BUILDING CLIMATE RESILIENCE IN THE LOWER EAST SIDE

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Equitable Adaptation: Collaborating for Resilience

December 1, 2016 from 12:00 to 1:00 pm EST





Outline

The Lower East Side

Hurricane / Super storm Sandy

Community-Based Disaster Response

Lessons learned & Best Practices

The Lower East Side

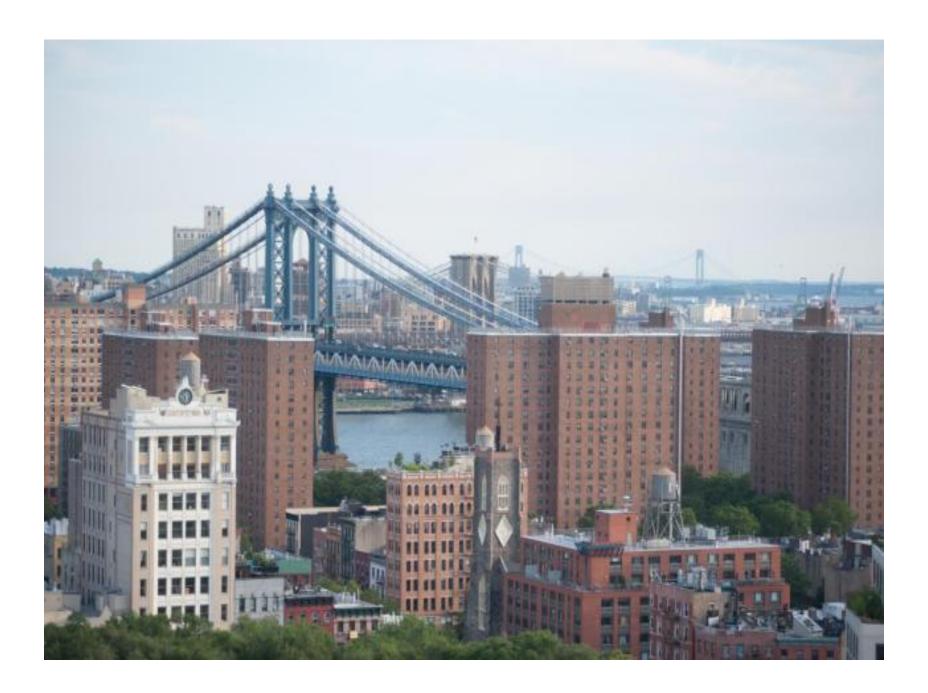


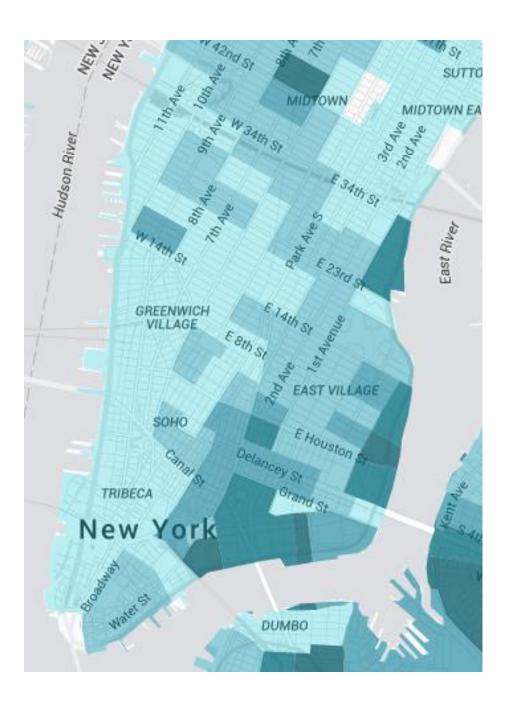
- Chinatown
- East Village
- Two Bridges
- Alphabet City











