



APPENDIX C: HAZARD MITIGATION SURVEY



A. Hazard Mitigation Survey Methodology

The Planning Team created an online hazard mitigation survey to gain a better understanding of the types of hazards that members of the general public feel pose a risk to the city. The survey also contained questions regarding actions that local communities can take to mitigate the impact of hazards as well as strategies that local, state, and federal government can implement to lessen disaster losses. The survey was posted to OEM's website on October 28 until January 22nd and sent to the following groups: Citizen Corps, Community Emergency Response Teams (CERT) teams, Partners in Preparedness members, Special Needs Advanced Warning System (AWS) contact list, the Special Needs Task Force, Volunteer Organizations Active in Disasters (VOAD), community board offices, borough presidents' offices, and academic institutions.

B. Hazard Mitigation Survey

1. What borough do you live in?

Manhattan Bronx Brooklyn

Queens Staten Island

Neighborhood (optional)

2. Have you ever experienced or been impacted by a disaster?

Yes No

3. How concerned are you about the possibility of being impacted by a disaster?

Extremely concerned Somewhat concerned

Not concerned

4. Please select the natural or man-made hazard(s) you feel poses a threat to your neighborhood:

Coastal Erosion Coastal Storms Flooding Drought Earthquakes

Extreme Temperatures (Hot and Cold) Winter Storms Disease Outbreaks

Severe Weather (Thunderstorms, Wind Storms, Tornadoes) Wild Fires

Utility Disruptions Hazardous Waste Release Infrastructure Failures

Building Collapses and Explosions Cyber Threats Other

5. Is there another hazard not listed above that you think is a wide-scale threat to your neighborhood?

Yes No

If yes, please explain:

6. Do you rent or own your home?

Rent Own

7. Is your home located in a flood zone?* [*Flood zones are areas that are vulnerable to flooding and are identified by FEMA through the National Flood Insurance Program (NFIP). Flood zones should not to be confused with hurricane evacuation zones, which were developed by the City of New York, and represent varying threat levels of coastal flooding resulting from storm surge.]

Yes No Not Sure

8. If you own your home, do you have flood insurance? (Flood insurance is not included in a standard home-owners policy and must be purchased separately)

- Yes No N/A

9. What is the best way for you to receive information about how to make your home and community more resistant to natural and man-made hazards?

- Internet/Social Media Television/Radio Brochures Public workshops/Meetings
 Mail Email Text Message

10. In your opinion, what are some steps that government (local, state, and federal) could take to reduce the risk of future natural and man-made hazard damages in your neighborhood?

11. There are many actions and strategies to reduce the risk from natural and man-made hazards. Overall, these actions fall into one of the following categories. Please tell us how important you think each one is for your neighborhood.

Very Important Somewhat Important Not Important

A. Prevention

Policies to reduce the impact of hazards, such as zoning, planning, and building codes.

B. Property Protection

Modifications of existing homes and buildings to protect them from hazards, such as elevation of electrical equipment.

C. Coastal/Natural Resource Protection

Actions that not only reduce the impact of hazards but also preserve and restore natural habitats. Examples include parks preservation and wetlands restoration.

Very Important

Somewhat Important

Not Important

D. Emergency Preparedness & Services

Actions that protect people and property during or immediately after a disaster or hazardous event. Examples include advanced Warning systems, emergency response training, etc.

E. Infrastructure Projects

Engineering of structures to reduce the impact of hazards. Examples include seawalls, bulkheads, levees, etc.

C. Hazard Mitigation Survey Findings

From October 28, 2013 to January 22, 2014 there were 207 responses to the hazard mitigation survey. Although, there were respondents from all five boroughs, Brooklyn had the highest percentage of survey responses while the Bronx had the lowest percentage (see Figure C.1). The survey's preliminary findings are grouped by the following categories: concerns regarding future disasters, hazards that may pose a risk to New York City neighborhoods, individual efforts to reduce risk, government efforts to reduce risk, and ratings of mitigation strategy type. The survey will remain on the OEM website in order to get more responses. In addition, analysis of the results will continue in order to aid in future mitigation initiatives.

Survey responses were voluntary and responses should not be considered scientific or statistically significant.

Concerns regarding future disasters: (see Figure C.2 and Figure C.3)

- Sixty-five percent of survey respondents reported to have experienced or to be impacted by a disaster
- A little over 50% were extremely concerned about the possibility of being impacted by a disaster

Hazards that may pose a threat to New York City neighborhoods: (see Figure C.4)

- Of the 15 hazards, severe weather and utility failures received the highest response for hazards that posed the greatest risk to their neighborhood
- Drought and wild fires received the lowest response for hazards respondents felt posed the greatest threat to their neighborhood

Individual mitigation efforts: (Figure C.5 and Figure C.6)

- A low percentage (27 percent) of respondents live in a FEMA flood zone
- Even fewer respondents (17 percent) who

owned a home in a FEMA flood zone reported to have flood insurance

Government mitigation efforts:

- Seventy respondents choose to write in actions that they felt local, state, and federal governments should take to reduce the risk to future hazards. Below are some examples of the types of strategies respondents identified:
 - Enhance advance warning communications for populations who do not speak English
 - Improve communications with special needs populations
 - Build levees, seawalls, and jetties to protect the city from storm surge
 - Supply generators to critical facilities
 - Provide education on climate change
 - Support environmental cleanup
 - Improve waterway maintenance
 - Hold city-wide exercises or drills

Ratings of mitigation strategy type:

- Emergency preparedness and infrastructure projects received the highest percentage points for the very important rating
- Property protection received the lowest percentage points for the very important rating

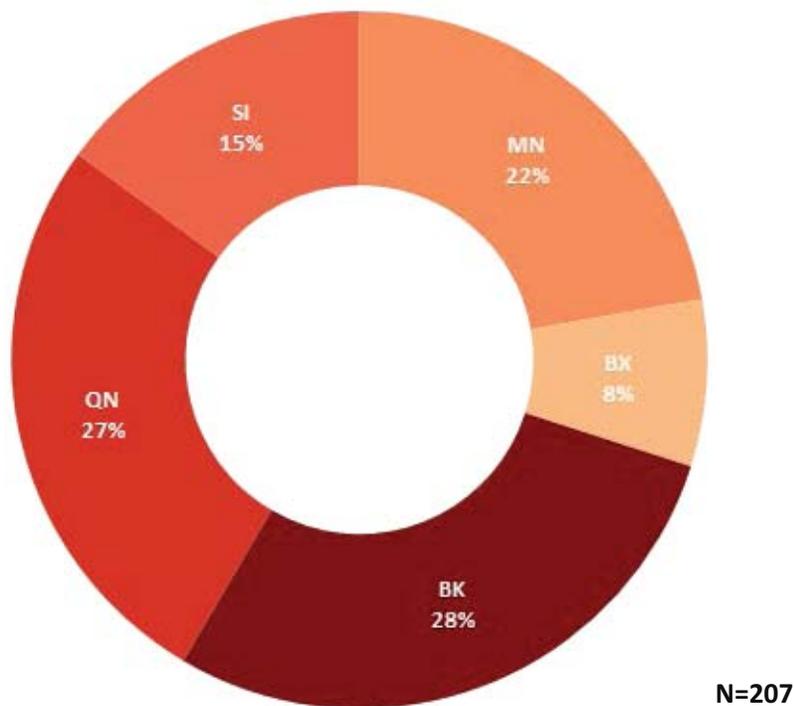


Figure C.1: Percentage survey responses by borough

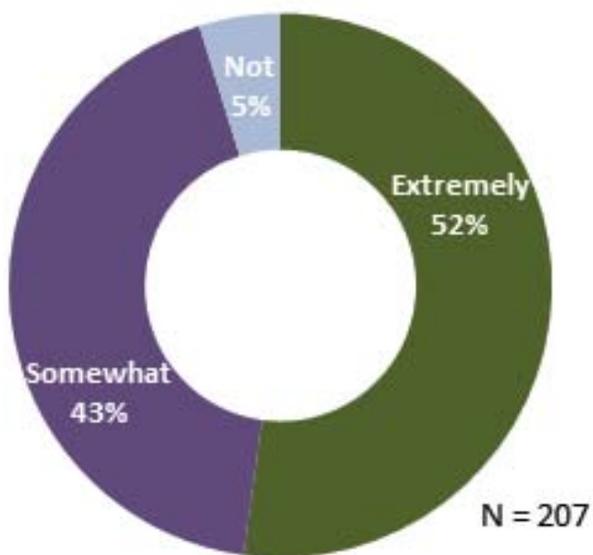


Figure C.2: Percentage of respondents who are concerned about being impacted by a disaster

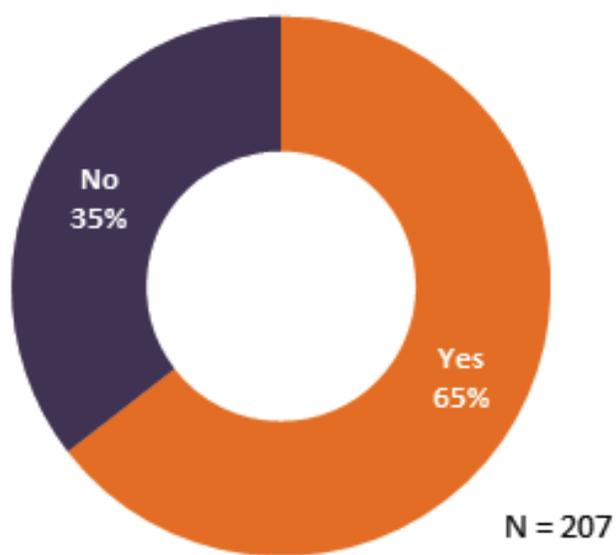


Figure C.3: Percentage of respondents who have experienced or been impacted by a disaster

