

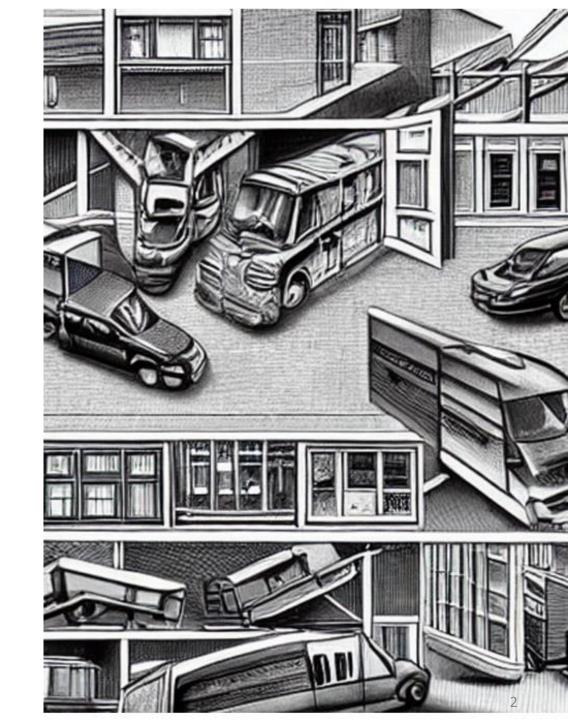
## Talk Outline

#### Part I: Background

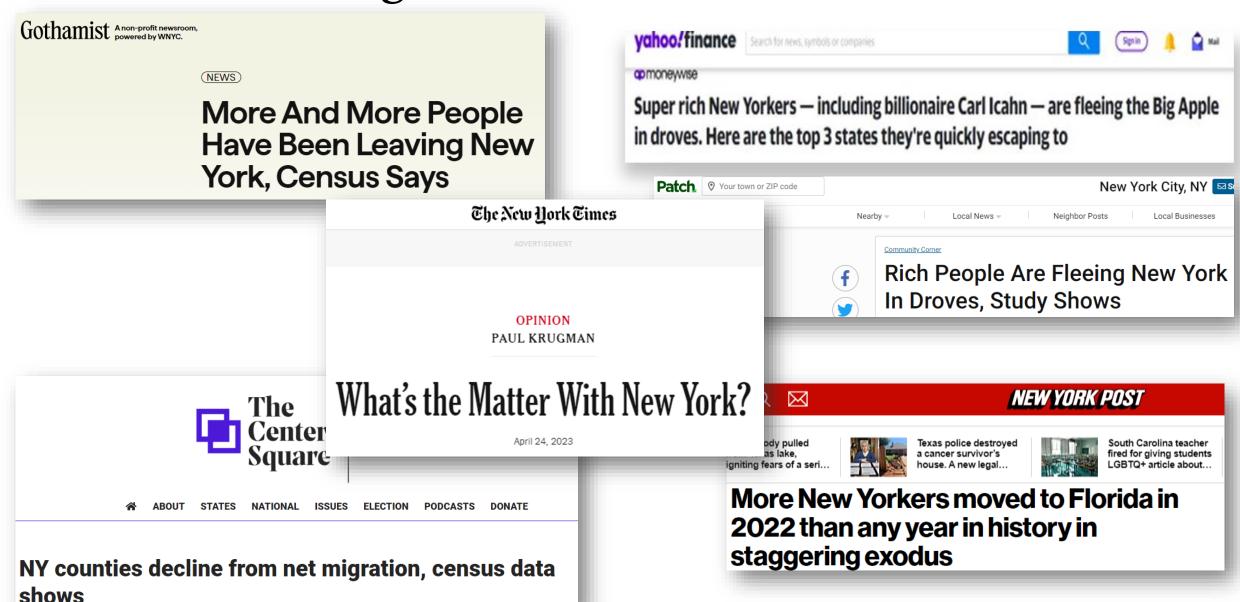
- Recent Headlines on New York State Migration
- Migration Data Sources

