

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Lawrence G. McDade, Chairman
Dr. Kaye D. Lathrop
Dr. Richard E. Wardwell

In the Matter of)	Docket Nos.	50-247-LR
)		and
)		50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)		
)		
(Indian Point Nuclear Generating Units 2 and 3))		
_____)	Date:	November 15, 2013

**HUDSON RIVER SLOOP CLEARWATER, INC.’S REQUEST FOR THE BOARD TO
TAKE JUDICIAL NOTICE OF A RECENT JUDICIAL FINDING**

Hudson River Sloop Clearwater, Inc. (“Clearwater”) hereby requests that the Atomic Safety and Licensing Board (“the Board”) take judicial notice of certain facts (listed in Appendix A) contained in the judicial opinion in *Brooklyn Ctr. for Independence of the Disabled v. Bloomberg* (SDNY 11-Civ-6690, November 9, 2013) (attached as Appendix B) that finds that New York City’s evacuation plans violate the Americans with Disabilities Act. Contention EC-3A alleges “Entergy’s environmental report and the Final Supplemental Environmental Impact Statement contain seriously flawed environmental justice analyses that do not adequately assess the impacts of relicensing Indian Point on the minority, low-income and *disabled* populations in the area surrounding Indian Point.” Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3), ASLBP No. 07-858-03-LR-BD01, 60 (ASLB July 6, 2011) (emphasis added).

In making this request, Clearwater is cognizant that a decision by this Board on Contention 3A may be imminent and that the Board did not find the position of the United States government in the case relevant. It has therefore extracted the specific facts listed in Appendix A because they relate directly to the ability of New York City's evacuation plans to be effective for disabled people. They are relevant because the contention alleges among other things that the NRC Staff failed to identify the potential for disparate impact on disabled people should an accident at Indian Point necessitate evacuation of New York City. This request is timely because the decision from which the facts are drawn was published on November 9, 2013. In addition, generally judicial notice may be taken at any time, including on appeal.

In addition, Clearwater would like to remind the Board that it may also take judicial notice that disability is strongly correlated to poverty. The Census Bureau has found that the poverty rate among people with a disability was 28.8% in 2011, compared with 12.5 % for the general population. U.S. Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States: 2011*, 16 available at <http://www.census.gov/prod/2012pubs/p60-243.pdf>. In addition, among people aged 18 to 64, those with a disability represented 16.3 percent of people in poverty, compared with 7.7 percent of all people in this age group. *Id.*

The general standard for judicial notice is given by F.R.C.P. 201, which states that facts that can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned. FRE 201(b)(2). Courts routinely take judicial notice of government-compiled statistics and official reports and publications of agencies of the United States. *E.g. United States v. Orozco-Acosta*, 607 F.3d 1156, 1164 n.5 (9 Cir. 2010).

In addition, a court may take judicial notice of an order of another court for the limited purpose of noticing the undisputed facts therein. *Kay v. Lone Star Fund v. (U.S.), L.P.*, 453 B.R. 645, 664–65 (N.D.Tex.2011) (“When a court takes judicial notice of public documents or documents from another court, it may only take notice of the undisputed facts therein”). Illustrating that the

same general principles are applicable in NRC litigation, the Commission recently upheld a Board decision that rested, in part, on taking judicial notice of an American Automobile Association road map. *In the Matter of Strata Energy, Inc.*, (Ross In Situ Uranium Recovery Project), 2012 WL 1759015, CLI-12-12, FN. 28 (2012).

For the foregoing reasons, Clearwater requests the Board to take judicial notice of the undisputed facts in Appendix A, drawn from the opinion Attached in Appendix B regarding New York City's emergency evacuation plan that the Board believes are relevant and non-duplicative of the evidence already presented regarding Contention EC-3A.

Respectfully Submitted,

/s/

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Dated: November 15, 2013

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CERTIFICATION OF CONSULTATION

Pursuant to 10 C.F.R. § 2.323(b), counsel for Entergy certifies that he made a sincere effort to contact the other parties in this proceeding, to explain to them the factual and legal issues raised in this Motion, and to resolve those issues. As a result of the initial consultation, Clearwater produced the specific list of facts provided in Appendix A and presented it to the parties. As a result the NRC Staff and Entergy maintained their blanket objection to the Board taking any notice of these facts, while New York State and Riverkeeper did not oppose.

Executed in accord with 10 C.F.R. § 2.304(d)

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NUCLEAR REGULATORY COMMISSION**

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In the Matter of)	Docket Nos. 50-247-LR
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ENTERGY NUCLEAR OPERATIONS, INC.)	
)	
(Indian Point Nuclear Generating Units 2 and 3))	
_____)	Date: November 15, 2013

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305 (as revised), I certify that, on this date, copies of the Notice of No Objection were served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned proceeding.

Executed in accord with 10 C.F.R. § 2.304(d)

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Appendix A – Undisputed Facts From Appendix B for the Board’s Consideration (Citations Omitted)

- Fact 1) Page 9 “The City’s primary planning documents include the Area Evacuation Plan, the Coastal Storm: Evacuation Plan, and the Coastal Storm: Sheltering Plan.
- Fact 2) Page 13 “The City has two principal plans for evacuation: the Coastal Storm Evacuation Plan and the Area Evacuation Plan. The former is the City’s plan for evacuations in advance of a coastal storm or any other large-scale event with advanced warning. The latter is its general evacuation plan for emergencies that occur without warning, including but not limited to terrorist attacks.”
- Fact 3) Page 15 “Eight pages of the 107-page Coastal Storm Evacuation Plan are devoted to the “Homebound Evacuation Operation” (“HEO”), the purpose of which is “to coordinate evacuation assistance for homebound individuals who have no other options for evacuation.” With the exception of the HEO, which is discussed in more detail below, the Coastal Storm Evacuation Plan fails to provide any specific details about how the City will ensure that people with disabilities are able to evacuate.”
- Fact 4) Page 19: “Most of the City’s public transportation, however, is inaccessible to people with disabilities.”
- Fact 5) Page 27: "Finally, and most fundamentally, it is hard to know whether, or how, the HEO could function in a no-notice emergency, such as a terrorist attack. As noted above, the HEO was originally conceived as part of the Coastal Storm Evacuation Plan for use in emergencies with advance notice. And, by its terms, it appears to depend on such advance notice. As currently written, for example, the Operation ends at least six hours before an emergency actually strikes, and does not reactivate afterwards.”
- Fact 6) Page 27: "As noted above, earlier versions of the Area Evacuation Plan — the City’s plan for evacuations in no-notice events — did not include the HEO or any other provisions to evacuate people with disabilities. Although the version of the Area Evacuation Plan adopted on the eve of trial incorporates the HEO and provides that it will be implemented ‘if necessary,’ it does not detail how the Operation would be implemented in an emergency without warning."
- Fact 7) Page 27: "Indeed, FDNY Chief Villani conceded at his deposition that because the HEO is “designed specifically for something in advance,” he did not know whether it could be implemented in an emergency without warning and that the Fire Department had neither planned nor prepared for such implementation."
- Fact 8) Page 30: "The record demonstrates that [during Hurricane Sandy] some people with disabilities were unable to evacuate because of insufficient transportation."
- Fact 9) Page 31: "There is substantial evidence that people with disabilities were stuck in high-rise buildings after the storm [Hurricane Sandy]"

- Fact 10) Page 34: "Because people with disabilities often require accessible housing or other accommodations, they may be less able than those without disabilities to stay with friends, family, or neighbors during a disaster."
- Fact 11) Page 35: "The City also has eight special medical needs shelters ("SMNSs"), at least one of which is located in every borough. The SMNSs are intended to shelter individuals whose needs exceed the capability of the general shelters but who do not require hospitalization."
- Fact 12) Page 37: "Significantly, the City does not even know which of its shelters and evacuation centers are accessible [to the disabled]."
- Fact 13) Page 38: "Further, the evidence at trial demonstrated that many of the City's shelters and evacuation centers are not fully accessible to people with disabilities — and that the City is aware of that fact."
- Fact 14) Page 42: "City officials testified that if a shelter was not sufficiently accessible, the City would provide accessible transportation to another shelter that was. But there is nothing in the City's sheltering plan that requires this."
- Fact 15) Page 42: "In addition, the City has not assessed how many people might require accessible transportation between evacuation centers and shelters — and, by extension, whether it would be able to provide such transportation."
- Fact 16) Page 49: [The City warns people that] "[i]f you need oxygen tanks or other medical equipment, bring it with you to the evacuation center," and "refrigeration for medication will NOT be provided at evacuation centers")."
- Fact 17) Page 54: "As noted above, people with disabilities are particularly vulnerable to power outages, as they often rely on equipment that requires electricity."
- Fact 18) Page 60: "The City does not, in fact, have any plan directing the provision of prescription medication assistance in the event of an emergency."
- Fact 19) Page 65: "there appears to be no way for people with special needs to determine in advance which shelters or evacuation centers are accessible to them (a gap that is hardly surprising given that, as discussed above, the City itself does not know which evacuation centers are accessible)."
- Fact 20) Page 67: "The City's Emergency Public Information Plan, its general plan for communicating emergency information, provides "recommendations" about how emergency announcements should be publicized. For example, the Plan recommends that "TV stations should not overlap closed-captioning space when using crawl"; that the City should "[r]emind stations to pronounce websites and spell them out, as well as print them across the screen"; that "[i]f public briefings have a sign language interpreter, stations should include them in the frame"; and that TTY/TDD numbers and relay information (services that allow people with hearing or speech deficiencies to communicate over them across the screen"; that "[i]f public briefings have a sign language interpreter, stations should include them in the frame"; and that TTY/TDD numbers and relay information"

- Fact 21) Page 67: By their terms, these recommendations are just recommendations; there is no requirement that they be followed, and the City does not have any agreements in place to ensure that they will be."
- Fact 22) Page 75: "The primary problem with New York's Advance Warning System is that the targeted individual must be connected with a service organization, and persons who are not affiliated with a service or government organization would not get these notifications. This means that many people who live at home independently day to day, who would nonetheless need accessible services during an emergency, would not get warnings about how to use and access accessible emergency services."
- Fact 23) Page 76: "During Hurricanes Irene and Sandy, the City distributed fliers that were not, in fact, accessible to those with visual disabilities."
- Fact 24) Page 77: "[T]he City's plans do not require that the City provide information about shelter accessibility, accessible transportation, evacuation assistance, or any other information required by people with disabilities to respond to an emergency. "
- Fact 25) Page 80: "Instructing people with special needs to call 311 immediately before or during an emergency is not as effective as providing them with information directly and in advance of an emergency. First, it undermines their ability to develop a personal plan in advance of an emergency, the importance of which the City's own outreach materials stress."
- Fact 26) Page 90: "Most glaringly, apart from the HEO, the City has no plan whatsoever for evacuating people with disabilities from multi-story buildings. The evidence at trial showed, however, that many people with disabilities cannot evacuate multi-story buildings on their own, particularly if a power outage has rendered elevators inoperable."
- Fact 27) Page 90: "[T]he evidence at trial, including testimony from the City's own witnesses, demonstrated that the needs of people with disabilities, including the need for evacuation assistance, could only be accommodated through advance planning."
- Fact 28) Page 90: "The City's evacuation plans rely on public transportation, but there is no dispute that the vast majority of such transportation is inaccessible to people with disabilities under the best of circumstances."
- Fact 29) Page 91: "Additionally, the City has no plans or agreements to ensure that paratransit — which is run by the MTA, a state agency, rather than by the City — remains open for a sufficient amount of time after an evacuation order is issued to allow people with disabilities to evacuate; that it remain open for as long as other forms of public transportation to ensure people with disabilities have an equal opportunity as those without disabilities to evacuate; that paratransit operate without the need for reservation in the event of an emergency; or, indeed, that paratransit be available for evacuations at all. Nor does the City have any other plan to ensure the availability of accessible transportation in the event of an emergency."
- Fact 30) Page 91: "But the failure to plan for accessible transportation virtually ensures that the opportunity of people with disabilities to evacuate will be unequal to that of individuals without special needs"

- Fact 31) Page 92: “[T]he City incorporated the HEO into its Area Evacuation Plan, its plan for disasters that occur without warning, such as radiological incidents, major explosions, and terrorist attacks. But the HEO is not well suited for such incidents. It is dependent on advance warning and designed to begin — and end — even before the relevant emergency occurs. Even the City’s witnesses were hard pressed to explain whether, or how, the HEO could be implemented in the event of a no-notice emergency event. Thus, the HEO does nothing to remedy the fact that people without disabilities are able to plan to evacuate via public transportation, whereas people who require accessible transportation are not informed in any meaningful way whether or how they may evacuate.”
- Fact 32) Page 102: "For some people with disabilities, the ability to meaningfully access the City’s sheltering services also depends on access to electricity. Without electricity, those who, for example, depend on ventilators or power wheelchairs will be less healthy, safe, and independent at a shelter than people without disabilities. Nevertheless, while all of the City’s SMNSs [Special Medical Needs Shelters] have back-up generators or the capacity to quickly to connect to a back-up generator, there is no plan for ensuring electricity at the other shelters where some people with special needs are bound to be located."
- Fact 33) Page 105: "Because many people with disabilities depend on elevators, a power outage renders many people with disabilities unable to leave their buildings. Those unable to leave their buildings are obviously unable to access the City’s emergency services, such as sheltering, food and water distribution, and the provision of medical services. "
- Fact 34) Page 109: "[P]eople without disabilities are able to plan in advance where they will go and how they will get there in an emergency. Without any information on accessible evacuation centers or transportation, people with disabilities cannot make such a plan."
- Fact 35) Page 112: "Nor do the plans require the City to publicize the availability of evacuation assistance or accessible transportation. Instead, the City encourages residents to call 311 to access this information. As repeatedly noted above, however, the 311 system may be unavailable during an emergency. And, in any event, limiting people with disabilities to calling 311 during an emergency deprives them of the opportunity to develop an evacuation plan in advance of the emergency."

Appendix B

The Opinion in *Brooklyn Ctr. for Independence of the Disabled v. Bloomberg* (SDNY 11-Civ-6690, November 9, 2013)



UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

-----X
BROOKLYN CENTER FOR INDEPENDENCE OF :
THE DISABLED, a nonprofit organization, CENTER :
FOR INDEPENDENCE OF THE DISABLED, NEW :
YORK, a nonprofit organization, GREGORY D. BELL, :
and TANIA MORALES, :
:
Plaintiffs, :
:
-v- :
:
MICHAEL R. BLOOMBERG, in his official capacity as :
Mayor of the City of New York, and THE CITY OF :
NEW YORK, :
:
Defendants. :
:
-----X

11 Civ. 6690 (JMF)

OPINION AND ORDER

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JESSE M. FURMAN, United States District Judge:

INTRODUCTION

The task of planning for, and responding to, emergencies and disasters is one of the most important, and challenging, tasks any government faces. Emergencies can take many forms — from power outages, to hurricanes, to terrorist attacks — and a government, particularly a local

government, must be prepared for them to strike at almost any moment. Such preparedness requires considerable planning, resources to execute those plans, and a willingness to learn from experience and revise plans that do not sufficiently accomplish their goals. Even then, each emergency is different and, to some extent, unpredictable, and no amount of planning or resources can fully prepare a local government to respond to what may come. Moreover, ultimately, there are limits to what the government can do on its own: Not only must a local government be prepared, but its residents must also prepare themselves.

In recent years, New York City (the “City”) has faced more than its fair share of emergencies and disasters, from the September 11th terrorist attacks in 2001; to Hurricane Irene in August 2011; to Hurricane Sandy, just over one year ago. Separate and apart from that tragic record, the task of planning for, and responding to, emergencies and disasters is especially challenging in New York City, given, among other things, the size and density of the City’s population, its island geography, and its large daily commuter and tourist populations. Given those challenges, and what New York City has had to face in recent years, the City’s planning and response have been remarkable in many ways. In particular, the array and detail of its plans for every imaginable kind of emergency is impressive; and the valor and sacrifice of those who have come to the aid of New Yorkers in times of emergency, from first responders to volunteers, have been nothing short of extraordinary. This lawsuit does not challenge those facts. Far from it: In many respects, this lawsuit has confirmed them.

Instead, the question in this lawsuit, certified as a class action pursuant to Federal Rule of Civil Procedure 23(b)(2) , is whether in planning for, and responding to, emergencies and disasters, the City has adequately addressed the needs of people with disabilities — a segment of the population for which emergency planning is even more challenging and, some argue, more

important. The Plaintiff class comprises all people with disabilities, as defined by the Americans with Disabilities Act (the “ADA”), 42 U.S.C. § 12102, who are within the City and the jurisdiction served by the City’s emergency preparedness programs and services. *See Brooklyn Ctr. for Independence of the Disabled v. Bloomberg*, 290 F.R.D. 409, 420-21 (S.D.N.Y. 2012) (Docket No. 66). (*See also* Docket No. 69 (noting the lack of objections to the Court’s proposed definition of the class and ordering the certification of that class)). These Plaintiffs contend that the City’s emergency preparedness program fails to accommodate their needs by, among other things, inadequately planning for the evacuation of people with disabilities, from multi-story buildings and generally; failing to provide a shelter system that is accessible within the meaning of the ADA; ignoring the unique needs of people with disabilities in the event of a power outage; failing to communicate adequately with people with special needs during an emergency; and failing to account for the needs of people with disabilities in recovery operations following a disaster. They seek declaratory and injunctive relief under the ADA, Title 42, United States Code, Section 12131, *et seq.*; Section 504 of the Rehabilitation Act of 1974, Title 29, United States Code, Section 794, *et seq.*; and the New York City Human Rights Law (“NYCHRL”), New York City Administrative Code, Section 8-101 *et seq.*

In March 2013, only months after Hurricane Sandy devastated the City, the Court held a six-day bench trial limited to the question of liability — that is, whether the City’s emergency preparedness program does, in fact, fail to sufficiently accommodate people with disabilities. At trial, the Court heard from at least thirty-five witnesses, including City officials involved in emergency planning at the City’s Office of Emergency Management (“OEM”), the New York City Fire Department (“FDNY”), and the New York City Police Department (“NYPD”); City officials involved in addressing the needs of people with disabilities, at the Mayor’s Office for

People with Disabilities (“MOPD”) and elsewhere; experts on emergency planning with respect to people with disabilities; and several people with disabilities who testified about their needs with respect to emergency planning as well as their experiences in recent emergencies, including Hurricane Sandy.¹ In addition, the parties introduced approximately 25,000 pages of documentary exhibits, including over twenty plans developed by the City to address everything from providing shelter during an emergency to responding to a flash flood. Following trial, the parties and the United States Department of Justice, as an interested party, *see* 28 U.S.C. § 517, filed several hundreds of pages of briefing and proposed findings of fact and conclusions of law, a process that was completed in late May 2013.

This mountain of evidence and argument confirms that planning for, and responding to, emergencies and disasters is a Herculean task, and that, in many — perhaps most — respects, the City has done an outstanding job. But it also reveals that while the City’s emergency preparedness program adequately accommodates the needs of people with disabilities in some respects, it fails to do so in others. Most significantly, the City’s plans are inadequate to ensure that people with disabilities are able to evacuate before or during an emergency; they fail to provide sufficiently accessible shelters; and they do not sufficiently inform people with disabilities of the availability and location of accessible emergency services.

Notably, there is no evidence that these failures are a result of intentional discrimination by the City against people with disabilities. But the ADA, the Rehabilitation Act, and the NYCHRL seek to prevent not only intentional discrimination against people with disabilities, but also — indeed, primarily — discrimination that results from “benign neglect.” *Alexander v.*

¹ Pursuant to this Court’s Individual Rules and Practices, the Court heard direct testimony of all witnesses by affidavit. Had the Court heard direct testimony live, the trial would have been considerably longer than six days.

Choate, 469 U.S. 287, 301 (1985). Moreover, these laws require that a government entity do more than provide a program on equal terms to those with and without disabilities; they require “affirmative accommodations to ensure that facially neutral rules do not in practice discriminate against individuals with disabilities.” *Henrietta D. v. Bloomberg*, 331 F.3d 261, 275 (2d Cir. 2003). The evidence shows that the City has not done so in various ways.

Based on the evidence and testimony presented at trial, the Court makes the following findings of fact and conclusions of law. The trial did not, and this Opinion does not, address the actions the City must take to remedy the deficiencies in its emergency preparedness program. Those actions will be addressed in the next phase of the case.

FINDINGS OF FACT

A. Emergency Planning for People with Disabilities

1. According to New York City, of the more than eight million people living in the City, “it is estimated that there are 889,219 individuals with disabilities, making up 11% of the population. . . . [Of these,] 183,651 individuals have a serious hearing difficulty, 210,903 have serious vision difficulties, and 535,840 individuals have difficulty walking or climbing stairs.” (Ex. 120, at P003738; *see also* Ex. 7, at CNY000361-62 (providing social vulnerability statistics by evacuation zone based on 2000 census data); Ex. 24 at CNY018522 (providing statistics about the numbers of people with various disabilities living in New York City); Tr. 286:1-3 (Special Needs Coordinator Aaron Belisle discussing a “rule of thumb” that twenty percent of the City’s population has some form of disability)).² The City estimates that, within just the area

² Exhibit 120 is one of two briefing papers prepared by committees of the New York City Council in advance of hearings on Hurricane Sandy that Plaintiffs offered at trial. (*See also* Ex. 115). Defendants objected to admission of these documents on the basis that they are hearsay. (*See* Docket No. 128). Defendants later objected on the same basis to statements of New York City Council members contained within a transcript of a City Council hearing (Ex. 116). (*See*

that was subject to the mandatory evacuation order during Hurricane Sandy, “there are at least 118,000 people with disabilities.” (Ex. 120 at P003738).

2. People with disabilities face unique challenges in responding to emergencies. (See, e.g., Ex. 65, at CNY020238). They may, for example, rely on the availability of elevators, accessible transportation, accessible communication, or electricity-powered medical devices, any or all of which may be compromised in an emergency.³ (See Blanck Decl. ¶ 28; see also Bell Decl. ¶ 18 (“As a result of my blindness and PTSD, I am unable to react as quickly and easily to new and dangerous situations without accommodations. Because of my [disabilities], I need to plan ahead to make sure that my needs would be met during travel and at a shelter”); Buckner Decl. ¶ 13 (“Being blind and unable to drive, if I cannot arrange transportation, I am stuck wherever I happen to be.”); Halbert Decl. ¶ 9 (“There are things that I cannot do as quickly or at all as compared to people without disabilities. For example, I cannot run out of a high-rise building in an emergency.”); Morales Decl. ¶ 10 (“If I am at home and the power goes out, I do not know how I could evacuate because I have to use a motorized lift to get up and down the stairs at my house.”)).

3. Thus, as the City itself concedes, it is particularly important to account for the needs of people with disabilities in emergency planning. (See Defs.’ Response to Statement of

Ex. 566, at 4). The parties have stipulated to the admissibility of certain portions of these City Council documents. (See Ex. 566, at 3-4). Because this Opinion relies only on those portions, the Court need not decide whether any other portions of the documents are admissible.

³ “Accessible” is a term of art in the context of addressing the needs of people with disabilities. See, e.g., Report of Committee on Education and Labor, H.R. Rep. 101-485, pt. 2, at 117-18 (1990), *reprinted in* 1990 U.S.C.C.A.N. 303, 400-01; Report of Committee on the Judiciary, H.R. Rep. 101-485, pt. 3, at 60, *reprinted in* 1990 U.S.C.C.A.N. 445, 483. As discussed in more detail below, regulations issued pursuant to the ADA by the United States Department of Justice provide standards for determining whether a particular facility or service is accessible to people with disabilities. See, e.g., 49 C.F.R. Part 36 (providing standards for accessible design); *id.* Parts 37-38 (providing standards for accessible transportation).

Interest of United States 6 n.1 (Docket No. 157); *see also, e.g.*, Ex. 65, at CNY020275 (“Planners must compensate for their increased vulnerability by addressing, specifically, the needs of people with disabilities during the planning process.”); *id.* at CNY020277 (“Emergency planners must plan ahead to effectively provide services and communicate with people with disabilities before, during, and after an emergency.”); Ex. 153, at P001974 (“The importance of advance[] planning in developing and implementing [accommodations for people with disabilities] in general population shelters cannot be overstated. . . . [Accommodations for people with disabilities] cannot wait to be identified and put into place once an emergency or disaster occurs.”); *see also* McKinney Dep. 90:9-24 (OEM Deputy Commissioner for Planning testifying that it is important to plan for the needs of people with disabilities)). Indeed, the National Council on Disability, an independent federal agency charged with advising the President, Congress, and other agencies regarding policies, practices, and procedures that affect people with disabilities, has opined that the failure to address the specific vulnerabilities of people with disabilities in emergency planning “often leads to increased injury and death rates among this segment of the population during disasters.” (Ex. 65, at CNY020275; *see also* Blanck Decl. ¶ 34 (“When there is a lack of system-wide disaster planning for persons with disabilities . . . persons with disabilities are vulnerable to significant life-threatening harm.”)).

B. The City’s Emergency Planning Structure

4. The City’s emergency preparedness program consists of numerous plans, guides, strategies, playbooks, scripts, and protocols designed, among other things, to educate the public about emergency preparedness; to guide evacuation, transportation, and shelter during an emergency; to disseminate emergency information during a disaster; and to aid the City and its residents in recovering from an emergency. (*See, e.g.*, McKinney Decl. ¶ 14; Exs. 1-4A, 6-26,

28-36, 40-42, 113). The City's primary planning documents include the Area Evacuation Plan (Ex. 245A), the Coastal Storm: Evacuation Plan (Ex. 6), and the Coastal Storm: Sheltering Plan (Ex. 7). These general plans are supplemented by many other more specific plans, as well as by playbooks, manuals, and field guides, detailing how the plans should be implemented.

5. OEM is the City agency responsible for coordinating the City's emergency planning and responses to emergency situations. Among other things, OEM is responsible for preparing the City's emergency plans, conducting training and exercises, and overseeing the City's extensive education and outreach program. (*See* McKinney Decl. ¶ 9; Ex. 113, at P001941). *See also* N.Y.C. Charter, Ch. 19-A, §§ 495-497. OEM has more than 200 employees, and is divided into at least six levels of management. (*See* Tr. 281:14-16; Ex. 44, at CNY006811).

6. The City has a Special Needs Coordinator, whose role it is to advocate within OEM for people with special needs and to provide guidance on incorporating the needs of people with disabilities into the City's emergency plans. (*See* Belisle Decl. ¶ 2). Aaron Belisle was the full-time Special Needs Coordinator until August 2012, when he moved to a different position at OEM. (Tr. 282:10-14). As of the time of trial in this case, the City still had not replaced Belisle with a full-time Special Needs Coordinator. (*Id.* at 282:20-23). Instead, from August 2012 until at least the time of trial — a period that included Hurricane Sandy — Belisle performed both his new job and the role of Special Needs Coordinator on an acting basis. (*See* Belisle Decl. ¶ 4; Tr. 282:10-23).