Pct. below the poverty line



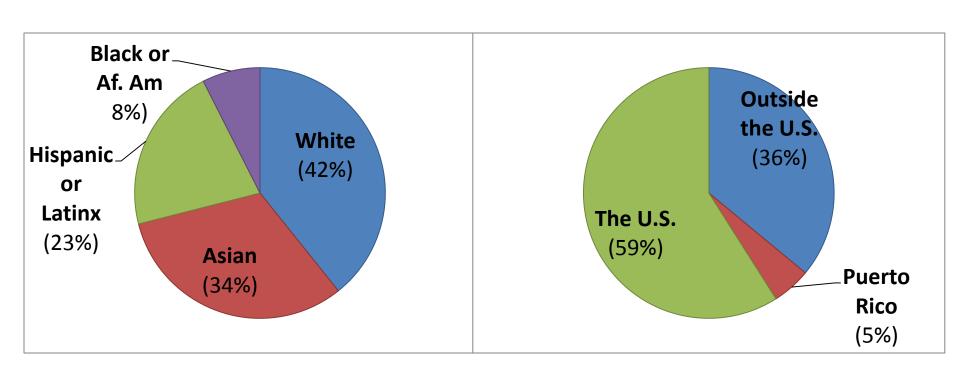
POVERTY THRESHOLDS IN 2012

\$23,283 Family of four

\$11,945 Indivdual under 65

Race & Ethnicity

Place of Birth

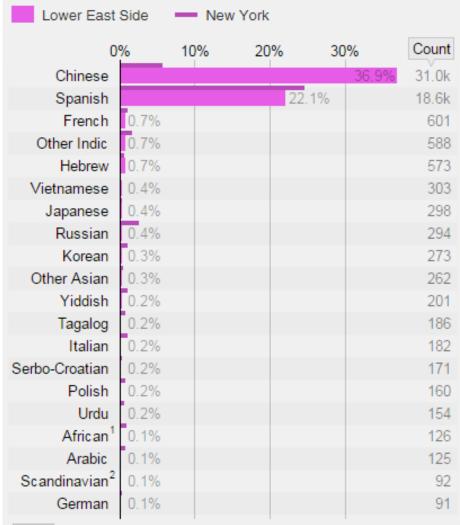


Language Spoken At Home

#1 Spe

Percentage of the total population living in households in which a given language is spoken at home.

Scope: population of New York and Lower East Side



Count number of people speaking given language at home

Speaking English 'Very Well'

Percentage of people living in households in which a given language is spoken at home.

Scope: population of New York and Lower East Side

	Less Than 'Ve	ry Well' Very Wel	ľ	
New York		_		
Lower East Side	÷			
	50% 0	% 50% 100%	6 Don't	Do
Scandinavian	0.0%	100.0%	0	92
Hebrew	0.9%	99.1%	5	568
German	4.7%	95.3%	4	86
French	9.7%	90.3%	58	542
African	13.7%	86.3%	17	108
Yiddish	20.4%	79.6%	41	160
Japanese	27.4%	72.6%	82	217
Spanish	35.7%	64.3%	6,629	11.9k
Italian	36.1%	63.9%	66	116
Tagalog	37.1%	62.9%	69	117
Korean	38.2%	61.8%	104	169
Polish	40.7%	59.3%	65	95
Urdu	42.9%	57.1%	66	88
Arabic	44.0%	56.0%	55	70
Other Indic	46.9%	53.1%	276	312
Russian	67.8%	32.2%	199	95
Serbo-Croatian	68.7%	31.3%	117	53
Other Asian	72.1%	27.9%	189	73
Chinese	76.3%	23.7%	23.7k	7,341
Vietnamese	92.6%	7.4%	281	22

Don't number of people that don't speak English 'very well'

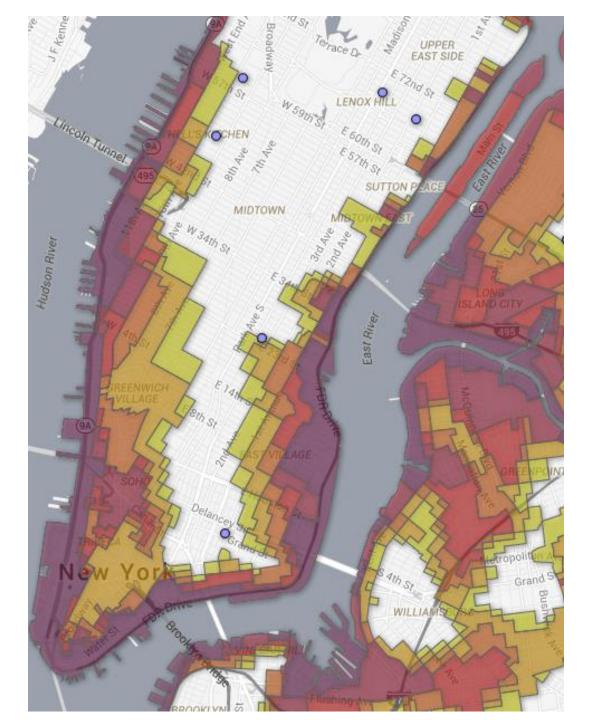
Do number of people that do speak English 'very well'

