairs are critically dependent on utility power for safe patient care; in light of the forecasted impact of the storm, the College of Dentistry closed along with the rest of the University as a
pre-emptive measure, and was forced to remain closed the rest of the week along with the rest of the University; it re-opened following full restoration of utility power.

The College of Dentistry and the Faculty of Arts & Science both have research labs and equipment that are also sensitive to loss of utility power. The need to protect research specimens stored in these areas emerged as an important priority once power was lost. Of particular concern was the research support equipment – freezers – that were installed in some areas without a back-up power source. NYU electricians were in high demand in the immediate aftermath of losing power to rig up emergency circuits from local generators or to tap into circuits powered by the cogeneration plant to power critical freezers. Researchers worked to consolidate specimens into other freezers that were or could be connected to back-up power. It was also necessary to secure adequate supplies of dry ice to ensure temperatures were maintained in equipment for which back-up power could not be established.

**Recommendations**

We are currently working with representatives of the College of Dentistry and the Faculty of Arts and Science to identify their most critical facility needs and ensure that we have adequate protections and strategies in place to protect their research from the risks of future events of all types. The most immediate step in this effort is to ensure we have a full inventory of these spaces and equipment so that we can ensure adequate back-up power sources and/or other response strategies for each. This detailed information is not included in this report for reasons of facility and research security.

**Representative Feedback on Academic & Research Impact (submitted via the Hurricane Sandy Feedback Website):**

“I am working in the Meyer building where half of the building was on backup power but my lab wasn’t; I lost important chemical and precious experiments because the fridges and incubator were not working anymore. So, thank you again for your involvement; I just wanted to point out some discrepancies that seem quite unfair; I had the feeling that everyone wasn’t treated equally.”

“I thought the message on Wednesday about the University closure was confusing. It stated that classes and activities were cancelled but the dental school was open because of its client services. This gave me the impression that it was a school-based decision to open the remainder of the week. The schools didn’t have effective communication except from ITS about various administrative closures and expectations of staff to report to work. Most of the messaging was faculty and student centric. That created a great deal of confusion for administrative employees of schools, especially since our dean and top leaders were without power for most of the week.”

“A big, big thank you to administrators and staff who were there during the first tough days and tried their best to help while we were rescuing our things. In particular: security officers, cleaning staff, facilities management and the electricians who hooked up our freezers to the emergency lines when everything else broke down. In brief, NYU’s response was fantastic, I felt the University took care of its students and faculty.”

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July 1, 2013
NYU’s residential environment is complex – buildings that are referred to as “faculty housing” are residences for staff, administrators, graduate students, post-docs, retirees, non-affiliates and visiting faculty in addition to permanent, full-time NYU faculty. Additionally, buildings that are considered to be student residence halls also include residences for faculty, graduate students and administrators among their residents.

During and after Hurricane Sandy, this complexity hampered communication as we attempted to provide targeted solutions intended to assist our faculty and meet the specific needs of others in University housing.

This section focuses on the common needs of all residents residing in University housing (more commonly referred to as “faculty housing”; the buildings that are included in this category are identified below), regardless of the resident’s affiliation; needs that may be unique to specific constituencies are addressed in additional sections of this report.

Buildings Comprising University Housing
The University owns and operates multiple dwelling housing facilities at the following addresses:

- 1, 2, 3, 4 Washington Square Village
- 100 and 110 Bleecker Street (“Silver Towers”)
- 14 and 15 Washington Place
- 29 and 37 Washington Square West
- 7 – 13 and 21 Washington Square North
- 6-8 and 12–26 East 8th Street
- 120 West 15th Street (“Armory”)

These buildings have been physically inventoried for the elements that affect residents’ experience in any kind of emergency, and this data has been established in a secure database for the University’s response team; ready access to this data will enable the response team to easily identify the specific potential impacts of various types of emergencies, and establish response priorities more quickly.

Residents’ Experience During Hurricane Sandy
Most University residential buildings are connected to and receive their electricity from the local utility; the only exceptions to this rule within the University housing portfolio are the two Silver Towers buildings, which are connected to and receive their electricity from the University’s cogeneration plant.¹

¹ People have asked why Silver Towers is connected to the cogeneration plant and Washington Square Village (WSV) is not. The Silver Towers buildings are “master metered”, meaning that the full electrical load of those buildings (both the building or “house” loads and individual apartment loads) could be readily and easily connected to the new plant. In contrast, the individual apartments in WSV are and have historically been individually metered by the local utility. Because there is a preference at the Public Service Commission (PSC) for apartment buildings to be individually metered, gaining approval from the utility to replace WSV’s individual
The local utility lost its ability to produce and distribute electricity in the late evening hours of Monday, October 29, 2012, affecting every building in the University housing portfolio except for the two Silver Towers buildings, which were completely unaffected throughout the storm and its aftermath.

In the buildings which lost power, the batteries that power the emergency lighting in corridors and stairwells were depleted within 90 minutes – the standard battery capacity required by code -- of losing utility power. Building elevators and pumps that supply water to the buildings’ upper floors ceased to operate; lower apartments that could get water could only get cold water. Buildings that require electricity to operate all or parts of their heating equipment began to lose heat. Refrigerators, freezers and other electric appliances stopped operating.

Residents were almost immediately unable to receive electronic communication due to a combination of loss of technology components in their apartments (desktop PCs, wireless routers, etc.), loss of network connectivity through their service provider, and as their mobile devices lost their charge. Televisions and electric radios went silent.

Residents experienced immediate inconvenience and discomfort following the loss of power, and these hardships increased as the power outage wore on: they had to travel through pitch-dark corridors and stairwells (only a few buildings have windows in corridors and stairwells to relieve the darkness) to make contact with the rest of the community and obtain basic information; getting water to their apartments to meet basic needs required carrying water up as many as 18 stories in the dark; and pet owners found it difficult and scary to safely navigate their pets in and out of their buildings to tend to their pets’ needs.

As the power outage continued, residents’ personal supplies of perishable food went bad, and non-perishable food supplies were depleted; without grocery stores or eateries operating in the area, the ability to replenish these supplies did not exist. We became aware that not all residents had their own flashlights or other portable means of lighting. Elderly and disabled residents found the conditions particularly isolating and alarming.

These conditions persisted over the course of five days. Utility power began to be restored to University housing on Friday, November 2, 2012; power was fully restored to all buildings by the next day.

**Mitigation Efforts During and After the Storm**

Building staff employed by NYU’s property management partners, Cushman & Wakefield and Collins Building Services (CBS), remained on site throughout the storm and its aftermath, and have been praised by many residents for their individual efforts to ease residents’ discomforts. CBS took steps in preparation for the storm to stock up on glow sticks and flashlights, and they helped to compensate for loss of emergency lighting by installing the glow sticks in stairwells and distributing them to residents.

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A study is now underway to assess the feasibility of connecting WSV to the cogeneration plant; the results of this study will be communicated to the WSV community in the fall of 2013.

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July 1, 2013
until all supplies were depleted. Additionally, they set up water stations at several ground floor locations for residents.

By Wednesday, October 31, 2012, the University augmented its communication strategy to reach residents by providing paper postings of information at each building, and in some cases, by personally delivering paper communications to each resident’s apartment. These postings communicated locations where residents could find light, heat, water and functioning electrical outlets to charge mobile devices.