7. Belisle testified that he is involved in many facets of OEM's work, that he feels empowered to raise issues regarding the needs of people with disabilities, and that he believes his input is valued. (*See* Belisle Decl. ¶¶ 13, 20, 21). Belisle also testified that he participated in

drafting several of the City's plans, operational documents, and online trainings. (Belisle Decl. ¶ 33). Belisle had no involvement, however, in drafting some of the City's core emergency plans, including its sheltering and evacuation plans. (Tr. 285:1-5). And while the Special Needs Coordinator may make suggestions about the City's emergency plans, Belisle testified, he does not have the authority to approve (or reject) them. (See Tr. 284:8-20 ("Ultimately, the plans are not approved by me. I would say that my suggestions are taken under advisement, and used or not used. Ultimately, I do not sign off on the plans."); *id.* at 357:24-358:1).

8. In fact, the OEM Special Needs Coordinator is on the lowest rung of OEM's organizational chart. (Ex. 44). Moreover, the position of Special Needs Coordinator has no staff. (Ex. 44; Tr. 281:23-25). Besides the Special Needs Coordinator, there is no one else at OEM whose job specifically includes representing people with disabilities in disaster preparedness. (Tr. 282:1-4). Nor is there a central coordinator for the City who represents people with special needs in the event of an emergency. (Tr. 282:25-283:4).

9. In addition to the Special Needs Coordinator, who represents the interests of people with disabilities within OEM, the MOPD helps to ensure that City services and programs more generally address the needs of people with disabilities. (See Calise Decl. ¶ 3). Although the Office responded, and continues to respond, to the needs of people with disabilities related to Hurricane Sandy (*see id.* ¶¶ 10-17, 19, 23-33, 35), the Commissioner of the MOPD, Victor Calise, acknowledged that he does not have a substantial role in emergency planning (*see* Tr. 437:15-438:9).

10. There was no evidence that either the Police or the Fire Department employs anyone responsible for ensuring that the department's emergency plans and policies accommodate the needs of people with disabilities. (See Tr. 341:9-16; Maniotis Dep. 34:5-24;

Villani Dep. 12:17-21; Wahlig Dep. 51:15-52:16). OEM Assistant Commissioner Dina Maniotis testified that she was not aware of anyone in either department who is “a liaison specific for persons with disabilities.” (Maniotis Dep. 34:5-24). NYFD Division Chief Fredrick Villani testified that the FDNY’s Bureau of Operations — the unit responsible for working with OEM (*see* Villani Decl. ¶ 3) — does not have a person responsible for ensuring that the Bureau’s plans and policies comply with the ADA. (*See* Villani Dep. 12:17-21). And James Wahlig, an NYPD Deputy Inspector in the Operations Division — the division responsible for the Police Department’s emergency response (*see* Wahlig Decl. ¶¶ 2, 5) — testified that he did not know if the Police Department had anyone responsible for addressing the needs of people with disabilities in an emergency. (*See* Wahlig Dep. 51:15-52:16).

C. Involving People with Disabilities in Emergency Planning

11. One way in which emergency planners can help ensure that the needs of people with disabilities are incorporated sufficiently into emergency plans is to include people with special needs in the planning process. (*See, e.g.*, Belisle Decl. ¶ 30 (“One of the ways we ensure the plans are reflective of those they serve is to include community members in the planning process.”); Blanck Decl. ¶ 57 (“Meaningful participation by the disability community is central to effective disaster planning.”); Kailes Decl. ¶ 128 (similar)).

12. The parties disagree about the extent to which people with disabilities are included in the City’s emergency planning process. The City’s expert Elizabeth Davis testified that the City’s planning process is “collaborative and inclusive” and that its emergency plans “are developed in conjunction with a [sic] multiple stakeholders, governmental and non-governmental organizations, a number of which have direct experience working with the disability community.” (Davis Decl. ¶ 4). By contrast, Plaintiffs’ expert Peter Blanck testified

that “the disability community has not been meaningfully and effectively engaged by New York City in the emergency planning process.” (Blanck Decl. ¶ 58; *see also* Kailes Decl. ¶ 129 (“[T]he City has not actually engaged the disability community in a way that the community views as legitimate, meaningful, or in a way that uses their input and expertise.”)).

13. The City maintains a Special Needs Advisory Group (“SNAG”), composed of approximately fifty representatives of agencies, service providers, and advocacy groups that represent and work with people with special needs. (*See* Belisle Decl. ¶¶ 3, 34). The group, which is chaired by the Special Needs Coordinator, meets quarterly to discuss emergency planning and to offer feedback and suggestions to the City. (*Id.* ¶¶ 3, 34, 37). Its members have participated in emergency training, given presentations, and advised OEM on some of its outreach materials. (*Id.* ¶ 36). In particular, SNAG helped develop the *Ready New York: My Emergency Plan* guide (Ex. 3), an emergency preparedness guide, the goal of which is to help people, particularly those with special needs, develop a personal emergency plan. (*See* Belisle Decl. ¶ 38; Tr. 377:21-379:18).

14. SNAG’s role is merely advisory. (*See* Tr. 347:8-22). The group has no decisionmaking authority and, indeed, has not even seen any of the City’s emergency plans in their entirety. (*Id.* at 347:11-22). Some SNAG participants expressed frustration at what, in their view, is a lack of opportunity for the group to meaningfully contribute to the City’s core emergency plans. (*See, e.g.*, Trapani Decl. ¶ 29 (testifying that in her time at SNAG, she was not given the opportunity to comment on the adequacy of the City’s emergency plans with respect to people with disabilities); Tr. 145:9-24, 146:6-147:25 (employee of Plaintiff organization CIDNY, Margi Trapani, testifying that CIDNY stopped sending a representative to SNAG because she “felt, and [CIDNY’s] executive director concurred, that the time there was not

valuable to [CIDNY's] interests in helping people prepare for emergencies or disasters, [and] that [SNAG was] having very limited effects on anything to do with the real needs of people with disabilities as they experience emergencies and disasters"); Tr. 509:11-25 (Executive Director of Plaintiff organization BCID, Joan Peters, testifying that "the concerns of the disability community" were not being addressed by SNAG and that she therefore decided that BCID would no longer attend SNAG meetings)).

D. Evacuations

15. The City has two principal plans for evacuation: the Coastal Storm Evacuation Plan (Ex. 6) and the Area Evacuation Plan (Ex. 245A).⁴ The former is the City's plan for evacuations in advance of a coastal storm or any other large-scale event with advanced warning. The latter is its general evacuation plan for emergencies that occur without warning, including but not limited to terrorist attacks. (*See* Wahlig Decl. ¶ 10; Tr. 784:25-785:2; Ex. 245A). Its "purpose" is to "coordinate evacuations of one or more neighborhoods due to large-scale, no-notice incidents." (Ex. 245A, at 6).

16. The Area Evacuation Plan in effect at the time this case was filed was approved in 2005. (*See* Ex. 5). In September 2012, the plan was revised; a draft version of the revised plan that had not yet been approved was entered into evidence at trial. (*See* Ex. 245; Tr. 727:3-7). Some of the witnesses' declarations were based on the 2005 Area Evacuation Plan, and some were based on the 2012 draft. (*Compare, e.g.*, Blanck Decl. ¶ 70 (citing 2005 plan), *and* Kailes Decl. ¶ 37 (same), *with* McKinney Decl. ¶ 19 (citing 2012 draft); Davis Decl. ¶ 77 (same)). The

⁴ The City has a separate plan for the evacuation of health care facilities. (*See* Ex. 9). Plaintiffs have not alleged that this plan is deficient and did not present any evidence that the plan fails to address the needs of people with disabilities. (*See* Pls.' Revised Proposed Findings of Fact & Conclusions of Law, Docket No. 154). Accordingly, it is not addressed here.

plan was revised again in February 2013. (Ex. 245A). That version of the plan was formally approved on March 4, 2013 — one week before trial. (Ex. 245A; Tr. 863:9-15).⁵

17. Eight pages of the 107-page Coastal Storm Evacuation Plan are devoted to the “Homebound Evacuation Operation” (“HEO”), the purpose of which is “to coordinate evacuation assistance for homebound individuals who have no other options for evacuation.” (Ex. 6, at CNY000139). With the exception of the HEO, which is discussed in more detail below, the Coastal Storm Evacuation Plan fails to provide any specific details about how the City will ensure that people with disabilities are able to evacuate.

18. The 2005 version of the Area Evacuation Plan did not include any information regarding the evacuation of people with disabilities. (*See* Ex. 5). Although the version of the plan that was approved on the eve of trial states that “[e]very operational strategy must account for populations with special needs and mobility impairments” (Ex. 245A, at 8), it provides little information about exactly how such populations will be accommodated. It contains a “Special Needs and Mass Care operational strategy” (Ex. 245A, at 33), but it does little more than incorporate the HEO, which had been developed for evacuation of homebound individuals during coastal storms (*see* McKinney Decl. ¶ 19). With the exception of the HEO, there is no information in the Area Evacuation Plan about how the City will evacuate people with disabilities from multi-story buildings or how it will ensure sufficient accessible transportation.

⁵ The City, however, did not advise Plaintiffs or the Court that the revised Area Evacuation Plan had been adopted until March 18, 2013 — one day before the close of testimony. (*See* Tr. 851:6-853:24). Nevertheless, as the Area Evacuation Plan is central to the City’s emergency planning and because the parties stipulated to its admission (Ex. 566), the Court will consider the revised plan. Unless otherwise specified, all references in this Opinion to the Area Evacuation Plan are to the version approved on March 4, 2013.

a. Building Evacuations

19. FDNY is the lead City agency responsible for building evacuations. (Villani Decl. ¶ 34). The NYPD is also involved in emergency evacuations and, in particular, in canvassing buildings to identify and rescue those who may be unable to evacuate without assistance. (Wahlig Decl. ¶ 20).

20. As Defendants' expert Elizabeth Davis testified, New York is "a vertical, not a horizontal city." (Tr. 917:10-13). The City has thousands of multi-story buildings. (See Kailes Decl. ¶ 57). Naturally, evacuation from these buildings may be more challenging for people with disabilities than for others. (See, e.g., Blanck Decl. ¶ 63; Halbert Decl. ¶¶ 9, 12; Kailes Decl. ¶¶ 55, 57; Tr. 462:18-23, 715:23-716:5; Ex. 65, at CNY020324). For example, many people with disabilities are unable to navigate stairs independently and therefore need assistance evacuating during an emergency in which elevators are rendered inoperable or may not be used. (See Trapani Decl. ¶ 27(e); Kailes Decl. ¶ 55; Tr. 462:18-23). In addition, many people with disabilities rely on wheelchairs or other assistive devices or service animals that, where possible, should be evacuated with them. (See Ex. 65, at CNY020335, CNY020341). As Plaintiff's expert Peter Blanck testified, because of these challenges, "[e]ffective and adequate evacuation planning from high rise structures is important to the needs of people with mobility impairments, and other disabilities, in the event of large scale or localized evacuations." (Blanck Decl. ¶ 63).

21. The City's plans generally assume that people will be able to evacuate their buildings without assistance. (See, e.g., McKinney Dep. Vol. III 28:11-13 ("[W]e rely on individuals to be prepared and to leave when they're asked to leave."); see also Ex. 1, at CNY000040 (*Ready New York* emergency planning guide for seniors and people with disabilities

instructing readers to not to use elevators during an emergency, but failing to suggest an alternative for those whose disabilities prevent them from navigating stairs)).

22. With the exception of the HEO, the City's emergency plans fail almost entirely to address the needs of people with disabilities during an evacuation of a multi-story building. Belisle, OEM's Special Needs Coordinator, testified that there is nothing in the written plans "[s]pecific to [the evacuation of] people with disabilities" from high-rise buildings. (Tr. 309:21-24; *see also* Tr. 358:18-22 (Belisle testifying that he is not aware of any Fire or Police Department plans that address the evacuation of people with disabilities from high-rise buildings)). Representatives of the NYPD and FDNY testified that they do not have any plans that address "high-rise evacuations for people with disabilities in the City of New York." (Tr. 789:9-12 (FDNY Division Chief Villani); Tr. 731:4-7 (NYPD Deputy Inspector James Wahlig); *see also* Manahan Dep. 96:13-25; Wahlig Dep. 59:12-16, 100:3-7).

23. FDNY Division Chief Villani testified that there was no need to plan specifically for the evacuation of people with disabilities, because the Fire Department "treat[s] everybody the same way." (Tr. 945:10-11; *see also id.* at 307:2-5 (testimony of Belisle that his "understanding of the fire department's plans is that they treat everyone who they help evacuate from a high-rise building as having a special need"); *id.* at 945:10-11 (FDNY Assistant Chief Manahan testifying that "[i]f somebody is stuck and needs to be removed, we treat everybody the same way")). Villani explained that "FDNY personnel use their training and experience to respond to and evacuate individuals with disabilities in much the same way as with able-bodied individuals: firefighters, paramedics and EMTs quickly assess the needs of the individual and transport them out of harm's way — whether to a hospital or other safe place — depending on the needs of the individual and the dictates of the particular emergency situation." (Villani Decl.

¶ 36). NYPD Deputy Inspector James Wahlig testified that the NYPD conducts evaluations in a similar manner, treating people with disabilities who require evacuation on a “case-by-case basis.” (Tr. 732:17-20).

24. The City has several resources that may be used to assist in evacuating people with disabilities. For example, firefighters carry stokes baskets, backboards, and skids, all of which allow them to transport people who are unable to evacuate on their own. (*See* Tr. 958:3-10). Every ambulance in the City is equipped with a stair chair, a device that allows emergency responders to assist non-ambulatory evacuees down stairs. (Villani Decl. ¶¶ 39-40). While NYPD police cars do not carry stair chairs, the Emergency Services Unit, NYPD’s special operations division, has special equipment, including stair chairs, necessary to assist non-ambulatory evacuees. (*See* Tr. 751:12-17).

25. Although FDNY Chief Villani testified that the Fire Department’s Emergency Medical Services “protocols allow the transportation of a wheelchair, a home health aide, or service animal” with an evacuee (Villani Decl. ¶ 42; *see* Tr. 797:4-15), NYPD Deputy Inspector Wahlig testified that the Police Department provides no such guidance (*see* Tr. 731:8-732:20).

26. There is little doubt that the FDNY and the NYPD are capable of rescuing individuals with disabilities from high-rise buildings under ordinary circumstances. (*See, e.g.*, Villani Decl. ¶¶ 34, 35, 45; Tr. 923:1-22). It is less clear, however, that they would be able to do so during a large-scale evacuation, particularly one that occurs with little or no notice. (*See* Kailes Decl. ¶ 61). As Plaintiffs’ expert June Kailes testified, “[i]n a mass evacuation, it may be impossible for fire personnel to get to the numbers of people who will need evacuation assistance, and responding fire personnel may not be able to coordinate with ambulance services.

Moreover, first responders may need to fight against the tide of people going down and out of the building in order to get [their] equipment to the correct location.” (*Id.*).

27. The City does not require most high-rise buildings to maintain emergency evacuation devices for people with disabilities and, indeed, most buildings do not have them. (*See id.* ¶ 60; Tr. 307:23-308:7). Nor does the City have any plan for making these devices available during an emergency. (Tr. 307:20-24). As noted above, with the exception of the HEO, the City does not, in fact, have any plan for how people who cannot evacuate on their own, such as people with mobility disabilities, will be evacuated in these circumstances. (*See* Kailes Decl. ¶ 60; Blanck Decl. ¶ 68; *see also* Delarosa Decl. ¶ 38 (class member testifying that she called 911 in advance of Hurricane Sandy and “the 911 operator told [her] that [the operator] did not know what the emergency plans were for people who use wheelchairs”). Plaintiffs’ expert Peter Blanck testified that without such a plan, “it will be difficult for the City to effectively evacuate people with disabilities from [high-rise] structures, . . . particularly . . . during a large scale evacuation and for emergencies with no advance warning.” (Blanck Decl. ¶ 68).⁶

b. Transportation

28. The City’s emergency evacuation plans rely heavily on the use of public transportation. (*See, e.g.*, Ex. 6, at CNY000130 (“[A] successful evacuation will depend on the efficient use of mass transportation.”); *id.* (noting that, “[i]n the worst case scenario, . . . about 1.83 million [people] are expected to use public transportation” to evacuate during an

⁶ Plaintiffs’ witnesses suggested that the City could accommodate people with disabilities during an evacuation by requiring high-rise buildings to maintain evacuation devices. (*See, e.g.*, Tr. 201:25-203:17). The City has asserted that such a requirement would be unduly expensive and difficult to implement. (*See* Defs.’ Proposed Findings Fact & Conclusions Law ¶ 77 (citing Tr. 202:17-203:13, 257:20-258:9, 909:7-910:7, 920:15-922:14)). Because the trial was limited to liability, with remedies to be discussed at a later stage, the Court need not and does not address the issue here.

emergency); Ex. 245A, at 25 (“[Public transportation] will be a key component of many evacuation options, both for moving evacuees from the evacuation area, and for redistributing those displaced by the incident.”); Tr. 318:19-22 (Belisle testifying that “the emergency plans operate under the assumption that people are going to use the existing transportation resources”); Tr. 735:20-736:2 (Wahlig testifying that an emergency evacuation would rely on the City’s existing public transportation infrastructure); *see also* Ex. 68, at CNY00023744 (Mayor stating during press conference in advance of Hurricane Sandy that, “[i]f you are going to” a shelter, “we strongly urge you to get there via public transportation”). Accordingly, the City encourages people to use public transportation to evacuate during an emergency. (*See, e.g.*, Tr. 318:11-18; Ex. 4A, at CNY000028 (directing people to “[u]se public transportation if possible” to evacuate in an emergency)). In fact, Belisle testified that, with the exception of the HEO, the City was “not responsible for transportation of people to evacuation centers” and that the City plans for “people [to] find their [own] way to evacuation centers.” (Tr. 318:23-319:3).

29. Most of the City’s public transportation, however, is inaccessible to people with disabilities. (*See, e.g.*, Tr. 315:11-15 (Belisle testifying that “the majority of subway stops in New York are not accessible”); *id.* at 461:8-11 (testimony of MOPD Commissioner Calise that public transportation in New York “presents challenges” to people with disabilities); Kailes Decl. ¶ 39; *see also* Ryan Decl. ¶ 18 (“[T]he usual ways of traveling in New York City are extremely inaccessible to wheelchair-users”); Conner Decl. ¶ 15 (class member testifying that “the types of public transportation available to [her] are very limited” because she is blind)). The vast majority of the New York City subway system is inaccessible; indeed, less than twenty percent of all subway stations are accessible. (*See* Ex. 157, at P002127, P002130-37; Curry Decl. ¶ 29; Halbert ¶ 15; Torres Decl. ¶ 23). Public buses have only two seats that can

accommodate wheelchairs (Tr. 187:8-11, 188:15-18), and during an emergency may be too full to accommodate passengers with disabilities. (*See* Tr. 187:12-23; Martinez Decl. ¶ 35.) Only about two percent of the City’s yellow taxicabs are accessible to people with disabilities, *see Noel v. N.Y.C Taxi & Limousine Comm’n*, 687 F.3d 63, 66 (2d Cir. 2012), and those that are accessible pick up passengers only in Manhattan. (*See* Tr. 315:16-18, 455:20-456:19, 460:20-461:1).

30. To address these deficiencies, New York State’s Metropolitan Transit Authority (the “MTA”) provides paratransit services — that is, accessible public transportation — through the Access-A-Ride program. (*See* Morales Decl. ¶ 28; Ryan Decl. ¶ 19; Tr. 337:23-25, 338:1-5, 459:20-22). *See also* 49 C.F.R. § 37.121 (requiring that “each public entity operating a fixed route system” to “provide paratransit or other special service to individuals with disabilities”). Because “[m]uch of New York City’s public transportation system is not accessible to persons who use wheelchairs. . . . , persons with mobility disabilities rely disproportionately on paratransit for travel around New York City.” (Trapani Decl. ¶ 67). Unlike other forms of public transportation, however, paratransit ordinarily requires a user to reserve a ride at least twenty-four hours in advance. (*See* Bell Decl. ¶ 28; Buckner Decl. ¶ 19; Conner Decl. ¶ 16; Morales Decl. ¶ 28; Ryan Decl. ¶ 19; Torres Decl. ¶ 23; Tr. 193:13-15, 251:19-21, 337:5-9, 458:1-6).

31. The City directs people with disabilities to continue to rely on paratransit in an emergency. (*See, e.g.*, Tr. 608:2-8; *see also* Ex. 58, at CNY00025360, CNY00025362 (scripts from 311, the City’s government information hotline, for Hurricanes Irene and Sandy informing callers that “Access-A-Ride should be able to help [people with disabilities] get to an evacuation center”)). There is nothing in the City’s plans, however, to ensure that people with disabilities

are actually able to use paratransit during an emergency. The City's plans do not, for example, mandate that paratransit be available without reservations during an emergency; that it remain open for a certain amount of time after the issuance of an evacuation order; or even that it be available at all during an emergency. (*See, e.g.*, Tr. 789:3-5 (FDNY Chief Villani testifying that the plans do not contain any directive about the availability of paratransit during an emergency)). Nor may the City direct Access-a-Ride's operations during an emergency: Access-a-Ride is not run by the City but rather by the MTA, a public corporation chartered by the state, and the City has no agreement with the MTA to provide services during an emergency. (*See* Kailes Decl. ¶ 46; Tr. 335:20-23, 336:6-9, 336:18-21, 337:1-4, 337:20-21, 374:23-375:9).

32. In fact, the City has no meaningful plan whatsoever to ensure sufficient accessible transportation to evacuate people with disabilities during an emergency. With the exception of the HEO, the Coastal Storm Evacuation Plan contains no information at all about the transportation of people with disabilities during an emergency evacuation. (*See* Ex. 6). And the Area Evacuation Plan states that, in the event of an emergency, the "MTA *may* reroute paratransit vehicles to support special needs evacuations"; that the Taxi and Limousine Commission "*may* request support from private ambulette operators";⁷ that "MTA Paratransit *may* be asked to implement shuttle routes to hospitals or Evacuation Staging Areas"; and that "[b]uses and paratransit vehicles *may* be given special or prioritized access on restricted routes if used for evacuation operations." (Ex. 245A, at 28 (emphases added); *see also* Tr. 788:9-789:5 (FDNY Chief Villani testifying that the plans contain no directives requiring support from the MTA or the Taxi and Limousine Commission in an emergency)). The City has not even

⁷ New York law defines an ambulette as "a special-purpose vehicle, designed and equipped to provide nonemergency transport, that has wheelchair-carrying capacity, stretcher-carrying capacity, or the ability to carry disabled individuals." 18 N.Y.C.R.R. § 505.10(b)(3).

determined whether sufficient accessible transportation would be available in the event of an emergency. (*See* Tr. 293:19-23 (Belisle testifying that he is not aware “of any surveys of the sufficiency of accessible transportation in the event of an emergency”)); *id.* at 743:1-3 (testimony of NYPD Deputy Inspector Wahlig that “[t]he NYPD doesn’t know how many paratransit vehicles could be available to it” in an emergency)).

c. The HEO

33. As noted, the purpose of the HEO is to “coordinate evacuation assistance for homebound individuals who have no other options for evacuation” in an emergency. (Ex. 6, at CNY000139). Although it was developed as part of the Coastal Storm Evacuation Plan, the City now views the Operation as an all-hazards plan to be implemented, when needed, in any kind of emergency. (*See* Villani Decl. ¶ 9; Ex. 245A, at 36).

34. The HEO is designed to begin when the City’s shelter system, discussed below, opens and to end six to eight hours before a storm makes landfall. (*See* Ex. 6, at CNY00140). The HEO does not resume after a storm has cleared.

35. People are referred to the HEO when they call 311, the City’s government information hotline, during an emergency and state that they require evacuation assistance. (*See* Ex. 6, at CNY000139 (“Public messaging will inform homebound individuals in need of transportation assistance to call 311.”); Morrisroe Decl. ¶ 41 (stating that homebound individuals are directed through “mayoral press conferences and press releases, NYC.gov, 311’s online Web site and texting services, the MOPD and its Web site,” and emails to nongovernmental partners to call 311 if they need assistance evacuating)).

36. When someone calls 311 to inquire about assistance evacuating, the 311 representative determines which of three levels of assistance the caller requires. (*See* Ex. 6, at

CNY000140; Morrisroe Decl. ¶ 42; Villani Decl. ¶¶ 10-11). First, people who are capable of getting to the sidewalk in front of their building are transferred to MTA paratransit dispatchers. (*See* Ex. 6, at CNY000142; Villani Decl. ¶¶ 11-12). Second, for callers who can sit up unassisted for an extended period of time but cannot exit the building on their own, 311 dispatchers take their contact information and forward it to the FDNY. (*See* Ex. 6, at CNY000142; Villani Decl. ¶¶ 11-12). The FDNY compiles a list of those who need assistance, and dispatches teams of firefighters on a school bus to evacuate them. (*See* Ex. 6, at CNY000193-94; Manahan Decl. ¶¶ 16-19; Villani Decl. ¶ 12). If an evacuee does not answer the door, the FDNY evacuation team makes one attempt to contact the evacuee by phone and, if the evacuee cannot be reached, it moves on. (*See* Ex. 6, at CNY000193). Finally, those who are incapable of sitting up unassisted and must be transported on a stretcher are transferred to the Emergency Medical Service (“EMS”) through the 911 system to be transported by ambulance to a hospital outside the evacuation zone. (*See* Ex. 6, at CNY000142; Villani Decl. ¶¶ 11-12).

37. The HEO does not allow evacuees to choose their destination. As described in the Coastal Evacuation Plan, all of those evacuated by the HEO are transported to an evacuation center or a hospital, depending on the level of care they require. (*See* Ex. 6, at CNY000142; Tr. 314:11-15). FDNY Chief Villani testified that those who require assistance evacuating from their building may also request that they be left in front of the building and not be transported anywhere. (Tr. 793:22-794:11).

38. The HEO is not intended to meet the needs of all people with disabilities during an evacuation. Instead, it is designed to be a limited program, a “last resort” for those who are homebound and unable to evacuate without assistance. (Ex. 6, at CNY000107; Villani Decl. ¶ 9; Davis Decl. ¶ 81; Tr. 776:8-10, 895:6-9; *see also* Kailes Decl. ¶ 40 (“The scale of the program

appears to be designed to provide individualized assistance to a small number of people.”)). During Hurricane Irene, in which approximately 370,000 residents were ordered to evacuate (*see* Ex. 154, at P001703), only about 200 people were evacuated via the HEO (Manahan Decl. ¶ 13); and during Hurricane Sandy, in which approximately 375,000 people were ordered to evacuate (*see* Ex. 78, at CNY00022673), the HEO evacuated fewer than 100 people (McKinney Dep. Vol. III, at 18:12-16).

