

# **2020 CENSUS DATA PRODUCTS THE DATA USERS' PERSPECTIVE**

**Workshop on Challenges and New Approaches for  
Protecting Privacy in Federal Statistical Programs**

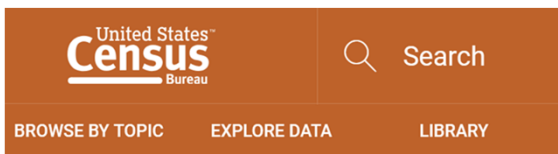
**Committee on National Statistics**

**June 7, 2019**

**Joseph Salvo  
Population Division**



# Twin Pillars: Achieving a Balance



// Census.gov / About the Bureau / What We Do

## About the Bureau

Who We Are

What We Do



What We Do

## Data Utility

### Our Mission

The Census Bureau's mission is to serve as the nation's leading provider of quality data about its people and economy.



### Title 13, U.S. Code

The Census Bureau is bound by Title 13 of the United States Code. These laws not only provide authority for the work we do, but also provide strong protection for the information we collect from individuals and businesses.

Title 13 provides the following protections to individuals and businesses:

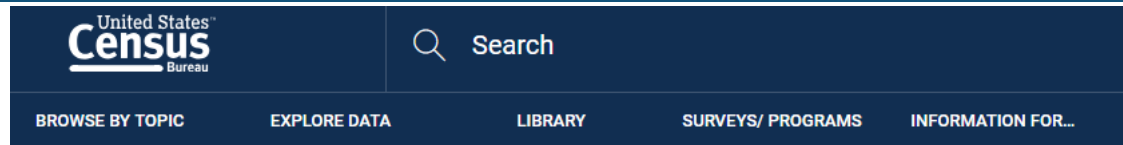
- Private information is never published. It is against the law to disclose or publish any private information that identifies an individual or business such, including names, addresses (including GPS coordinates), Social Security Numbers, and telephone numbers.

## Disclosure Avoidance

- The Census Bureau collects information to produce statistics. Personal information cannot be used against respondents by any government agency or court.
- Census Bureau employees are sworn to protect confidentiality. People sworn to uphold Title 13 are legally required to maintain the confidentiality of your data. Every person with access to your data is sworn for life to protect your information and understands that the penalties for violation are severe, including a lifetime ban from the Census Bureau.
- Violating the law is a serious offense. Anyone who violates this law will be subject to a federal prison sentence and a fine of up to \$250,000.



# What is the Census Bureau's Primary Mission?



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## About the Bureau

Who We Are

**What We Do**

Combining Data

Business Opportunities

Census Careers

Advisors, Centers and  
Research Programs

Congressional &  
Intergovernmental  
Affairs



## What We Do

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# The Research Problem

“Too many statistics published too accurately from a confidential database exposes the entire database with near certainty.”

TOTAL  
PRIVACY



TOTAL  
ACCESS

**Disclosure:** The release of information that would enable the identification of an individual, or otherwise reveal sensitive information that could be linked to an individual.

# Privacy-loss Budget: The Data User Perspective



1. Decisions on the amount of noise to inject into the data are inherently subjective
2. Providing useful data should be ***the*** priority
3. The only real guidepost is a strong sense of how the data are being used at multiple geographic levels
4. A representative set of data applications needs to be assembled in order to determine what works and what does not. (The Federal Register Notice does not make the grade)