By Thursday, November 1, 2012, NYU’s College of Nursing in collaboration with the Visiting Nurse Services of New York began door-to-door visits to check on elderly, disabled and other potentially vulnerable residents to ensure they had adequate water, food and access to their medical prescriptions. Student and staff volunteers conducted building runs to provide food, blankets, water and batteries through the remainder of the week. Also on Thursday, the University started running special bus service to midtown Manhattan to enable residents to replenish food supplies, refill prescriptions, etc., and temporary power was established at the Coles Sports Center to enable residents to get a hot shower.

NYU faculty in affected buildings were offered the opportunity to have hotel expenses defrayed if they chose to relocate during the power outage. Additionally, all affected residents received a rent rebate for the five days that they were without power.

Preparedness and Response Improvements
Reflecting on the feedback we received from residents, further informed by our interviews with faculty and the Public Affairs Committee of the University Senate, we developed the following list of action items to help better prepare residents for future events and to ensure more timely University response in case an emergency situation develops:

General Preparedness: Actions in progress for completion in June 2013:

- Implement the expanded communication protocol described in the “Communication” section of this report; install battery-lighted display frames for emergency communications on every floor near exit stairwells (please note that these will only be used in the event of a power/network failure that prevents electronic communication)
- Distribute “preparedness accessories convenience kits” to all residents to ensure they have basic supplies such as a flashlight and a copy of the emergency communication protocol
- Establish accurate email addresses for all residents by building and affiliation to facilitate focused electronic communication
- Provide means by which residents can confidentially request special assistance in the event of an emergency situation, either by contacting the Office of Faculty Housing in advance or by displaying a special doorknob hanger that will be included in the “personal preparedness starter kits”
University (Faculty) Housing

- Complete feasibility studies and subsequent planning for the installation of portable generators that will, at minimum, provide power to emergency lighting, one elevator per building, common area lighting and power outlets at ground floor, and building water pumps
  - Connections for portable emergency generators for Washington Square Village buildings will be tested in July 2013; all other buildings to be completed as soon thereafter as practical and necessary to support safe building occupancy in an emergency condition
- Install emergency lighting with sufficient battery back-up capacity to enable connection of portable generators or installation of additional means of lighting in egress paths
- Assess feasibility, and implement as practical, installation of wi-fi capability in building ground floor lobbies
- Assess feasibility of installing flat screen monitors in building lobbies with central control for posting communication updates; these monitors, where installed, will be on emergency power circuits to ensure operability during a power outage
- Conduct regularly scheduled information sessions and/or training drills for residents and staff to ensure awareness of emergency procedures

In the event of a specific, forecasted event with the potential to disrupt normal University life, or immediately upon the onset of an unexpected event, we will:

- Activate the NYU Emergency Operations Center (for details, please see the section on “Responders”)
- Redistribute communication that outlines:
  - Steps to take to prepare for the event and a possible power outage;
  - The means by which the University will communicate with residents in the event of a power outage and/or loss of technology in accordance with the communication strategy outlined in the “Communication” section of this report
- Assign a team with a leader within the University’s Emergency Operations Center with responsibility for monitoring conditions in University housing and directing/coordinating appropriate response activities

In the event of an actual emergency that is anticipated to exceed 24 hours, we will:

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2 We have received requests to connect the Washington Square Village buildings to the University’s cogeneration plant. Making these connections will require us to secure changes to existing utility tariffs, conduct engineering studies, modify plant equipment and perform extensive construction. To ensure that we meet the most critical emergency power needs in time for this year’s hurricane season, we are starting with steps to enable the connection of portable generators in the event of another extended power outage (greater than 24 hours) while we undertake the studies that a larger project will require.
University (Faculty) Housing

- Staff NYU’s Emergency Operations Center 24 hours per day until the emergency situation is resolved and normal operations have resumed. The communication protocols and service response will follow those outlined in the “Communication” and “Our Services” sections of this report, respectively.
- Set up a satellite University housing command center at Silver Towers to facilitate operations focused on University residents.
- Ensure building staff are provided accurate and timely information as decisions are made to facilitate staff’s ability to be a resource for residents.
- Conditions will be closely monitored to ensure timely and proactive services and direction to residents that are specific to the emergency needs that develop.

Representative Feedback from Residents in University Housing (submitted via the Hurricane Sandy Feedback Website):

It is fair to say that the vast majority of comments we received came from residents in University housing, and many of the comments reflected the deep level of concern or anger that some residents felt about their experience. Others had favorable comments and specific recommendations. Following is a representative sampling of the constructive feedback we received:

“I live in Washington Square Village and think it is important to devise some system to have lighting in the halls and stairwells. This week was extremely difficult. It might be a good idea also to have sheets automatically put up in the lobbies for volunteers to sign up to help neighbors in the same building. I would like to take this occasion to commend the doormen, maintenance men and NYU administrators who did double duty working on behalf of the NYU community.”

“I am a faculty living in Washington Square Village. I think NYU could do much better with the management of storm-related issues. Here are some recommendations: 1) better communications with residents before and after the storm. Before the storm, put up fliers asking people to fill up their bathtubs and prepare flashlights. After the storm, put up fliers summarizing what is going on in the apartments; 2) provide light for dark stairs and hallways; 3) better support for elderly and disabled; 4) NYU communication with faculty – there should have been 1-2 emails directed for faculty housing; 5) provide ice – we could keep food cold for a few days if we had ice; 6) encourage and organize volunteers.”

“The University’s response overall was terrific. Many thanks! I have a small, friendly suggestion for the future. In the residence halls, there’s an RA for each floor. That person helps coordinate communication and critical services for everyone on the floor. I propose we adopt something similar in faculty housing. Some people in my building were unaware of the many good things you were doing to help us after the storm. If you adopt this suggestion, I would gladly volunteer to be the point person for my floor.”
“I am a professor at NYU who lives in Washington Square Village and stayed for the duration of the power failure. You mention that there were problems at WSV, but I would like to impress upon you that the problems were far worse than your letter indicates: 1) the emergency lights died within hours of the power failure; by morning, we were in total blackness; 2) there was no communication with the University; the NYU community did not find out about meals at Kimmel and Weinstein except by the grapevine; 3) it took three days for the volunteers to make an appearance; some wonderful law students came because I begged them to help by carrying water up the stairs; 4) there was not food for non-NYU residents until near the end of the ordeal. To sum up, your response was much too slow, unforgivably so. I feel strongly that WSV was simply neglected or forgotten.”

“Hey! Why wasn’t WSV hooked up to the co-gen plant and Silver Towers was? It would be nice to get an explanation. Porta-sans would be nice – after the power goes out and the water stops, you only get one free flush. Overall, I think the staff and the University did a great job. Thanks for asking.”

“I live in 14 Washington Place. For future blackouts, there could be a supply of batteries available (the super did put some out and people who didn’t plan could have used them). Flashlights could also be stockpiled. Most importantly, water could and should be made available given that we all lost water within a few hours.”

“Every dark night looking outside of our apartment window, there were these two shining towers, Silver Towers to be exact, shining through the dark lower Manhattan, a very sore sight I have to say. Please explain what are the reasons that WSV with thousands of NYU faculty being the residents was not considered to be part of the NYU community?”