39. Despite this limited mandate, the City’s expert Elizabeth Davis testified that the Operation has “served the needs of the people who requested its services” and that “the FDNY has the capacity to successfully fulfill all requests during its implementation.” (Davis Decl. ¶ 80). In support of this conclusion, Davis cited the deposition testimony of Kelly McKinney, OEM’s Deputy Commissioner of Planning and Preparedness, that, theoretically, there is no “upper bound to the capacity” of the HEO; the capacity of the Operation at any given point, McKinney explained, depends on the resources available to it at that point, and the availability of such resources is a “function of time.” (McKinney Dep. Vol. I, at 75:11-25; *see* Davis Decl. ¶ 80). But McKinney did not, in his deposition or otherwise, state what the capacity of the Operation as currently resourced is, whether he believed such capacity was sufficient to evacuate all those who might require evacuation through the HEO during an emergency, and, if not, how long it would take to acquire the resources to make the HEO sufficient. (*See* McKinney Dep. Vol I, at 74:9-75:25). And Davis testified that she had not seen any assessment of the capacity of the HEO. (Tr. 895:23-896:3).

40. The evidence presented at trial does support the conclusion that FDNY was able to fulfill all the requests it received for evacuation as part of the HEO during Hurricanes Irene and Sandy. FDNY Assistant Chief Manahan testified that, during Hurricane Irene, the Fire

Department was able to safely evacuate everyone who requested its assistance through the HEO. (*See* Manahan Decl. ¶ 13). He testified that, during Hurricane Sandy, he did not “receive any reports of any problems or disruptions involving [the FDNY’s] evacuation activities.” (Manahan Decl. ¶ 21). Plaintiffs did not introduce any evidence to the contrary.

41. Notwithstanding the FDNY’s ability to serve all of those who requested its assistance during Hurricanes Irene and Sandy, there are several reasons to believe that the HEO could be insufficient to meet the needs of people with disabilities in future emergencies. First, the evidence at trial related solely to the Fire Department’s resources. The Fire Department, however, is not involved in transporting those who are able to exit their buildings unassisted, but who need assistance getting to a shelter or other location. (*See* Ex. 6, at CNY000140-42). Instead, the HEO depends upon paratransit to evacuate these people. (*See* Ex. 6, at CNY000142). The Fire Department’s capacity is therefore irrelevant to the HEO’s ability to accommodate them. And, as explained above, there is nothing in the City’s emergency plans to ensure that paratransit will remain available in an emergency.

42. Second, the City does not inform the public about the existence of the HEO. (*See* Tr. 293:13-16; Kailes Decl. ¶ 41). Homebound individuals are directed to call 311 if they are unable to evacuate. (*See, e.g.*, Ex. 6, at CNY000140; Ex. 61 (email to service providers of people with special needs before Hurricane Sandy stating that “[c]lients who cannot evacuate their homes independently and who do not have any other options can call 311 to coordinate transportation to an evacuation center”); Ex. 67, at CNY 00023739 (mayoral press conference before Hurricane Sandy stating “[i]f you can’t get to a shelter by yourself, you can request transportation by calling 311”); Morrisroe Decl. ¶ 41; *see also* Ex. 3, at CNY001091 (“Call 911 if you are stranded and need emergency assistance to evacuate your home.”)). But they are not

informed that there is a City program that could help them do so, or that that Operation is available before — and, indeed, *only* before — a storm actually makes landfall.

43. It is difficult to know how many more people would have requested the assistance of the HEO during Hurricanes Irene and Sandy if they had known that it was available, or whether the Operation would have been able to accommodate an increase in requests. (*See* Kailes Decl. ¶ 40 (noting that while the HEO evacuated 200 people during Hurricane Irene and fewer than 100 people during Hurricane Sandy, “[i]n a major coastal storm, thousands of people with disabilities, if not more, might need to evacuate”); Villani Decl. ¶ 22 (“It is not possible to predict with precision the number of individuals who will require evacuation assistance during an emergency.”); Tr. 779:1-10 (Villani testifying that the Fire Department has not assessed how many wheelchair-accessible vehicles would be available for the HEO; that he did not know how many vehicles of any kind are available for the Operation; and that there is no “predefined number of vehicles” available to support homebound evacuations); *Id.* at 781:10-14 (Villani testifying that the Fire Department has not determined the greatest number of people it could evacuate through the HEO)).

44. Third, the HEO is triggered by a request for evacuation assistance. Some people with disabilities, however, may not be able to request such assistance (and may not have someone who could request assistance on their behalf). Moreover, the City depends on the 311 system, discussed below, to “serve as the single point of intake for all homebound individuals requesting evacuation assistance.” (Ex.6, at CNY000140). Indeed, it provides no other method for people with disabilities to request assistance. (*See, e.g.*, Tr. 744:1-7). As explained below, however, 311 may be unreliable or unavailable during an emergency. The City has not even

evaluated the capacity of 311 to assist those who might require evacuation assistance. (*See* Tr. 313:15-18).

45. Finally, and most fundamentally, it is hard to know whether, or how, the HEO could function in a no-notice emergency, such as a terrorist attack. As noted above, the HEO was originally conceived as part of the Coastal Storm Evacuation Plan for use in emergencies with advance notice. (*See* McKinney Decl. ¶ 19). And, by its terms, it appears to depend on such advance notice. As currently written, for example, the Operation ends at least six hours *before* an emergency actually strikes, and does not reactivate afterwards. (*See* Ex. 6, at CNY00140; Tr. 779:15-23, 952:10-12; Manahan Dep. 88:6-18; 101:12-15). It is designed, therefore, to assist homebound individuals in evacuating *before* a storm makes landfall, not after. (*See* Ex. 6, at CNY000139-CNY000140; Manahan Dep. Tr. 100:16-17; *id.* at 101:7-17 (testifying that the Homebound Evacuation Operation is a pre-event plan)).

46. As noted above, earlier versions of the Area Evacuation Plan — the City’s plan for evacuations in no-notice events — did not include the HEO or any other provisions to evacuate people with disabilities. (*See* Ex. 5). Although the version of the Area Evacuation Plan adopted on the eve of trial incorporates the HEO and provides that it will be implemented “if necessary,” it does not detail how the Operation would be implemented in an emergency without warning. (Ex. 245A, at 36). It is unclear how an evacuation operation that is intended to begin and end before an emergency actually strikes can be applied to an emergency that occurs without warning. Indeed, FDNY Chief Villani conceded at his deposition that because the HEO is “designed specifically for something in advance,” he did not know whether it could be implemented in an emergency without warning and that the Fire Department had neither planned nor prepared for such implementation. (Villani Dep. 15:6-20).

d. Evacuations During Hurricane Sandy

47. Hurricane Sandy provided some indication of how the City's evacuation plans operate in the event of an emergency with advance notice.

48. The Mayor issued a mandatory evacuation order for the areas of the City most likely to be most affected by Hurricane Sandy — denominated Zone A — at 11:30 a.m. on Sunday, October 28, 2012. (*See* Ex. 68, at CNY00023743; Ex. 76, at CNY00023346). The Mayor directed residents of Zone A to evacuate by the end of the day. (*See* Ex. 76, at CNY00023346). The City directed people who needed assistance evacuating to call 311. (*See, e.g.*, Ex. 61 (email to service providers of people with disabilities stating “[c]lients who cannot evacuate their homes independently and who do not have any other options can call 311 to coordinate transportation to an evacuation center.”); Ex. 67, at CNY00023739 (Mayor's statement that “[i]f you can't get to a shelter by yourself, you can request transportation by calling 311. But I would stress that your first option should be to stay with family and friends.”); Ex. 68, at CNY00023744 (Mayor's statement that “[i]f you cannot evacuate yourself and need assistance, call 311 and we will be sure to make sure somebody comes and helps you”); Morrisroe Decl. ¶ 43).

49. In advance of the evacuation order, Access-a-Ride was available to people with disabilities who made reservations at least twenty-four hours in advance. (Ex. 397, at CNY00022779 (October 26, 2012 Situation Report stating that, as Hurricane Sandy approached, MTA paratransit was “[s]etting up schedules from two-day to one-day booking for clients”)). Paratransit began to shut down almost immediately after the evacuation order was issued on October 28, 2012, with the MTA website announcing that “[o]utbound Access-A-Ride trips” would be “scheduled only until 12 p.m. . . ., and return trips [would] continue until 5 p.m.” (Ex.

160, at CNY00382). Any trips scheduled to take place after that time were cancelled. (*Id.*). By contrast, subway service did not begin to shut down until 7:00 p.m. on October 28, 2012, and MTA bus service was not curtailed until at least 9:00 p.m. (Ex. 76, at CNY00023346; *see also* Ex. 79, at CNY00022662 (indicating that some subways ran until 10:00 p.m., and some buses did not stop running until 11:00 p.m.)).

50. The NYPD requisitioned thirty MTA buses, and for several hours after public transit had shut down, police officers drove through the evacuation zone providing transportation to those who had no other way to evacuate. (*See* Wahlig Decl. ¶ 19; Tr. 747:4-23). The buses traveled along a designated route, but also responded to calls for assistance via 311 and 911 as well as reports from patrol officers of people who needed help evacuating. (*See* Tr. 748:1-6). The bus drivers were not instructed to ensure that the buses did not get too full to allow wheelchair users to access them, and no wheelchair users were evacuated in this way. (*Id.* at 749:10-12, 750:6-12).

51. The HEO began at 9:00 a.m. on Sunday, October 28, 2012, the same time the City's shelter system opened (*see* Ex. 76, at CNY00023346; Tr. 950:9-12), and was deactivated at 10:00 p.m. that same night (*see* Tr. 952:1-9 (testimony of FDNY Assistant Chief Manahan that the Operation concluded at 10:00 p.m. on October 28, 2012); Manahan Decl. ¶ 17 (same); *see also* Ex. 79, at CNY00022656 (Hurricane Sandy situation report stating that by 3:00 a.m. all HEO activities had ceased); Manahan Dep. 70:10-15 (confirming that the HEO concluded at 10:00 p.m. on October 28, 2012)). Those who called 311 after that time requesting evacuation assistance were advised not to leave their locations and to shelter in place. (Ex. 79. at CNY00022651, CNY00022659; *see* Ex. 58, at CNY00025363). The HEO did not reopen after the hurricane passed. (*See* Tr. 952:3-12).

52. The storm made landfall at approximately 7:30 p.m. on Monday, October 29, 2012, and by the night of October 30, 2012, it had subsided. (*See* Ex. 116, at 31; Ex. 81, at CNY00022463). *See* National Oceanic and Atmospheric Administration, Service Assessment: Hurricane/Post-Tropical Cyclone Sandy, October 22-29, 2012, at 12 (May 2013), *available at* <http://www.nws.noaa.gov/os/assessments/pdfs/Sandy13.pdf> (visited on October 31, 2013); *see also, e.g., Chubb & Son, Inc. v. Kelleher*, No. 92 CV 4484 (CBA), 2006 WL 2711543, at *4, n.2 (E.D.N.Y. Sept. 21, 2006) (taking judicial notice of the National Oceanic and Atmospheric Administration’s records reflecting the date Hurricane Wilma struck a certain region in Florida); *Mamiye Bros. v. Barber S.S. Lines, Inc.*, 241 F. Supp. 99, 116 (S.D.N.Y. 1965) (taking judicial notice of forecasts from the United States Weather Bureau published in the newspaper).

53. In the immediate aftermath of the hurricane, the Fire and Police Departments conducted a search-and-rescue operation. (*See* Manahan Decl. ¶ 23). The operation was limited to rescuing those in life-threatening situations. (*See* Manahan Dep. 108:13-14 (“[W]e were searching for people who desperately need to be saved.”); Tr. 946:17-19 (FDNY Assistant Chief Manahan testifying that “a rescue is when there’s — if you didn’t show up at the scene, that the person could suffer serious injury or death”); Kass Decl. ¶ 9). It did not aid those who were in need of evacuation assistance but otherwise safe. (*See* Manahan Dep. 109:6-15).

54. The record demonstrates that some people with disabilities were unable to evacuate because of insufficient transportation. (*See, e.g.,* Bell Decl. ¶ 30 (class member testifying that during Hurricane Sandy, he “tried to use Access-A-Ride, but the Access-A-Ride dispatch did not answer the phone”); Martinez Decl. ¶ 35 (class member testifying that the evacuation buses were too crowded for him to board in his wheelchair)).

55. Even after Hurricane Sandy had passed, some class members were unable to access public transit. (*See* Bell Decl. ¶ 30 (testifying that “[w]hen Access-[A]-Ride started to operate again, [he] was told that only those individuals who had medical emergencies” would be provided transportation); Morales Decl. ¶ 24 (testifying that several days after Hurricane Sandy, she needed to go to the hospital to speak with her doctor, but she was unable to get there because the MTA buses were too crowded for her to board in her wheelchair, and Access-A-Ride did not answer the phone)).

56. MTA buses resumed modified service on Tuesday, October 30, 2012 at 5:00 p.m. (Ex. 81, at CNY00022461, CNY00022468), and bus service was as close to fully operational as possible by October 31, 2012. (Ex. 83, at CNY00022418). Subway service was partially restored on November 1, 2012. (Ex. 85, at CNY00022379). Access-A-Ride began offering limited paratransit service in cases of “medical necessity” on October 31, 2012, and resumed regular service on November 1, 2012, although it did not resume most transportation within Zone A for several more days. (*See, e.g.*, Exs. 365, 367, 375, 378).

57. There is substantial evidence that people with disabilities were stuck in high-rise buildings after the storm. For example, MOPD Commissioner Calise testified that he received calls from people who were stranded in their buildings and, more generally, that it was “known” that people who used wheelchairs were stuck in high-rise buildings in the aftermath of Hurricane Sandy. (Tr. 444:8-24; *see* Calise Decl. ¶ 26). Belisle also testified that he was aware that people with disabilities had been stranded in their apartments after Hurricane Sandy, but that he did not know how many had been stranded. (*See* Tr. 310:23-311:4; *see also* Lekas Miller Dep. 54:12-24 (testifying that in a building she had visited after Hurricane Sandy, there were many people with limited mobility who could not leave their apartments); Ex. 116, at 73:8-10 (testimony of Deputy

Mayor Caswell Holloway at a City Council hearing that the City recognized that “some New Yorkers [were] unable to leave their homes without elevators or for medical reasons”); Tr. 721:1-8 (Deputy Commissioner for Environmental Health at the City’s Department of Health and Mental Hygiene testifying that it was “clear” after Hurricane Sandy that “there was a need for reaching out to people who might remain stranded”); *id.* at 947:19-22 (Manahan testifying that he was aware that after Hurricane Sandy there were many people stranded in multi-story buildings); Ex. 329, at CNY00023894 (press release stating that after Hurricane Sandy, there were teams canvassing high-rise buildings in Far Rockaway and Coney Island to “assess[] the wellbeing of residents who had not been able to leave their apartments and who may have been without water, electricity and heat”).

58. Class member Kenneth Martinez, who relies on a motorized wheelchair for mobility and lived in Far Rockaway when Hurricane Sandy struck, testified that he became aware of the impending hurricane on Sunday, October 28, 2012, the day before it was to make landfall. (Martinez Decl. ¶ 28). Police officers directed him to an intersection where buses were gathering to transport evacuees. (*Id.* ¶ 34). Although there were “four or five buses lined up at the intersection,” Martinez could not get on any of them because they were too crowded for him to board in his wheelchair. (*Id.* ¶ 35). A bus driver told him that more buses would be arriving within ten to fifteen minutes. (*Id.*). Martinez waited outside for twenty minutes, but no more buses came. (*Id.*). He could not stay outside for any longer because it was raining, and he feared that his motorized wheelchair would short out in the rain. (*Id.*).

59. The following day, Martinez called 311 in an attempt to get evacuation assistance. (*Id.* ¶ 37). He testified that although he began calling at 12:30 p.m., he could not get through until 4:00 p.m. (*Id.* ¶¶ 37-38). The 311 operator informed Martinez that he would be put “on a

list,” but that he would “have to wait.” (*Id.* ¶ 38). Nobody ever came to assist him. (*Id.*). That evening, flood water began to fill Martinez’s first-floor apartment, and Martinez was scared that he “was going to drown.” (*Id.* ¶¶ 39-46). With the water “so high” that his “head was almost to the ceiling,” Martinez began “banging on the ceiling, hoping that the neighbors would hear” him. (*Id.* ¶ 47). They did — and were able to break a window into his apartment, swim inside, and rescue him. (*Id.* ¶¶ 48-50).

60. Class member Joyce Delarosa, who uses a wheelchair and relies on oxygen and lives on the east side of Manhattan, testified that during Hurricane Sandy, the power in her building went out, leaving her unable to power her oxygen concentrator or exit the building. (Delarosa Decl. ¶¶ 2, 51-55). She called 911 for evacuation assistance, and was told that, “unless [she] was having an immediate medical crisis and need[ed] to go to the hospital,” she could not receive assistance. (*Id.* ¶ 57). Because she did not think she needed to be in a hospital, but rather only needed to plug in her oxygen concentrator, she declined emergency assistance. (*Id.*). She testified that she called 311 to request assistance evacuating her daughter, who also uses a wheelchair, but was told that the City would not provide evacuation assistance unless her daughter needed to go to a hospital. (*Id.* ¶ 59). Eventually, Delarosa testified, the consequences of lack of oxygen became so severe that she did require medical attention, at which point she called 911 again. (*Id.* ¶ 64). EMS came to her apartment, used a stair chair to evacuate her, and provided her oxygen. (*Id.* ¶¶ 64-65). Delarosa testified that the only way she was able to convince the EMS providers to evacuate her daughter too was to lie and say that her daughter needed to go to the hospital as well. (*See id.* ¶¶ 66-70; Tr. 88:9-89:9).

61. Class member Melba Torres, who uses a wheelchair and lives on the Lower East Side of Manhattan, testified that after receiving an evacuation order, she sent her aide to

investigate accessible transportation options, but that her aide reported to her that the buses being used to evacuate the people in her building were not wheelchair accessible. (*See* Torres Decl. ¶¶ 2, 62, 66). As a result, she did not evacuate, and spent six days in her apartment without running water, heat, or electricity. (*Id.* ¶ 72). At one point, Torres testified, a police officer came to her apartment, but the officer stated that she could not receive evacuation assistance unless she was having a medical emergency. (*See id.* ¶ 82).

E. The Shelter System and Sheltering in Place

62. A core aspect of the City's emergency plans is providing shelter to those displaced in an emergency. (*See* Tr. 319:5-9; Ex. 7). Because people with disabilities often require accessible housing or other accommodations, they may be less able than those without disabilities to stay with friends, family, or neighbors during a disaster. (*See, e.g.*, Torres Decl. ¶¶ 25-26 (testimony of class member Melba Torres, who has a mobility disability, that she does not know of anyone with whom she could stay during an emergency because she does not know anyone who both has a wheelchair accessible apartment and could provide her the assistance she needs to complete her daily activities); Delarosa Decl. ¶¶ 27-28 (class member testifying that she does not have any family or friends with whom she could stay); Halbert Decl. ¶ 22 (same); Martinez Decl. ¶ 20 (same)). Therefore, emergency shelters are particularly important for people with disabilities.

63. The City's plan for providing shelter during a disaster is the Coastal Storm Sheltering Plan ("Sheltering Plan"). (Ex. 7; *see* Maniotis Decl. ¶ 19). Despite its name, this Sheltering Plan is not limited to coastal storms. (Maniotis Decl. ¶ 19). It is an "all-hazards" plan, meaning that it could be activated during any large-scale emergency, including an emergency that arose without warning. (*Id.*).

64. As detailed in the Sheltering Plan, the City uses a “scalable solar system model” for sheltering. (Maniotis Decl. ¶ 21; *see* Van Pelt Decl. ¶ 12; Ex. 7, at CNY000357). The City has over five hundred shelters, which are grouped into sixty-five “solar systems.” (*See* Maniotis Decl. ¶ 20; Ex. 7, at CNY000357). Each solar system consists of one evacuation center that serves as the “hub,” along with five to ten shelters. (*See* Van Pelt Decl. ¶ 12; Ex. 7, at CNY000357). In most cases, one of these shelters is co-located with the evacuation center. (Tr. 326:6-8; Ex. 7, at CNY000360).

65. The City also has eight special medical needs shelters (“SMNSs”), at least one of which is located in every borough. (*See* Van Pelt Decl. ¶ 13; Ex. 7, at CNY000357; Ex. 14, at CNY001390). The SMNSs are intended to shelter individuals whose needs exceed the capability of the general shelters but who do not require hospitalization. (Van Pelt Decl. ¶ 13; Ex. 7, at CNY000389; Ex. 14, at CNY001390).

66. During every emergency in which the City offers sheltering, all evacuation centers and SMNSs are open. (*See* Tr. 323:14, 373:10-11; 914:23-915:3; Ex. 7, at CNY000394). Additional shelters are opened based on need. (*See* Tr. 323:14-15, 914:23-915:3; Ex. 7, at CNY000385, CNY000395). Evacuees seeking shelter are instructed to report first to an evacuation center. (*See* Van Pelt Decl. ¶ 14; Ex. 7, at CNY000357, CNY000363, CNY000371). Once there, they undergo a basic intake process to evaluate their needs, after which they are either directed to a co-located shelter or transported to another shelter, an SMNS, or a hospital. (*See* Van Pelt Decl. ¶ 14; Tr. 374:5-12; Ex. 7, at CNY000357, CNY000363, CNY000371).

67. The vast majority of evacuation centers and shelters are located within New York City Department of Education (“DOE”) facilities — that is, school buildings. (Van Pelt Decl. ¶ 16; Ex. 43, at CNY0023932). Although the locations of evacuation centers are publicized in

advance of an emergency in various ways (Van Pelt Decl. ¶ 15; Ex. 7, at CNY000417; *see, e.g.*, Ex. 4A (brochure providing a list and map of evacuation centers)), the City does not publicize the location of other shelters in the system (*see* Tr. 322:17-20, 322:25-323:1, 373:3-23).

68. If fully activated, the City's shelter system has the potential to shelter over 600,000 people. (*See* Ex. 7, at CNY000359; Van Pelt Decl. ¶ 12).

69. The solar system model has important benefits. First, because the system is scalable, it allows emergency managers to activate facilities only when needed and thus efficiently allocate City staff, equipment, and other specialized resources. (*See* Tr. 915:14-21; Van Pelt Decl. ¶ 12). Second, it "allows for a consistent message to the public," as people can be "directed to a limited number of evacuation centers which are publicized" in advance and always open, "rather than to shelters which may or may not be open depending on the size of the storm." (Davis Decl. ¶ 98). As evacuation information is "not dependent on the size of the storm," the City's expert Elizabeth Davis explained, people "can more easily develop an evacuation plan in advance of" an emergency. (*Id.* (emphasis omitted)).

70. The Court heard testimony about both the architectural accessibility of the City's shelters — that is, the accessibility to people with disabilities, and particularly mobility disabilities, of the buildings the City uses as shelters — as well as the accessibility of the programs and services offered therein. It also heard testimony about the City's plans for refuges of last resort and sheltering in place. The Court will address each in turn.

a. The Architectural Accessibility of Shelters

71. The City's Sheltering Plan is silent as to the architectural accessibility of the shelter system. (*See* Ex. 7). It does not require that the City consider accessibility in choosing facilities to serve as shelters, let alone mandate that the shelter system, or any portion thereof, be

architecturally accessible to people with disabilities. Nor does it provide any guidance to ensure that there are accessible pathways between the shelter entrance, the rooms used for sheltering, and the bathroom, or that the particular rooms set up for sheltering — that is, the rooms chosen as dormitories, used for food service, etc. — are themselves accessible. The other plans related to sheltering similarly lack such guidance. (*See, e.g.*, Ex. 15 (Evacuation Center Field Guide); Ex. 16 (Hurricane Shelter Field Guide)).

72. The City's written plans do instruct shelter operators, when opening a shelter or evacuation center, to identify which areas of the shelter are accessible to people with disabilities, but they do not provide instructions for how to do so, nor do they require that any of the shelter areas actually be accessible. (*See* Ex. 15, at CNY01119; Ex. 16, at CNY001258). In addition, during an emergency, shelter operators are provided a checklist to evaluate the accessibility of their shelter. (Belisle Decl. ¶ 48; Ex. 472). The checklist asks shelter staff, for example, to mark the accessible entrances and bathrooms as such. (Ex. 472). But again, it does not require that a shelter actually have accessible entrances or bathrooms, and it does not give instructions for determining whether an entrance or bathroom is accessible. (*See id.*; Tr. 392:1-6). It is unclear whether shelter operators even use the checklist. (*See* Tr. 808:19-25, 809:16-20 (testimony of Erin Villari, who managed two different shelters during Hurricane Sandy, stating that she did not check to see if the restrooms at those shelters were accessible)).

73. Significantly, the City does not even know which of its shelters and evacuation centers are accessible. (*See, e.g.*, Tr. 328:23-329:1 (Belisle testifying that the City has yet to determine what percentage of New York public schools — the facilities the City uses for most shelters — have accessible bathrooms); *id.* at 333:18-22 (Belisle agreeing that “no one from the City knows what percentage of shelters have rest rooms that are accessible to people who must

use wheelchairs”); *id.* at 359:23-360:9 (Belisle testifying that he did not know whether all evacuation centers are accessible); Maniotis Dep. 90:3-5 (testifying that she did not know how many shelters are wheelchair accessible)).

74. Further, the evidence at trial demonstrated that many of the City’s shelters and evacuation centers are not fully accessible to people with disabilities — and that the City is aware of that fact. (*See, e.g.*, Tr. 319:21-14 (Belisle testifying that he is “aware that many polling sites,” which are located in the same DOE facilities as shelters, “as they were used the day of election, may be inaccessible”); *id.* at 330:2 (Belisle testifying that he is “aware that schools lack accessible bathrooms”); *id.* at 447:14-17 (MOPD Commissioner Calise testifying that he is aware of the fact that “at least some public schools have multiple architectural barriers for persons with disabilities”); *id.* at 496:25-497:3 (Susan Dooha, Executive Director of Plaintiff CIDNY, testifying that during a conversation with former MOPD Commissioner Matt Sapolin after Hurricane Irene, Sapolin stated “that he believed the City knew that the shelters were not accessible, and that they would not claim that the shelters were accessible”); *see also id.* at 915:22-916:10 (Elizabeth Davis, the City’s expert, testifying that “[t]here are evacuation centers that appear to have deficiencies [in accessibility] that need correction”). For example, Special Needs Coordinator Belisle testified that “[n]ot all of [the City’s] shelters are accessible” and that “some of [the City’s evacuation centers] may not be as accessible as we want.” (Tr. 359:21-360:4). Similarly OEM Deputy Commissioner McKinney testified that “[n]ot all of the City’s emergency shelters are fully accessible.” (McKinney Dep. Vol. I 105:20-21).