# A Recommended Course of Action



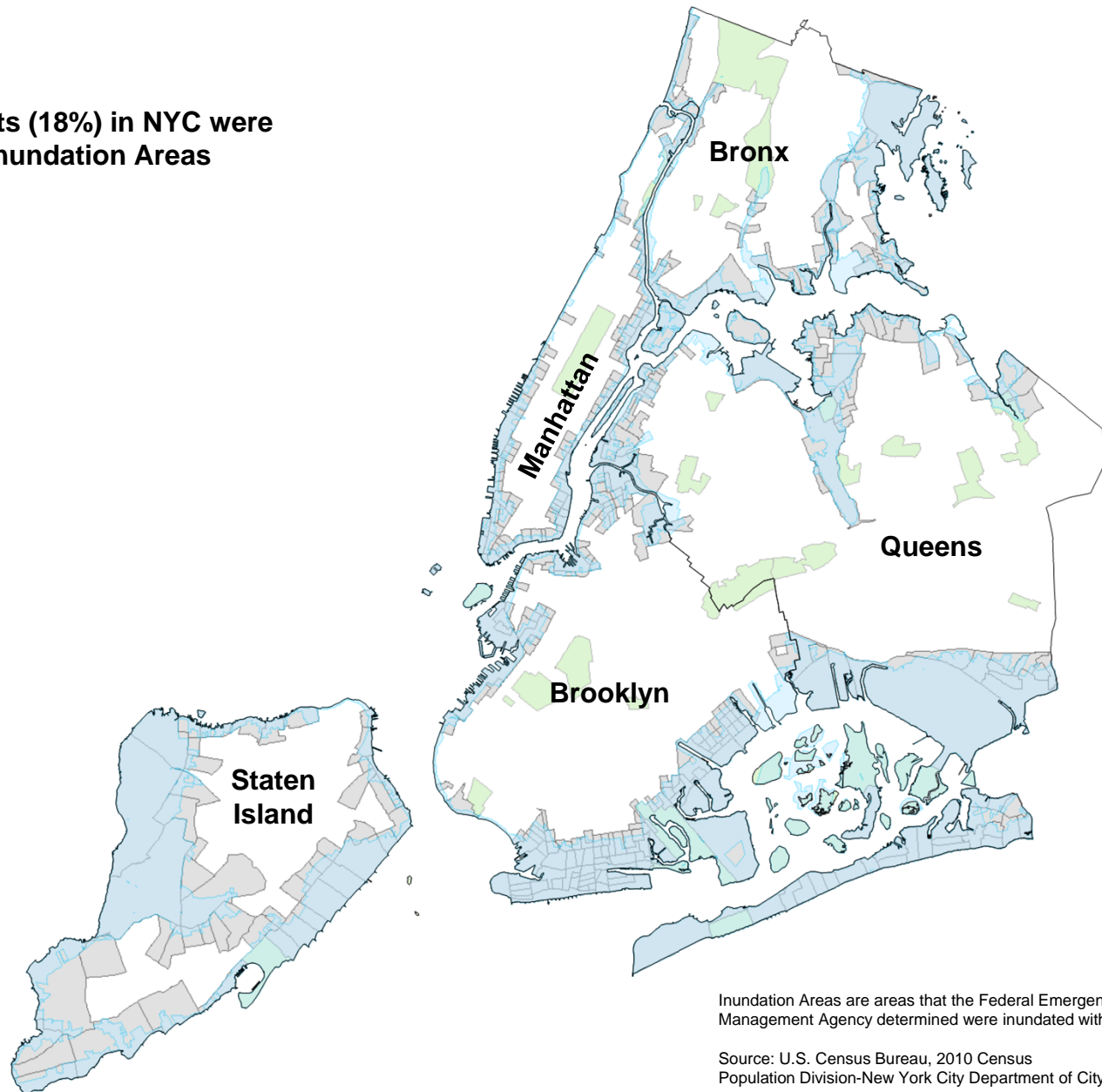
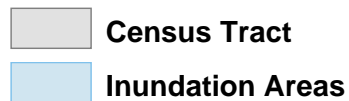
1. Provide a representative group of data users with access to SF1 data from the 2010 Census at different noise levels
2. Engage users in an iterative feedback process that would demonstrate the utility (or lack thereof) of tables at different noise levels
3. Gather case studies of data applications that represent cross section of users and conduct a forum/workshop where analyses can be presented and discussed
4. Disclosure issues should not prohibit the release of files to the group, since the Epsilon can be set for some minimum amount of noise to ensure confidentiality



## **Emergency Preparedness New York City**

# Hurricane Sandy Inundation Areas in New York City

394 of 2165 Census Tracts (18%) in NYC were in the Hurricane Sandy Inundation Areas



Inundation Areas are areas that the Federal Emergency Management Agency determined were inundated with flood waters

Source: U.S. Census Bureau, 2010 Census  
Population Division-New York City Department of City Planning 8