“We must invest in upgrading our infrastructure, and have regularly quarterly tests for back-up generators, venting systems, etc. NYU needs to dedicate serious resources to major infrastructure overhaul and replacement of buildings and other infrastructure that is so decrepit. This is extremely expensive, but needs to be on the University’s strategic roadmap.”

“I am so proud of NYU’s response to Hurricane Sandy and the steps that it took to care for its residents in faculty housing. Having immediate access to computers to access email, restrooms, heat and food was a godsend. Thank you so much. The only suggestion that I might make is in regard to how the availability of these services was communicated. I don’t believe this information was ever gathered and posted in the lobbies of the various housing units. I found that some of the retired residents, most of whom don’t have access to email, were completely unaware that these services were available to them. Thanks again, I feel so lucky to work for NYU.”

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NYU owns and leases residence halls to house approximately 11,000 students. Just as NYU’s University housing occupancy is complex, so, too is its student housing – buildings that are referred to as “student housing” also include faculty, administrators, and graduate students in addition to undergraduate students. During and after Hurricane Sandy, all residents within the student residential buildings were treated as if they were undergraduate students, which afforded services to non-student residents of those buildings that were not widely available to the rest of the community by virtue of response efforts being initially focused on the undergraduate population.

This section focuses on the common needs of all residents residing in student housing (the buildings that are included in this category are identified below), regardless of the resident’s affiliation; needs that may be unique to specific constituencies will be addressed in other sections of this report.

**Buildings Comprising NYU Student Housing**

The University houses students in the following owned and leased buildings:

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<th>Building</th>
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<tr>
<td>Stuyvesant Town</td>
<td>Gramercy Green</td>
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<td>Greenwich Hotel</td>
<td>Palladium Hall</td>
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<tr>
<td>Second Street</td>
<td>Brittany Hall</td>
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<tr>
<td>80 Lafayette</td>
<td>University Hall</td>
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<tr>
<td>Broome Street</td>
<td>Founders Hall</td>
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<td>Goddard Hall</td>
<td>Hayden Hall</td>
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<td>Carlyle Hall</td>
<td>Rubin Hall</td>
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<tr>
<td>13th Street</td>
<td>Third North</td>
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<tr>
<td>Alumni Hall</td>
<td>Weinstein Hall</td>
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These buildings have been physically inventoried for the elements (such as backup power, food service capacity, etc.) that affect residents’ experience in any kind of emergency, and this data has been established in a secure database for the University’s response team; ready access to this data will enable the response team to easily identify the specific potential impacts of various types of emergencies, and establish response priorities more quickly.

**Students’ Experience During Hurricane Sandy**

Most NYU student residential buildings are connected to and receive their electricity from the local utility; the only exceptions to this rule within the student housing portfolio are Weinstein Hall and Goddard Hall, which are connected to and receive their electricity from the University’s cogeneration plant. When the local utility lost its ability to produce and distribute electricity in the late evening hours of Monday, October 29, 2012, every residence hall was affected except for Weinstein and Goddard Halls, which were completely unaffected throughout the storm and its aftermath.
Of the other student housing buildings, only five – Palladium Hall, University Hall, Founders Hall, Third North, and Gramercy Green – currently have local, “house,” emergency generators. These generators enabled fire life safety systems, emergency lighting, limited elevator service, and in some cases, house pumps (for pumping domestic water to upper floors and rooftop water tanks) to continue to operate after utility power was lost. Note that emergency lighting was limited to hallways and some staircases; individual residents’ suites/rooms were without power, except at Weinstein and Goddard Halls.

In the affected buildings, the batteries that power the emergency lighting and fire alarm systems were depleted within eight to eighteen hours of losing utility power, and some lost their fire sprinkler protection. Building elevators and pumps that supply water to the buildings’ upper floors ceased to operate; there was only cold water on limited numbers of lower floors in some buildings. Buildings that require electricity to operate all or parts of their heating equipment lost heat. Refrigerators, freezers and other electric appliances stopped operating.

Residents were severely limited in their ability to receive electronic communications due to a combination of loss of their personal technology components in their rooms (computers, for example), loss of network connectivity through their service provider, or as their mobile devices lost their charge. Televisions and electric radios went silent.

Some students became concerned immediately following the loss of power, and the Resident Assistant (RA) staff worked quickly to assuage these concerns. A robust communications strategy led by Student Affairs and the RA team provided swift reassurance.

Through the combined efforts of NYU’s Information Technology Services, Residence Life, and the Office of Public Safety, NYU provided free telephone services to the majority of residence halls before, during and after the storm. Students were encouraged to use this service through the middle of November, 2012, to be in touch with their families.

Students were not immediately displaced from buildings that lost power. Once emergency lighting and fire alarm systems ceased to operate as their batteries were depleted, fire watches were implemented and staffed by NYU’s Residential Life and Housing Services staff and Public Safety Officers. Upon determination that buildings could no longer be occupied due to strained staffing and the further deterioration of conditions due to the lack of water and heat, students in the affected halls were notified on Tuesday, October 30 that they could begin to voluntarily relocate to other halls that were designated safe for occupancy.

By Wednesday, October 31, relocation from affected halls by 3:00 p.m. was made mandatory. Students were directed to relocate to either a pre-determined “partnered” hall (i.e. Coral residents were directed to Palladium) and to the Kimmel Center, which was also operating normally by virtue of its connection to the University’s cogeneration plant. In order to limit the inconvenience, students were given the ability to re-access their vacated residence hall each day on a sign-in/sign-out during restricted daylight
hours basis to retrieve personal items. Students who had the option and ability to go home or stay with a friend were encouraged to do so. A large number of students sought their own accommodations.

Approximately 6000 students were displaced from their normal residence halls. While the overwhelming majority chose to stay with students in non-vacated buildings or off campus with friends and family, roughly 600 stayed at the Kimmel Center and approximately 200 stayed in the Palladium Athletic Center; all were provided cots for sleeping and were admitted to the two operating dining halls for meals. The Kimmel Center and the Palladium Athletic Center were staffed by Resident Assistants and professional Student Affairs staff members around the clock for the duration of the emergency response.

As utility power was restored to the University’s affected buildings, each was inspected to verify proper and safe operation of its fire alarm systems and elevators before the students were allowed to return. All displaced students returned to their assigned residence halls by Sunday, November 4.

Throughout the week, parents were eager to know about the conditions on campus. NYU’s Facebook page was a particularly effective way for parents to stay informed, to be reassured of their children’s safety, and to convey their questions and concerns.

Mitigation Efforts During and After the Storm
The full complement of the NYU Office of Student Affairs, from its vice president through its residence hall directors, residence hall resource managers, and resident assistants (RA), along with building staff employed by NYU’s building maintenance partners, Collins Building Services (CBS), remained on site throughout the storm and its aftermath; they have been praised by many students and their parents for their individual and collective efforts to ease students’ concerns and discomforts. The Building Leadership Teams (BLT) and RAs were particularly important for their role in rapid communication of accurate information throughout the student population.

Students experienced an obvious disruption to their regular class and activity schedules, and students who were displaced from their residence halls due to the extended power outage experienced a further upset from their normal routines. While there were disruptions to normal dining services, meals were served on or close to the normal schedule in the Kimmel and Weinstein dining facilities. Food was provided free of charge to all students, although menu choices began to dwindle as the week wore on.