¹ Amharic, Ibo, Twi, Yoruba, Bantu, Swahili, Somali

² Danish, Norwegian, Swedish







Zone 1 Zone 2 Zone 3 Zone 4 Zone 5 Zone 6

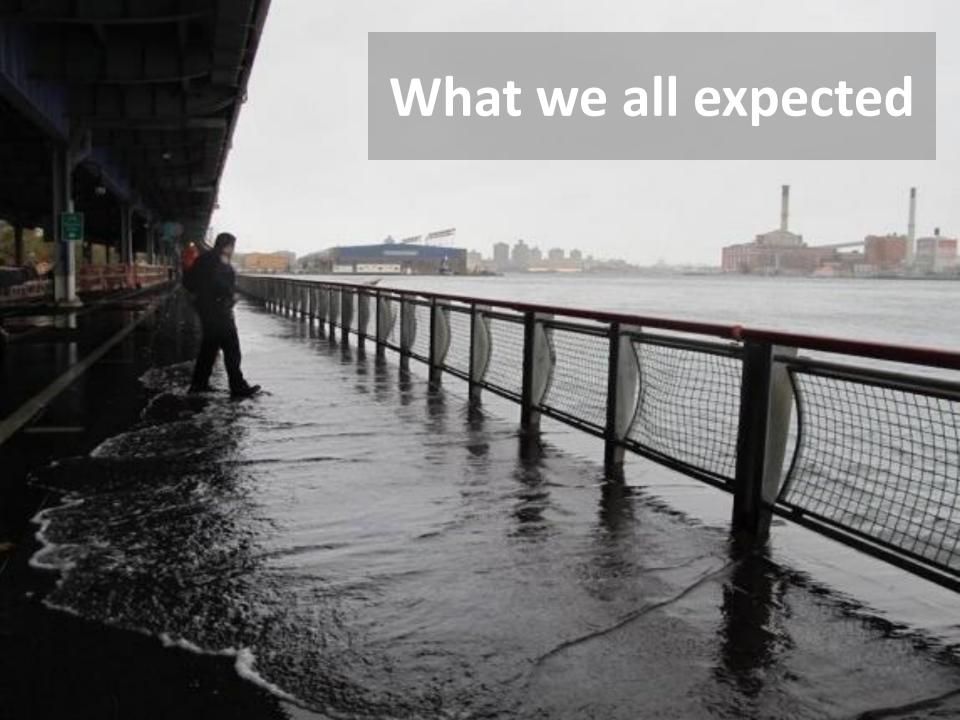
No Zone

Residents who do not live in a hurricane evacuation zone face are unlikely to experience a storm surge flooding from a hurricane.

HURRICANE SANDY

- October 29th 2012
 - Wind speed: 80 mph
 - ➤ Wind field extension: 1,000 mi
 - ➤ Full Moon + High Tide





Impact in Manhattan



- Battery: Storm Surge 14'+
- Flooding beyond 100-yr floodplain boundaries (~Zone A)
- No power South of 39th St

17% (51 sq miles) of NYC flooded.

\$19 Billion damage

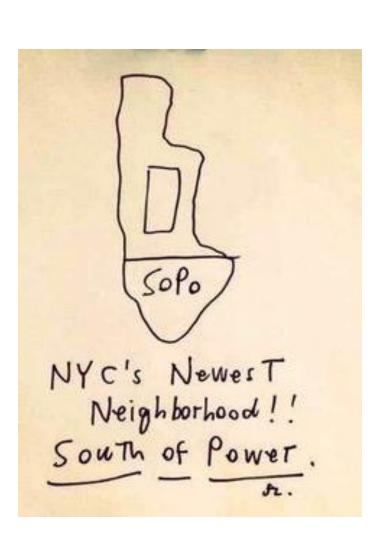
Damage to key infrastructures



Immense need among affected residents

- 2 million without power
- 13th St pumping station out of service
- Manhattan<->Bk subways closed
- Roads damaged; No street/ traffic lights
- No ATM
- No EBT
- No phone lines; Cell phone services disrupted
- Many businesses closed
- Gas scarce

On the Lower East Side...