# Population 75 and Over Hurricane Sandy Inundation Areas in New York City

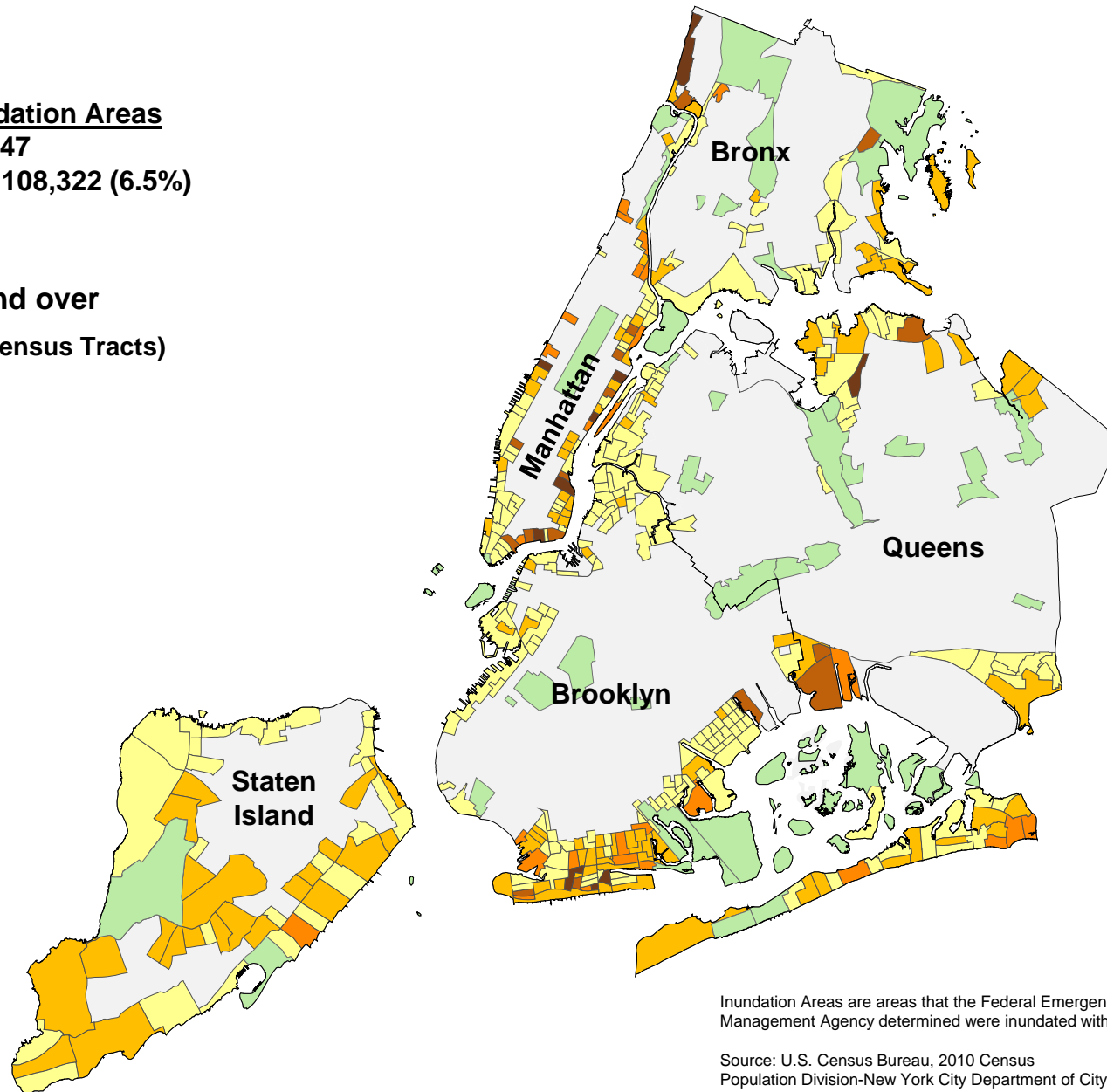
## In Hurricane Sandy Inundation Areas

Total Population: 1,659,347

Population 75 and Over: 108,322 (6.5%)

### Population 75 years and over

|               |                    |
|---------------|--------------------|
| 1,000 or more | (10 Census Tracts) |
| 750 to 999    | (16)               |
| 500 to 749    | (28)               |
| 250 to 499    | (107)              |
| Less than 250 | (233)              |



Inundation Areas are areas that the Federal Emergency Management Agency determined were inundated with flood waters

Source: U.S. Census Bureau, 2010 Census  
Population Division-New York City Department of City Planning 9