In addition to maintaining dining service, the University provided access to free domestic and international long distance calling from all University phones in the days prior to, during and after the power outage. A calling center was established at the Kimmel Center; cell phone charging stations were available at Bobst Library and the Kimmel Center as well.

Other positive student experiences during the outage included the opportunity to meet Alec Baldwin (a neighborhood resident and friend of NYU, he made a special visit to check on our students), plan and attend the “Sandy Soiree” (a highly attended social event at Bobst Library), and enjoy a diverting
comedy performance at the Skirball Auditorium. RA’s led a number of social programs in their respective communities throughout this period to further alleviate concerns and provide a sense of normalcy.

The Student Health Center continued to provide essential services to students in need and established means of refilling prescriptions and met other urgent needs through the Student Resource Center.

Preparedness and Response Improvements
Reflecting on the feedback we received from students, we developed the following list of action items to help better prepare them for future events and to ensure more timely University response in case a new emergency situation develops:

Actions in progress for completion by Fall Check-in, August 2013:
- Implement expanded communication protocol described in the “Communication” section of this report
- Provide means by which students can self-identify any special needs in the event of an emergency situation for more rapid, specialized assistance
- Enhance emergency response training sessions for student and professional staff
- Install emergency lighting with sufficient battery back-up capacity to enable connection of portable generators or installation of additional means of lighting in egress paths
- Expand the emergency generator distribution at Palladium Residence Hall to include the food preparation and dining facilities to augment food storage and serving capacity in an extended power outage
- Complete installation of local emergency generator at Brittany Hall as part of that building’s renovation project currently in progress
- Complete the installation of a portable generator connection for the residence hall at 80 Lafayette Street
- Remind parents to sign up for direct information alerts
- Establish an inventory protocol that ensures the building and central office supplies are at appropriate levels
- To enable emergency communications when cellular service is degraded or unavailable, students checking into NYU residence halls are encouraged to bring a traditional “plug-in” analog phone set to plug into the phone jack in their room.
Additional measures that will be completed as soon as possible:

- Expand the emergency generator distribution at Gramercy Green to include water and sewage pumps to enable healthful occupancy on upper floors in an extended power outage

In the event of a forecasted event with the potential to disrupt normal University life, or immediately upon the onset of an unexpected event, we will:

- Redistribute communication that outlines:
  - Steps to take to prepare for the event and the potential for a power outage
  - The means by which the University will communicate with students in the event of a power outage and/or loss of technology per the protocol outlined in the Communications section of this report
  - Ways to remind parents to sign up for direct information alerts

- Assign a team with a leader within the University’s Emergency Operations Center with responsibility for monitoring conditions in student housing and directing/coordinating appropriate response activities;

- Ensure Building Leadership Teams and RAs are provided accurate and timely information as decisions are made to facilitate their ability to be a resource for students.

Ongoing actions to be taken:

- The Office of Residential Life and Housing Services (ORLHS) will develop an action plan that seeks to address the needs of ORLHS professional staff, including Faculty Fellows in Residence, relating to services for families and pets in an emergency

- Conduct semi-annual review of emergency response protocols and training to ensure all staff are informed and prepared to respond

- Conduct semi-annual audit of emergency supplies, kits and materials

Once an emergency situation develops:

- NYU’s Emergency Operations Center will be staffed 24 hours per day until the emergency situation is resolved and normal operations have resumed. The communication protocols and service response will follow those outlined in the “Communication” and “Our Services” sections of this report, respectively

- Conditions will be closely monitored to ensure timely and proactive services and direction to students that are specific to the emergency needs that develop
Representative Feedback from Our Students and their Parents (submitted via the Hurricane Sandy Feedback Website):

The majority of feedback we received from students was positive and constructive; following is a representative sampling of the feedback we received:

“First, I would like to say that I was very impressed overall with how NYU handled the storm and the week of Kimmel craziness. With that being said, I think that the University should invest in longer lasting emergency lighting in the stairwells and hallways of their residential dorms.”

“Being new to the City and to the NYU community, I was perhaps more apprehensive than the average student in the days following the storm. The constant and varied communication from the University helped me plan how to best react to the storm. Knowing that NYU had facilities where I could go when the power and water was cut from my building brought me much solace. I was so relieved to be back in class today! The caring words and concerns expressed by everyone in our community from the shuttle driver to the director of my program to my classmates were truly moving.”

“Although I have heard many students complaining about the conditions of their temporary housing and the lack of something/anything, I think the University was pretty well prepared and cannot deny that everyone did the best to prepare and recover from Sandy. Thank you to everyone who made this week pass as smoothly as possible.”

And from some parents:

“Thank you so much for keeping parents updated via the information alerts and emails. When the power was out, it was quite a challenge connecting with my freshman daughter, and your communications answered a lot of my questions and gave me a sense of what was going on. I appreciated that you detailed the status of each residence, and my daughter was confident that if there was something she needed to know, it would get communicated to her. I can only imagine the amount of work that went into getting the school up and running again. Congratulations on a job well done!”

“As the parents of an NYU undergraduate student, we are immensely grateful for your excellent handling of a very challenging event. Congratulations to the NYU team and thank you for all your hard work. The communications were detailed, yet precise, and kept us fully informed. We gained great comfort from the fact that everyone at NYU was on top of this situation. Thank you.”

“As a parent of a Hayden freshman, I was concerned for the safety of my son. I knew Hayden had been evacuated, and I was unable to reach him. The Student Affairs staff took the time to not only respond to my questions and concerns with the most helpful responses possible, they even sent a member of their team to find my son at Kimmel and to unobtrusively encourage him to contact me. Thank you, NYU! You have my respect, my gratitude and my loyalty – I cannot be happier with the NYU community!”

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The “commuter” label is one that applies to a particularly diverse and large population. The majority of those who commute to campus from across the City -- and from neighboring states -- are primarily administrators and staff, and also include faculty, graduate and undergraduate students.

As diverse as this group is, they have a few things in common: they are not able to easily access University services in an emergency -- if at all; and we are not able to easily communicate with them in the absence of electronic communications or access to social media.

The feedback we received from people who identified themselves as commuters came primarily from students and fell largely into two categories of concern: communications and accommodations, particularly the need for transportation services and/or on-campus residential accommodations.

Our first priority for better serving all commuters is to improve communication with them, particularly with respect to our ability to reach them and for them to reach us during a network or power outage that prevents electronic communication. As described in the “Communication” section, we will achieve this in a couple of ways:

- We will transmit, as we usually do, announcements regarding University operating status to local broadcast media
- We will enhance our utilization of the long-established information hotline (212-998-1220, a land-line phone line that is less vulnerable to power outages) to provide recorded announcements of University closure; this line will be answered by a live body in the University’s Emergency Operations Center an extended emergency (longer than 24 hours)

We have also developed plans for a dedicated space to meet the unique needs of commuter students; this space will be available to support commuter students under normal operating conditions as well as during emergency conditions. The timing of the availability of this space is still to be determined based on its renovation schedule.

Additionally, as outlined in the “Responders” section, we will establish a role in the Emergency Operations Center to focus on the unique needs of commuter students in an effort to more proactively assist their efforts to maintain academic continuity.

Representative Feedback from Commuters (submitted via the Hurricane Sandy Feedback Website):

We received a large volume of comments from commuters -- primarily from commuting students. Following is a representative sampling of the feedback we received:

“I live off campus, but was comforted knowing that I could find shelter on campus if needed, and it was nice to be informed of everything going on with residence halls and academic buildings. A sincere thank you to all involved.”

