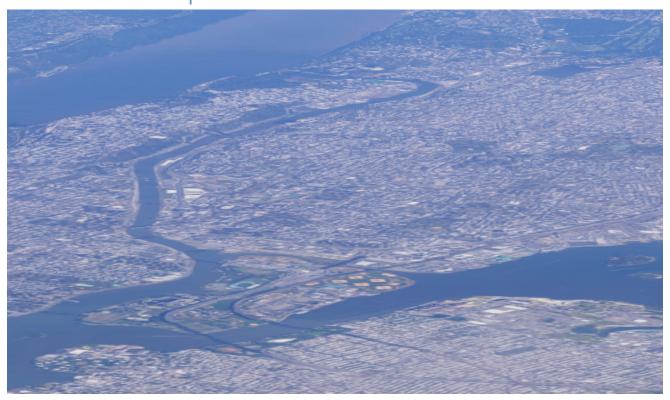


COLUMBIA UNIVERSITY

MAILMAN SCHOOL of PUBLIC HEALTH

EPIDEMIOLOGY



RISE: Resistome 2015 Time Estimate

Prepared By:

Daniel M. Sheehan

Geographer, GIS Analyst

Built Environment and Health Research Group

Department of Epidemiology

Columbia University

722 West 168th Street, R735

New York, New York 10032

www.beh.columbia.edu

dms2203@cumc.columbia.edu

Prepared For:

Dr. Andrew Rundle
Associate Professor of Epidemiology
Built Environment and Health Research Group
Department of Epidemiology
Columbia University
722 West 168th Street, R730
New York, New York 10032
www.beh.columbia.edu
agr3@columbia.edu
agr3@columbia.edu

June 22, 2015 Page 1 of 7

Time Estimate Introduction	3
Target Temporal Resolution for Data	3
Study Area	3
Abbreviations & Acronyms	3
Tasks Overview	3
RISE GIS Plan	3
Create Neighborhood Definitions	3
Construct Variables	3
Administrative:	3
Economic:	4
Ethnicity/Nativity:	4
Medical:	5
Food Environment:	5
Educational:	6
Task Totals	7

June 22, 2015 Page 2 of 7

TIME ESTIMATE INTRODUCTION

This time estimate represents the total number of hours required to construct each Type or Category of GIS metric(s) and task(s) for the RISE: Resistome project for Summer 2015.

Target Temporal Resolution for Data

The target time to get data for this project is 2014-2015.

Study Area

New York City (the extent of the study area).

Abbreviations & Acronyms

BEH - Built Environment and Health Group

BEH-GIS - Built Environment and Health Geographic Information Systems Team

TASKS OVERVIEW

RISE GIS Plan

The RISE data sets included swab sample collection from

- 3 homes per zip code
- across 15 zip codes in Northern Manhattan and the Bronx
- And swab sample collection from fast food restaurant bathrooms in those same zip codes.
- Samples were collected over the past year.

Create Neighborhood Definitions

1km Street Network Buffer and 0.5Km Street Network Buffer around each address.

CREATE NEIGHBORHOOD DEFINITIONS

Create Neighborhood Definitions	Low Estimate	High Estimate
0.5 km network buffer	4	8
1.0 km network buffer	4	8
Total	8	16

Construct Variables

Administrative:

Borough

New York City Borough of point.

ZIP code

ZIP code of point.

Community District

Community District of point.

UHF ID

UHF of point.

ADMINISTRATIVE VARIABLES PER POINT

Administrative Variables	Low Estimate	High Estimate
Borough	1	2
ZIP Code	1	2
Community District	1	2
UHF	1	2
Total	4	8

Economic:

Percent in Poverty

Percent in Neighborhood Geography below poverty rate.

Median Household Income

Median Household Income for Neighborhood Geography.

ECONOMIC VARIABLES PER NEIGHBORHOOD GEOGRAPHY

Economic Variables	Low Estimate	High Estimate
Percent in Poverty	4	8
Median Household Income	4	8
Total	8	16

Ethnicity/Nativity:

Percent Hispanic

Percent in Neighborhood Geography Hispanic.

Percent Black

Percent in Neighborhood Geography Black.

Percent Foreign Born

Percent in Neighborhood Geography Foreign Born.

Percent Linguistically Isolated

Percent in Neighborhood Geography Linguistically Isolated.

ETHNICITY VARIABLES PER NEIGHBORHOOD GEOGRAPHY

Ethnicity Variables	Low Estimate	High Estimate
Percent Hispanic	4	8
Percent Black	4	8
Percent Foreign Born	4	8
Percent Linguistically Isolated	4	8
Total	16	32

Medical:

Hospital or Community Health Clinic or Urgent Care facility

Count of a hospital or community health clinic or urgent care facility in neighborhood geography.

Note: This data does not currently exist in BEH's data archives. Some of this will have to be mined and possibly geocoded. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

Nursing Home

Count of a nursing homes in neighborhood geography.

Note: This data does not currently exist in BEH's data archives. Some of this will have to be mined and possibly geocoded. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

MEDICAL VARIABLES PER NEIGHBORHOOD GEOGRAPHY

Medical Variables	Low Estimate	High Estimate
Hospital	16	24
Community Health Clinic	16	24
Urgent Care Facility	16	24
Nursing Home	16	24
Total	64	96

Food Environment:

Farmers Market

Count of farmers markets in neighborhood geography.

Note: This dataset may require some updating. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

Slaughterhouse

Count of slaughterhouses in neighborhood geography.

Note: This dataset may require some updating. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

FOOD ENVIRONMENT VARIABLES PER NEIGHBORHOOD GEOGRAPHY

Food Environment Variables	Low Estimate	High Estimate
Farmers Market	8	16
Slaughterhouse	8	16
Total	16	32

Educational:

Presence of a school (k-12),

Count of schools in neighborhood geography.

- 1) NYC Schools dataset.
- 2) BEH Schools dataset.

Note: This dataset may require some updating. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

Head Start

Count of a Head Start. Count of Head Start Locations in neighborhood geography.

Search for Head Start locations 50 miles from ZIP code 10032 result:

(http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices?findAddress=&findCity=New

+ York&findState = NY&findZip = 10032&search = true&searchBy = zip&language = 0&autocomplete = &findRadius = 50&findType = All&findGrantNumber = #entryTotal)

Note: This data does not currently exist in BEH's data archives. Some of this will have to be mined and possibly geocoded. Extra time will be assigned to the High Estimate for this variable due to uncertainty.

EDUCATIONAL VARIABLES PER NEIGHBORHOOD GEOGRAPHY

Educational Variables	Low Estimate	High Estimate
NYC Schools	6	12
BEH Schools	6	12
Head Start	6	12
Total	18	36

June 22, 2015 Page 6 of 7

TASK TOTALS

TIME ESTIMATE TOTALS

	Low Estimate	High Estimate
Create Neighborhood Definitions	8	16
Administrative Variables	4	8
Economic Variables	8	16
Ethnicity Variables	16	32
Medical Variables	64	96
Food Environment Variables	16	32
Educational Variables	18	36
Total in Hours:	134	236
Total in Days:	16.75	29.5
Total in Weeks:	3.35	5.9

June 22, 2015 Page 7 of 7