- Basements East of Ave A flooded
- Boilers & electrical grids compromised
- Many 1st floor & basement residents displaced
- No functioning elevators in highrise buildings









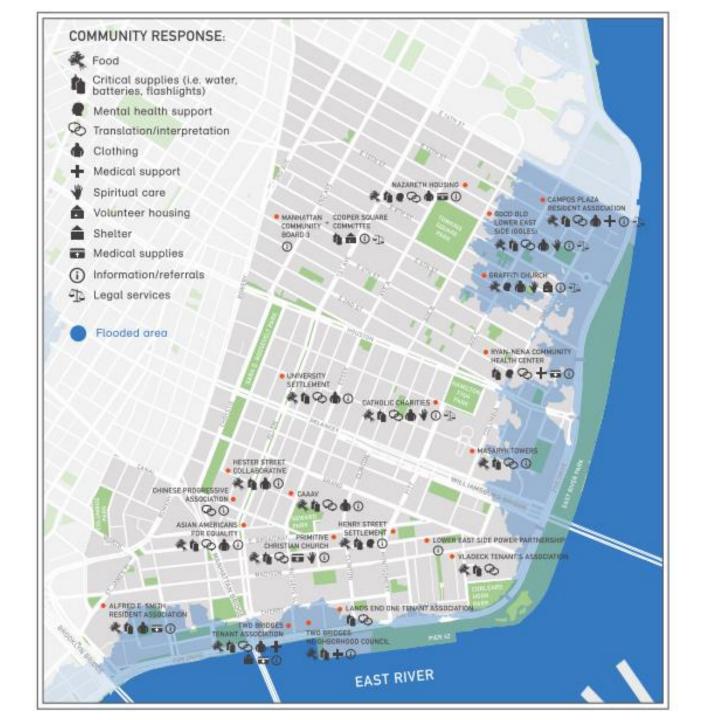








GOOD OLD LOWER EAST SIDE + ~PEOPLE POWERED RELIEF~





Nearly **3,000** volunteers



to more than 15,000 households.







Special Challenges in Public Housing



"Over half of city residents affected by Sandy live in Public Housing."

LES home to more than 15,000 units of PH



- No electricity
- No running water
- No heat or hot water

Other issues after Sandy

- Evictions
- Closing businesses
- Increased electrical bills
- Lack of repairs
- Health impacts:
 Exposure to mold & other hazards

Building Long-Term Resiliency



Lower East Side Long Term Recovery Group:



- 1. Address community's unmet needs
- 2. Create a community disaster preparedness and recovery plan; &
- 3. Explore community driven mitigation/solutions.

The LTRG/LES Ready has 25+ local organizations currently participating.

Building Partnerships & Engaging Community

- Citywide, statewide, and National Coalitions
- Federal Government and Private Institutions Rebuild by Design
- State Government NY Rising
- New York City Housing Authority
- NYC Government Mayor's office of RR
- Universities

Sandy Regional Assembly



Sandy Regional Assembly RECOVERY AGENDA

Recovery from the ground up: Strategies for community-based resiliency in New York and New Jersey

April 2013

NYC Government





Hurricane Sandy After Action

Report and Recommendations to Mayor Michael R. Bloomberg

May 2013

Deputy Mayor Linda I. Gibbs, Co-Chair Deputy Mayor Caswell F. Holloway, Co-Chair

Recommendations

42. Formalize the borough recovery director structure and deploy staff to the field sooner after the storm to work with community organizations and lay the groundwork for relief operations.