“I realize that NYU is extremely committed to students in every way and tried to assist people who commute. I am a commuting graduate student who has children and a husband who works. I didn’t
have any options for attending classes. I am still without electricity. It is very difficult to get to class when my community is still without electricity. In the future, it would help to address commuting students with children. Hopefully, it is not a problem and I do appreciate always being informed by NYU and for my understanding professors. I will still miss a valuable class, though.”

“I have been realizing over the past several months at NYU that this is not a commuter-friendly school, at least not for students who live outside Manhattan. The University offered bus service to faculty members and their families to get groceries, but they can’t offer a bus for commuters to be picked up at ferry terminals or Penn Station now that services like the subway and the Path are experiencing technical difficulties. Understand that many of us are still without power, although people in Manhattan, for the most part, have their power restored. So going on a Facebook page, to set up carpooling – especially when gas is a rare item right now – seems, honestly, like you were just offering the suggestion to be sure you acknowledge commuters and not for actually providing help. For your faculty and on-campus residents you did a great job, but for your out-of-Manhattan residents or out-of-state students, we were given lackluster effort.”

“I am an off-campus student and NYU completely overlooked us off-campus students and made us fend for ourselves. Only action for on-campus residents was taken, and when I tried to seek refuge in a residence hall with my NYU ID, I was not welcomed. There needed to be a place and communication set up specifically for helping those of us off campus.”

“I would like to express my appreciation for how well NYU handled this whole situation. Although I live in an apartment and was not required to evacuate my housing, I am so grateful for how well NYU helped all of their students. From the free meals to the brand new cots being provided, I believe NYU did a superb job and I couldn’t have asked for anything more. There is no way I think NYU could have handled this any better. I am so thankful for all that was done to support all of the students.”

“Accommodate commuters and off-campus students. It is a hassle for some to get to campus, so why continue with classes while many of them cannot make it? They account for a sufficient part of the University community, and as such, should be taken into consideration on whether or not University activities are open. Restarting classes even though so many commuters and off-campus students are incapable of making it to campus is a slap in the face to those students because it shows that they are not important enough for NYU to affect NYU’s decision.”

“I live a 5-10 minute walk from campus and felt very unsafe walking home from Kimmel in the dark. With no power or heat to return home to, simply leaving Kimmel before it got dark was a depressing option. I live alone, and with no street lights or people on the street, and no reception anywhere in the area, my nightly trip home made me feel extremely vulnerable. Having a public safety officer escort me to my apartment would have given me immense peace of mind. Thank you so much for requesting feedback and for all the amazing services you provided at the Kimmel center!”

***

July 1, 2013
NYU Campus Services normally operates fourteen dining halls and food vending facilities across the Washington Square Campus. We serve more than 10,000 meals on a normal day, and we supply food products (i.e. coffee, sodas, snacks, etc.) in another 3500 retail transactions daily. The three professional schools (College of Dentistry, School of Law and Stern School of Business) also independently operate their own food programs in their facilities. Under normal circumstances, all of NYU’s food services facilities are surrounded by countless other eateries and grocery stores in the neighborhood that are available to our entire community.

Campus Services typically maintains a one-week inventory of food supplies with fresh food inventory being replenished almost daily. Maintaining the schedule of food supply deliveries and ensuring the freshness and safety of food products are critically important to our ability to provide meals.

When we lost utility power on the Washington Square Campus, all but two of the Campus Services dining halls were put out of service; only Weinstein Hall and the Kimmel Center, which are both connected to NYU’s cogeneration plant, remained in operation. As a result, the volume that we would normally handle across fourteen sites was suddenly concentrated to just these two.

Our ability to serve our customary student population in just these two dining facilities was further challenged by other factors:

- We needed to feed responding staff; there were as many as 1000 NYU staff and contract workers on campus through the emergency for whom meals were an essential service especially as they worked around the clock;
- Additionally, we served students beyond those with meal plans, as well as NYU affiliates that presented an NYU ID; meals were free of charge or were not deducted from meal plan allowances during that week;
- Neighboring grocery stores and eateries were also out of business due to the loss of electricity, eliminating other options for supplementing our own meal capacity.

In the week following Hurricane Sandy, we served almost 65,000 meals in just two facilities, compared to a normal week of 70,000 in fourteen. These demands on the food preparers and servers were further exacerbated by needs to deliver meals to the Emergency Operations Center (EOC) and other hub worksites around campus. Their efforts and good humor throughout this long week were remarkable and worthy of commendation again here.

As the week wore on, many of our neighbors began to seek meals at NYU. Being limited by the physical capacity of our two dining facilities and dwindling food supplies, as well as being mindful of our first responsibilities to our undergraduate students, we were not able to extend dining invitations to the neighborhood at large.
Preparedness and Response Efforts
There are two relatively simple improvements that will expand our meal capacity at Washington Square in future events:

- The School of Law’s food service facilities are connected to NYU’s cogeneration plant and could have remained in service throughout this emergency; we are working with the School of Law and their food service provider to develop an emergency preparedness plan that will enable them to remain open in future emergencies.

- The Palladium Residence Hall has its own emergency generator, but the food storage equipment is not connected to it; we are modifying the distribution system from the emergency generator to include this equipment so that this dining hall can also remain in service during an emergency.

These two improvements will increase serving capacity by almost 100% from our capacity following Hurricane Sandy. This will help to decompress the volume that was forced through the two facilities we were able to operate during Hurricane Sandy, better enabling us to meet the needs of responding NYU staff and contract workers (some were reluctant to wait in the long lines for meals because of their work demands, a situation we must correct in future events). We may also be able to further expand meal service to the larger NYU community; our ability to do so will be decided in the actual circumstances of the specific emergency as we evaluate our staffing levels and ability to replenish food supplies.

Because of their remote location from Washington Square, we are also working with the College of Dentistry and NYU Poly to ensure that they have appropriate contingency plans in place that do not necessitate their dependence on Campus Services’ Washington Square operations in an emergency.

Representative Feedback on Our Food Services (submitted via the Hurricane Sandy Feedback Website):

“Overall, I thought NYU did a great job in dealing with the storm! The dining staff deserve the highest praise for their efforts in keeping the students fed during this ordeal! I’m honored to be a part of the NYU community – a community filled with caring individuals who all banded together during this difficult and trying time!”

“Hello! I wanted to give a huge thank you for NYU’s administration for deciding to distribute free food during the hurricane week! It was a life-saver since all shops and restaurants were closed! I’d especially like to thank the NYU dining hall staff who were able to organize the food distribution to so many people so extremely well and efficiently. Also, the fact that the staff were so cheerful and positive throughout made a big impact to lift up everyone’s spirits. The hurricane has given me a newfound respect and appreciation towards the NYU staff. Thank you!”

“Thank you so much, NYU! Your warm halls, hot food and general kindness definitely eased some of the stress of last week.”

***
In a community the size of NYU’s, it is to be expected that there will be many people with unique needs and concerns, and many of these will become critical as they are exacerbated by the extreme conditions imposed by an emergency situation. We want to make sure that we have identified as many of these special needs as possible in an effort to better meet them in future events.