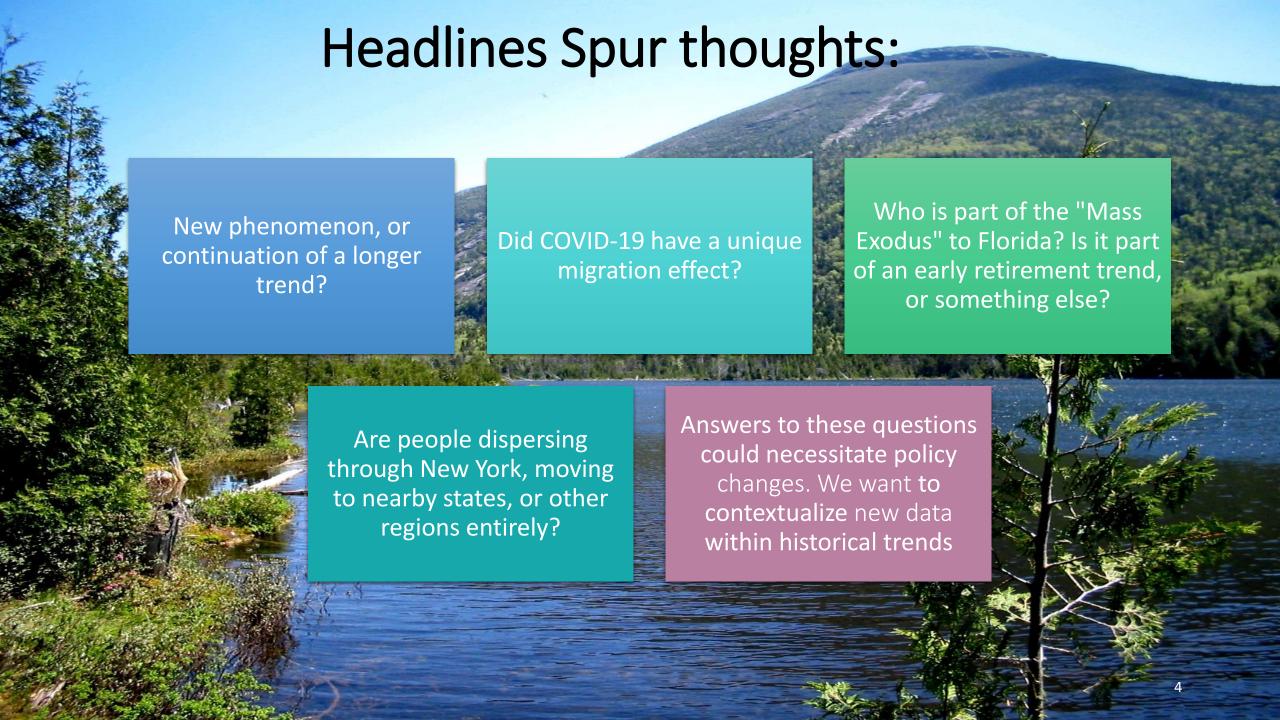
#### Part 2: Results

- Net Migration
- Moving to and from...?
- Who is moving?



## Migration in the News



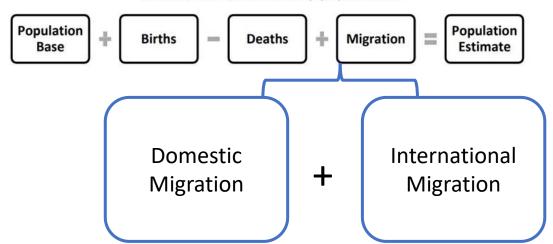


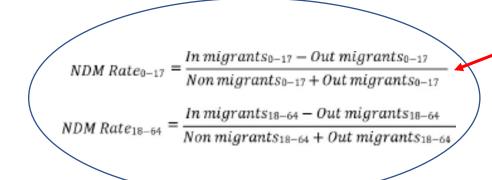
## Migration Data: Annual Population Estimates

Pop Estimates created from...