75. When CIDNY employee Trapani compared a list of shelters open during Hurricane Irene with a list of schools identified by the DOE as inaccessible to people with disabilities, she found that the majority of schools used as shelters during Hurricane Irene had

been characterized by the City itself as inaccessible. (*See* Trapani Decl. ¶ 35; Tr. 148:14-149:19; Ex. 146). And several witnesses, including the Commissioner of the MOPD, testified about shelters that lacked accessible entrances or bathrooms, or were otherwise not fully accessible to people with disabilities, during Hurricanes Irene and Sandy. (*See, e.g.*, Trapani Decl. ¶¶ 39-41, 43, 52-54, 58, 61-62; Dooha Decl. ¶¶ 57-58, 81-82; Calise Decl. ¶¶ 15-16).

76. Although the record makes clear that many evacuation centers and general shelters are not accessible to people with disabilities, the evidence suggests that SMNSs are wheelchair accessible. (*See, e.g.*, Maniotis Decl. ¶ 24; Tr. 448:13). At a minimum, Plaintiffs did not prove through competent evidence that the SMNSs are inaccessible to people with disabilities. (*But see* Tr. 541:1-12 (Plaintiffs' expert Peter Blanck testifying that he visited an SMNS that did not appear to be fully accessible — citing, in particular, apparently inaccessible outdoor showers — but stating that he did not perform “an accessibility assessment”)).

77. Because of its awareness that not all shelters and evacuation centers are accessible — that is, compliant with the ADA — the City has adopted a “usability” standard. (*See, e.g.*, Tr. 363:8-11 (Belisle testifying that “during the training . . . for coastal storm staff,” the City “reiterate[s] the importance of having a *usable* entrance for people with disabilities” (emphasis added)); Tr. 330:6-10 (Belisle testifying that “before Hurricane Sandy, the City confirmed that “all of the shelters” had “a wheelchair *usable* entrance” (emphasis added)); Calise Decl. ¶¶ 17-18 (testifying that during Hurricane Sandy, the MOPD chose — and the Mayor, the OEM website, and the MOPD website used — the term “usable” rather than accessible to describe evacuation center entrances because not all of the entrances were “completely code compliant,” but they did “enable an individual using a wheelchair to enter the shelter, sometimes with assistance”)).

78. As the City's expert conceded, the concept of "usability" is not equivalent to the ADA's standard of accessibility. (Tr. 912:25-913:14; 915:22-916:5, 930:5-8; *see also* Tr. 439:3-5 (testimony of MOPD Commissioner Calise that usability does not necessarily mean consistent with the ADA); Calise Decl. ¶ 18 (same); Kailes Decl. ¶ 80 (describing usability as "an unclear term, not a standard or reassuring term in the disability community, and likely lead to confusion and lack of trust as to the accessibility at these facilities")). Instead, it represents the City's attempt to enable people with disabilities to at least enter a facility, despite the fact that it might be inaccessible within the meaning of the ADA. (*See* Calise Decl. ¶ 18; Tr. 439:3-24, 913:7-13). For example, during Hurricane Sandy, some evacuation centers had temporary ramps that, while not ADA-compliant, enabled a person using a wheelchair to enter the facility, at least when assisted by a police officer. (*See* Calise Decl. ¶¶ 15, 18).

79. During Hurricanes Irene and Sandy, some shelters lacked even a usable entrance. (*See, e.g.*, Trapani Decl. ¶¶ 52-53 (testifying that at Newcomers High School, used as a shelter during Hurricane Sandy, the ramp leading to the front door was unsafe, the front door was too narrow to accommodate a person using a wheelchair, and there was no indication of any other entrance that was accessible); *id.* ¶ 58 (testifying that at P.S. 166, another shelter used during Hurricane Sandy, the accessible entrance was difficult to find and locked and that there was no doorbell); Morales Decl. ¶¶ 18-22 (class member testifying that she was unable to get into a shelter during Hurricane Irene because the accessible entrance was locked). *But see* Belisle Decl. ¶ 65 (testifying that the City, presumably after Trapani's visit, identified an accessible entrance at Newcomers High School)).

80. Some evacuation centers and shelters also lacked bathrooms that were even usable by people with disabilities. (*See, e.g.*, Torres Decl. ¶¶ 38-39 (class member testifying that

she was unable to use the bathroom at Hunter College, the shelter to which she evacuated during Hurricane Irene, because the stalls were too narrow to accommodate her wheelchair)). The City's public information during Hurricane Sandy stated only that the shelters would have usable *entrances*; it made no commitment that the shelters would have usable — let alone accessible — restrooms, or that the dormitories, food distribution areas, and other shelter areas would themselves be usable. (*See, e.g.*, Ex. 69 at CNY00023748; Ex. 61; *see also, e.g.*, Tr. 439:16-19 (MOPD Commissioner Calise testifying that a shelter would be “usable” if it permitted a person with a disability to enter but lacks a bathroom that person could use)).

81. Furthermore, nothing in the City's written emergency plans requires any of the City's evacuation centers or shelters to be usable, or even defines the term. Nor do the plans provide any guidance for making evacuation centers and shelters usable. Therefore, there is no way to know whether or how the City will attempt to make inaccessible shelters usable for people with disabilities in the future.

82. The City's sheltering plans also provide little or no guidance for setting up shelters to ensure that people with disabilities can navigate within them. The plans do not, for example, require that accessibility be considered in designating the rooms to be used for registration, dormitories, and other shelter spaces. Nor do they require that the pathways to and from the accessible entrance (if there is one), the bathroom, and the main sheltering areas be navigable by people with mobility disabilities (although the checklist given to shelter operators does direct them to determine whether such pathways are “clearly marked, unobstructed, and without stairs” (Ex. 472)). Both the plan for setting up general shelters and the plan for SMNSs, however, do provide guidelines designed to allow people in wheelchairs to access the cots used in the dormitories. (*See* Ex. 14, at CNY001441 (providing that cots at SMNSs should be set up

with “[s]pace to pull a wheelchair up to the cot”); Ex. 16, at CNY001266 (instructing that general shelter operators should “[a]llocate additional space around cots for shelterees who use wheelchairs or walkers, or who need extra room to get on and off the cots”).

83. City officials testified that if a shelter was not sufficiently accessible, the City would provide accessible transportation to another shelter that was. (*See* Calise Decl. ¶ 21; Van Pelt Decl. ¶ 14; Tr. 328:8-9). But there is nothing in the City’s sheltering plan that requires this. The plan states that once evacuees arrive at an evacuation center, they will “either be assigned to a Hurricane Shelter in the same facility or transported to an associated Hurricane Shelter or Special Medical Needs Shelter by bus.” (Ex. 7, at CNY000357). It does not, however, provide that the bus itself will be accessible to people with disabilities. In addition, the City has not assessed how many people might require accessible transportation between evacuation centers and shelters — and, by extension, whether it would be able to provide such transportation. (*See* McKinney Dep. Vol. I 81:3-8).

b. The Programmatic Accessibility of Shelters

84. In addition to ensuring that the shelter facilities are physically accessible, there are several other accommodations that may be required to ensure that people with disabilities are able to access sheltering. First, people with cognitive or sensory disabilities may require accommodations in order to effectively communicate with shelter staff, receive information, and navigate a shelter. (*See* Kailes Decl. ¶ 70; Ex. 65, at 126, 130; Ex. 153, at P001989). For example, those who are blind or have low vision might require information to be written in Braille or read aloud; those who are deaf may require a sign language interpreter or written communications; people with cognitive disabilities may require that information be presented slowly or in simple language. (*See* Ex. 65, at CNY020343, CNY020347; Ex. 153, at P001980-

81, P001989; Conner Decl. ¶ 20 (blind class member testifying that she would “need accessible formats of any printed materials in an emergency shelter . . . in Braille, in audio format, read aloud to [her], or electronically”); Curry Decl. ¶¶ 32-33 (testimony of class member who is deaf and has low vision that she would need “assistance with orientation” as well as assistance reading any printed materials and completing any paperwork)). Therefore, emergency planning experts emphasize the importance of both training shelter staff to communicate with people with disabilities and ensuring that emergency plans direct and make possible the provision of information via multiple modes of communication. (*See, e.g.*, Kailes Decl. ¶ 69; Ex. 65, at CNY020343, CNY020345; Ex. 153, at P001989).

85. The City provides shelter staff with some training and guidance on communicating with people with disabilities. For example, as part of their training, shelter operators are taught that in order to accommodate people with disabilities, information should be provided in multiple formats. (Ex. 501, at CNY014100). In addition, the City has developed a guide for shelter staff primarily focused on effective communication with people with disabilities. (Belisle Decl. ¶ 46; Ex. 48). And at the time of trial, OEM was developing a new video training course focused on interacting with people with disabilities, scheduled to be available to all City employees involved in the emergency sheltering system by the 2013 hurricane season. (Van Pelt Decl. ¶ 33; Belisle Decl. ¶ 45).

86. The sheltering plans, however, do not mention accessible communication, let alone provide for accommodations, such as sign language interpreters or common signage in Braille, to ensure that people with disabilities are able to communicate and understand the information provided at shelters. (*See, e.g.*, Tr. 338:17-21). Although the MOPD website stated that those who required sign language interpretation while in an evacuation center or shelter

during Hurricane Sandy would be provided an interpreter (*see, e.g.*, Ex. 359, at CNY00021262), Belisle testified that the City does not, in fact, provide interpreters at shelters (Tr. 338:20-21). The package of materials given to shelter operators does include an emergency communications board that contains pictures and symbols related to emergency situations and basic needs to help individuals who have difficulty communicating share their needs with shelter staff. (*See* Belisle Decl. ¶ 47; Van Pelt Decl. ¶ 30; *see also* Calise Decl. ¶¶ 13-15 (testifying that the boards were at the registration tables of five shelters he visited just before Hurricane Sandy); McLachlan Decl. ¶ 11 (testifying that there were communication boards available at the registration table at the SMNS at which she worked during Hurricane Sandy)). The board was not entered into evidence, however, so it is not clear what it contains or how helpful (or not) it might be.

87. Regardless, the City does not provide — or plan for — any other accommodations. Instead, the City relies on people with disabilities to find ways of communicating their needs without assistance. For example, the City’s *Ready New York* guide to developing a personal emergency plan advises individuals with hearing disabilities to “practice communicating [their] needs through gestures, note cards, text messages, or other means.” (Ex. 3, at CNY001089; *see also* Ex. 1, at CNY000039 (similar); Ex. 3, at CNY001089 (advising those preparing emergency plans to “plan how [they] will talk to . . . emergency workers in an emergency”)).

88. Some people with disabilities depend on service animals or caregivers to assist them and keep them safe and may only remain safe and independent in a shelter that permits them to remain with their service animal or caregiver. (*See* Kailes Decl. ¶¶ 69, 77; Ex. 65, at 126, 129; Ex. 153, at P001987-88). The City’s plans provide that people with disabilities may bring service animals to shelters and evacuation centers. (*See, e.g.*, Ex. 12, at CNY000663; Ex.

14, at CNY001484). The plans give conflicting guidance on whether people with disabilities will be permitted to stay in the same shelter with their caregivers; the plans suggest that people with disabilities may be placed in the same general shelter as their caregiver, but that caregivers may not be permitted to stay in SMNSs. (*Compare* Ex. 12, at CNY000664 (stating that people with disabilities may bring their “home health aide or family member” with them to a general shelter but not to an SMNS); *with* Ex. 14, at CNY001440 (providing that operators of SMNSs should “[m]ake every effort to see that each shelteree’s companions or caregivers also have space in the [same] Dormitory Area”)).

89. People with disabilities often depend on access to electricity. (*See* Kailes Decl. ¶ 70; Ryan Decl. ¶ 30; Ex. 65, at CNY020347-48; Ex. 153, at P001980). For example, some people depend on electricity to power life-sustaining equipment, such as ventilators. (Ex. 65, at CNY020347-48). And people with mobility disabilities often rely on power wheelchairs or scooters that need to be recharged. (*See* Kailes Decl. ¶ 70; Ex. 153, at P001980). In addition, some shelters are only accessible if the elevator is working, and thus if the shelter has power. (*See* Trapani Decl. ¶¶ 57, 61; Dooha Decl. ¶ 58). For many people with disabilities, then, their ability to stay in a shelter depends upon the availability of electricity at the shelter. (*See* Kailes Decl. ¶ 70 (“Another essential element that ensures people with certain disabilities are included in general population shelters is the ability to access power (when necessary via generators) for: charging power wheelchairs, scooters and other essential devices, and refrigerating certain medications.”); Ex. 153, at P001978 (guidance from the Federal Emergency Management Agency (“FEMA”) stating that emergency plans “should include strategies to provide power for services that require a back-up power system in an emergency or disaster”)).

90. The City's shelter plans do not include strategies to provide back-up power generators at shelters or to otherwise ensure that electricity will be available at shelters for those who depend on it. (*See* Tr. 340:11-15 (Belisle testifying that nothing in the City's written emergency plans "addresses the issue of providing power for people who use medical devices powered by electricity")). Every SMNS, however, either has a back-up generator on site or has the capacity to quickly connect one of the generators the City has purchased for this purpose. (*See* Davis Decl. ¶ 110; Maniotis Decl. ¶ 24; Tr. 340:7-10). The City does own some back-up generators (*see* Tr. 621:9-17), and during Hurricane Sandy, it was able to procure over 200 more (McKinney Decl. ¶ 60; *see also* Jenkins Decl. ¶ 13 (testifying that during Hurricane Sandy, the City was able to "set up emergency contracts with three vendors that provided large generators")). And "quick-connects" — connections that allow for the rapid installation of generators during an emergency — are installed at a small number of shelters. (*See* Davis Decl. ¶ 111 & n.4; Jenkins Decl. ¶ 40). During Hurricane Sandy, however, most evacuation centers lacked generators and some, therefore, at times, lacked power. (*See* Ex. 116, at 169:5-170:3).

91. At the time of trial, the City was in the midst of conducting an assessment of "critical infrastructure sites," including evacuation centers and shelters, to survey and record the requirements of each facility for installing back-up generators, so that these requirements do not have to be assessed during an emergency. (Jenkins Decl. ¶ 40). The City has also requested funding from the federal government to install quick-connects in additional shelters and evacuation centers, as well as other critical sites. (Jenkins Decl. ¶ 41; Tr. 626:4-627:9).

92. As explained in a FEMA guide to planning for the integration of people with disabilities in general population shelters, "[d]espite best efforts and advance planning," some people with disabilities will arrive at emergency shelters without the medical equipment,

medications, or food they need. (Ex. 153, at P001978; *see also* Kailes Decl. ¶ 75 (“For many people, it is unrealistic that they will be able to bring with them the equipment or supplies they need to stay independent and healthy.”); Buckner Decl. ¶ 12 (class member testifying that if she were away from home when an emergency occurred, she “would not have [certain] supplies that are essential for [her] survival”). FEMA therefore advises that emergency planners include in emergency plans “a process for locating, purchasing, and storing as much of the supplies and equipment as possible and practical to meet the needs of” shelter residents with special needs and that, prior to an emergency, planners “[d]evelop provider agreements with the private sector to ensure that necessary equipment and supplies that have not been purchased and stored will be available during an emergency or disaster.” (Ex. 153, at P001978; *see also* Blanck Decl. ¶ 43 (testifying that disaster planning “includes the need to ensure that shelters, when opened, contain life-sustaining equipment and other means that people with disabilities need, which may include . . . emergency medications, and durable medical equipment such as wheelchairs, walkers, and crutches”). Among other things, FEMA recommends that wheelchairs, wheelchair battery chargers, accessible cots, and nutritional drinks (for people with diabetes) be available at general population shelters. (Ex. 153, at P02076-82; *see* Kailes Decl. ¶ 76).

93. The City maintains a stockpile designed to provide the shelter system with the “basic supplies” required to house and care for 70,000 people for seven days. (Ex. 43, at CNY00023926). These supplies are pre-configured into sets to be delivered to evacuation centers, general shelters, and SMNSs in the event of an emergency. (*See* Ex. 43, at CNY00023930, CNY00023936-39; Ex. 250, at CNY00024561; Tr. 637:24-638:3). For emergencies with advance warning, supplies are sent to each shelter in advance. (*See* Ex. 8, at CNY018277; Ex. 249, at CNY00025688). The company with which the City contracts to deliver

stockpiled goods to shelters is obligated to do so within forty-eight hours of a City request. (Tr. 640:9-16). Therefore, in disasters that occur without warning, or where a shelter requires additional supplies from the stockpile, these supplies may be deployed within two days. (*See id.* at 638:17-24, 640:9-16; Van Pelt Decl. ¶ 41).

94. While the supplies provided to SMNSs include some items to accommodate people with disabilities, such as wheelchairs, accessible cots, and diabetic testing kits, the City's emergency plans do not call for such items to be provided to general shelters. (*See* Ex. 43, at CNY00023928-29, CNY00023936-39; Jenkins Decl. ¶ 29). Nevertheless, it seems that during Hurricane Sandy, at least some general shelters had accessible cots available. (*See* Villari Decl. 19 (testifying that special needs cots were available at the general shelter housed in P.S. 217)); Trapani Decl. ¶ 59 (testifying that she observed that the general shelter located at P.S. 166 had both regular and special needs cots). *But see* Torres Decl. ¶ 42 (class member Melba Torres testifying that the shelter where she stayed during Hurricane Irene lacked accessible cots)).

95. Robert D. Van Pelt, the Director of Human Services at OEM, testified that this year, the City plans to purchase double the supplies typically stockpiled for SMNSs, so that these supplies will also be available to any general shelters that need them. (Tr. 839:14-19). In addition, he testified that the City is purchasing additional items to accommodate people with special needs, such as "wheelchairs of different kinds" and "toilet seats that are raised and have grips." (*Id.* at 839:20-24).

96. There are several items people with disabilities might require that are not stockpiled by the City. For example, the City does not stockpile power wheelchairs, chargers for such wheelchairs, walkers, ventilators, or prescription medications. (*See* Jenkins Decl. ¶ 30; Tr. 619:3-6, 619:17-24). Nor does the City have any memoranda of understanding with

organizations that might be able to provide these items in the event of an emergency. (*See* Tr. 619:25-620:11; 621:3-6). The City does have a requisition process through which it can obtain items that are not stockpiled. (Jenkins Decl. ¶ 30; Tr. 619:10-12, 640:24-641:11, 641:23-643:7). It is unclear, however, how long this process takes (*see* Tr. 619:7-16), or which items the City would be willing to requisition. But during trial, Plaintiffs did not point to a single instance during Hurricane Sandy or otherwise where the City failed to provide a person with a disability with supplies he or she needed; nor did they produce any evidence that, more generally, the requisition process is insufficient to meet the needs of people with disabilities.

97. Although the record indicates that at least some of the supplies required by people with disabilities are available at — or can, if needed, be procured by — the City’s shelters, the City warns otherwise in its communications with the public. For example, one *Ready New York* guide cautions that “Shelters DO NOT have special equipment (e.g., oxygen, mobility aids, and batteries). Be prepared to bring your own.” (Ex. 3, at CNY001092; *see also* Ex. 51 (311 call script for Hurricane Irene stating that evacuation centers “are not equipped to provide food for special diets”); Ex. 60 (311 call script for Hurricane Sandy stating “[i]f you need oxygen tanks or other medical equipment, bring it with you to the evacuation center,” and “refrigeration for medication will NOT be provided at evacuation centers”)).

98. These warnings are likely to discourage people with disabilities from evacuating to a shelter in the first instance. (*See* Kailes Decl. ¶ 72 (stating that the issuance of such warnings “will likely result in people being reluctant and fearful to evacuate, and can have serious unintended life-threatening consequences,” because people with disabilities will “believe that if they . . . cannot get what they need to survive and maintain their health, safety and independence once they get to a shelter, then they will be better off ignoring evacuation

instructions”); Bell Decl. ¶ 5 (class member testifying that he “would be reluctant to go [to a shelter] if [he] did not know . . . if [he] could get the help, medicine, and food” he needs); Ex. 65, at CNY020312 (“As seen in east coast hurricanes, some people with disabilities do not evacuate if they believe that shelters are not ready for them.”)).

c. The Shelter Survey

99. In order to determine the accessibility of the facilities it uses as shelters, the City included several questions about accessibility in a survey distributed online to all DOE facilities in October 2012. (*See* 2012 Shelter Survey, Ex. 47; Van Pelt Decl. ¶ 19; Maniotis Decl. ¶ 38; Belisle Decl. ¶ 50; Tr. 328:13-16 (Belisle testimony)). By the time of trial, nearly all of the schools in the DOE system had completed the survey. (*See* Van Pelt Decl. ¶ 19; Belisle Decl. ¶¶ 50, 51; Tr. 328:17-19).

100. The survey was completed by the custodial engineers at each facility. (*See* Van Pelt Decl. ¶ 21; Belisle Decl. ¶ 49). These employees were given an instruction sheet with the survey, but were not given any specialized training. (Tr. 331:22-24; 332:2-6). Although Belisle testified that no specialized training was needed to administer the survey (Tr. 332:2-6), Plaintiffs’ expert testified that the custodial engineers were inadequately trained to complete the survey, which was “very likely to lead to unreliable survey data.” (Kailes Decl. ¶ 81).

101. The survey directed the collection of information such as the measurements of facility entrances, the availability (or lack thereof) of wheelchair ramps, the measurements of facility elevators, and the presence (or absence) of Braille and visual cues in the facility elevators. (Ex. 47, at CNY019647-48, CNY019657). It did not, however, request measurements for bathrooms. (*See* Ex. 47, at CNY019665-66). Instead, it stated that “a bathroom is ADA accessible if it is marked with the universal wheelchair symbol.” (*Id.* at CNY019665). The

presence of such a symbol, however, does not necessarily mean a bathroom is actually accessible. (*See* Tr. 389:13-20 (Belisle testifying that “[w]e have . . . learned that there are bathrooms in schools that are marked with accessible symbols” that are not, in fact, accessible); *id.* 207:13-16; Kailes Decl. ¶ 82). In fact, during Hurricane Sandy, MOPD Commissioner Calise visited a shelter that had a restroom that was inaccessible, despite being marked with a universal access sign. (Tr. 450:19-451:5).

102. To remedy this problem, and to verify the survey data more generally, the City has begun to conduct site visits of the facilities surveyed. (*See* Davis Decl ¶ 104; Tr. 384:16-385:3). During these visits, teams from OEM, trained by Belisle, assess the accessibility of the facility by, for example, measuring entrances and restrooms. (*See* Tr. 395:6-21, 835:16-21; Davis Decl. ¶ 105; Van Pelt Decl. ¶ 21). Van Pelt testified that, as of the date of the trial, teams from OEM had visited all of the facilities used as evacuation centers in Zone A. (Tr. 835:22-25). In addition, OEM is working with MOPD to recruit volunteers with mobility disabilities to participate in additional site visits. (Van Pelt Decl. ¶ 21).

103. Although the City had initially planned to analyze the data from the surveys and site visits by February 28, 2013 (Ex. 483, at CNY 020085), it had not done so at the time of trial in March 2013. (*See* Tr. 328:25-329:1; 384:18-21). Once analyzed, the City intends to use the data to create a “corrective action plan.” (Ex. 483, at CNY 020085). It has not, however, done so yet. In addition, the City does not have a plan for implementing any corrective action needed to ensure the shelter system is accessible or for funding such action. Belisle testified that there is a proposal to allocate \$10 million dollars to the project, but that proposal has not been approved and there is no evidence that it will be. (Tr. 333:23-334:10).

d. Refuges of Last Resort

104. For coastal storms (that is, emergencies for which there is advanced notice), the City also provides refuges of last resort, facilities intended to provide a safe place for people who are stranded on the street and unable to reach a regular shelter before the storm hits. (*See* Ex. 6, at CNY000147). These refuges may operate without food, water, utilities, or other City assistance until the storm passes. (*Id.*). Like regular shelters, refuges of last resort are typically located in DOE school facilities. (Ex. 6, at CNY000149).

105. OEM maintains a list of facilities that could be chosen as refuges of last resort. (*See id.* at CNY000147-49). Facilities are chosen based on four criteria: (1) location within inundation zones; (2) proximity to major highways and thoroughfares; (3) structural ability to withstand storm surges; and (4) the number of floors above the rise of the greatest expected storm surge. (*Id.* at CNY000149). As a storm approaches, the City chooses the facilities that will be opened during that storm and disseminates the list to the media. (*Id.* at CNY000148). Facilities do not need to be accessible to people with disabilities to be chosen as refuges of last resort. (*See* McKinney Dep. Vol. I, at 127:14-16).

106. Because refuges of last resort are located in schools, the facility survey described above will provide information about the accessibility (or lack thereof) of these refuges. (*See* Tr. 344:5-8).

e. Sheltering in Place

107. In its outreach materials, the City advises residents that, in the event of an emergency, they may need to shelter in place — that is, remain where they are. (*See, e.g.*, Ex. 1, at CNY000041; Ex. 2, at CNY000008; Ex. 4A; Maniotis Dep. 55:24-57:2). Given this possibility, the City encourages residents to “[k]eep enough supplies in your home to survive for

at least three days.” (Ex. 4A; *see also* Ex. 1, at CNY000033 (“Every New Yorker should plan to be self-sufficient for several days.”)).

108. As Defendants’ expert explained, this guidance “serves to remind individuals that assistance may be slow to arrive due to the existence of debris and the massive response needs after a large-scale disaster.” (Davis Decl. ¶ 45). Additionally, it “helps individuals who cannot realistically self-sustain for that period to acknowledge that reality in advance of an event and to incorporate additional contingencies into their personal emergency plan to account for that reality.” (*Id.*). The seventy-two hour figure is consistent with advice from FEMA and the Red Cross that people should be prepared to shelter in place for at least seventy-two hours after an emergency. (*See id.*; Tr. 211:14-17, 261:5-9).

109. Plaintiffs’ experts characterized the City’s guidance as “evidence that the City assumes people with disabilities can shelter in place for 72 hours.” (Kailes Decl. ¶ 90; *see* Blanck Decl. ¶ 85 (“New York City’s emergency plans assume that individuals must be prepared to survive after an emergency in place for up to three days.”)). Such an assumption, these experts testified, is problematic because some people with special needs cannot survive for that long without electricity, medication, and/or assistance from others. (*See* Blanck Decl. ¶ 85; Kailes Decl. ¶ 89).

110. But the City’s plans do not *assume* that people with disabilities (or anyone else) can or will shelter in place after an emergency. The Coastal Storm Plan, for example, provides an evacuation plan designed to ensure that all those in the affected area are evacuated *before* an emergency strikes. (*See* Ex. 8, at CNY018277). Similarly, the Area Evacuation Plan provides for evacuation as an initial response to an emergency. (*See* Ex. 245A, at 11). Thus, the City’s guidance that people, including those with disabilities, prepare to shelter in place is simply that:

guidance that people should be prepared for the possibility that assistance within the first seventy-two hours will not be available.