**Mobility-Impaired**

Because the power outage affected the elevators in most residential buildings, the needs of those for whom navigating many flights of stairs is a daunting challenge -- or may even be impossible -- were among the first to be identified. By the third day of the power outage, NYU’s School of Nursing and Visiting Nurses of New York were calling on residents in University housing and in neighboring 505 LaGuardia to bring aid to people who may not have been able to obtain it on their own.

The nurses’ efforts were hampered by the lack of any directory that would help them to quickly and accurately identify those that might be in need, causing us to recognize that a means of locating people in this vulnerable situation is needed; this is reinforced by many who wrote to suggest doing just this.

We propose to establish several ways by which people who are mobility-impaired may ensure that we are aware of and responsive to their needs:

- Residents in University housing may confidentially contact NYU’s Office of Faculty Housing to identify themselves as someone for whom special assistance may be needed in an emergency situation; this information will be maintained in a confidential database with limited access for the sole purpose of directing our attention in an emergency situation

- All residents in University housing will be provided with a door-hanger placard that they can hang on the doorknob of their apartment door in an extended emergency that has severe impact such as we saw following Hurricane Sandy; when such an emergency condition occurs, building staff, visiting nurses, and neighbors will have the ability to quickly see the apartments where their help may be needed

- Students in student residence halls should be in touch with their RAs to make any special needs they may have known

- All residents may call the Emergency Operations Center (when it is activated in an extended emergency situation) at 212-998-1220 to advise us of their need

Our response protocol going forward will provide for dispatch of responders to University housing on the first day of the emergency to check on residents, and to establish a schedule of visits thereafter to ensure we are aware of and responding to their needs. RAs will similarly check on students in residence halls.

**Families with Young Children and/or Pets**

As the power outage wore on, families with young children were particularly challenged; fresh food supplies diminished, impenetrable darkness set in at unusually early hours in the absence of electric...
light, the ability to get outside and play was hampered by flights of stairs, etc. Pet owners were also challenged as they tried to lead their pets through dark hallways and stairwells to get out for some fresh air.

A few days after Hurricane Sandy hit, we opened up two University facilities to families to provide a warm, lighted place for them to gather. We intend to do this more immediately in the face of a similar emergency in the future; our ability to provide these facilities may be limited by our ability to staff them with Public Safety officers and custodial staff to ensure the safety and cleanliness of the facilities.

International Students
International students, who are often further away from home than our US students and for whom navigating New York City in a second language may present an even more daunting challenge in an emergency, comprise another special group who we need to be prepared to assist. University communications to inform students’ loved ones back home who may not have command of English presents a particular challenge; ensuring that international students can be in touch with their families in other countries is our best strategy for reassuring parents of the safety of their children.

Campus Visitors
Every day, thousands of visitors flood our campus for a wide variety of reasons; some are here for campus tours; some come for the cultural and educational events that are scheduled nearly every day of the year; some appear for scheduled job interviews; the reasons are too numerous to count. Ensuring that visitors understand when the University’s normal activities are altered or cancelled will help to minimize their inconvenience and avoid putting them in harm’s way when travel to and from the University is not advised.

Reaching these visitors may most effectively be achieved through widespread communication on the various Facebook pages that the University, its schools and many of the units that host events already utilize to communicate with their constituencies. Augmenting this with radio announcements of University closure (along with the other schools and institutions that also utilize this form of communication) may also be helpful. Hard-copy notices will be posted at locations where visitors may appear.

Representative Feedback from our Community (submitted via the Hurricane Sandy Feedback Website):

“I reside at Washington Square Village. As, of course, you know, this last week was a trying time for residents of WSV. We live on the 12th floor and have a small child and a dog, so we spent a lot of time in the darkened hallways and stairwells of the building, attempting to get on with our lives and responsibilities. The doormen and most of the building staff were heroic in these instances, giving us information we needed about water and assured us about the elderly neighbors in our large building.”
“There was no mentioning of faculty with family members in the University’s communications, no mentioning how faculty are handling darkness with young children. Only on Thursday did I learn from a colleague about facilities for faculty with young children. There are so many lessons to be learned about how the NYU infrastructure could be more convenient and friendly to every member of the NYU community, not just to certain parts of it."

“There should have been an effort to organize students in Kimmel to try to help the elderly or handicapped who were prisoners in the Washington Square Village buildings. The first three nights of no water, no heat, there were no visits from anyone to check on people."

“I don’t know how many international kids were able to find accommodations elsewhere, but I know quite a few F-1 students (myself included) who, because of lack of familiarity in the USA and friends who were stranded in similar situations, were able to turn to Kimmel’s make-shift hurricane shelter. International students are not as well-endowed as many American students, mostly because we are ineligible for federal assistance and many scholarships. When Hurricane Sandy struck I found myself in an increasingly desperate situation. If it wasn’t for you opening up Kimmel to us, I don’t know what would have happened. Thanks to the NYU community, I was able to stay at Kimmel for four days. It may not seem like a lot, but four days with food, water, power and warmth meant the world to me. I emphasize, I don’t know how many international students actually utilized Kimmel but I am an international student and I thank you for what you did for me."

“I’m really happy about everything the University made for us during this past week. All the support we received made these days less difficult, and gave some relief to my anxious family back in Brazil to know I had everything to be safe. There’s nothing I can think of that could have been done differently. Thank you so much, NYU! I’m proud to be one of your students!"

***
In emergency events, NYU has an established protocol for activating and staffing an Emergency Operations Center (EOC); the EOC is responsible for directing the University’s response to the emergency and serves as the official source of information and direction for the University community.

In the days leading up to Hurricane Sandy, NYU administrators were tracking the storm and its likely impact on the Washington Square neighborhood. On Sunday, October 28, NYU activated and staffed its EOC; it remained staffed 24 hours per day until normal campus operations were restored on Monday, November 5.

Hundreds of NYU administrators, staff and contract workers began arriving on campus in the afternoon of Sunday, October 28, to ensure they would be here once mass transit shut down at 7:00 pm that evening. Many did not leave campus to return home until the following weekend.

Representatives from ITS, Public Safety, Student Affairs, Facilities Management, Technical Services, Residence Life & Housing Services, Emergency Management, Campus Services, University Relations & Public Affairs, University Human Resources and Operations maintained a full-time presence in the EOC to direct the University’s response. Representatives of other groups and functions joined regularly scheduled conference calls to update response plans and provide input to communications to the community.

The team worked extraordinarily well to anticipate and meet many of the needs of our community. Even so, the scope and duration of this emergency imposed severe strain on this team and revealed a greater set of demands for which we need to ensure adequate staffing in the future.