#### The Cohort Component Method

Nation, state, and county populations





#### Net Domestic Migration (July 1, year A to June 30, year B)

Data from multiple data sources:

- IRS Tax Return data, ages 0-64
- Center for Medicare and Medicaid Services (CMS)
   Medicare Enrollment Data, 65+
- Social Security Administration (SSA) NUMIDENT File, all ages
- Change in Group Quarters

#### *Method:*

- -Net Domestic Migration rates for each age group (under 18, 18-64, and 65+)
  - -Using NUMIDENT and IRS data for under 65
  - -NUMIDENT and CMS data for 65+
- -At county-level, combine age-specific NDM rates with total GQ change for each age group
- -Sum to state level and repeat same process
- -Controlled to sum to 0 at national level

## Migration Data: Annual Population Estimates (cont.)

#### **Net International Migration**

#### Components and Data Sources

- Non-U.S. born immigration (1-year ACS residence one year ago (ROYA))
- Non-U.S. born emigration (NCHS Hispanic life tables by age and sex, 1-year ACS year of entry)
- Net migration between the U.S. and Puerto Rico (1-year ACS and PRCS)
- Net migration of U.S. born population to/from the U.S. (census, survey, and population register data from 100 countries)
- Net movement of armed forces to and from the U.S. (Defense Manpower Data Center (DMDC))

#### *Method:*

- Estimate national totals for each component
- National totals nation and state characteristics, using PU from three 1-year ACS files
  - o For all components but movement of the Armed Forces
- Nation and state characteristics
   county characteristics, using PU from ACS 5-year file
- o *Armed forces:* characteristics and state/county distributions come from DMDC and pooled 1-year ACS

## Migration Data (cont.): U Wisconsin Applied Population Lab

- Data on Net Migration by Decade, from 1950-2020
  - For the U.S., Counties and states
  - By age, race. Hispanic origin, and sex
- Population at the beginning of the decade (Census count) aged forward over time
  - Births added, deaths subtracted = Expected population at end of decade
  - Net Migration= observed population from the end of decade Census minus the expected population
- 2020 Population is from the blended base
  - Beta version: no data for ages 75+, use caution when interpreting migration of children under 10

#### **Residual Method**

```
Census_{Cohort}^{2020} = \\ Census_{Cohort}^{2010} - Mortality_{cohort} + NetMigration_{cohort} \\ Observed = Expected + NetMigration \\ or \\ NetMigration = Observed - Expected \\ NetMigrationRate = 100 * NetMigration/Expected
```

## Migration Data (cont.): American Community Survey (ACS)

#### Standard Tabulations (data.census.gov):

- In-migration and outmigration using residence one year ago (ROYA)
- Geographical mobility categories (e.g. non-movers, mover from same state different county etc.)
- By Select characteristics (e.g. 5-year age group, sex, tenure, race/ethnicity etc.)
- Microdata for more nuanced analysis (specific age groups or by household structure)

#### ACS Migration flow data:

- Household and GQ locations + responses to migration questions
- Period estimates (5 years) of current residence versus ROYA
- Annual number of movers between...
  - Counties
  - ☐ Counties/minor civil divisions (MCD)
  - Metropolitan Statistical Areas (MSA)

# Other sources of migration data



**Internal Revenue Service (IRS)** 

County-to-county migration



**Current Population Survey** (CPS)



**Driver licenses surrendered** 



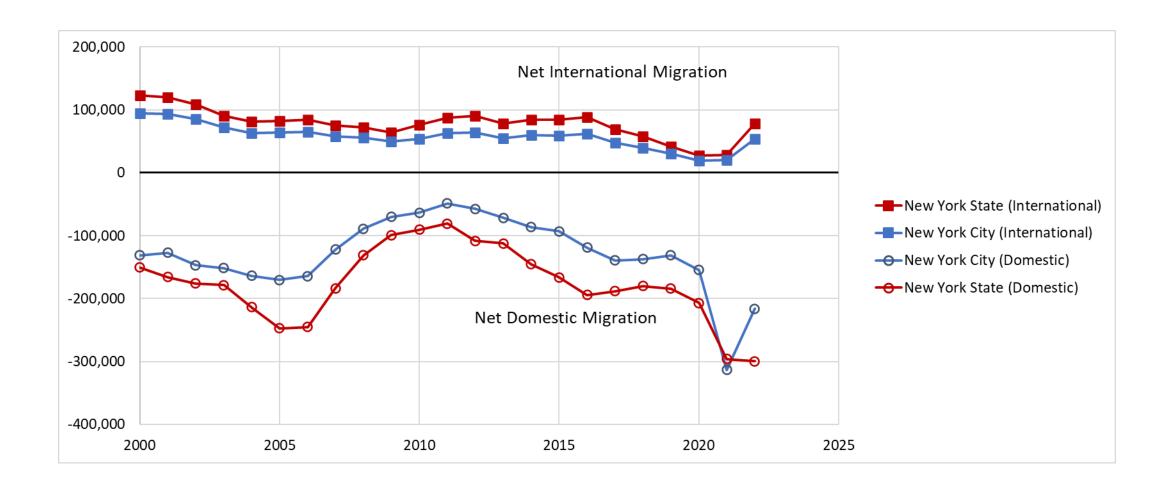
Commercial data, e.g.:

Moving Companies
Credit card transactions
Facebook

# North America Sander et al., 2014

# Part II: Results

# Annual Population Estimates of net migration

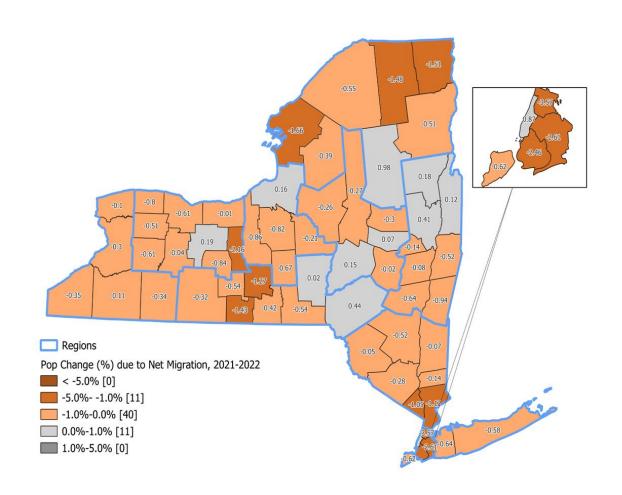


## Population Change Due to Net Migration



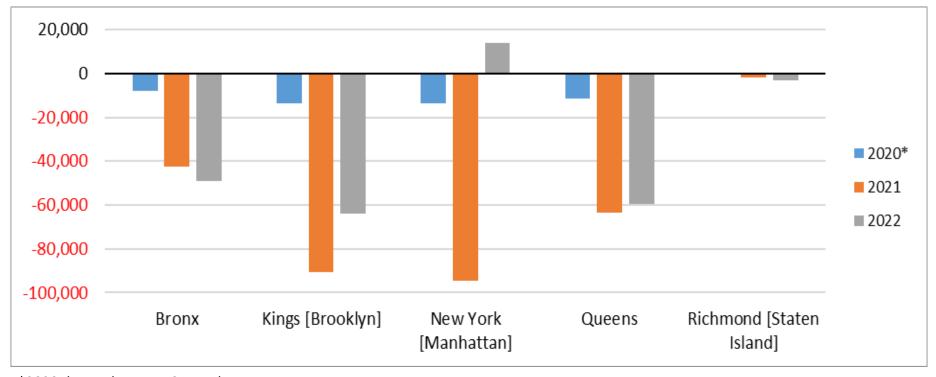
# Regions Pop Change (%) due to Net Migration, 2020-2022 < -5.0% [4] -5.0%- -1.0% [15] -1.0%-0.0% [23] 0.0%-1.0% [12] 1.0%-5.0% [8]