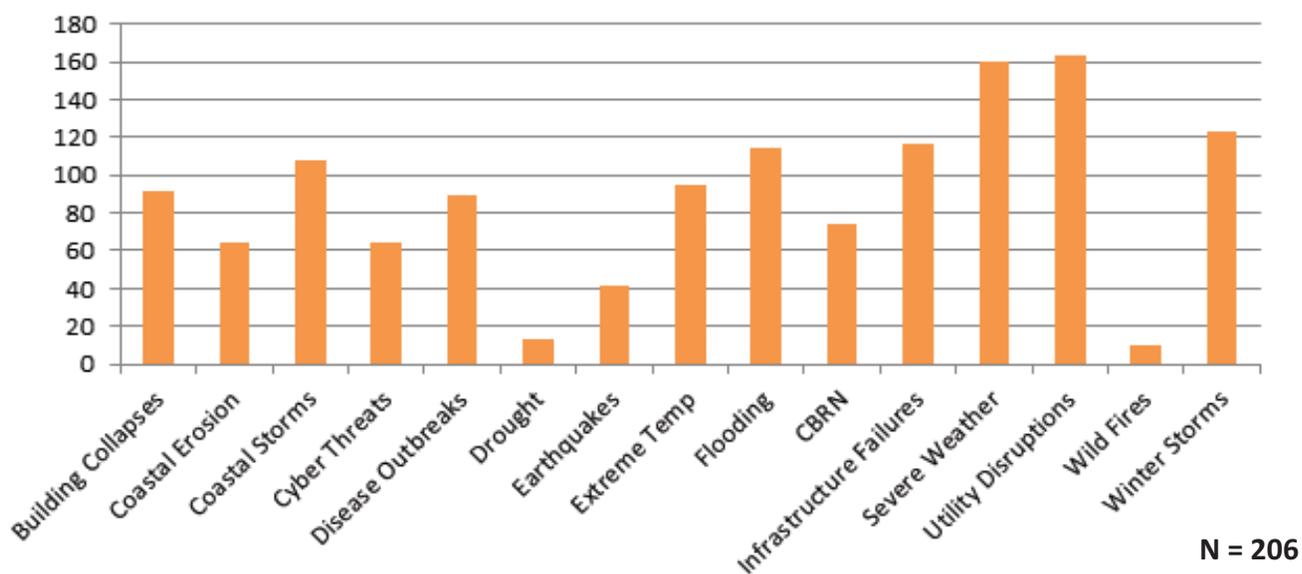


Figure C.4: Hazards respondents feel poses threat to their neighborhood

* respondents could vote for more than one hazard

N = 207 surveys

N = 1,328 total hazard votes

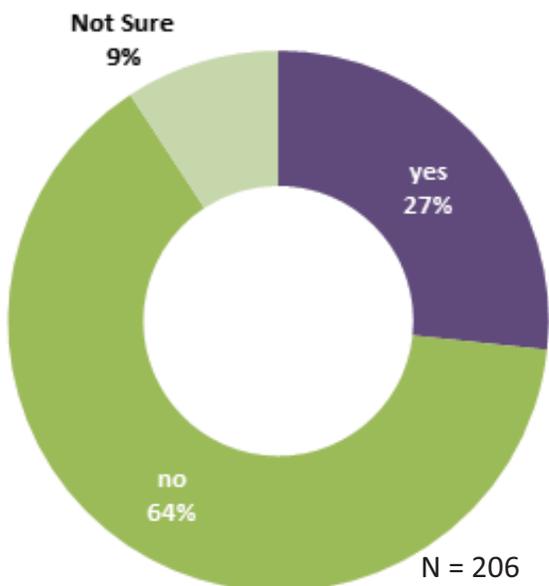


Figure C.5: Percentage of respondents who have a home located in a flood zone.

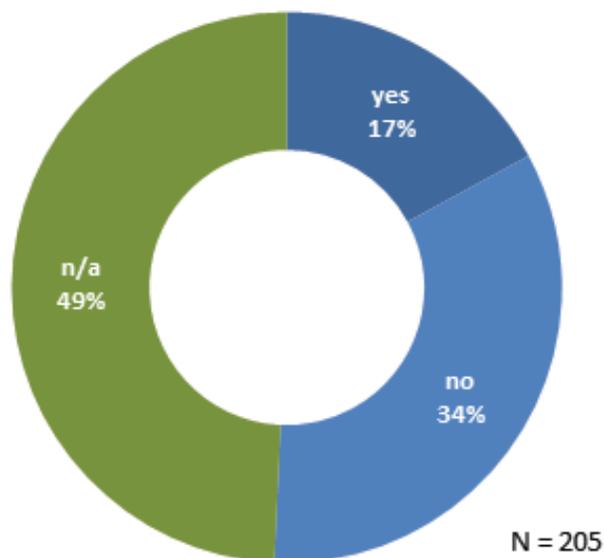


Figure C.6: Percentage of respondents who own homes in the flood zone and have flood insurance