Emergency Operations Management Model
In emergencies of broad scope and extended duration, the model for the University’s emergency operations should be expanded as illustrated:
The responsibilities of each component of this model are broadly defined to be:

**Emergency Operations Center**: the EOC will direct and coordinate the overall response and will serve as the official source of information for University status, directions to the community, and updates to the University Leadership Team and Board of Trustees. The EOC will be led by the designated Response Director and will maintain round-the-clock presence and staffing with representatives for:

- **Public Safety**, with responsibility for monitoring officer staffing, determining coverage needs, and developing officer instructions; establishing fire watches as identified and needed; coordinating transportation services as needed; monitoring Public Safety hub to identify emerging trends and needs
- **Emergency Management**, with responsibility for interfacing with New York City Office of Emergency Management and other City agencies; monitoring weather, transit, utility and other city-wide conditions
- **Public Affairs**, with responsibility for managing and monitoring NYU’s principal social media platforms for conveying information and rapid response to emerging issues, developing and electronically distributing community messages, communicating with media organizations and ensuring that communications that will be helpful to deans, trustees and others in leadership positions are developed and distributed, etc.
  - **Information Centers**, with responsibility for answering calls directly to the EOC and monitoring walk-in inquiries to Bobst and Kimmel information centers to identify emerging trends and needs, ensure broad dissemination of decisions, services and other information to all stakeholders, staff, etc.
- **Academics and Research**, with responsibility for evaluating academic impacts, liaison with Provost office and Deans, directing alternate academic accommodations as necessary and viable
- **Technology**, with responsibility for monitoring the status of the University’s technology and communications systems, activating technology continuity plans, and directing technology recovery efforts
- **Student Affairs**, with responsibility for managing student housing and relocation as needed; coordinating student health needs and service delivery; communicating with and through RA network
  - **Graduate, Commuter & International Students**, with responsibility for assisting commuter students identify alternate transportation and temporary housing needs, and responding to the unique needs of other special student categories
- **Faculty Housing**, with responsibility for directing building staffing needs; monitoring faculty and non-affiliate needs and service delivery (including Visiting Nurses); ensuring timely and accurate communications to residents via building staff, hard copy postings, etc.; monitor Silver Towers satellite to identify emerging trends and needs
- **Campus Services**, with responsibility for directing food services and temporary accommodations for responding NYU staff and contract workers, as well as for the community at large
Facilities/Central Plant, with responsibility for monitoring staffing levels and directing resources in response to building/system problems, custodial support, etc.; monitor activity reports from Facilities hub to identify emerging trends and needs

Financial Operations, with responsibility for ensuring continuity of financial transactions (payroll, purchasing, etc.) throughout the period of the emergency

Volunteers, with responsibility for identifying needs for volunteer workers and matching community volunteers with these needs, providing volunteer instructions, etc.

Logistics, with responsibility for assisting with procurement of various services, supplies and equipment as identified

Public Safety Hub: the Public Safety hub will fulfill its customary role of being a first point of contact for campus emergencies (please note that in the event of an emergency where response by the Fire Department of New York [FDNY], the New York City Police Department [NYPD], and/or emergency medical services is needed, your first call should be to 911). The Public Safety hub will dispatch NYU safety officers and/or coordinate other rapid response efforts as needed.

Facilities Hub: the Facilities hub (also known as the Facilities Client Services Center) will fulfill its customary role of being a first point of contact for reporting building problems and dispatching facilities staff accordingly. Normally staffed by Client Services Aides, the Facilities hub may be staffed by its management team during an emergency situation.

Silver Towers Satellite: in an extended emergency (longer than 24 hours) affecting University faculty housing, particularly one such as Hurricane Sandy that causes an extended power, a satellite to the Emergency Operations Center will be established at Silver Towers. This will provide a dedicated focus to the needs of residents in University housing that is more easily accessible to the majority of residents in University housing.

Bobst Information Center (Walk-in): in an extended emergency (longer than 24 hours) that affects normal electronic communications, the information kiosk in the ground floor lobby of the Bobst Library will be staffed along with the Emergency Operations Center. This position will be a resource to the extended NYU community as well as our neighbors in Greenwich Village.

Kimmel Information Center (Walk-in): in an extended emergency (longer than 24 hours) that affects normal electronic communications, a student information center will be established in the ground floor lobby of the Kimmel Center and will be staffed along with the Emergency Operations Center. This position will be an additional resource to the diverse NYU student community.

Every emergency situation will vary in its specific circumstances, and some of these functions may be augmented, combined or omitted, depending on what is required to meet the demands of the situation. The Response Director will determine the appropriate EOC staffing level at the onset of the emergency and as it continues until restoration of normal operations.

***
Just as our response during Hurricane Sandy was made possible by a strong team of people who worked together to meet the needs of our community, so, too, is this assessment and report made possible by the contributions of many from across the University and our key service providers. I would like to thank the following people for their important contributions to this report, in alphabetical order by last name:

- David Alonso, Facilities & Construction Mgmt, Vice President
- Sal Ariganello, Cushman & Wakefield, Portfolio Manager
- Larry Ayala, Cushman & Wakefield, General Manager
- Fred Barlow, Public Safety & Transportation, Assistant Director
- John Beckman, Public Affairs, Vice President
- Rachel Belsky, Faculty Housing, Director
- John Bradley, Technical Services, Associate Vice President
- Monica Bullet, Faculty Housing, Director
- Peter Burke, Cushman & Wakefield, Assistant General Manager
- Barbara Cardeli-Arroyo, University Human Resources, Executive Vice President
- Carlo Ciotoli, Student Health Center, Executive Director
- Louis Cusano, Associate General Counsel, Office of General Counsel
- Martin Dorph, Finance & Information Technology, Executive Vice President
- Tom Ellett, Student Affairs, Senior Associate Vice President
- Marcy Ferscheider, Student Health Center, Medical Director
- William Filardi, Facilities Management, Director
- Katherine Fleming, Office of the Provost, Deputy Provost
- Robin Friedman, Emergency Management, Director
- David Greenberg, Strategic Assessment, Director
- Karen Gulino, Faculty Housing, Assistant Vice President
- Neil Hanrahan, Residential Life & Housing Svcs, Senior Director
- Alicia Hurley, Governmental & Community Affairs, Vice President
- Robert Kivetz, Campus Services, Vice President

July 1, 2013
**Acknowledgments**

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<tr>
<th>Name</th>
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<tr>
<td>Delmy Lendof</td>
<td>Residential Life &amp; Housing Services</td>
<td>Associate Director</td>
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<td>Philip Lentz</td>
<td>Public Affairs</td>
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<td>Michael Liebowitz</td>
<td>Insurance &amp; Risk Management</td>
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<td>Jerry Matthews</td>
<td>Public Safety</td>
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<td>Marilyn McMillan</td>
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<td>Beth Morningstar</td>
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<td>David Vogelsang</td>
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<td>Jay Zwicker</td>
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Closing

Over the six months since Hurricane Sandy hit, our team has worked to dispassionately consider the feedback we received from our community. We have endeavored to assess our performance in the wake of Hurricane Sandy as objectively as possible in an effort to learn important lessons that will improve our preparedness for, and response to, future events.

Six months later, I continue to be proud of our team’s response; I am also committed to ensuring we demonstrate to our community an even higher level of response when we are called upon in the future. For the past six months, we have been actively working to implement all of the improvements described in this report so that we do not disappoint our community or ourselves when that time comes.

It is my hope now that all of the members of our community will feel that our self-examination has been thorough, honest and unflinching, and that we have taken seriously to heart your feedback and suggestions. I invite your continued feedback and I look forward to hearing from you at alison.leary@nyu.edu.

Respectfully,

Alison Leary
Appendix – Summary of Improvements in Progress

Each section of this report focuses on a specific constituency and/or service to examine what worked during Hurricane Sandy and identify improvements for the future. The actions we are taking to improve future response efforts are, as a result, sprinkled through all sections of the report. The following table consolidates the most important of these actions (as determined by the community feedback we received) to facilitate readers’ review of the actions that are currently underway.