# Hazard Mitigation Strategies Require Serviceable Data

## Mitigation Strategy

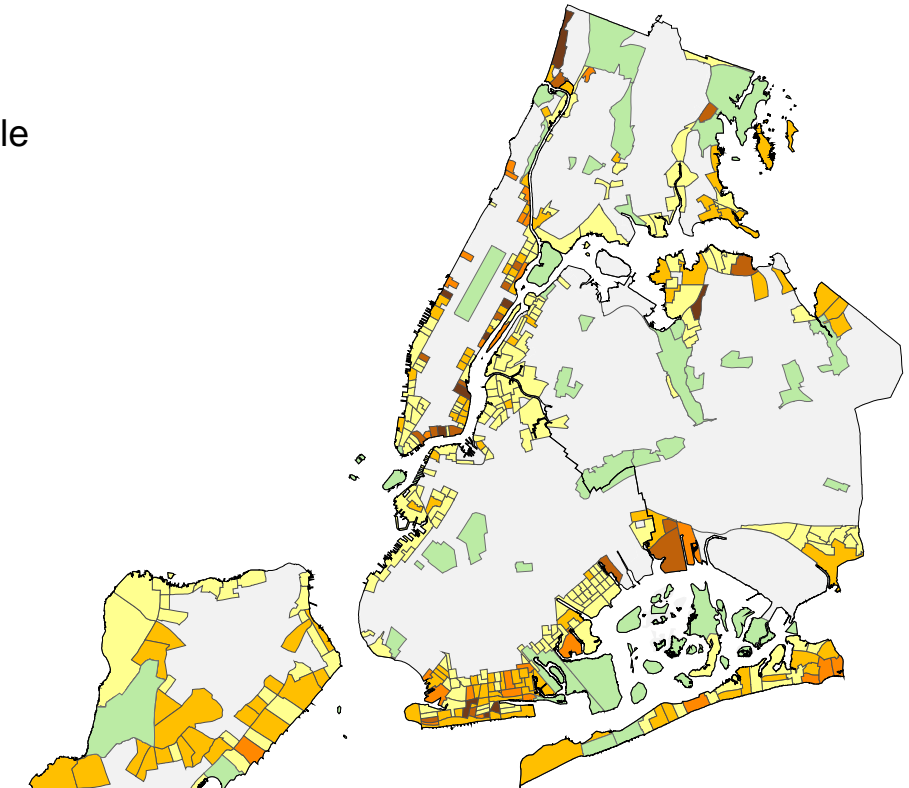
Ensure coastal storm shelters are physical accessible

## Lead agency

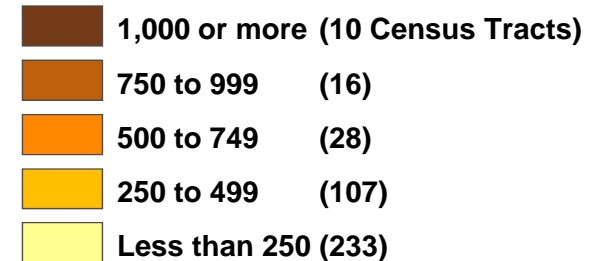
Mayor's Office for People with Disabilities

## Importance of good data

Need characteristics of local population



## Population 75 years and over



Inundation Areas are areas that the Federal Emergency Management Agency determined were inundated with flood waters

Source: U.S. Census Bureau, 2010 Census  
Population Division-New York City Department of City Planning 10