F. Power Outages

111. As noted above, people with disabilities are particularly vulnerable to power outages, as they often rely on equipment that requires electricity. (*See* Trapani Decl. ¶ 27 (testifying that people with disabilities often “rely on electricity daily to power their wheelchairs, run life sustaining equipment like oxygen concentrators, and keep temperature sensitive medicines cool”); *id.* (“Without some preparedness for the extraordinary power needs of people with disabilities, these people are less able to remain safe and healthy during a disaster.”); *see also* Kailes Decl. ¶ 64; Ryan Decl. ¶ 30; Ex. 65, at 130-31; Ex. 153, at P001980).

112. The City maintains a Power Disruption Plan to coordinate and guide the City’s response to power outages. (*See* Ex. 19). The Plan provides that the Consolidated Edison Company of New York (“Con Ed”), which provides electricity for nearly all of New York City (*id.* at CNY001667), must compile a list of its customers who rely on electricity for life-supporting medical equipment or for whom the loss of electricity would cause a serious medical hardship. (*See id.* at CNY001693; *see also* Ex. 112 (Con Ed brochure allowing customers to inform Con Ed that they are supported by electrically powered life-sustaining equipment)).⁸ The plan provides that, in the event of a power outage (or, if possible, in advance of one), Con Ed will attempt to contact the customers on the list by telephone and advise them to use back-up equipment or to go to the nearest hospital emergency room. (*See* Ex. 19, at CNY001693-94; Wahlig Decl. ¶ 22). If Con Ed is unable to reach a customer that relies on electrically powered

⁸ State law requires that electric companies maintain such a list. *See* 16 N.Y.C.R.R. § 105.4(b)(5).

life-sustaining equipment, the NYPD will dispatch an officer to make sure that the person is safe. (Ex. 19, at CNY001694; Wahlig Decl. ¶¶ 22-23).

113. Many people with disabilities rely on electricity-powered equipment that is integral to their ability to remain healthy, safe, and mobile, but is not technically life-supporting. (See Kailes Decl. ¶ 64 (“[T]he definition of ‘life sustaining equipment’ is quite narrow, and would not encompass the many thousands of people who are not on life-sustaining equipment but who nevertheless rely on electricity for mobility (whether for mobility devices such as a power wheelchair, or in order to use the elevator) or who have periodic use of breathing devices and oxygen, or to store temperature sensitive medication.”)). Although the Power Disruption Plan recognizes that these people may be particularly affected by a power outage (see Ex. 19, at CNY001670), there is nothing in the plan, or in any other City plan, about accommodating the needs of these people. (See Tr. 340:11-15 (Belisle testifying that there is nothing in the City’s emergency plans that addresses the provision of power to people with disabilities who require electricity to power their medical devices); Kailes Decl. ¶¶ 66-67; see also Tr. 792:20-23 (FDNY Chief Villani testifying that there is no Fire Department plan for evacuating people with disabilities in the case of a power outage)).

114. During Hurricane Sandy, a vast swath of the City lost power. The day after the hurricane made landfall, over 700,000 people were without power. (See Ex. 81, at CNY00022469). Nearly 40,000 customers remained without power over a week later. (See Ex. 93, at CNY00022117). MOPD Commissioner Calise testified that, after Hurricane Sandy, he heard that some people had problems because their medical equipment had run out of power. (See Tr. 445:11-14).

115. Class member Joyce Delarosa testified that although she has informed Con Ed that she relies on an electricity-powered oxygen machine, Con Ed did not notify her in advance of Hurricane Sandy that it would be shutting down power in her neighborhood. (Delarosa Decl. ¶¶ 20, 40). Because of the power outage, she was unable to use her oxygen machine. (*Id.* ¶¶ 54-63). As a result, her health deteriorated and she was in serious pain, leading her to require emergency medical attention for oxygen deprivation. (*Id.* ¶¶ 63-64, 71).

116. Class member Melba Torres relies on electricity to power her wheelchair, the air mattress she uses to reduce the pain caused by a curve in her spine, and the lift she uses to get in and out of bed. (Torres Decl. ¶¶ 84-86). Torres testified that, because of the power outage during Hurricane Sandy, she was unable to evacuate her building and was unable to inflate her bed for a week, leaving her in severe pain. (*Id.* at ¶ 85).

117. In the aftermath of Hurricane Sandy, the City established charging centers in areas that remained without power. (Murray Decl. ¶ 40). But there is nothing in the City's emergency plans that mandates such stations.

118. Days after the hurricane, many residents still lacked power, and the City was concerned that people might be trapped in their homes. (*See* Murray Decl. ¶¶ 21-22; Tr. 716:6-16). But the City's emergency plans did not account for this situation — at the time of Hurricane Sandy (and at the time of trial), the City had no plan for canvassing after a power outage or other emergency. (*See* Tr. 355:14-18; 714:16-25; McKinney Dep. Vol. III, at 22:8-17).

119. The City's first response was to coordinate a volunteer effort to canvas apartment buildings as well as single family homes in areas without power. (*See* Murray Decl. ¶¶ 15, 21; Ex. 477). That effort began on November 3, 2012 — five days after Hurricane Sandy. (*See id.* ¶ 21). Volunteers distributed food, water, and blankets and identified those who needed

assistance. (*See id.* ¶¶ 23, 30-32). Between November 3 and November 5, over 1,000 volunteers managed to reach about 12,000 structures in four boroughs. (*Id.* ¶ 21-22). The City did not, however, track where these volunteers had been, and it had no way of knowing which buildings had been reached. (*See* Tr. 719:15-720:23).

120. Fearing, therefore, that these efforts were insufficient, between November 9 and November 14, 2012, the City undertook a more systematic canvassing operation of high-rise buildings conducted by teams composed of local and federal health and emergency personnel. (*See* Kass Decl. ¶¶ 10-12, 19; McKinney Decl. ¶ 62; Ex. 116, at 73:8-12; Tr. 719:12-721:5, 721:19-722:7). These teams assessed and attempted to fulfill the needs of those they reached — by providing food, water, medical attention, prescription medication, and, where necessary, evacuation assistance. (*See* Kass Decl. ¶¶ 12, 15-17). In six days of canvassing, the teams knocked on nearly 37,000 doors, approximately 13,000 of which were occupied; received nearly 1,000 food and water requests; and assisted with 35 medical evacuations. (*Id.* ¶ 19).

121. On November 24, 2012 — nearly a month after the hurricane — the City began canvassing buildings that were six stories or lower in which people remained without heat or electricity. (*See* Belisle Decl. ¶ 67; Manahan Decl. ¶ 24; McKinney Decl. ¶ 62; Tr. 346:3-6). The City worked with the National Guard to provide residents with food, blankets, and space heaters as well as to encourage them to relocate to a hotel, paid for by the City. (*See* Belisle Decl. ¶ 67; Manahan Decl. ¶ 24).

122. As noted above, none of these canvassing efforts was undertaken pursuant to a City emergency plan, as the City had no such plan. (*See* Tr. 355:14-18; 714:16-25; McKinney Dep. Vol. III, at 22:8-17). Without such a plan, although the City was able to marshal substantial resources and reach a large number of people, its efforts were haphazard and belated. Its first

systematic effort to reach those without power began ten days after Hurricane Sandy. (*See* McKinney Decl. ¶ 62). And even that effort suffered from a lack of guidance that could have been remedied by advance planning. For example, the canvassing teams were directed to record information such as the need for food and water. (*See* Tr. 718:21-719:1; Ex. 516). But halfway through the canvassing operation, there was a change of management structure, and the new teams did not continue to gather information in a systematic way. (*See* Tr. 718:2-18).

123. The City intends to develop a canvassing plan, but at least as of the time of trial had not yet done so. (*See* McKinney Decl. ¶ 32 (testifying that a plan for canvassing after an emergency will likely be incorporated into the City’s emergency plans in the future); McKinney Dep. Vol. III, at 57:10-22 (testifying that the City intends to develop a canvassing plan, but as of yet, there is no such plan “underway”)).

G. Recovery Operations

124. There is also evidence in the record supporting Plaintiffs’ claims about the recovery process after an emergency. The City has several plans relating to recovery after an emergency, including plans for the provision of both life-sustaining commodities, such as food and water, as well as information, assistance, and services. (*See, e.g.*, Exs. 24, 25, 30, 31, 273). The City also has a Debris Management Plan to guide debris clearance, removal, and disposal after an emergency. (*See* Ex. 17, at CNY000696). Finally, at the time that Hurricane Sandy struck, the City was considering the formulation of a plan concerning interim housing following a disaster. After the hurricane, the City established an office to design and implement a housing recovery plan for those affected by the disaster. The Court will describe each in turn.

a. Resource Provision

125. The City's primary plan for distributing life-sustaining commodities after an emergency is the Commodities Distribution Point Plan. (Ex. 24). This plan provides that, after a large-scale emergency, the City may set up commodity distribution points to distribute, among other things, food, water, and ice for medication that must be kept cold. (*See id.* at CNY018522, CNY018544). It requires that the distribution sites be accessible to people with mobility impairments and that the sites be clear of debris. (*See id.* at CNY018542; Ex. 25, at CNY018609). There is, however, nothing in the plan to ensure that communications at the commodity distribution points are accessible to people with disabilities.

126. The City opened several commodity distribution points after Hurricane Sandy. (*See, e.g.*, Ex. 85, at CNY00022385; Ex. 86, at CNY0002234-35; Ex. 89, at CNY00022271). Putting aside those people who were unable to reach the distribution points because, for example, they had no way to leave their apartments in the first place, there was no evidence presented at trial that people with disabilities were unable to access the services these centers provided.

127. The City also has a Disaster Assistance Service Center plan, which provides that, after a disaster, the City may open Disaster Assistance Service Centers to provide information, assistance, and services from federal, state, and local agencies as well as from private organizations. (*See* Ex. 30, at CNY015216; Maniotis Decl. ¶¶ 27-30). Such centers provide generally applicable services — including the provision of telephone and internet access, financial assistance, and relocation assistance — as well as services specifically relevant to people with special needs. (*See* Ex. 30, at CNY015226-30). For example, they provide information regarding the replacement of lost durable medical equipment and referrals for medical consultations. (*See id.*). The plan governing the Disaster Assistance Service Centers

directs that they are to be located in a facility that is “Americans with Disabilities Act (ADA) compliant or modifiable to be compliant.” (*See id.* at CNY015234). There is, however, nothing in the plan to ensure that communications within these centers are accessible to people with disabilities.

128. The City opened several Disaster Assistance Service Centers (in some cases, called Restoration Centers) after Hurricane Sandy. (*See, e.g.*, Ex. 85, at CNY00022385; Ex. 93, at CNY00022116; Ex. 94, at CNY00022074). MOPD Commissioner Calise testified that he visited these centers to make sure that they were accessible to people with disabilities and to inform the centers’ staff that there was a video sign language interpretation system they could use. (Calise Decl. ¶ 32). Again, putting aside those who were unable to leave their buildings, there was no evidence presented at trial that people with disabilities were unable to access the services that these Disaster Assistance Service Centers provided.

129. Finally, after Hurricane Sandy, the City provided substantial assistance to those who required prescription medication. For example, volunteers handed out fliers listing pharmacies that were open and could expedite prescription requests. (*See* Murray Decl. ¶¶ 44-45; *see* Ex. 477, at CNY00025439-41; Tr. 693:22-694:8). Some volunteers even contacted pharmacies on behalf of those who required medication refills. (*See* Murray Decl. ¶ 45). The City also partnered with the State Department of Health to provide a mobile pharmacy in areas affected by the hurricane in which pharmacies were not yet reopened. (*See id.* ¶ 46). These actions were not, however, taken pursuant to any emergency plan. The City does not, in fact, have any plan directing the provision of prescription medication assistance in the event of an emergency.

b. Debris Removal

130. People with disabilities are uniquely affected by the debris that may accumulate after a disaster. (*See* Ex. 65, at CNY020369-70; Blanck Decl. ¶¶ 44, 94). People with mobility disabilities or visual or cognitive impairments, for example, may not be able to navigate streets and sidewalks obstructed with debris. (*See* Ex. 65, at CNY020369-70; Bell Decl. ¶ 26; Buckner Decl. ¶ 27; Kailes Decl. ¶ 32).

131. The City's Debris Management Plan provides for debris clearance and removal in phases. (*See* Ex. 17 at CNY000699). The initial phase of the Plan calls for clearing debris from roadways, prioritizing “[p]rimary routes and streets that provide access to hospitals, shelters, police, fire stations and other facilities providing vital public services”; then, “[r]outes and streets that provide access to components of the . . . utility systems that are vital to the restoration of essential utility services”; and finally, “[r]esidential streets and access ways.” (*Id.* at CNY000711-13). The next phase of the Plan involves removing the debris that was cleared to the side of the road during the first phase and collecting debris from neighborhoods affected by the emergency. (*See id.* at CNY000714).

132. While the Debris Management Plan provides that the City shall “coordinate efforts” to address the needs of people with disabilities, it does not provide any guidance as to how their needs will be taken into account. (*See* Ex. 17, at CNY000745). Plaintiffs’ experts testified that this cursory mention of people with special needs was insufficient to ensure that the needs of people with disabilities were met. (*See* Blanck Decl. ¶ 83; Kailes Decl. ¶ 114).

133. Class member Jen Halbert, who uses a wheelchair, testified that after a blizzard in 2010, the snow on the sidewalk in front of her building was not removed, and therefore she could not leave her apartment building for a week. (Halbert Decl. ¶ 21). Similarly, class member Jean

Ryan, who also uses a wheelchair, testified that a few years ago, she stayed home for over a month due to the City's failure to clear snow from in front of her building. (Ryan Decl. ¶¶ 31-32). Plaintiffs, however, provided no evidence that anyone with disabilities was hindered by debris in the aftermath of either Hurricane Irene or Hurricane Sandy.

c. Interim Housing

134. Special Needs Coordinator Belisle testified that an important component of the City's emergency planning is to provide interim housing after a disaster. (Tr. 344:23-345:2). Before Hurricane Sandy, the City participated in the development of a Regional Disaster Recovery Housing Plan. (See Ex. 248; McKinney Decl. ¶ 70). It is not clear, however, whether or to what extent this plan was ever adopted by the City. (See, e.g., McKinney Decl. ¶ 70 (testifying that the Regional Disaster Recovery Housing Plan is an "example of planning that was interrupted by" Hurricane Sandy)).

135. Approximately five years ago, the City began to develop a removable, reusable housing unit that could be installed quickly to provide interim housing in the aftermath of a disaster. (See McKinney Decl. ¶ 70; Ex. 37; Tr. 345:13-21). The unit is designed to be fully compliant with the ADA. (See McKinney Decl. ¶ 70; Ex. 37, at CNY006996). A series of prototype units were being installed next to OEM's Cadman Plaza headquarters in Brooklyn at the time of trial. (See McKinney Decl. ¶ 70). OEM Deputy Commissioner McKinney testified that he expected them to be operational by fall of 2013. (*Id.*).

136. As this interim housing was not operational at the time of trial, it was, of course, not available during Hurricane Sandy. (See Tr. 766:5-10). In fact, at the time the hurricane struck, the City had no operational plan to provide interim housing — that is, housing beyond

that provided by the shelter system — for people with disabilities, or anyone else for that matter, following an emergency. (*See* Tr. 345:3-12, 764:1-3).

137. In the aftermath of Hurricane Sandy, Mayor Bloomberg created an Office of Housing Recovery Operations to design and implement a housing recovery plan for those affected by the hurricane. (*See* Gair Decl. ¶ 1; Ex. 258; Ex. 310, at CNY00023834). Among other things, the Office of Housing Recovery Operations helped to ensure that people with disabilities had livable housing after Hurricane Sandy. For example, it convinced FEMA to include repairs of accessibility features, such as ramps, in the kinds of home repairs it would fund through FEMA’s Rapid Repair program. (Gair Decl. ¶ 13).

138. In addition, the City provided accessible hotel rooms to people with special needs who required interim housing through a program that provided hotel rooms to those displaced after Hurricane Sandy. (*See id.* ¶ 21). Individuals could request a hotel room by calling 311, by visiting a Restoration Center — a center coordinating recovery services — or through a referral from those who were canvassing after the hurricane. (*See* Ex. 251, at CNY00025531; Weissman Decl. ¶ 22). There is no evidence that people with disabilities were unable to enter the City’s hotel program or that they were not given accessible hotel rooms. (*See* Davis Decl. ¶ 135 (testifying that the program “includes a number of features that support the needs of people with disabilities including . . . multiple access points” and the availability of “accessible hotel rooms”)). In fact, several people who were given interim housing through the City hotel program were identified as having a mobility disability. (*See* Gair Decl. ¶ 20).

139. With respect to longer-term solutions, at the time of trial the Office of Housing Recovery Operations was developing a plan to use a \$20 million grant the City had received for housing recovery. (*See* Tr. 770:5-23).

140. Although there is a draft Concept of Operations guiding the Office of Housing Recovery Operations, its purpose is limited to providing guidance on the internal operations of the Office with respect to Hurricane Sandy. (*See* Tr. 764:4-10). It is not, and is not intended to be, a general housing recovery plan. (*See id.*). At the time of trial, therefore, the City still lacked an emergency plan for housing recovery after a disaster.

H. Education and Outreach

141. In addition to the foregoing plans concerning the response to emergencies, the City has a substantial outreach program, designed to encourage disaster preparedness and volunteerism. (*See* Schaffer Decl. ¶ 2). This program includes training volunteers to educate their communities about emergency preparedness and to assist with the City's emergency response; bringing together the leaders of community organizations to discuss and promote emergency preparedness; giving presentations throughout the City; and publishing emergency preparedness brochures. (*See id.* ¶¶ 14, 26, 28, 30).

142. The outreach and education materials distributed by the City emphasize personal preparedness. (*See* Exs. 1-4A; Tr. 387:7-9, 570:1-8; Trapani Decl. ¶ 5). In particular, the City publishes a series of emergency preparedness guides titled *Ready New York*, which are designed to assist people in developing their own personal emergency plans. (*See* Exs. 1-4A; Ex 12, at CNY000635; Schaffer Decl. ¶¶ 26-27). They are distributed throughout the year at fairs and presentations, including those targeted to seniors and people with special needs; they are available on the OEM website; and they may also be ordered by calling 311. (*See* Schaffer Decl. ¶¶ 28-29; Tr. 571:25-562:9). Most of the guides are available in audio, and the guide for seniors and people with disabilities is available in Braille as well. (Schaffer Decl. ¶¶ 2, 26). As noted

above, the *Ready New York: My Emergency Plan* guide is specifically designed to assist people with special needs in creating their own emergency plan. (See Ex. 3; Schaffer Decl. ¶ 27).

143. Personal preparedness is indisputably an important component of emergency planning. (See Davis Decl. ¶ 35). The information provided by the City, however, fails in several respects to provide people with disabilities sufficient information to prepare for an emergency. For example, the *Ready New York* guides provide almost no information about the accessibility of the shelter system — and, to the extent they do, the information is incorrect. None of the *Ready New York* guides provides a list of shelters or evacuation centers that are accessible to people with disabilities. The *Ready New York: My Emergency Plan* guide — which is specifically designed for people with special needs — states only that “[s]helters are subject to change depending on the emergency” and that residents should “call 311” to find an accessible shelter during an emergency. (Ex. 3, at CNY001092).

144. In fact, the *Ready New York* guide specific to hurricanes is the only guide that even provides a list of the City’s evacuation centers. (Tr. 573:23-574:2). But that guide does not specify which evacuation centers are accessible. (See Ex. 4A). Instead, it states that “[c]ity shelters include accessible facilities and accommodations for people with special needs,” suggesting incorrectly that all shelters are accessible to people with disabilities. (*Id.*). City websites also lack shelter accessibility information. (See Delarosa Decl. ¶ 35; Trapani Decl. ¶ 37). Thus, there appears to be no way for people with special needs to determine in advance which shelters or evacuation centers are accessible to them (a gap that is hardly surprising given that, as discussed above, the City itself does not know which evacuation centers are accessible).

145. Similarly, although the City advises people with special needs to plan for transportation in an emergency, it does not provide information about whether accessible

transportation will be available or how to access it. (*See, e.g.*, Ex. 3, at CNY001089 (stating that residents should “[b]e prepared to make other transportation plans if [their] subway or bus is not running” but failing to provide any information about accessible emergency transportation options); Ex. 4A (advising people with special needs to “consider your transportation needs” without providing any guidance as to how they should do so)).

146. As numerous class members testified, without information such as which shelters or evacuation centers, if any, are accessible or whether there will be accessible transportation available during an emergency, it is difficult for people with disabilities to develop a sufficient personal emergency plan. (*See* Bell Decl. ¶¶ 18-19; Buckner Decl. ¶ 13; Conner Decl. ¶ 12; Curry Decl. ¶¶ 25-26; Delarosa Decl. ¶ 74; Halbert Decl. ¶¶ 9-10; Martinez Decl. ¶ 60; Morales Decl. ¶¶ 11-12; Ryan Decl. ¶¶ 14-15).

I. Communications

147. Finally, as noted, Plaintiffs raise various claims with respect to the means and content of the City’s communications with people with disabilities.

148. Because people with disabilities have diverse communication needs — for example, those who are blind may require Braille or oral communication and those who are deaf may require visual communication or translation into American Sign Language — reaching people with special needs often requires the use of multiple modes of communication. (*See* Ex. 65, at CNY020313; Belisle Decl. ¶ 44; Davis Decl. ¶¶ 53, 58). In addition, people with disabilities may be more likely to receive and heed emergency information that is disseminated through people who are familiar with, and trusted by, those receiving the information. (*See* Ex. 65, at CNY020310; Davis Decl. ¶¶ 54; Kailes Dec. ¶ 106).

149. The City uses both of these strategies. The City provides emergency-related information through several means of communication, including traditional media, government websites, social media, the 311 system — the City’s non-emergency, government services hotline — and door-to-door notification. (*See, e.g.*, Exs.1-4A, 66-75; Ex. 12, at CNY000627-29; Ex. 29, at CNY011850-51, CNY011854, CNY011883-84; Ex. 302, at CNY00023789; McKinney Decl. ¶ 63). In addition, it distributes information through the Special Needs Advance Warning System, a network of service providers for people with special needs and other special needs organizations. (*See* Ex. 12, at CNY000631; Ex. 18).

a. Traditional Media

150. A primary way in which the City communicates emergency information to the public is through traditional media — in particular, through press conferences and press releases. (*See, e.g.*, Ex. 12, at CNY00638-58; Exs. 66-74, 299-335).

151. The City’s Emergency Public Information Plan, its general plan for communicating emergency information, provides “recommendations” about how emergency announcements should be publicized. (*See* Ex. 29, at CNY011881). For example, the Plan recommends that “TV stations should not overlap closed-captioning space when using crawl”; that the City should “[r]emind stations to pronounce websites and spell them out, as well as print them across the screen”; that “[i]f public briefings have a sign language interpreter, stations should include them in the frame”; and that TTY/TDD numbers and relay information (services that allow people with hearing or speech deficiencies to communicate over the telephone, typically via text) should “[a]lways” be included. (*Id.* at CNY01182). By their terms, these recommendations are just recommendations; there is no requirement that they be followed, and the City does not have any agreements in place to ensure that they will be.

152. Similarly, the Coastal Storm Public Information Plan, the City's plan for communicating emergency information during a coastal storm, provides that "OEM will . . . work with the media and partner organizations to ensure information is disseminated to people with hearing and sight impairments, and that information is provided in an accessible format." (Ex. 12, at CNY000619). It does not, however, detail how it will do so.

153. Before and during Hurricane Irene, there was no closed captioning of the Mayor's press conferences; nor did the City use a sign language interpreter. (*See* Curry Decl. ¶ 20; Tr. 296:9-11). In connection with Hurricane Sandy, the City drafted a policy titled "Engaging the Deaf/Hard-of-Hearing Community." (*See* Calise Decl. ¶ 11). The policy provides that "American Sign Language ('ASL') interpreters shall be used, at a minimum, when the Mayor provides the public with critical and time-sensitive communications about a significant and imminent threat to public health and safety during a state of emergency." (Ex. 298). "Such situations," the policy continues, "[s]hall also require the City to issue a media advisory to the directors, managers, and editors of all major television networks . . . formally request[ing] that networks provide open captioning and post written bullets on screen summarizing the Mayor's official statements." (*Id.*). Finally, the policy provides that "all of the Mayor's official statements under a state of emergency shall be promptly posted on the City website at nyc.gov." (*Id.*).

154. In accordance with this policy, there was an ASL interpreter present at the Mayor's press conferences during Hurricane Sandy. (*See* Calise Decl. ¶ 11; Curry Decl. ¶ 22; Tr. 295:23-296:1). In addition, the City issued a Media Advisory "request[ing] that broadcasters provide . . . open captioning of all mayoral announcements and storm updates and when applicable include graphics and post bulleted points that summarizes [sic] the announcement."

(Ex. 297; *see* Calise Decl. ¶ 11. *But see* Curry Decl. ¶ 22 (testifying that the press conferences she saw during Hurricane Sandy were not closed captioned)).

b. Websites

155. The City also disseminates information through multiple websites, including NYC.gov, the 311 website, the OEM website, and the website of the MOPD. (*See, e.g.*, Ex. 1, at CNY000038; Ex. 12, at CNY000627; Calise Decl. ¶ 24). The Emergency Public Information Plan “recommends” that websites publicizing emergency information “are accessible to those with special needs.” (Ex. 29, at CNY011881-82). With the exception of the City’s online evacuation zone map, which cannot be read by a screen reader for people with disabilities (*see* Bell Decl. ¶ 24), there was no evidence presented at trial that the City’s websites are inaccessible to people with special needs.

156. During Hurricane Irene, the NYC.gov website experienced so much traffic that it caused a temporary outage. (*See* Morrisroe Decl. ¶ 56). The City increased its web capacity thereafter, and as a result, the website remained online during Hurricane Sandy. (*See id.* ¶ 58).

c. The 311 System

157. The 311 system is the City’s main source of government information and access to non-emergency services. (*See* Morrisroe Decl. ¶¶ 11-12; Tr. 292:22-25, 598:13-15). The 311 system is available twenty-four hours a day, seven days a week, by telephone and text message, as well as online. (Morrisroe Decl. ¶¶ 11-12). The 311 call center is accessible to people with hearing impairments through the New York State Relay system for those with hearing impairments. (Morrisroe Decl. ¶¶ 12, 16). The City publicizes the existence of 311 in various ways, including through press releases, social media, and emergency preparedness brochures. (*See* Morrisroe Decl. ¶ 29).