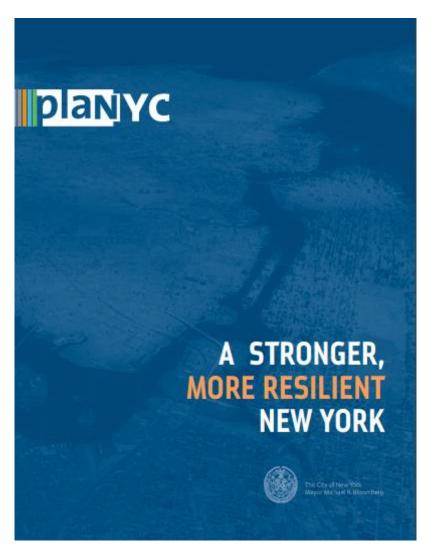
Recommendations

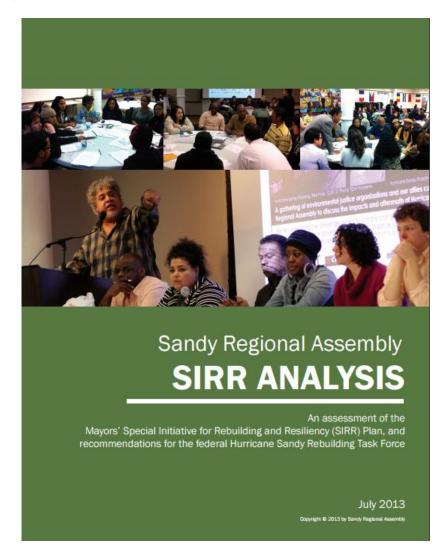
- 48. Develop a vulnerable populations/homebound doorto-door service Task Force and Action Plan that includes specific operational timelines and leverages community groups and other advocacy organizations, as well as state and federal resources. This plan will leverage the work of the Mayor's Office of Data Analytics and improved staff training to coordinate data collection and sharing.
- 53. Conduct a preliminary needs assessment in each stormimpacted community prior to the activation of Restoration Centers to determine the community's greatest needs and tailor the available services to these needs.
 - Work with partner organizations to focus their scope of services on the most critical community needs that are distinct from immediate food, water, and other material goods needs.

Recommendations

55. Expand NYC Service's emergency preparedness plan that pre-identifies partners with the capacity to manage volunteers in various roles on a large scale and across multiple affected areas.

Mayors' Special Initiative for Rebuilding and Resiliency (SIRR) Plan





ALLIANCE FOR A JUST REBUILDING

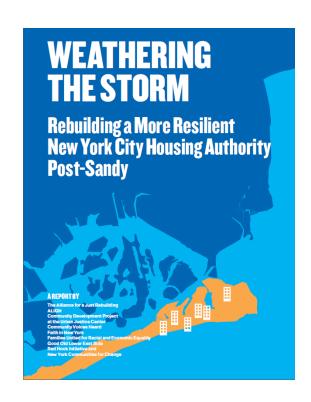




HOW OUR NEXT MAYOR SHOULD TACKLE SANDY REBUILDING

www.relmildajustny.org

July 2013



How Sandy Rebuilding Can Reduce Inequality in New York City



A Plan of Action for Mayor de Blasio from Sandy Survivors



February 2014 www.rebuildajustny.org

Universities





Internships Case Studies Collaborations









Rebuild By Design





NY Rising

Community emergency preparedness program IV-3 Community resource/recovery centers and CBO grant program IV-9

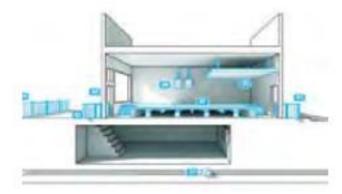




Residential resiliency and education program
IV-19

Small business resiliency and education program
IV-27





Stormwater capture study IV-33

Targeted flood protection strategy for lower West Street IV-49

Coastal protection study for east and west side IV-59



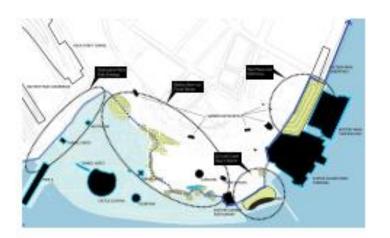




Wetland creation at East River Park IV-39

Berming and deployable walls at Battery Park IV-43





Gardens Rising



Listening & Learning from Our Community

Getting LES Ready: Findings, Lessons & Recommendations

Finding 1. Majority did not evacuate

The majority of LES residents did not evacuate before Hurricane Sandy hit & many decided to "shelter in place."