It is important to note that these are only the first actions we are taking, the steps that have been identified as the most immediately necessary or beneficial. We will continue to build on these over time to continue to raise the bar on NYU’s emergency preparedness efforts. The table below has been updated to reflect the status of each item as of July 1, 2013; updates are highlighted in yellow.

<table>
<thead>
<tr>
<th>Category Sub-Category</th>
<th>Goal</th>
<th>Improvements</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>NYU Community Communications</td>
<td>Establish contingency communication plan in case electronic communication capability is lost</td>
<td>Enhanced communication strategy augments electronic communications with radio, telephone, hard copy and in-person communications; see the “Communications” section of this report for full details</td>
<td>Contingency plan done&lt;br&gt;Contingency plan will be distributed every June and September; done&lt;br&gt;Contingency plan will be re-communicated in advance of foreseeable events (i.e. storms); ongoing&lt;br&gt;Contingency plan will be included on information card in “personal preparedness starter kits” (described further below); done&lt;br&gt;Contingency plan will be posted on NYU website; website to be launched in September 2013</td>
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## Appendix – Summary of Improvements in Progress

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<tr>
<td><strong>NYU Community</strong></td>
<td><strong>Facilitate personal emergency preparedness planning</strong></td>
<td>Provide “personal preparedness starter kits,” specific to the needs of residents and commuters</td>
<td>Distribute to residents of faculty housing May 2013 and at lease renewal thereafter; <strong>complete</strong></td>
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<td></td>
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<td>Distribute to residential students at check-in; <strong>this item has been amended to outfit RA’s to ensure high level of preparedness on behalf of students</strong></td>
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<td>Distribute to broader NYU community during annual fall safety fair; <strong>this item is under study for feasibility and logistics</strong></td>
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<tr>
<td><strong>NYU Community</strong></td>
<td><strong>Facilitate personal emergency preparedness planning</strong></td>
<td>Launch a “personal preparedness” information program with timely reminders for personal safety, awareness and preparedness tips</td>
<td>Program scheduled for launch in September 2013; ad hoc communications to be used in the interim; <strong>in progress and on schedule</strong></td>
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<td><strong>Academics &amp; Research</strong></td>
<td><strong>Ensure critical research is properly protected in the event of an extended power outage</strong></td>
<td>Survey critical research facilities to ensure they are on emergency power; develop plans to protect equipment that is not already backed up</td>
<td>Surveys are in progress; plans are being developed in partnership with school representatives; <strong>effort on this item is underway</strong></td>
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July 1, 2013
# Appendix – Summary of Improvements in Progress

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<th>Category</th>
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<th>Implementation</th>
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<tbody>
<tr>
<td>University</td>
<td>Residents</td>
<td>Enable NYU response team to quickly identify and assist residents with special needs</td>
<td>Maintain confidential list of residents who have self-identified special needs in the event individualized assistance may be needed in a community emergency&lt;br&gt;Provide “assistance needed” door hangars for residents in faculty housing</td>
<td>Residents of faculty housing (including non-affiliates) may confidentially contact the Office of Faculty Housing; <strong>ongoing</strong>&lt;br&gt;Residential students may confidentially contact their RA or Student Affairs: <strong>ongoing</strong></td>
</tr>
<tr>
<td></td>
<td>Personal Preparedness</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>University</td>
<td>Residents</td>
<td>Increase emergency lighting duration following utility power outage from 90 minutes to 24-48 hours</td>
<td>Install additional fixtures in hallways and stairwells and/or replace existing fixtures with longer-burning fixtures</td>
<td>Washington Square Village scheduled for June 2013; <strong>complete in July 2013</strong>&lt;br&gt;Complete all other faculty and student residential buildings planned by September 2013; in progress, on schedule</td>
</tr>
<tr>
<td></td>
<td>Emergency Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>Residents</td>
<td>Provide means of providing back-up power to critical loads in residential buildings in an extended power outage (greater than 24 hours)</td>
<td>Enable critical electrical loads (emergency lighting, one elevator, water and sewage pumps, and heating systems) to be powered in an extended power outage; means of providing emergency back-up power include portable generators, permanent generators, or connection to NYU cogeneration plant</td>
<td>Complete portable generator connection for Washington Square Village scheduled for June 2013; <strong>testing planned for July 2013</strong>&lt;br&gt;Develop implementation schedule for other buildings by September 2013 prioritized by need and depending on viability; <strong>in progress</strong></td>
</tr>
<tr>
<td></td>
<td>Emergency Power</td>
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</tr>
</tbody>
</table>

July 1, 2013
## Appendix – Summary of Improvements in Progress

<table>
<thead>
<tr>
<th>Category</th>
<th>Goal</th>
<th>Improvements</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Residents</td>
<td>Facilitate electronic communications in a network/power outage</td>
<td>Install wi-fi in building lobbies to enable receipt and transmission of electronic communication in network/power outage</td>
<td>Complete for Washington Square Village buildings in June 2013; complete</td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td></td>
<td>Develop implementation schedule for other buildings by September 2013 prioritized by need and depending on viability</td>
</tr>
<tr>
<td>Student Residence Halls</td>
<td>Reduce number of residential students needing to be displaced from their assigned residence hall in an extended power outage</td>
<td>Expand Gramercy Green emergency generator distribution to include water/sewage pumps</td>
<td>Complete Gramercy Green work by September 2013; in progress, on schedule</td>
</tr>
<tr>
<td>Emergency Power</td>
<td></td>
<td>Install new generator at Brittany Hall for critical loads</td>
<td>Complete Brittany Hall by September 2013; in progress, on schedule</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install portable generator hook-up capability at 80 Lafayette residence hall</td>
<td>Complete 80 Lafayette by September 2013; in progress, behind schedule</td>
</tr>
<tr>
<td>Student Residence Halls</td>
<td>Increase emergency lighting duration following utility power outage to 24-48 hours</td>
<td>Install additional fixtures in hallways and stairwells and/or replace existing fixtures with longer-burning fixtures</td>
<td>Complete by September 2013; in progress, on schedule</td>
</tr>
</tbody>
</table>
Appendix – Summary of Improvements in Progress

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<tr>
<th>Category</th>
<th>Sub-Category</th>
<th>Goal</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Food Services</td>
<td>Expand food service capacity</td>
<td>Expand emergency power distribution system at Palladium to include refrigeration equipment and dining hall</td>
<td>Palladium work to be completed by September 2013; complete</td>
</tr>
<tr>
<td>Students</td>
<td>Food Services</td>
<td>Expand food service capacity</td>
<td>Work with School of Law and College of Dentistry food service providers to implement emergency plans in addition to Washington Square program</td>
<td>In progress</td>
</tr>
<tr>
<td>Students</td>
<td>Commuters</td>
<td>Provide a facility on campus to support commuter students</td>
<td>Space has been identified; timing of renovation and delivery to be determined</td>
<td>Permanent space of 3000 square feet in Hayden Hall will be outfitted as a commuter student lounge by Fall 2015</td>
</tr>
<tr>
<td>Students</td>
<td>Commuters</td>
<td>Ensure unique student needs are not overlooked and are responded to in an emergency</td>
<td>Establish a position within the Emergency Operations Center to identify and coordinate response to unique student needs</td>
<td>Ongoing</td>
</tr>
</tbody>
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