158. The 311 call center responds to most inquiries with an automated system that provides information through pre-recorded instructions, messages, and announcements. (Morrisroe Decl. ¶ 19). The automated system begins by stating “that 311 is ‘here to help’” and directing callers to call 911 if the situation is an emergency. (*Id.*).

159. A caller whose question cannot be answered through the automated system is connected with a representative, who responds to the caller based on scripts in the 311 database. (*See* Morrisroe Decl. ¶¶ 27-28; Exs. 50-57, 59-60). The scripts are based on information provided by City agencies, which is translated into a usable format by 311 employees. (*See* Morrisroe Decl. ¶ 24; Tr. 603:22-604:8).

160. Callers cannot directly access emergency services through the 311 system, but 311 call representatives can connect a call to 911. (Morrisroe Decl. ¶ 32). If a 311 representative believes a caller might have an emergency, the representative initiates a conference call with 911 and remains on the line until the 911 operator decides whether 311 or 911 should handle the call. (*Id.* ¶ 33; Tr. 615:18-616:4).

161. During an emergency, the 311 system provides information such as guidance on preparing for an emergency, how to shelter in place, the location of evacuation zones, how to request evacuation assistance, and evacuation center locations. (*See* Morrisroe Decl. ¶ 34-36; Exs. 50-60, 486). In fact, in many cases, the City’s public information regarding emergencies does not directly provide information relevant to people with disabilities, but rather directs them to call 311. (*See, e.g.*, Ex. 1, at CNY000041 (“To find an accessible shelter near you during an emergency, call 311”); Ex. 67, at CNY00023739 (Mayoral press release issued during Hurricane Sandy directing individuals to call 311 for transportation assistance)).

162. The 311 system is supported by telephone lines provided by Verizon. (Morrisroe Decl. ¶ 55). During Hurricane Sandy, both of the locations Verizon uses to support the 311 lines failed. (*Id.*). Nevertheless, the 311 call center remained operational, albeit in a more limited capacity, because the City was able to redirect lines from another location until service at the primary 311 locations was restored. (*Id.*).

163. Belisle, OEM's Special Needs Coordinator, testified that he had never seen an assessment of the capacity of 311 during an emergency. (Tr. 293:6-9). Further, although the 311 system maintains statistics about the number of calls it receives and the time each caller waits to speak to a representative, it cannot track callers who try to reach the system but are unable to get through because the capacity of the system was reached. (Tr. 612:20-24). Therefore, although the 311 system was operational throughout Hurricane Sandy, there is no way to know how many people attempted to get through to the system but were unable to do so. (*See id.*).

164. Several class members testified that they had difficulty reaching 311 during Hurricane Sandy. Class member Kenneth Martinez, for example, testified that he called 311 for about three and a half hours before he was able to get through. (Martinez Decl. ¶ 38; *see also id.* ¶ 41 (testifying that he also called 911, which just had a recording instructing callers to call 311)). Melba Torres testified that she called 311 numerous times and was unable to get through. (*See Torres Decl.* ¶¶ 47, 52). Similarly, Mary Conner testified that there were times in the week after Hurricane Sandy when she was unable to reach 311. (*See Conner Decl.* ¶ 12).

165. During Hurricane Sandy, the 311 system experienced a much higher than average call volume, leading to longer than average wait times for those who wished to speak with a representative. (Morrisroe Decl. ¶ 50). Before the hurricane, the system received an average of 360,000 calls per week, and the average wait time to speak with a 311 call representative was

eighteen seconds. (*Id.* ¶¶ 47, 49). In the days between October 25 and November 10, 2012 — that is, the time period just before, during, and after the hurricane — 311 received over three million calls, and the average wait time to speak with a representative was 5.3 minutes. (*See id.* ¶¶ 48, 50). Some callers, however, waited over twenty minutes to speak to a representative. (*See id.* ¶ 50 (stating that the maximum wait time on November 4, 2012 was just over twenty minutes); Ex. 84, at CNY00022409 (noting that as of 11:20 p.m. on October 31, 2012, callers were waiting over twenty-six minutes to speak with a representative)).

166. While under ordinary circumstances, these wait times may not be problematic, during an emergency in which the power goes out, some individuals may not have sufficient power in their cellular telephones to wait on hold. (*See, e.g.*, Delarosa Decl. ¶ 48; Torres Decl. ¶ 74; Tr. 195:14-22). In addition, even when 311 has sufficient capacity to receive calls, it can only help those who have the ability to place calls, an ability that is threatened in an emergency. (*See, e.g.*, Ex. 301, at CNY00023773 (transcript of Mayor Bloomberg’s remarks two days after Hurricane Sandy describing the loss of telephone service); Tr. 89:21-92:1 (class member Joyce Delarosa testifying that she had intermittent difficulty making calls during Hurricane Sandy)).

167. For these reasons, 311 may not always a reliable source of information or services during an emergency.

d. The Special Needs Advance Warning System

168. One of the primary ways the City communicates emergency-related information to people with disabilities is through the Special Needs Advance Warning System (“AWS”). (*See* Belisle Decl. ¶ 40; Ex. 18). The AWS is “an all-hazards tool to push targeted information to individuals with special needs during hazardous weather, potential utility or transportation

disruptions, public health emergencies, incidents requiring evacuation, and other emergencies that may impact special needs populations.” (Ex. 18, at CNY000859).

169. The AWS does not provide information directly to people with disabilities; instead, it provides information to service providers for people with special needs by email and online. (Belisle Decl. ¶¶ 40, 42; Ex. 18, at CNY000857). These providers are, in turn, supposed to convey the information to those they serve. (See Maniotis Decl. ¶ 16; Ex. 18, at CNY000857). In addition, when there is an emergency, OEM conducts conference calls with “umbrella AWS agencies,” government agencies that provide services or support to people with special needs or the organizations that serve them. (See Belisle Decl. ¶ 42). The AWS also allows providers to convey information to OEM, such as, for example, how an emergency is affecting their clients or resources the provider might need. (See Ex. 18, at CNY000857; Belisle Decl. ¶ 40).

170. Approximately 900 service providers — organizations such as City agencies that serve people with special needs, advocacy groups for people with disabilities, and health care organizations — have access to the AWS website and receive AWS emails. (See Belisle Decl. ¶ 43; Tr. 294:21-22).

171. As explained in the City’s plan detailing the AWS, the rationale behind the system is that “[e]mergency communication to people with special needs is more effective when done through their service providers” because “[t]hese agencies have developed trusted relationships with their clients and can tailor communication and support to their client’s specific needs.” (Ex. 18, at CNY000857). Plaintiffs’ expert June Kailes testified that “emergency communication to people with disabilities can,” in fact, “be more effective when done through their service providers.” (Kailes Dec. ¶ 106). She expressed concern, however, that “the City is

overly reliant on this system to communicate with all people with disabilities” and that “the City does not know the effectiveness of the system, or lack thereof.” (*Id.*).

172. Although it is clear that the AWS reaches many organizations, it is not clear to what extent the information provided to these organizations actually reaches people with disabilities. For one thing, the providers do not receive any resources from the City to aid them in communicating emergency information to people with disabilities. (Tr. 295:8-11). The organizations, therefore, may simply lack the resources to communicate the messages they receive via AWS to their clients. (*See, e.g.*, Trapani Decl. ¶ 75 (“Many of the AWS participating organizations . . . are small non-profits whose budgets and staffs are overtaxed on a good day. These are not organizations that have the resources to take on major notification efforts.”); *id.* ¶ 74 (testifying that Plaintiff organization CIDNY was unable to reach all of its clients who lived in the evacuation zone during Hurricane Sandy and that if an emergency occurred at night or on a holiday, the organization might not have staff available to pass along AWS messages); Wasserman Decl. ¶ 27 (testifying that during Hurricane Irene, Plaintiff organization BCID was unable to reach all of its clients “because it had limited time and resources with which to conduct this outreach and notification” and that “[i]n an emergency with no advance warning, it is unlikely that BCID would be able to reach a significant portion, if any, of its clients”); Tr. 516:18-517:2 (BCID Executive Director Peters testifying that during Hurricane Sandy, BCID was closed due to the storm, and therefore the organization could not contact its clients until after the Mayor had issued the evacuation order); Ex. 18, at CNY000862 (“Not [all] AWS agencies have the time or resources to reach all clients during an emergency.”)).

173. In addition, many people with disabilities are not connected to a service provider, and therefore would not receive any information transmitted via the AWS. (*See, e.g.*, Kailes

Decl. ¶ 108 (“The primary problem with New York’s Advance Warning System is that the targeted individual must be connected with a service organization, and persons who are not affiliated with a service or government organization would not get these notifications. This means that many people who live at home independently day to day, who would nonetheless need accessible services during an emergency, would not get warnings about how to use and access accessible emergency services.”); Trapani Decl. ¶ 73 (“People who do not regularly rely on CIDNY for services because they live independently do not get our AWS notifications despite the fact that in an emergency, these people would need additional help and aid.”); Delarosa Decl. ¶ 41 (class member testifying that she is “not a client of any of the independent living centers, or a client of Meals on Wheels, or any other similar organization, so there is no reason . . . any of those organizations would have [her] contact information”); Ex. 18, at CNY000857 (“Not all people with special needs are connected to an AWS agency or are ‘known.’”).

174. As Belisle acknowledged, the City has not conducted any study to determine the capacity of service providers to deliver the information they receive through AWS to their members and clients. (Tr. 295:12-17).

e. Notify NYC

175. In addition to the AWS, which provides emergency information to organizations, the City maintains an emergency notification service for individuals called Notify NYC. (McKinney Decl. ¶ 13). Anyone wishing to receive notifications from Notify NYC may register online or via 311 to receive Notify NYC messages, which are available in several formats, including email, text message, and recorded phone call. (*Id.*; Ex. 1, at CNY000047). The City’s expert Elizabeth Davis testified that the service was accessible to people with disabilities because

it allowed people to register online or by telephone and because it provided messages in a variety of formats. (Davis Decl. ¶ 68).

176. Notify NYC's reach, however, is limited. The day before Hurricane Sandy made landfall, Notify NYC had only 100,245 subscribers — only about one percent of the population of New York City. (Ex. 79, at CNY00022659).

f. On-the-Ground Communication

177. In addition to its efforts to reach people through traditional media and online, the City also distributes emergency information — for example, evacuation notices — by passing out fliers door-to-door. (See Ex. 12, at CNY000621; Ex. 302, at CNY00023789; Conner Decl. ¶ 14; Murray Decl. ¶¶ 41, 44; Torres Decl. ¶ 62; Tr. 752:7-11).

178. The Emergency Public Information Plan directs that written messages should “[u]se specific, clear and concise language, written at a 3rd grade reading level”; that “[w]hen stating locations,” written messages should “include information about finding accessible transportation and sites for those with special needs”; and that those creating fliers and forms should “consider” various “print accessibility guidelines,” such as font type, style, color, and spacing. (Ex. 29, at CNY011881). But there is nothing in the City's emergency plans requiring that these fliers be accessible to those with visual disabilities or that the information they contain be communicated in other ways to those who cannot read the fliers.

179. During Hurricanes Irene and Sandy, the City distributed fliers that were not, in fact, accessible to those with visual disabilities. (See, e.g., Conner Decl. ¶ 14 (class member with vision disability testifying that, in advance of Hurricane Irene, she received a flier containing evacuation information that she could not read); Tr. 695:6-12 (testifying that the fliers distributed

during canvassing after Hurricane Sandy were not available in Braille and that there were no instructions about other methods of distributing the information they contained)).

180. Although not called for by the City's emergency plans, during Hurricane Sandy, NYPD officers also drove through neighborhoods using their patrol car loudspeakers to convey emergency information. For example, in the aftermath of the hurricane, officers drove through neighborhoods that remained without power and used patrol car loudspeakers to encourage residents to go to shelters. (*See, e.g.*, Ex. 305, at CNY00023801; Ex. 307, at CNY00023818; Ex. 310, at CNY00023833; Ex. 313, at CNY00023842).

181. Several class members reported that they lacked sufficient information during Hurricane Irene and Hurricane Sandy. (*See* Bell Decl. ¶ 25; Conner Decl. ¶ 14; Delarosa Decl. ¶¶ 35-36, 38; Torres Decl. ¶ 62). For the most part, however, the problem was not that they were unaware of the emergency. (*But see* Martinez Decl. ¶ 28 (testifying that he was unaware of Hurricane Sandy until the day before it made landfall because he did not have a computer and did not watch television or listen to the radio in the days before the storm)). To the contrary, the evidence demonstrates that, because the City distributed information through multiple means, emergency information effectively reached people with disabilities.

g. The Content of Communication

182. The absence of information cited by class members was thus more a function of the content than the means of the City's communications. (*See* Bell Decl. ¶ 25; Delarosa Decl. ¶¶ 35-36; Torres Decl. ¶ 62). For example, the City's plans do not require that the City provide information about shelter accessibility, accessible transportation, evacuation assistance, or any other information required by people with disabilities to respond to an emergency. And, indeed,

during recent emergencies, the information relevant to people with special needs has often been incomplete, incorrect, or lacking entirely.

183. For example, the City has failed to provide reliable information about the accessibility of the shelter system. The City has alternately (and in some cases, incorrectly) stated that all evacuation centers are accessible; that all shelters have at least one wheelchair-accessible entrance; and that all evacuation centers have at least one entrance usable by people with wheelchairs. (*See* Ex. 61 (email sent before Hurricane Sandy via the AWS incorrectly stating that “[a]ll shelters have at least one wheelchair *accessible* entrance” (emphasis added)); Ex. 151 (email sent by Belisle to an employee of CIDNY before Hurricane Irene stating incorrectly that “all 65 evacuation centers are *accessible*” (emphasis added)); Ex. 60 (311 script from Hurricane Sandy instructing 311 operators to inform callers that “[a]ll evacuation centers have at least one *usable* entrance for wheelchairs” (emphasis added)); Ex. 69, at CNY 00023748 (transcript of Mayoral statement, in which Mayor stated “[a]ll of these shelters have at least one entrance usable for wheelchairs”); *see also* Delarosa Decl. ¶ 33 (class member testifying that in researching the shelter system in advance of Hurricane Irene, she “found that the information about accessibility was inconsistent”).

184. During Hurricane Sandy, the Mayor repeatedly stated that all of the City’s evacuation centers had at least one entrance that was “usable” by people with wheelchairs. (*See* Exs. 67-69). This information was also provided to those who called 311. (*See* Ex. 60). There was no information, however, about whether the facilities within the evacuation centers — such as restrooms and sheltering areas — were accessible. (*See* Exs. 60, 67-69; *see also* Delarosa Decl. ¶ 35 (class member testifying that in advance of Hurricane Sandy, a 311 operator told her that the City maintained a list of “accessible” shelters, but that the operator could not tell whether

the shelters on the list had accessible bathrooms); Trapani Decl. ¶ 37 (testifying that she “was simply not able to obtain information that was reliable about where fully accessible shelters were located, or about how accessible any individual shelter was in fact”).

185. The City also fails to provide sufficient information about evacuation and transportation assistance for people with disabilities. The City’s initial messages regarding Hurricane Sandy, for example, did not provide any information at all about evacuation assistance for people with disabilities. (*See* Ex. 66, at CNY00023735 (transcript of Mayor Bloomberg’s remarks, stating “[a]s to the homebound who are living in these communities: if you have homebound relatives or acquaintances in these low-lying areas, consider taking steps now to move them to a safer location, in your own home, or in the home of a relative or friend”); Ex. 278, at CNY00020830 (AWS message stating “[i]f your client lives in an evacuation zone, and the Mayor calls for an evacuation then please prompt them to make arrangements to stay with friends and family if necessary. If those arrangements cannot be made please help him or her determine where they will go and how they will get there if there is an evacuation.”)). This is consistent with the press release templates provided in the Coastal Storm Public Information Plan, which, until twenty-four hours before a storm, do not provide any information about accessible transportation or evacuation assistance from the City; instead, they state “[i]f you have a disability that may prevent you from evacuating your home on your own, seek assistance from friends, relatives, and neighbors.” (*E.g.*, Ex. 12, at CNY000642, CNY000644, CNY000646).

186. One day before the Mayor issued the evacuation order in connection with Hurricane Sandy, the City began directing people to call 311 for transportation or evacuation assistance. (*See, e.g.*, Ex. 67, at CNY00023739; Ex. 68, at CNY00023744; Ex. 355). The City, however, provided no further information about, for example, what accessible transportation was

available, how long it would be available, and where it was located. Additionally, the information provided was sometimes wrong or misleading; for example, the website for the MOPD continued directing people to contact 311 to request evacuation assistance from paratransit for one day after paratransit had already shut down. (*See* Ex. 356). After Hurricane Sandy, the Mayor announced that the City would provide buses to shelters in areas that remained without power, but he did not state whether the buses would be accessible to people with disabilities. (*See, e.g.*, Ex. 304, at CNY00023797).

187. Instructing people with special needs to call 311 immediately before or during an emergency is not as effective as providing them with information directly and in advance of an emergency. First, it undermines their ability to develop a personal plan in advance of an emergency, the importance of which the City's own outreach materials stress. (*See* Exs. 1- 4A; Tr. 387:7-9, 570:1-8; Trapani Decl. ¶ 5; *see also, e.g.*, Tr. 451:25-452:3 (MOPD Commissioner Calise acknowledging that people who use wheelchairs or have other disabilities need to plan and learn in advance where accessible shelters are located)). Further, as explained above, during an emergency, the 311 system may have long wait times; callers may have difficulty getting through; and telephone service may be unavailable entirely. During an emergency, the communication and transportation options for people with disabilities in particular may be severely curtailed.

188. Several class members testified about the lack of sufficient information during Hurricane Sandy. (*See, e.g.*, Bell Decl. ¶ 25 (“The Mayor . . . gave no useful information or instructions about what people who are blind should do. The Mayor said nothing I could use about how blind people or persons with other disabilities like me might evacuate, shelter, or signal to authorities that they need help.”); Delarosa Decl. ¶ 35 (stating that during Hurricane

Sandy, she could not find shelter accessibility information online, nor was 311 able to provide such information); *id.* ¶ 38 (testifying that during Hurricane Sandy, a 911 operator informed her that she “did not know what the emergency plans were for people who use wheelchairs”). Class member Melba Torres, for example, who lives in New York City Housing Authority housing, testified that the day the Mayor issued the evacuation order, she received a flier under her door at 5:40 p.m. informing her that the building’s elevators would be shut off by 8:00 p.m. (Torres Decl. ¶ 62). The flier, however, included no information about where she should go, whether the shelter system was accessible to people with disabilities, or whether there was accessible transportation to take her to a shelter. (*Id.*). Lacking this information, she stated that she was unable to get out of the building by the time the elevators shut down. (*See id.* ¶¶ 62-67).

CONCLUSIONS OF LAW

189. As noted, Plaintiffs allege deficiencies in the following areas of emergency planning and preparedness for persons with disabilities: (1) evacuations, including evacuations from multi-story buildings and transportation; (2) the sheltering system and the amount of time people are expected to shelter in place without assistance; (3) power outages; (5) recovery operations; and (6) communications and outreach. They bring claims under Title II of the ADA, 42 U.S.C. § 12131 *et seq.*, Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794 *et seq.*, and the NYCHRL, N.Y.C. Admin. Code § 8-101 *et seq.*

A. Legal Standards

190. The legal framework that governs this case is not materially in dispute. The parties largely, if not entirely, agree on the applicable legal standards.

a. The ADA and Rehabilitation Act

191. Title II of the ADA provides in relevant part that “[n]o qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity.” 42 U.S.C. § 12132. Similarly, Section 504 of the Rehabilitation Act states that “[n]o otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” 29 U.S.C. § 794.

192. Although “there are subtle differences between these disability acts, the standards adopted by Title II of the ADA for State and local government services are generally the same as those required under section 504 of federally assisted programs and activities.” *Henrietta D. v. Bloomberg*, 331 F.3d 261, 272 (2d Cir. 2003) (internal quotation marks omitted); *see also, e.g., Weixel v. Bd. of Educ. of City of New York*, 287 F.3d 138, 146 n.6 (2d Cir. 2002) (“Apart from the Rehabilitation Act’s limitation to denials of benefits ‘solely’ by reason of disability and its reach of only federally funded — as opposed to ‘public’ — entities, the reach and requirements of both statutes are precisely the same.”). Further, in this case, the parties agree that the differences between the two statutes are not relevant. (*See* Pls.’ Mem. Fact and Law, Docket No. 90, at 4 n.1; Defs.’ Pre-Trial Mem. Law, Docket No. 97, at 4 n.1). Accordingly, the Court will consider the ADA and Rehabilitation Act claims together. *See Henrietta D.*, 331 F.3d at 272 (doing the same and citing cases for the proposition that a court may do so unless one of the “subtle distinctions” between the statutes “is pertinent to a particular case”).

193. The ADA was enacted to “provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities.” 42 U.S.C. § 12101(b)(1). Given this purpose, it is to be broadly construed. *See Henrietta D.*, 331 F.3d at 279; *see also Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967) (noting the “familiar canon of statutory construction that remedial legislation should be construed broadly to effectuate its purposes”); *Castellano v. City of New York*, 142 F.3d 58, 69 (2d Cir. 1998) (noting “the ADA’s broad remedial purpose”). The same is true of the Rehabilitation Act. *See, e.g., Heilweil v. Mount Sinai Hosp.*, 32 F.3d 718, 722 (2d Cir. 1994) (“Because the [Rehabilitation] Act is a remedial statute, it and the regulations promulgated under it are to be construed broadly.”).

194. In order to establish a violation of the ADA or the Rehabilitation Act, Plaintiffs must show that: (1) they are “qualified individuals” with a disability; (2) Defendants are subject to the ADA or the Rehabilitation Act; and (3) Plaintiffs “were denied the opportunity to participate in or benefit from [the City’s] services, programs, or activities, or were otherwise discriminated against by [D]efendants, by reason of [their] disabilities.” *Henrietta D.*, 331 F.3d at 272 (internal quotation marks omitted). Here, there is no dispute that Plaintiffs are qualified individuals with disabilities (or organizations that advocate on their behalf and have standing to sue as organizations, *see Brooklyn Ctr. for the Disabled v. Bloomberg*, 290 F.R.D. 409, 415-17 (S.D.N.Y. 2012)); that the City is subject to the ADA and the Rehabilitation Act; and that the City’s emergency preparedness program is a service, program, or activity within the meaning of both statutes. (*See* Defs.’ Pre-Trial Mem. Law (disputing none of these issues); Defs.’ Proposed Findings Fact & Conclusions Law (same)). The only issue, then, is whether Plaintiffs were denied the opportunity to participate in, or benefit from, the City’s emergency preparedness and response program or were otherwise discriminated against by the City.

195. The ADA seeks to prevent not only intentional discrimination against people with disabilities, but also — indeed, primarily — discrimination that results from “thoughtlessness and indifference,” that is, from “benign neglect.” *Alexander v. Choate*, 469 U.S. 287, 301 (1985); see H.R. Rep. No. 101–485(II), at 29 (1990). Thus, it is insufficient for a program to be offered on equal terms to those with and without disabilities; the law requires “affirmative accommodations to ensure that facially neutral rules do not in practice discriminate against individuals with disabilities.” *Henrietta D.*, 331 F.3d at 275; see also *Tennessee v. Lane*, 541 U.S. 509, 511 (2004) (“Recognizing that failure to accommodate persons with disabilities will often have the same practical effect as outright exclusion, Congress required the States to take reasonable measures to remove . . . barriers to accessibility.”); 42 U.S.C. § 12112(b)(5)(A) (defining discrimination to include failing to “mak[e] reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability”). As the Second Circuit has put it, “[i]t is not enough to open the door for the handicapped; a ramp must be built so the door can be reached.” *Dopico v. Goldschmidt*, 687 F.2d 644, 652 (2d Cir. 1982) (internal quotation marks and alterations omitted).

196. In particular, with respect to Plaintiffs’ claims in this case, “the relevant inquiry asks not whether the benefits available to persons with disabilities and to others are actually equal, but whether those with disabilities are as a practical matter able to access benefits to which they are legally entitled.” *Henrietta D.*, 331 F.3d at 271. Specifically, “an otherwise qualified handicapped individual must be provided with *meaningful access* to the benefit that the grantee offers.” *Id.* (emphasis added) (internal quotation marks omitted); see also *Alexander*, 469 U.S. at 301 (holding that the ADA requires not only that people with disabilities be provided with access to public services, but that they “be provided with *meaningful access*” (emphasis

added)). To accomplish such “meaningful access, reasonable accommodations in the grantee’s program or benefit may have to be made.” *Henrietta D.*, 331 F.3d at 271; *accord Alexander*, 469 U.S. at 301.

197. At the same time, the Second Circuit has emphasized that a distinction must be drawn “between (i) making reasonable accommodations to assure access to an existing program and (ii) providing additional or different substantive benefits.” *Wright v. Giuliani*, 230 F.3d 543, 548 (2d Cir. 2000) (per curiam). The ADA and the Rehabilitation Act “do not require that substantively different services be provided to the disabled, no matter how great their need for the services may be. They require only that covered entities make ‘reasonable accommodations’ to enable ‘meaningful access’ to such services as may be provided, whether such services are adequate or not.” *Id.* The statutes, in other words, do not require “optimal” accommodations. *J.D. ex rel. J.D. v. Pawlet Sch. Dist.*, 224 F.3d 60, 71 (2d Cir. 2000).

198. In interpreting the mandates of the ADA, Courts look to the regulations promulgated by the Department of Justice, which was charged by Congress with implementing the Act. *See Henrietta D.*, 331 F.3d at 273.⁹ Such regulations provide in relevant part that “a public entity, in providing any aid benefit, or service, may not,” on the basis of disability:

(1) “[d]eny a qualified individual . . . the opportunity to participate in or benefit from the aid, benefit, or service”; (2) “[a]fford a qualified individual . . . an opportunity to participate in or

⁹ Whatever degree of deference is owed to the regulations (an issue not in dispute here), the views expressed by the Department of Justice in the Statement of Interest it filed in this case are “entitled to respect, but only to the extent that those interpretations have the power to persuade.” *Christensen v. Harris Cnty.*, 529 U.S. 576, 587 (2000) (internal quotation marks and citation omitted). The Court finds that the views expressed in the Statement of Interest are entitled to great respect, as the Statement was well researched, well reasoned, and ultimately quite persuasive. That said, although the Statement was very helpful to the Court in evaluating the complex issues in this case, the Court notes that it has conducted an independent analysis of each issue in this case, and has not relied on the Statement to support any of its conclusions.

benefit from the aid, benefit, or service that is not equal to that afforded others”; or (3) “[p]rovide a qualified individual . . . with an aid, benefit, or service that is not as effective in affording equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as that provided to others.” 28 C.F.R. § 35.130(b)(1).¹⁰

199. In evaluating whether a particular program complies with the ADA, the program must be evaluated “in its entirety.” 28 C.F.R. § 35.150(a). “[T]he ADA does not . . . require perfection.” *United Spinal Ass’n v. Bd. of Elections*, 882 F. Supp. 2d 615, 624 (S.D.N.Y. 2012). It does not, for example, “[n]ecessarily require a public entity to make *each* of its existing facilities accessible.” 28 C.F.R. § 35.150(a)(1) (emphasis added); *see also Tennessee v. Lane*, 541 U.S. at 531-32. It does, however, require that “when viewed in its entirety,” a “service, program, or activity” administered by a public entity be “readily accessible to and usable by individuals with disabilities.” 28 C.F.R. § 35.150(a).