#### From 2021 to 2022



## Net Migration in New York City by Borough

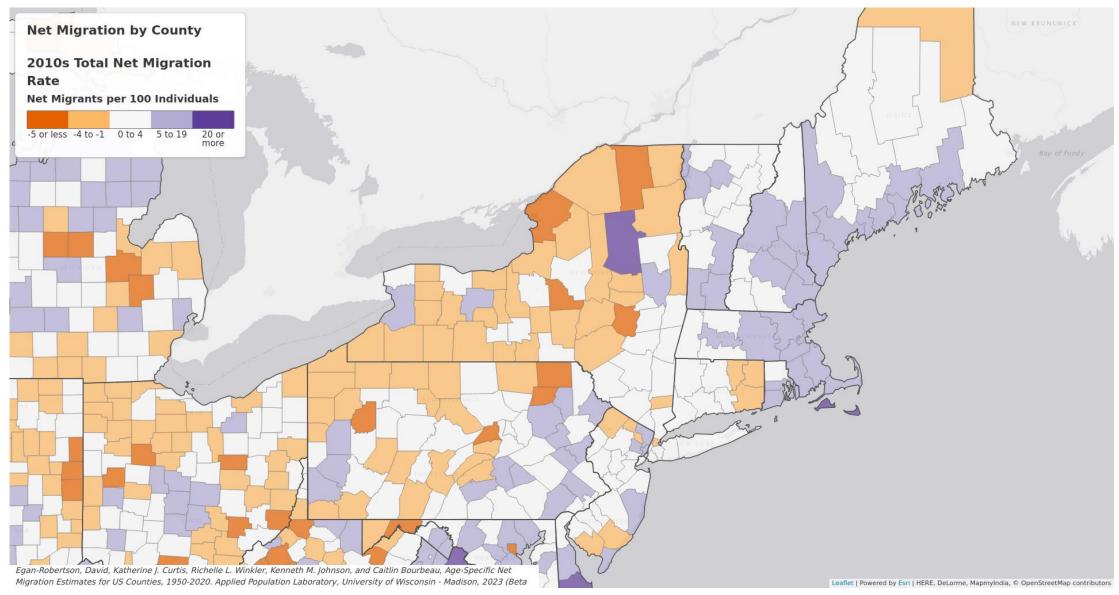




<sup>\*2020</sup> data only covers 3 months

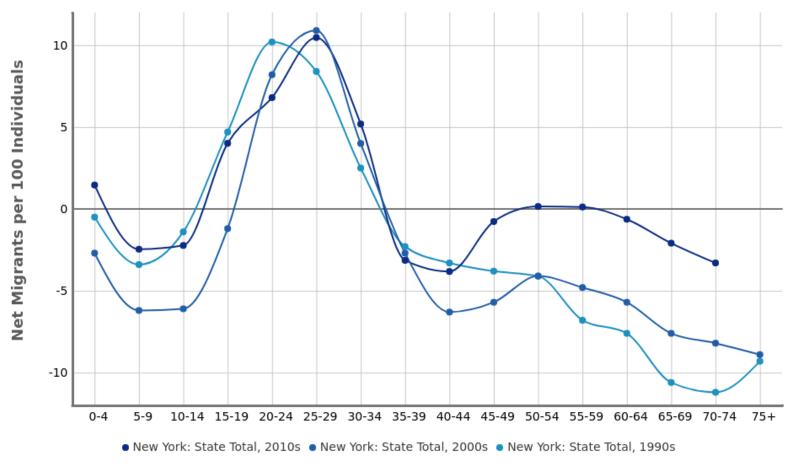
- More people moved out of than into all NYC boroughs in 2021
  - Manhattan had the steepest loss of 94,588 people, followed by Brooklyn (-90,759)
- In 2022, Manhattan was the only borough to gain population due to net migration (+13,855)
  - Brooklyn continued steep losses due to net migration (-63,801)

# **UW Net Migration Data**



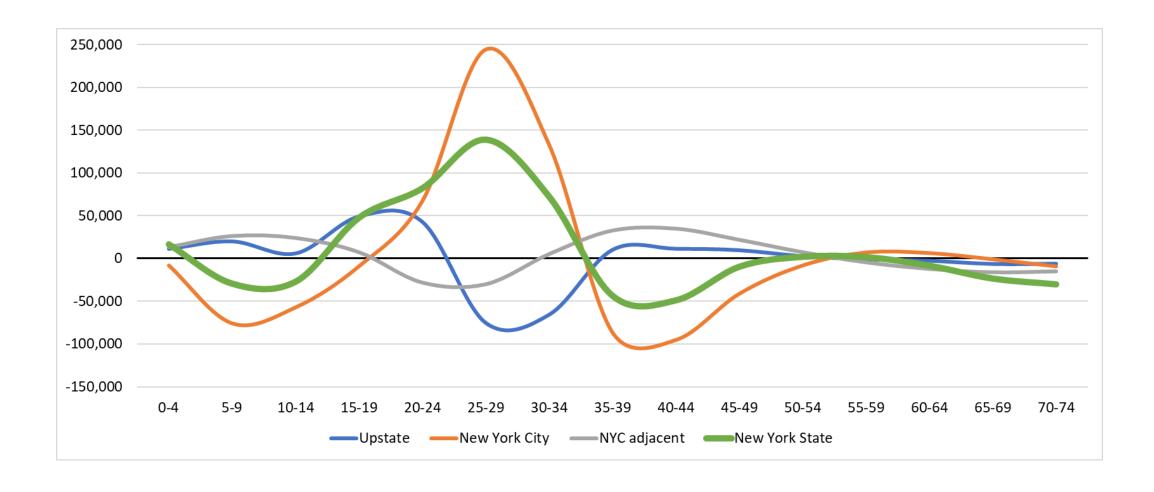
## Net Migration by age group, 1990-2020