"We heard it [Hurricane Sandy]
was coming and we were asked to
evacuate but didn't because the news
made Sandy look just like Irene in terms
of severity levels." – FG participant

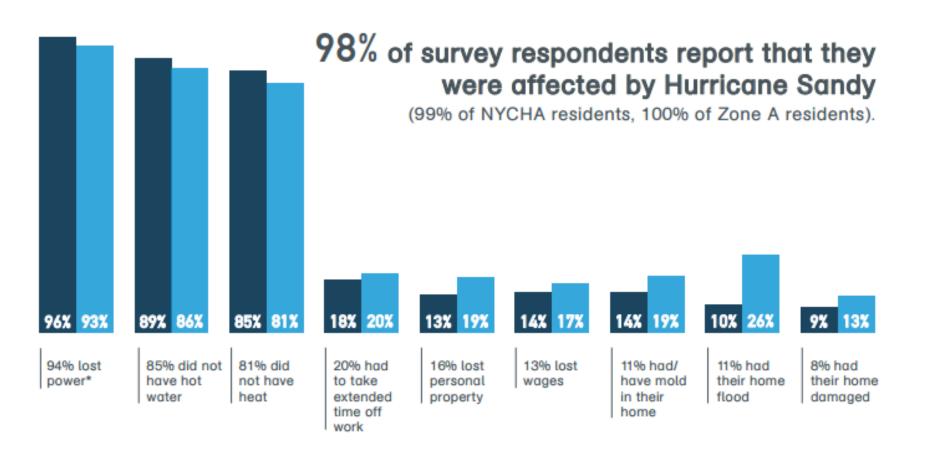
Recommendations for Evacuation

New York City Government:

- Evacuation Preparation
- Safe & Accessible shelters
- Make shelters info available in at least Mandarin, Cantonese, Spanish, and Russian.
- Provide Shuttle buses

- Ongoing education & awareness campaigns
- Trainings for residents
 - How to shelter in place;
 - What supplies to have;
 - What actions to take if you don't have power, water, heat, etc.
- Make sure people are prepared to evacuate
 - Evacuation info on buildings
 - Families have plans.

Finding 2. LES residents severely impacted



Recommendations to Reduce Impact

New York City Government:

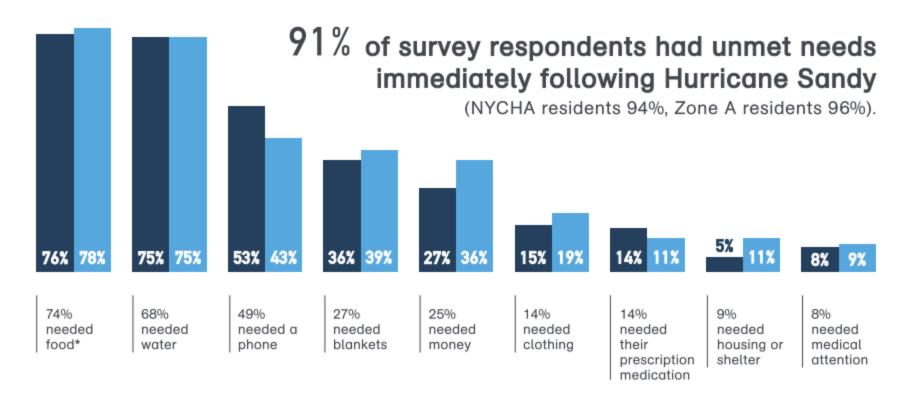
- Facilities
 - Medical supplies & attn, etc.
- Charging Stations
 - Solar Powered; Off the Grid

NYC & NYCHA

- Cogeneration (CHP) capacity in Zone 1 developments
- Boilers
 - Temporary & flood-proof

- Go bags & critical supplies
- Partnerships with medical professionals
- Prioritize homebound people with medical needs
- LES Ready Volunteer Coordinators
- LES Ready Certification Course
 - Train Volunteers before and during emergencies.

Finding 3: Many unmet needs post-Sandy



^{*}These percentages refer to the total number of residents surveyed.