200. To the Court’s knowledge, only one other court — the District Court for the Central District of California — has ever examined a public entity’s emergency preparedness and planning for compliance with the ADA and the Rehabilitation Act. *See Communities Actively Living Indep. & Free v. City of Los Angeles* (“CALIF”), No. CV 09-0287 (CBM), 2011 WL 4595993 (C.D. Cal. Feb. 10, 2011). In that case, the court found, on summary judgment, that the emergency preparedness program of the City of Los Angeles failed to “include provisions to notify people with auditory impairments or cognitive disabilities of an emergency, or evacuate, transport, or temporarily house individuals with disabilities during or immediately following an emergency or disaster.” *Id.* at *13. Such failures, the court held, violate Title II of

¹⁰ The Justice Department has also promulgated more specific regulations governing, for example, the accessibility of public communications and facilities that house government services. These regulations are discussed below as relevant.

the ADA and Section 504 of the Rehabilitation Act. *See id.* at *17. Although the court did not find it “necessary . . . to enumerate every deficiency at [that] stage of the litigation,” it highlighted Los Angeles’s failure “to provide or [even] identify accessible shelters when such shelters are available to other residents” as well as its reliance on *ad hoc* accommodations rather than planning in advance to meet the needs of people with disabilities. *Id.* at *13-14. Based on these deficiencies, and others the court did not address in detail, the court held that people with disabilities were “denied the benefits of the City’s emergency preparedness program because the City’s practice of failing to address the needs of individuals with disabilities discriminates against such individuals by denying them meaningful access to the City’s emergency preparedness program.” *Id.* at *15.

b. The NYCHRL

201. As noted, Plaintiffs also bring claims under the NYCHRL. Under that law, it is “an unlawful discriminatory practice for any . . . owner, lessee, proprietor, manager, superintendent, agent or employee of any place or provider of public accommodation, because of the actual or perceived . . . disability . . . of any person, directly or indirectly, to refuse, withhold from or deny to such person any of the accommodations, advantages, facilities or privileges thereof.” N.Y.C. Admin. Code § 8-107(4)(a). The NYCHRL further requires that “any person prohibited by the [law] from discriminating on the basis of disability shall make reasonable accommodation to enable a person with a disability to . . . enjoy the right or rights in question provided that the disability is known or should have been known by the covered entity.” *Id.* § 8-107(15)(a). Defendants do not dispute that the City’s emergency planning is subject to the NYCHRL. (*See* Defs.’ Pre-trial Mem. Law 5).

202. Although the ADA and the NYCHRL are similar in nature, they are not coextensive. *See Loeffler v. Staten Island Univ. Hosp.*, 582 F.3d 268, 278 (2d Cir. 2009). Under the Local Civil Rights Restoration Act of 2005 (the “Restoration Act”), N.Y.C. Local Law No. 85 (2005), the NYCHRL is to “be construed liberally for the accomplishment of the uniquely broad and remedial purposes thereof, regardless of whether federal or New York State civil and human rights laws, including those laws with provisions comparably-worded to provisions of [the NYCHRL], have been so construed.” *Id.* § 7. As New York courts have made clear, “[a]s a result of [the Restoration Act], the [NYCHRL] now explicitly requires an independent liberal construction analysis in all circumstances, even where state and federal civil rights laws have comparable language.” *Williams v. N.Y.C. Hous. Auth.*, 872 N.Y.S.2d 27, 31 (1st Dep’t 2009); *accord Loeffler*, 582 F.3d at 278. Accordingly, “[t]here is now a one-way ratchet: ‘Interpretations of . . . federal statutes with similar wording may be used to aid in interpretation of New York City Human Rights Law, viewing similarly worded provisions of federal and state civil rights laws as a *floor* below which the City’s Human Rights law cannot fall.’” *Loeffler*, 582 F.3d at 278 (quoting the Restoration Act § 1 (emphasis added)).

203. In particular, the NYCHRL has a broader definition of disability than the definitions contained in the ADA and the Rehabilitation Act, *see Attis v. Solow Realty Dev. Co.*, 522 F. Supp. 2d 623, 631-32 (S.D.N.Y. 2007), as well as a broader notion of which accommodations are reasonable, *see Phillips v. City of New York*, 884 N.Y.S.2d 369, 378 (1st Dep’t 2009). For purposes of liability in this case, however, the Court has not found — and the parties have not identified — any relevant difference between the analysis required by the NYCHRL and the analysis required by the federal laws of the question at issue here: whether the City discriminates against people with disabilities in its emergency preparedness program. *See*

Kreisler v. Second Ave. Diner Corp., No. 10 Civ. 7592 (RJS), 2012 WL 3961304, at *14 (S.D.N.Y. Sept. 11, 2012) (applying the same standard under the ADA and the NYCHRL where the parties had provided no reason to believe the standards under the two laws were different for purposes of the case at issue), *aff'd*, — F.3d —, 2013 WL 5340465 (2d Cir. 2013) (per curiam). Furthermore, as the Court concludes that the City's emergency plans violate the ADA and the Rehabilitation Act, it follows that Defendants are liable under the NYCHRL as well.

B. Discussion

204. Having summarized the applicable legal principles, the Court turns to Plaintiffs' challenges to the City's plans for (1) evacuations, including evacuation from multi-story buildings and transportation; (2) the sheltering system and sheltering in place; (3) power outages; (4) recovery operations following emergencies; and (5) emergency-related communications and outreach.

a. Evacuations

205. First, Plaintiffs have proved that the City's plans for evacuations, including its plans for the evacuation of multi-story buildings and its plans for transportation in the event of an emergency evacuation, are not in compliance with the ADA, the Rehabilitation Act, and the NYCHRL. The City maintains several plans intended to facilitate the safe evacuation of City residents and visitors during an emergency. For the most part, these plans assume that people will be able to exit their buildings unassisted and that they will evacuate using public transit. For many people with disabilities, however, these assumptions are flawed. People with disabilities may require assistance evacuating their buildings and accessible public transportation in order to reach an evacuation center. The City's plans do not sufficiently accommodate either of these needs.

206. Most glaringly, apart from the HEO, the City has no plan whatsoever for evacuating people with disabilities from multi-story buildings. The evidence at trial showed, however, that many people with disabilities cannot evacuate multi-story buildings on their own, particularly if a power outage has rendered elevators inoperable. The City's witnesses testified that the City does not need to plan specifically for the evacuation of people with disabilities because it can accommodate all those who need evacuation on a case-by-case basis. But as the court held in *CALIF*, such *ad hoc* accommodations "are both legally inadequate and practically unrealistic." 2011 WL 4595993, at *14.

207. Instead, the evidence at trial, including testimony from the City's own witnesses, demonstrated that the needs of people with disabilities, including the need for evacuation assistance, could only be accommodated through advance planning. "The purpose of the City's emergency preparedness program is to *anticipate* the needs of its residents in the event of an emergency and to *minimize* the very type of last-minute, individualized requests for assistance described by the City, particularly when the City's infrastructure may be substantially compromised or strained by an imminent or ongoing emergency or disaster." *Id.* With respect to its plans for evacuation of residents from multi-story buildings during an emergency, therefore, the City has failed to provide people with disabilities with meaningful access.

208. This exclusion is magnified by the City's failure to ensure the availability of sufficient accessible transportation in the event of an emergency. The City's evacuation plans rely on public transportation, but there is no dispute that the vast majority of such transportation is inaccessible to people with disabilities under the best of circumstances.¹¹ Further, the

¹¹ In its response to the Department of Justice's Statement of Interest, the City notes that subway and bus service are provided by the New York City Transit Authority ("NYCTA"), and that, "[w]hile NYCTA is a planning partner with the City, it is a separate legal entity, and [] not a

evidence at trial demonstrated that even transportation that is ordinarily accessible to people with disabilities is likely to be unavailable during an emergency. MTA buses, for example, which have two wheelchair-accessible seats, may be too crowded for people in wheelchairs to board. And paratransit requires a twenty-four hour advance reservation, which renders it almost useless in the event of a disaster that arises without warning. In addition, during Hurricane Sandy, paratransit began to shut down only half an hour after the Mayor issued the evacuation order, while subway and bus service remained open for at least eight more hours.

209. Additionally, the City has no plans or agreements to ensure that paratransit — which is run by the MTA, a state agency, rather than by the City — remains open for a sufficient amount of time after an evacuation order is issued to allow people with disabilities to evacuate; that it remain open for as long as other forms of public transportation to ensure people with disabilities have an equal opportunity as those without disabilities to evacuate; that paratransit operate without the need for reservation in the event of an emergency; or, indeed, that paratransit be available for evacuations at all. Nor does the City have any other plan to ensure the availability of accessible transportation in the event of an emergency.

210. The point of preparing for a mass evacuation in advance is to ensure that, when an emergency strikes, there will be sufficient resources (and plans for the use of those resources) to enable those who need to evacuate to do so. But the failure to plan for accessible transportation virtually ensures that the opportunity of people with disabilities to evacuate will be unequal to that of individuals without special needs — that is, that the opportunity of people with

party to this action.” (Defs.’ Response to Statement of Interest of United States 16 n.2). The City further notes that it does “not own operate or control [sic] the New York City taxis, and cannot be held liable for any purported inaccessibility of that system.” (*Id.*). That may be true, but it is beside the point here. The City is not liable in this case for the inaccessibility of the subway, bus, and taxi systems *per se*; it is liable for its emergency preparedness plans, which rely heavily on those systems and do not make adequate provision for people with disabilities.

disabilities to benefit from advance planning for evacuations is unequal to that of others. In short, because the City's evacuation plans do not sufficiently account for the transportation needs of people with disabilities, people with disabilities lack meaningful access to those plans.

211. The City's failure to plan for the evacuation and transportation of people with disabilities is not remedied by the HEO — the only provision in the City's evacuation plans specific to the evacuation of those with special needs. First, the City does not publicize the existence of the HEO, either in its emergency preparedness outreach or during an emergency. The program is meant as a "last resort." The City therefore does not intend for people with disabilities to *plan* to use the HEO to evacuate during an emergency; indeed, given that the public is generally unaware that the HEO even exists, people with disabilities are effectively precluded from doing so. Thus, the HEO does nothing to remedy the fact that people without disabilities are able to plan to evacuate via public transportation, whereas people who require accessible transportation are not informed in any meaningful way whether or how they may evacuate.

212. Second, as discussed above, the HEO was originally designed for emergencies with advance notice, such as coastal storms. On the eve of trial (and perhaps *because* of the trial), the City incorporated the HEO into its Area Evacuation Plan, its plan for disasters that occur without warning, such as radiological incidents, major explosions, and terrorist attacks. But the HEO is not well suited for such incidents. It is dependent on advance warning and designed to begin — and end — even before the relevant emergency occurs. Even the City's witnesses were hard pressed to explain whether, or how, the HEO could be implemented in the event of a no-notice emergency event. (Villani Dep. 15:6-20). Thus, the HEO is little or no help to people with disabilities in a disaster that occurs without warning.

213. Third, even in those emergencies in which the HEO can be implemented, there is no evidence that, as currently resourced, it has the capacity to evacuate all those who might require assistance. The City has not determined how many people might require evacuation assistance through the HEO, and therefore cannot know whether the resources available are sufficient. And finally, the effectiveness of the HEO is limited by its dependence on the 311 system. There is no other way for those who require its assistance to access it. As demonstrated during Hurricane Sandy, however, the 311 system is unreliable during an emergency: some people may be unable to reach 311; some may not have sufficient power in their cellphones to wait for an operator; and others may lack telephone service entirely.

214. Thus, the HEO cannot remedy the fact that although the City's evacuation plans are intended to apply to all residents, the plans plainly — and unlawfully — fail to take into account the special needs of people with disabilities. *See Shirey ex rel. Kyger v. City of Alexandria Sch. Bd.*, 229 F.3d 1143 (4th Cir. 2000) (per curiam) (holding that the failure to develop an emergency plan for the safe evacuation of people with disabilities violates the ADA). Hurricane Sandy dramatically demonstrated the consequences of this failure. Plaintiffs provided substantial evidence that people with disabilities, unable to leave their buildings unassisted or to locate accessible transportation, remained trapped in high-rise buildings for days after the storm.

b. The Shelter System and Sheltering in Place

215. Next, Plaintiffs have established that, due to both architectural barriers and programmatic failures, the City's plans deprive people with disabilities of meaningful access to its shelter system. On the other hand, the Court does not agree with Plaintiffs' contention that the City unlawfully assumes that people with disabilities can shelter in place without assistance for three days following an emergency.

i) Architectural Accessibility

216. A public entity may not select a facility to provide a public service that would “defeat or substantially impair[]” the ability of people with disabilities to access that service. 28 C.F.R. § 35.130(4)(ii); *see id.* § 35.149 (“[N]o qualified individual with a disability shall, because a public entity’s facilities are inaccessible to or unusable by individuals with disabilities, be excluded from participation in, or be denied the benefits of the services, programs, or activities of a public entity . . .”). This does not mean that every building used for a public service must be accessible: “A public entity may comply with this [regulation] through such means as . . . reassignment of services to accessible buildings, assignment of aides to beneficiaries, . . . delivery of services at alternate accessible sites, alteration of existing facilities and construction of new facilities, . . . or any other methods that result in making its services, programs, or activities readily accessible to and usable by individuals with disabilities.” *Id.* § 35.150(b); *see also id.* § 35.150(a)(1) (providing that Section 150(a) does not “[n]ecessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities”). But whatever means the City chooses, it must ensure that people with disabilities have meaningful access to the shelter system. The City’s plans fail to do so.

217. First, there is no requirement in the City’s emergency plans that the facilities selected as shelters — or at least, a percentage of them sufficient to accommodate the anticipated shelter population of people with disabilities — be accessible. Although the City argues that it directs people to evacuation centers, not shelters, there is not even a requirement that the facilities used as evacuation centers be accessible. The City’s own witnesses admitted that many shelters and evacuation centers are not accessible to people with disabilities.

218. In fact, the City does not even know which of its shelters and evacuation centers, let alone how many, are accessible. It follows that the City cannot determine whether there are enough accessible shelters to house all those who may require accessible shelter in an emergency; nor can it necessarily direct or transport people to an accessible shelter in an emergency. People with disabilities are plainly excluded from the shelter system if they cannot access the buildings in which it is housed. *See* 28 C.F.R. § 35.149; *see also CALIF*, 2011 WL 4595993, at *14 (holding that the City of Los Angeles had violated the ADA and the Rehabilitation Act where the City did “not know which, if any, of [its] shelters [we]re architecturally accessible to individuals with disabilities” and thus “[i]ndividuals with disabilities . . . [had] no way of knowing which shelters [had] been designated as accessible”).

219. Defendants’ arguments that the shelter system complies with the ADA are without merit. First, they contend that every evacuation center has at least one entrance that is “usable” by people with disabilities. (Defs.’ Proposed Findings of Fact & Conclusions of Law ¶ 247). But the ADA requires that the City’s sheltering program be not just usable, but “readily accessible to and usable by” people with disabilities. 28 C.F.R. § 35.150(a) (emphasis added).¹² Additionally, as of the time of trial, the City had not assessed the accessibility — or usability — of its shelter system. Thus, it is not even clear that the City’s contention about “usable” entrances is correct. During Hurricane Sandy, at least one evacuation center entrance was

¹² Contrary to the City’s suggestion (*see* Defs.’ Response to Statement of Interest of United States 21 n.3), the fact that the regulations also include the term “usable” is irrelevant. As noted above, the regulations require that the shelter system be not only usable by, but also *readily accessible to*, people with disabilities. *See* 28 C.F.R. § 35.150(a). The City’s own witnesses, including its expert witness, conceded that the term “usability,” as employed by the City, does not necessarily mean compliant with the ADA. (*See* Tr. 439:3-5, 912:25-913:14; 915:22-916:5, 930:5-8; *see also* Calise Decl. ¶ 18 (same)). In any event, regardless of the terminology with which the City describes its shelters, the evidence demonstrates that the City’s shelter system does not actually meet the requirements of the ADA and the applicable regulations.

rendered “usable” only by means of a ramp that was not, in fact, usable by a person in a wheelchair, at least not without the help of a police officer.

220. Even assuming the City’s contention is accurate, some of its evacuation centers only had usable entrances during Hurricane Sandy because of the City’s *ad hoc* modifications as the storm approached. There is nothing in the City’s plans that requires evacuation centers to be located in buildings with usable entrances (let alone anything that provides guidance as to how to modify non-accessible entrances such that they are usable) or confirms that the City has available the resources to do so. Therefore, while the Court does not doubt that the intent of the City during Hurricane Sandy was to make its evacuation centers usable for people with disabilities — and not simply to evade liability in this lawsuit — there is insufficient evidence to demonstrate that in future emergencies all evacuation centers will have usable entrances. *Cf. Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 189 (2000) (explaining that “[a] case might become moot if subsequent events made it *absolutely clear* that the allegedly wrongful behavior could not reasonably be expected to recur” and that demonstrating that “the challenged conduct cannot reasonably be expected to start up again” is a “heavy burden” (emphasis added)).

221. More importantly, the ability of people with disabilities to enter a facility is necessary, but not sufficient, for compliance with the ADA. *See Brown v. Cnty. of Nassau*, 736 F. Supp. 2d 602, 615 (E.D.N.Y. 2010) (noting that the ability of people with disabilities to enter a facility “does not necessarily equate with the facility being *readily* accessible and usable by the disabled under the law”). Those displaced by a disaster may need to stay at a shelter for days or longer. (*See, e.g.*, Ex. 7, at CNY000366 (“Worst-case storm scenario could require sheltering of over 600,000 evacuees for more than 72-hours.”)). During Hurricane Sandy, the shelters

remained open for over three weeks. (*See* Ex. 105, at CNY00022958). If a person with disabilities cannot use the bathrooms at a shelter, that shelter is not accessible — or even usable — by that person. *See Brown*, 736 F. Supp. 2d at 615-16; *Ass’n for Disabled Ams., Inc. v. Concorde Gaming Corp.*, 158 F. Supp. 2d 1353, 1367 (S.D. Fla. 2001) (“If a public accommodation’s restrooms are unfit for the use of a disabled person, the public accommodation is not accessible.” (internal quotation marks omitted)). Where, as here, a facility’s “wheelchair ramps are so steep that they impede a disabled person or . . . its bathrooms are unfit for the use of a disabled person, then it cannot be said that the [facility] is ‘readily accessible,’ regardless [of] whether the disabled person manages in some fashion to” enter it. *Shotz v. Cates*, 256 F.3d 1077, 1080 (11th Cir. Fla. 2001).

222. Next, Defendants assert that, during Hurricane Sandy, the City assigned aides to assist people with disabilities. (Defs.’ Proposed Findings of Fact & Conclusions of Law ¶ 247). The only evidence in the record that anyone in the shelter system was provided with an aide, however, is a single sentence in the declaration of Erin McLachlan, who managed a SMNS for a week during Hurricane Sandy. McLachlan testified that “a week or so” after the hurricane, “FEMA received a contract with ResCare and we brought in approximately 25-30 personal care attendants.” (McLachlan Decl. ¶ 15).¹³ There is no indication that these attendants were present

¹³ Defendants’ expert Elizabeth Davis described the Personal Assistance Service, pursuant to which, she explained, a local jurisdiction could request through FEMA personnel to serve as personal attendants and caregivers in the shelter system. (*See* Davis Decl. ¶ 118). She testified that Hurricane Sandy was the first time this service was activated. (*Id.*). Davis did not, however, assert any personal knowledge of the Personal Assistance Service or its use during Hurricane Sandy. Accordingly, the Court declines to rely on it. *See* Fed. R. Evid. 602 (“A witness may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter.”); *United States v. Cuti*, 720 F.3d 453, 457-58 (2d Cir. 2013) (“The Federal Rules of Evidence allow the admission of fact testimony so long as the witness has personal knowledge, while opinion testimony can be presented by either a lay or expert witness.” (internal citation omitted)). In any event, Davis’s testimony would not alter the

at any other shelter or evacuation center or that they assisted people with disabilities in navigating otherwise inaccessible facilities. Furthermore, even if the attendants aided people with disabilities in receiving sheltering services, they arrived a week after the shelter system opened. People with disabilities do not have meaningful access to the shelter system if they must wait a week after a disaster to use it. Finally, the attendants about which McLachlan testified were provided by FEMA; they were not made available pursuant to any City plan. Therefore, there is no reason to believe they will be available in future emergencies.

223. Third, Defendants note that the eight SMNSs are fully accessible to people with disabilities. (Defs.' Proposed Findings of Fact & Conclusions of Law ¶ 247). But the ADA requires that public entities "administer services, programs, and activities in the most integrated setting appropriate to the needs of qualified individuals with disabilities." 28 C.F.R. § 35.130(d); *see also id.* Part 35, App. B (defining "the most integrated setting appropriate to the needs of qualified individuals with disabilities" to mean "a setting that enables individuals with disabilities to interact with non-disabled persons to the fullest extent possible"). Many people with disabilities do not require the specialized medical care provided in the SMNSs; they require only that a general shelter be accessible to them. Requiring people with disabilities who do not require medical care to seek shelter in SMNSs would therefore violate this regulation. *See, e.g., Olmstead*, 527 U.S. at 597 ("Unjustified isolation . . . is properly regarded as discrimination based on disability."); *id.* at 600 (holding that "institutional placement of persons who can handle and benefit from community settings" violates the ADA).

conclusion that the provision of personal attendants to some people a week after a disaster pursuant to a FEMA program that is not embodied in any City plan is insufficient to overcome the architectural barriers to accessibility in the City's shelter system.

224. Finally, Defendants argue that the City's shelter system as a whole is sufficiently accessible to people with disabilities because, if a particular shelter does not meet a person's needs, the City will provide accessible transportation to relocate that individual to one that does. (Defs.' Proposed Findings of Fact & Conclusions of Law ¶ 247). But there is nothing in the City's sheltering plan about accessible transportation between shelters. And, in any event, it is unclear how the City would transport someone to an accessible shelter given that it does not even know which of its shelters are accessible. Furthermore, the provision of accessible transportation between shelters does not ensure that there are sufficient accessible shelters available. Nor does it account for the possibility that transportation may be difficult or impossible during and after an emergency. The City provides people without disabilities the opportunity to identify in advance, and to use in an emergency, an evacuation center in their neighborhood. People with disabilities are not given this same opportunity.

225. To be sure, the ADA does not require that *every* shelter be accessible. *See* 28 C.F.R. § 35.150(a); *see also Tennessee v. Lane*, 541 U.S. at 531-32. But the City cannot even identify which, or how many, of its shelters and evacuation centers are accessible. There is no way, therefore, for the City to ensure that there are sufficient shelters and evacuation centers to meet the needs of people with disabilities or for it to direct people to accessible shelters and evacuation centers.

226. The City's sheltering plans prepare it to open sixty-five evacuation centers, any one of which a person without disabilities can use in an emergency, as well as additional shelters sufficient to accommodate over 600,000 people, the maximum number of people the City anticipates will need shelter. At a minimum, to provide people with disabilities meaningful access to the City's shelter system, the City's evacuation centers must be accessible to people

with disabilities; a sufficient number of shelters to accommodate people with disabilities must also be accessible; and the City must be able to identify which shelters are, in fact, accessible. Therefore, in order for people with disabilities to have meaningful access to the City's emergency plans, the plans must provide for this level of accessibility.¹⁴

227. A similar conclusion applies to refuges of last resort. Accessibility is not a criterion the City considers in determining which facilities are chosen to serve as refuges. To ensure that people with disabilities are able to access these refuges in an emergency, the City must ensure in advance that a sufficient proportion are accessible to people with disabilities; identify which refuges are accessible; and, when it publicizes the list of open refuges of last resort during an emergency, provide information about which are accessible.

ii) Programmatic Accessibility

228. The purpose of the City's shelter system is not only to provide safe buildings in the event of an emergency, but also to "offer essential services to preserve the health and safety of evacuees." (Ex. 7, at CNY000363). Moreover, even if the purpose of the shelter system were merely to provide safe structures during a disaster, the City would be required to provide reasonable accommodations — such as, for example, the provision of signage in forms intelligible to people with hearing, cognitive, visual, or other disabilities — to ensure that people with disabilities had meaningful access to such structures. *See, e.g. Henrietta D.*, 331 F.3d at 271. Therefore, the City must do more than ensure that the buildings in which it locates its

¹⁴ The fact that, at the time of trial, the City was in the process of surveying all DOE facilities for accessibility does not change the Court's conclusion. First, the record does not contain the results of the process, let alone any evidence that the City has used the data to remedy the lack of accessibility. Second, as discussed above, there are reasons to believe that the methodology of the survey is flawed. Third, and in any event, "[w]hile the Court commends the City for continuing to conduct full accessibility surveys of its shelters . . . , such efforts — in isolation — are not sufficient." *CALIF*, 2011 WL 4595993, at *14 (citation omitted).

shelters are physically accessible; it must ensure that the services offered therein are also accessible. It fails to do so in several respects.

229. First, the City fails to accommodate the communication needs of people with disabilities. Department of Justice regulations provide that “[a] public entity shall take appropriate steps to ensure that communications with [people] with disabilities are as effective as communications with others.” 28 C.F.R. § 35.160(a)(1). Such steps may require the provision of “appropriate auxiliary aids and services.” *Id.* § 35.160(b)(1). And while “[t]he type of auxiliary aid or service necessary to ensure effective communication will vary in accordance with the method of communication used by the individual; the nature, length, and complexity of the communication involved; and the context in which the communication is taking place,” the regulations provide that, “[i]n order to be effective, auxiliary aids and services must be provided in accessible formats, in a timely manner, and in such a way as to protect the privacy and independence of the individual with a disability.” *Id.* § 35.160(b)(2).