# Hazard Mitigation Strategies Require Serviceable Data

## Mitigation Strategy

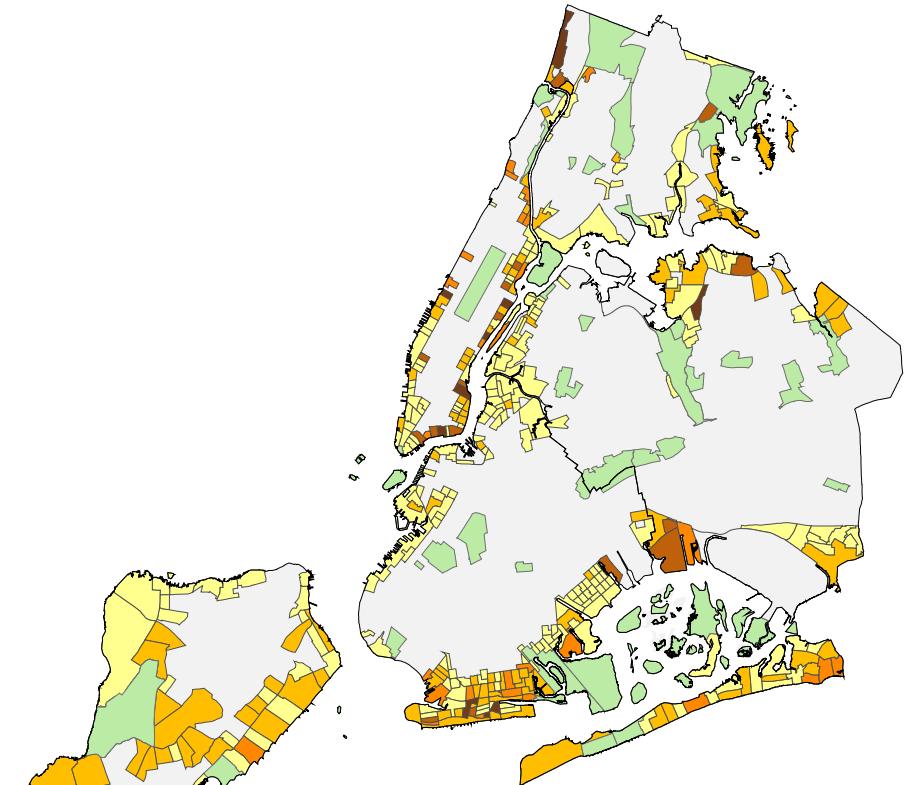
Establish evacuation fleet of 50 buses

## Lead agency

Metropolitan Transportation Authority

## Importance of precise population data

Need to identify areas with a large senior population



## Population 75 years and over

|               |               |                    |
|---------------|---------------|--------------------|
| Dark Brown    | 1,000 or more | (10 Census Tracts) |
| Brown         | 750 to 999    | (16)               |
| Orange        | 500 to 749    | (28)               |
| Yellow-Orange | 250 to 499    | (107)              |
| Light Yellow  | Less than 250 | (233)              |

Inundation Areas are areas that the Federal Emergency Management Agency determined were inundated with flood waters

Source: U.S. Census Bureau, 2010 Census  
Population Division-New York City Department of City Planning 11

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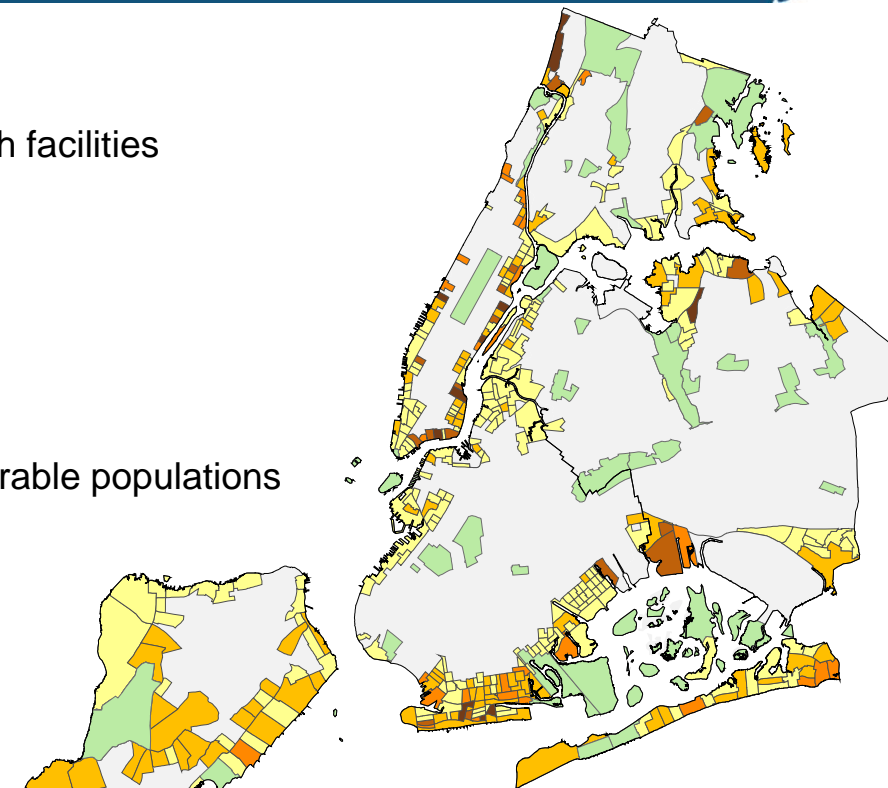
Install emergency generators at Department of Health facilities

## Lead agency

Department of Health and Mental Hygiene

## Importance of precise population data

Need to identify neighborhoods with significant vulnerable populations



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|               |               |                    |
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# For More Information



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[www.nyc.gov/population](http://www.nyc.gov/population)