- NYCHA RESIDENTS
- ZONE A RESIDENTS

Recommendations to Meet Residents' Needs

NYC, NYCHA & OEM:

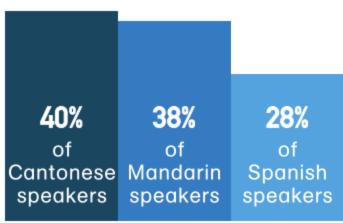
- Improve communication with residents
- Invest in Building & Development 'Captains'
- Disaster Preparedness training & safety equipment for residents & workers
- Transportation Access
- Comprehensive list of vulnerable residents
- Improve & Expand Shelters

- Clear Communication Plan with City for supplies
- Create clear donation plan
- Clear plan for prescription access
- Identify non-Flood Zone facilities

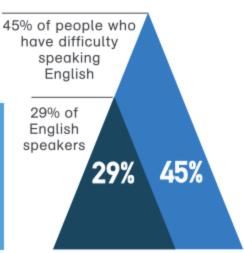
Finding 4. Poor communication from City



Information access during and immediately after the storm



Did not have access to information in their primary language



Did not have their needs met

Finding 4. Poor communication from City

The most useful sources of information were radios and social networks



45% got information from a radio



45% from a friend, family, or neighbor



28% from television

Recs to Improve Communication

NYC, NYCHA & OEM:

- Communicate & coordinate with local orgs
- Should make all notices available in the most common languages of the LES
- Clarify point person for disaster response duties.
- Street-level emergency signage

- People's Emergency Network, Beyond the Grid
- Alternative power systems
- Telecommunications network
- Community Hubs
- Maps (Online & Print)
- Language bank
- LES Ready Plan Refreshers
- Engage & train young people



Finding 5. Slow Relief from Government; Community as first responders.

GOVERNMENT

62% did not receive any relief from the government or other "official" sources.

- 15% received assistance from FEMA
- 12% from the Red Cross
- 11% from a NYC government agency
- 7% from CFRT
- 6% from National Guard

And for those that did receive "official" assistance, **53% had to wait 4/+ days**

"A church organization came and provided free food and stayed until it was no longer a necessity. NYCHA did not." – FG participant

COMMUNITY-BASED SOURCES

57% received assistance from at least one community source.

- 28% from a friend, family or neighbor
- 27% from community organizations
- 10% from a tenant/resident/block association
- 9% from religious organization

Finding 6. Importance of strong community bonds and infrastructure

57% of survey respondents are involved in their community.



28% are members of a community organization



19% are members of a religious institution



23% are members of a tenant, resident or block association



4% are members of the community board



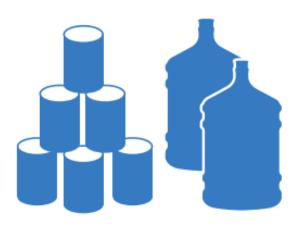
9% are involved in other ways

Finding 7. Importance of strong community bonds and infrastructure

Survey respondents also provided assistance to others despite difficulties they were facing.



49% helped neighbors, friends or family



12% donated supplies like food and money



5% volunteered with cleanup and/or rebuilding efforts

Recs to Support Community Resiliency

NYC, NYCHA & OEM:

- Invest in vibrant community centers
- Invest in community first responders
- Ongoing funding for CBOs

- Clear Communication Plan with City for supplies
- LES Ready committees
- Social cohesion & connections
- Mitigation Strategies

Other Lessons

- Gov. & CBO Partnerships: Necessary and have proven fruitful. Assert the community's role and right to be included. Deliver on your commitments. Ask for resources. Do not rely on individual relationships.
 - Still remain a work in progress. Mechanism needed to require collaboration.
- Impacted / Vulnerable Populations: Continue work to strengthen and address social/income inequality--issues at forefront of work and must have real benefits.
 - Challenge to keep engaged the further away from the disaster and with other pressing day to day needs.
- Maintaining Coalition/Long-term Work: Keep partners engaged and energized, constantly base build and recruit new groups, review accomplishments, and plan together--keep the work fresh. Our next steps include developing comprehensive community resiliency plan, bringing renewable energy work to LES, and more.
 - Continued participation requires building institutional memory.
- New Spaces/Areas of Work: EDA, NPA, NY Renews (NYCEJA & Alliance for just rebuilding), NYCEJA

Major Accomplishments

- ESCRP \$505 Million
- LMCR \$311 Million
- Solarize NYC
- Beyond the Grid (Micro-grid) \$100,000
- 5 Disaster Centers for the LES
- \$4+ Million for CBO Recovery & Resiliency
- Engaged thousands of residents

CONCLUSION

Equitable Adaptation:

- Center communities most impacted by climate change
- Address root causes of structural injustices
- Community-Determination
- Reparations
- Transgress Systems of Oppression

Increasing the efficacy of CBOs

- Communication & Co-Planning (Gov)
- Funding
- Resources



Thank You!

www.goles.org www.lesready.org