230. The City’s sheltering plans do not ensure effective communication with people with disabilities. The City’s efforts on this score are minimal: The City does not, for example, provide sign language interpretation at shelters or ensure that common signage is available in Braille. And while the City provides some guidance to shelter staff about communication with people with special needs, the only accommodation it makes in this regard is to provide a communications board with pictures and symbols at shelter registration tables. As noted, this board is not in evidence, and therefore the Court cannot determine the extent to which it might aid people with disabilities that impair their ability to communicate. In any event, such a board cannot aid those with visual disabilities; nor can it enable those with hearing disabilities to understand oral announcements. Nor is it clear that the communications board is available at any

point other than registration. Without the means to communicate at shelters, people with disabilities may be less able than others to access the services therein. The City's emergency plans fail to account for this possibility. As the purpose of these plans is to help ensure that all City residents have access to the services provided by shelters, they fail to provide meaningful access to those with disabilities.

231. For some people with disabilities, the ability to meaningfully access the City's sheltering services also depends on access to electricity. Without electricity, those who, for example, depend on ventilators or power wheelchairs will be less healthy, safe, and independent at a shelter than people without disabilities. Nevertheless, while all of the City's SMNSs have back-up generators or the capacity to quickly connect to a back-up generator, there is no plan for ensuring electricity at the other shelters where some people with special needs are bound to be located. Moreover, as noted, the City may not limit its accommodations of people with disabilities to SMNSs. Instead, those who are able to stay in general shelters must be accommodated there. *See* 28 C.F.R. § 35.130.

232. For the same reason, the City's provision of supplies required by people with disabilities, such as accessible cots, solely to SMNSs is impermissible. Although the City's Director of Human Resources testified that, in the future, the City plans to order enough supplies that they may be provided to both SMNSs and general shelters, there is nothing in the City's plans that requires this and therefore no assurance that the City will do so. *See, e.g., Friends of the Earth*, 528 U.S. at 189 ("It is well settled that a defendant's voluntary cessation of a challenged practice does not deprive a federal court of its power to determine the legality of the practice." (internal quotation marks omitted)); *R.C. Bigelow, Inc. v. Unilever N.V.*, 867 F.2d 102,

106 (2d Cir. 1989) (“[A] disclaimer of intention to revive allegedly unlawful conduct does not suffice by itself to meet defendants’ heavy burden in order to render the case moot.”).

233. Plaintiffs contend that, in general, the City’s stockpile does not contain sufficient supplies to meet the needs of people with disabilities. (*See* Pls.’ Mem. Fact & Law 12-13). In particular, the City does not stockpile items such as meals for special diets, chargers for power wheelchairs, or prescription medications. Defendants argue that the law does not require it to provide such supplies. Ordinarily, a public entity is not required “to provide to individuals with disabilities personal devices, such as wheelchairs; individually prescribed devices, such as prescription eyeglasses or hearing aids; readers for personal use or study; or services of a personal nature including assistance in eating, toileting, or dressing.” 28 C.F.R. § 35.135. This regulation, however, is not universally applicable. It does not apply “in special circumstances, such as where the individual is an inmate of a custodial or correctional institution.” 28 C.F.R. Part 35, App. B (2005). An emergency constitutes a similar special circumstance. The purpose of the shelter system is to provide people with the goods and services they need to remain healthy, safe, and functional when an emergency has rendered them unable to provide these goods and services for themselves. The City may not provide people without disabilities the goods and services they require while withholding them from those with special needs.

234. But Plaintiffs presented no evidence that those who need such supplies are unable to get them through the City’s substantial requisition process, through which the City can obtain almost anything within forty-eight hours. (Tr. 640:9-16). Therefore, there is no reason the stockpile itself must contain these items. Plaintiffs failed to demonstrate that the stockpile, combined with the elaborate requisition process, was insufficient to accommodate the needs of people with disabilities. *See, e.g., Wells v. Thaler*, 460 Fed. Appx. 303, 313 (5th Cir. 2012)

(holding that the plaintiff had failed to establish an ADA violation where there was “no evidence indicating that the existing resources are inadequate or did not meet his needs”).

235. The City’s communication about the stockpile, however, is another matter. Although the record indicates that the City provides adequate supplies for people with disabilities in the shelter system, the City informs the public that it will not do so. This misinformation not only violates the requirement that people with disabilities must be able to obtain accurate information about the provision of accessible services, *see* 28 C.F.R. § 35.163(a), but also dissuades people with disabilities from attempting to use the shelter system. In both respects, it does not provide people with disabilities meaningful access to the City’s program.

iii) Sheltering in Place

236. Next, Plaintiffs contend that because the City advises residents to prepare to shelter in place for three days after an emergency, its plans rely on this assumption. (*See* Pls.’ Mem. Fact & Law 15). Such an assumption, they argue, disproportionately burdens people with disabilities, many of whom are unable to survive on their own for that period of time. (*Id.*). But the City’s plans provide that, where possible, evacuation will take place before an emergency, and that in an emergency without notice, evacuation and life safety measures will take place as soon as possible thereafter. The City’s recommendation that people be prepared to shelter in place for up to seventy-two hours is simply personal preparedness advice — advice that is in accordance with guidance provided by FEMA and the Red Cross. Such guidance cannot in and of itself disproportionately burden people with disabilities.

c. Power Outages

237. The City’s failure to account for people with disabilities during a power outage impairs their ability to meaningfully access any City services after an emergency. Because many

people with disabilities depend on elevators, a power outage renders many people with disabilities unable to leave their buildings. Those unable to leave their buildings are obviously unable to access the City's emergency services, such as sheltering, food and water distribution, and the provision of medical services.

238. The City's power outage plan does not account for this. It plans for the electric company, and if that fails, the Police Department, to check on people dependent on electricity-powered life-sustaining equipment in the event of a power outage. But the City's emergency plans do not require that, where possible, the public — or least those who depend on electricity for health, safety, or mobility — be notified in advance of a power outage; as explained above, the plans do not provide sufficient evacuation assistance to ensure that during a power outage, people with disabilities can exit their buildings; nor do they call for canvassing after an emergency, to help ensure that the services provided to people without disabilities may reach those with disabilities who are unable to leave their buildings.

239. Although the City did undertake a large-scale canvassing effort after Hurricane Sandy, this canvassing was an improvised response to the realization that people remained trapped in their buildings after the storm. As noted, such “*ad hoc* reasonable accommodations . . . are both legally inadequate and practically unrealistic” in the context of an emergency preparedness program, the purpose of which “is to anticipate the needs of [the City's] residents in the event of an emergency and to minimize” the need for improvisation, “particularly when the City's infrastructure may be substantially compromised or strained by an imminent or ongoing emergency or disaster.” *CALIF*, 2011 WL 4595993, at *14. To ensure that people with disabilities are able to access the services provided by the City after an emergency, therefore, such a response must at least be incorporated into the City's plans.

d. Recovery Operations

240. As noted, the City's emergency plans provide for the provision of resources and the removal of debris in the aftermath of a disaster. For the most part, these plans are sufficient to accommodate the needs of people with disabilities.

i) Resource Provision

241. The City has several plans for the provision of resources — such as food and water, ice, and information about various kinds of assistance — after an emergency. The plans direct that the facilities at which these resources are provided be accessible to people with disabilities. (*See* Ex. 24, at CNY018542; Ex. 25, at CNY018609; Ex. 30, at CNY015234). And there was no evidence presented at trial that would suggest that the facilities were not, in fact, accessible following Hurricane Sandy. The City's emergency plans do not, however, provide for accessible communications at the centers where resources are distributed. Such failure plainly violates the City's obligation to provide equally effective communication to people with disabilities, *see* 28 C.F.R. § 35.160(a)(1), and impedes people with disabilities from accessing the resources provided.

ii) Debris Removal

242. Next, Plaintiffs argue that the City's plan for removing debris after an emergency does not adequately account for people with disabilities, who may be unable to navigate streets and sidewalks littered with debris. With the exception of one provision that states that the City will "coordinate efforts" to address the debris removal needs of people with disabilities, the Debris Management Plan does not specifically address those needs. Plaintiffs' argue that because of this omission, the plan violates the ADA. (Pls.' Mem. Fact & Law 20). The ADA, however, does not mandate that all City services provide special accommodations for people

with disabilities. Instead, it mandates that people with disabilities have meaningful access to all services; special accommodations are required only if necessary to achieve this access. *See, e.g., Henrietta D.*, 331 F.3d at 271; *Thomas v. Pa. Dep't of Corr.*, 615 F. Supp. 2d 411, 425-26 (W.D. Pa. 2009) (“[T]he law requires only that defendants provide accommodations that would allow plaintiff to participate in the desired programs; the court has found no cases, and plaintiff has not provided the court with one, which stand for the proposition that plaintiff is entitled to whatever accommodation he desires.”). This lawsuit was filed shortly after Hurricane Irene and went to trial months after Hurricane Sandy. And yet the only evidence Plaintiffs provided that anyone with disabilities was ever impeded by debris was testimony about the failure to clear snow banks after a single snowstorm years earlier. They have thus failed to demonstrate that the City’s debris removal plan does not sufficiently accommodate the needs of people with disabilities as it is written.

iii) Interim Housing

243. Plaintiffs argue that “the City’s plans for accessible housing in the recovery phase after an emergency are virtually nonexistent.” (Pls.’ Mem. Fact & Law 19). They are correct. That is not because the City’s housing plans fail to consider people with disabilities, however, but rather because the City lacks any plan for interim housing.

244. At most, the City has a plan that has not taken effect, pursuant to which it is developing interim housing units. As of the date of the trial in this case, however, these units had yet to be implemented. And, in any case, they were to be fully accessible to people with disabilities. During Hurricane Sandy, the City provided interim housing in hotel rooms. Again, however, this was not done pursuant to any preexisting emergency plan. And, again, the City provided accessible hotel rooms to those who needed them.

245. There is no dispute that interim housing after an emergency is important to people with and without disabilities. It is, however, a program that is not currently included in the City's plans. Because the City does not plan for interim housing for anyone, the ADA does not require that it do so specifically for people with disabilities. *See Wright*, 230 F.3d at 548 (“[T]he disabilities statutes do not require that substantively different services be provided to the disabled, no matter how great their need for the services may be. They require only that covered entities make ‘reasonable accommodations’ to enable ‘meaningful access’ to such services as may be provided, whether such services are adequate or not.”).

e. Communications

246. Plaintiffs' last substantial challenge to the City's plans concerns both the means and content of communications, from the City's outreach and education program in advance of an emergency to its communications before and during an emergency. For the most part, the City's means of communicating (at least outside of the shelter system and at the resource distribution centers, which are discussed above) are sufficient to comply with the ADA; the content of its communications, however, falls short in several respects.

i) Outreach and Personal Emergency Planning

247. As noted above, the City provides a robust outreach program designed to assist individuals in preparing a personal emergency plan. Among other things, a personal preparedness plan should include information about how a person would evacuate during an emergency, where they would go, and how they would get there. But the City's outreach fails to provide crucial information that people with disabilities would require to develop such a personal preparedness plan. For example, the City does not publicize which shelters or evacuation centers are fully accessible to people with disabilities (in part because the City itself does not know that

information). Nor does it provide information about whether accessible transportation will be available during an emergency and how to access it.

248. The law requires that “[a] public entity shall ensure that interested persons, including persons with impaired vision or hearing, can obtain information as to the existence and location of accessible services, activities, and facilities.” 28 C.F.R. § 35.163(a). The City’s otherwise impressive outreach program fails to do so. This failure to provide information about the existence and location of accessible services, such as evacuation centers and transportation, renders people with disabilities less able to develop a personal emergency plan than others.

249. The instruction, in some of the City’s materials, to call 311 during an emergency to find the locations of accessible shelters does not remedy this lack of advance information. For one thing, the ability of people to access the 311 system may be compromised in an emergency. But, more importantly, people without disabilities are able to plan *in advance* where they will go and how they will get there in an emergency. Without any information on accessible evacuation centers or transportation, people with disabilities cannot make such a plan. The ADA prohibits the provision of such an unequal opportunity to plan. *See* 28 C.F.R. § 35.130(b)(1); *see also U.S. Airways, Inc. v. Barnett*, 535 U.S. 391, 397 (2002) (characterizing the purpose of the ADA as a “basic equal opportunity goal”); *Henrietta D. v. Giuliani*, 119 F. Supp. 2d 181, 208 (E.D.N.Y. 2000) (holding that a City program that failed to provide people with disabilities an “equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as that provided to others” violated the ADA (internal quotation marks omitted)),

*appeal dismissed by 246 F.3d 176 (2d Cir. 2001), and aff'd sub nom. Henrietta D. v. Bloomberg, 331 F.3d 261 (2d Cir. 2003).*¹⁵

ii) Communications During an Emergency

250. Plaintiffs also contend that both the means and content of the City's communication during an emergency are insufficient. As noted above, with respect to the means of communication, Justice Department regulations provide that "[a] public entity shall take appropriate steps to ensure that communications with [people] with disabilities are as effective as communications with others," 28 C.F.R. § 35.160(a)(1), including, where necessary, the provision of "appropriate auxiliary aids and services," *id.* § 35.160(b)(1).

251. The City employs a wide variety of methods — including press conferences, websites, the 311 system, AWS, and NotifyNYC.gov — to communicate information during an emergency. Most, if not all, of these means are accessible to people with disabilities. The Mayor's office, for example, has a policy requiring sign language interpretation of important press conferences; the City's websites are largely accessible to those who are blind via screen readers; and 311 is available to those who are deaf via TTY. None of these means of information distribution is perfect. Press conferences may not always be closed-captioned; the 311 system may not always be available; and the reach of AWS is limited. But the multiplicity

¹⁵ That is not to say that the City needs to provide information on the accessibility of all of its shelters to comply with the ADA. Such a mandate would be incompatible with the solar system model of sheltering that the City has devised, a model with significant benefits (including the ability to focus resources where needed, which plainly helps in serving people with disabilities). Moreover, the ADA does not demand that level of perfection. *See, e.g., United Spinal Ass'n*, 882 F. Supp. 2d at 624. At a minimum, however, the ADA requires the City to provide accurate information about the accessibility of evacuation centers — the location of which the City knows in advance of an emergency and to which all evacuees are directed in the first instance.

of means by which information is distributed ensures that people with disabilities have an equal opportunity to access emergency information as those without disabilities. *See, e.g., Loye v. Cnty. of Dakota*, 625 F.3d 494, 499-501 (8th Cir. 2010) (holding that the proper standard is not whether every communication is accessible, but rather whether, as a whole, the communication provided to people with disabilities is “effective” and ensures “meaningful access to the services being provided”).

252. Notably, the only person with disabilities that Plaintiffs identified who was insufficiently warned of Hurricane Sandy’s approach, Kenneth Martinez, testified that he did not have a computer, watch television, or listen to the radio in the days leading up to the storm. (*See* Martinez Decl. ¶ 28). It was not, therefore, Martinez’s disability that prevented him from receiving the City’s emergency information; a person without disabilities who did not use a computer, watch television, or listen to the radio would also likely not have received information that a storm was approaching. Plaintiffs provided no evidence that the *means* of communication employed by the City during an emergency are any less effective at reaching people with disabilities as those without.

253. There is certainly room for the City to improve on its plans with respect to the means of communicating emergency information. For example, while the City adopted a policy during Hurricane Sandy to require a sign language interpreter at the Mayor’s press conferences, that policy is not memorialized in the City’s emergency plans themselves and is limited by its terms to the Mayor’s press conferences. (Ex. 298). Additionally, while there are recommendations that televised warnings and alerts contain audio and captioning components, there is nothing in the City’s plans that *requires* these accommodations. (*See* Tr. 295:18-22). Given the multiplicity of ways that the City communicates emergency information and the lack

of evidence that people with disabilities do not receive this information, however, these shortcomings are not enough in themselves to constitute a violation of the ADA.

254. The content of the City's emergency communications, however, is a different matter. In particular, just as the City's outreach program fails to provide sufficient information about the location of accessible emergency services, so too do its communications during an emergency. For example, the City's emergency plans do not require the City to provide information about the location of accessible evacuation centers during an emergency. During Hurricane Sandy, the City announced only that all evacuation centers had a usable entrance. As explained above, however, a usable entrance does not make an evacuation center or shelter accessible, let alone accessible within the meaning of the ADA and applicable regulations. The failure to provide information about which evacuation centers or shelters were actually accessible plainly deprives people with disabilities of the ability to "obtain information as to the existence and location of accessible services, activities, and facilities." 28 C.F.R. § 35.163(a).

255. Nor do the plans require the City to publicize the availability of evacuation assistance or accessible transportation. Instead, the City encourages residents to call 311 to access this information. As repeatedly noted above, however, the 311 system may be unavailable during an emergency. And, in any event, limiting people with disabilities to calling 311 during an emergency deprives them of the opportunity to develop an evacuation plan in advance of the emergency. That guidance, therefore, also fails to satisfy the requirement that the City provide people with disabilities information about the existence and location of accessible services. See 28 C.F.R. § 35.163(a); *Clarkson v. Coughlin*, 898 F. Supp. 1019, 1044 (S.D.N.Y. 1995) ("[A] public entity . . . is obligated by the ADA to make available . . . information regarding . . . the existence and location of accessible services, activities and facilities.").

f. Other Issues**i) Inclusion of People with Disabilities in the Planning Process**

256. In addition to evidence regarding the insufficiency of the City's emergency plans themselves, Plaintiffs also introduced evidence intended to demonstrate that the City does not sufficiently include people with disabilities in the planning process. Plaintiffs, however, have not alleged — let alone demonstrated — that people with disabilities are denied an opportunity to participate in the planning process that those without disabilities are given. *Cf.* 28 C.F.R. § 35.130 (prohibiting a public entity from denying a person with a disability “the opportunity to participate as a member of planning or advisory boards” on the basis of that disability). There is no question that the inclusion of people with disabilities in the planning process may facilitate the development of plans that accommodate their needs. (*See* Belisle Decl. ¶ 30; Blanck Decl. ¶ 57; Kailes Decl. ¶ 128). But the ADA does not mandate that the City involve people with disabilities in the formulation of its emergency preparedness program; instead, it requires only that they have meaningful access to that program. Conversely, even if — as Defendants contend — people with disabilities are included in the City's planning process, such inclusion does not remedy the failure of the emergency plans themselves to adequately accommodate people with special needs.

ii) Fundamental Alteration and Undue Hardship Defenses

257. Although public entities generally have an obligation to “make reasonable modifications in policies, practices, or procedures when the modifications are necessary to avoid discrimination on the basis of disability,” such modifications are not required if a public entity can demonstrate that the requested accommodations “would fundamentally alter the nature of the service, program, or activity,” 28 C.F.R. § 35.130(b)(7), or “impose an undue hardship on the

operation of [the] program,” *id.* § 41.53; *see also Henrietta D.*, 331 F.3d at 281. The contention that a requested accommodation constitutes a fundamental alteration or would impose an undue hardship is an affirmative defense. *See Am. Council of the Blind v. Paulson*, 525 F.3d 1256, 1266 (D.C. Cir. 2008); *Lentini v. Cal. Ctr. for the Arts*, 370 F.3d 837, 845 (9th Cir. 2004). Plaintiffs contend that Defendants waived any such defense by failing to plead it in their Answer. (*See* Pls.’ Mem. Fact & Law 4 n.2; Ans. (Docket No. 33)).

258. Rule 8(c) of the Federal Rules of Civil Procedure provides that “[i]n responding to a pleading, a party must affirmatively state any . . . affirmative defense.” But the fundamental alteration and undue hardship defenses arise in response to a plaintiff’s proposed accommodation. *See, e.g., Borkowski v. Valley Cent. Sch. Dist.*, 63 F.3d 131, 138 (2d Cir. 1995); *see also Henrietta D.*, 331 F.3d at 281 (“The regulations implementing both the Rehabilitation Act and the ADA give a public entity defendant the opportunity to show that *a requested accommodation* is unreasonable.” (emphasis added)). Here, Plaintiffs’ Amended Complaint did not propose any specific accommodations. Instead, it sought a declaration that Defendants had violated the ADA, the Rehabilitation Act, and the NYCHRL; and an injunction requiring Defendants to develop an emergency preparedness program that adequately accommodates people with disabilities. (Am. Compl. ¶¶ 155-56). Defendants, therefore, could not reasonably be expected to have pleaded a defense to a claim not presented. The Court has not found — and Plaintiffs have not cited — any case in which a court has held that failure to plead a fundamental alteration or undue hardship defense waived that defense, particularly where, as here, Plaintiffs did not request in their Complaint any particular modifications.¹⁶

¹⁶ Furthermore, the failure to plead an affirmative defense in an answer does not automatically waive that defense. *See McGuiggan v. CPC Int’l, Inc.*, 84 F. Supp. 2d 470, 480 (S.D.N.Y. 2000). In particular, the law is clear that, “in the absence of prejudice, a defendant

259. Because the trial was limited to the question of liability, the parties (and the Court) agreed to defer the question of remedies — that is, the availability of modifications to the City’s emergency preparedness program and the reasonableness thereof — until after the Court reached its decision on liability. (*See* Tr. 985:15-987:2). The Court notes, however, that the record supports the conclusion that reasonable modifications are available to remedy at least some of the demonstrated violations. For example, the Department of Justice provides a Tool Kit to help ensure that emergency planning complies with the ADA. (*See* Tinio Decl. Ex. A). And the City took several actions in response to Hurricane Sandy that are not currently included in the City’s emergency plans — for example, canvassing buildings after a prolonged power outage — that demonstrate that such actions are reasonable and do not pose an undue burden on the City or fundamentally alter the City’s emergency planning program. Because, however, the trial was limited to the question of liability, the Court need not, and does not, address the reasonableness of any specific proposed modification at this time. *See CALIF*, 2011 WL 4595993, at *16. Instead, at the remedy stage that will follow this Opinion, Plaintiffs will be given an opportunity to offer proposed accommodations, and Defendants will be given the opportunity to demonstrate that any such accommodations are unreasonable or fundamentally alter the nature of the City’s emergency preparedness program. *See Brown*, 736 F. Supp. 2d at 612 (explaining that an ADA plaintiff bears the initial burden of demonstrating that “there are

may raise an affirmative defense in a motion for summary judgment for the first time.” *Id.* (internal quotation marks omitted). This Court does not ordinarily — and did not in this case — permit summary judgment practice in a non-jury action. *See* Individ. Rules & Practices 3(C)(i). Defendants raised the issues of fundamental alteration and undue hardship in their pretrial memorandum of law (*see* Defs.’ Mem. Law 5), and their proposed findings of fact and conclusions of law (*see* Defs.’ Proposed Findings Fact & Conclusions Law ¶¶ 252-53). As the Court has yet to consider any particular accommodations, it follows that Plaintiffs have suffered no prejudice from Defendants’ failure to raise this defense in their Answer.

plausible modifications that could be made to make the [program or service] readily accessible and that the costs of such modifications, facially, do not clearly exceed their benefits” and that once that burden is satisfied, “the burden of persuasion shifts to the defendant to show that making the [program or service] readily accessible would result in a fundamental alteration of the nature of services or an undue burden”).

CONCLUSION

In sum, the Court concludes that the City has violated the ADA, the Rehabilitation Act, and the NYCHRL by failing to provide people with disabilities meaningful access to its emergency preparedness program in several ways. In particular:

- (1) The City’s evacuation plans do not accommodate the needs of people with disabilities with respect to high-rise evacuation and accessible transportation;
- (2) its shelter plans do not require that the shelter system be sufficiently accessible, either architecturally or programmatically, to accommodate people with disabilities in an emergency;
- (3) the City has no plan for canvassing or for otherwise ensuring that people with disabilities — who may, because of their disability, be unable to leave their building after a disaster — are able to access the services provided by the City after an emergency;
- (4) the City’s plans to distribute resources in the aftermath of a disaster do not provide for accessible communications at the facilities where resources are distributed;
- (5) the City’s outreach and education program fails in several respects to provide people with disabilities the same opportunity as others to develop a personal emergency plan; and
- (6) the City lacks sufficient plans to provide people with disabilities information about the existence and location of accessible services in an emergency.

By contrast, Plaintiffs have failed to prove that the City’s emergency preparedness program violates the law in other respects. For example, Plaintiffs failed to establish that the City’s plans regarding the provision of supplies to people with disabilities housed in the shelter

system during an emergency are insufficient or that the City's advice to residents to be prepared to shelter in place for seventy-two hours after an emergency violates the law. Additionally, while the evidence indicates that there are problems with the content of the City's emergency communications, Plaintiffs have not demonstrated that the means by which the City disseminates emergency information, and plans to do so in the future, are, considered together, inadequate to effectively communicate the information to people with disabilities. Finally, with respect to recovery operations, Plaintiffs have failed to establish that the City's emergency preparedness plans violate the rights of people with disabilities in providing for accessible facilities to distribute resources after an emergency, in preparing for the removal of debris, or — to the extent the City has a plan at all — in furnishing interim housing following an emergency.

The record in this case makes clear that, although the City's emergency preparedness plans fall short of legal requirements in several significant respects, they are still remarkable in many ways. The challenges facing cities in general, and this city in particular, are immense, and New York City has done an admirable job of preparing for a wide range of disasters, both manmade and natural, that could strike at almost any time. The record also makes clear that individual New Yorkers have gone to great lengths, and put themselves at great risk, to help their fellow New Yorkers, including many with special needs. The question in this case, however, is not whether the City, or individual first responders, have done an admirable job in planning for, or responding to, disasters generally. They plainly have. Instead, the question is whether the City has done enough to provide people with disabilities meaningful access to its emergency preparedness program given the broad remedial purposes of the ADA, the Rehabilitation Act, and the NYCHRL. The answer to that question is that it has not, and in doing so it has deprived

people with disabilities of what they are entitled to under the law, not to mention of the peace of mind that people *without* disabilities can have when it comes to the City's preparedness plans.


As noted above, the trial in this case was limited to the question of liability. Having found that the City violated the ADA, the Rehabilitation Act, and the NYCHRL in several respects, the Court will proceed to consider the issue of how to remedy those violations. Given the complexity and potential expense involved, there is no question that crafting an appropriate remedy would be better accomplished by those with expertise in such matters and through negotiation, whether court-supervised or otherwise, than by Court order. Further, the United States has indicated that it is able and willing to assist the parties and, if necessary, the Court in addressing the question of remedy. (Statement of Interest of the United States 1 n.2).

The parties are therefore directed to meet and confer — in person and with representatives of the Department of Justice, if they elect to participate — about the most productive means of resolving the question of remedies through alternative dispute mechanisms. At the same time, mindful that the Court will impose remedies if the parties cannot agree on them, the parties shall discuss the process and schedule for the remaining litigation, including but not limited to whether there is a need for additional discovery, whether the parties anticipate motion practice, and whether there is a need for another trial on remedies. The parties shall submit a joint status letter with respect to these matters and any other information that the parties believe may assist the Court in advancing the case to settlement or trial no later than **November 26, 2013**. They shall then appear for a conference with the Court on **December 3, 2013** at

3:15 p.m. in **Courtroom 1105** of the Thurgood Marshall Courthouse, 40 Centre Street, New York, New York.

SO ORDERED.

Dated: November 7, 2013
New York, New York



JESSE M. FURMAN
United States District Judge