#### **Net Migration by Age**



Egan-Robertson, David, Katherine J. Curtis, Richelle L. Winkler, Kenneth M. Johnson, and Caitlin Bourbeau, Age-Specific Net Migration Estimates for US Counties, 1950-2020. Applied Population Laboratory, University of Wisconsin - Madison, 2023 (Beta Release). Web.

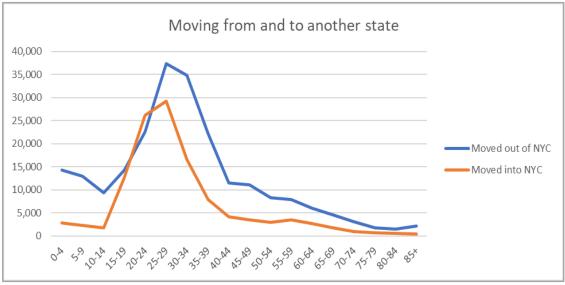
# Net migration by age (2010-2020)

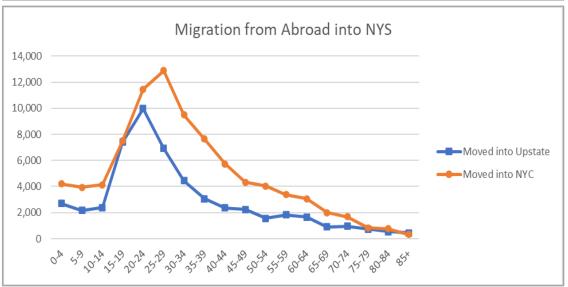


## Age Distribution of Movers, 2019 ACS

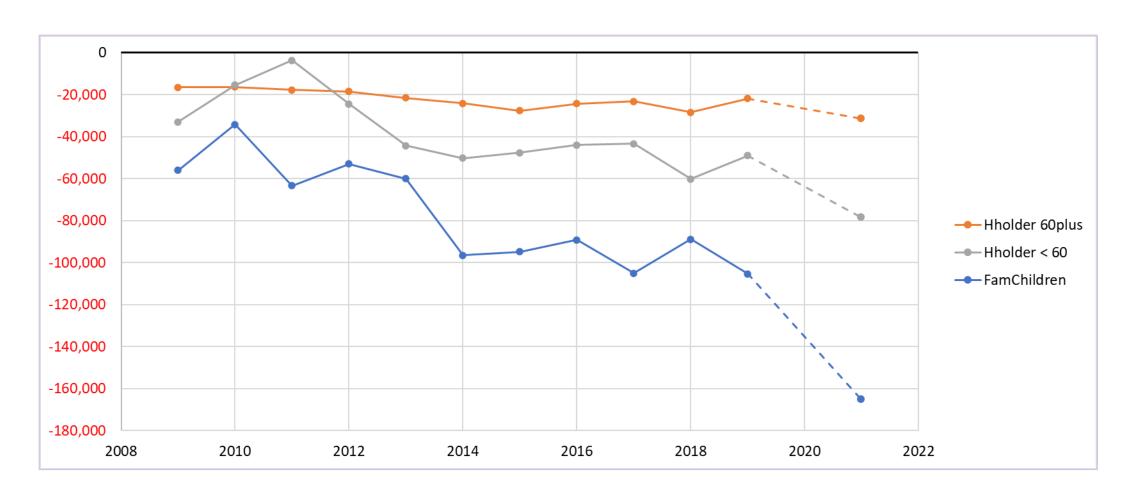




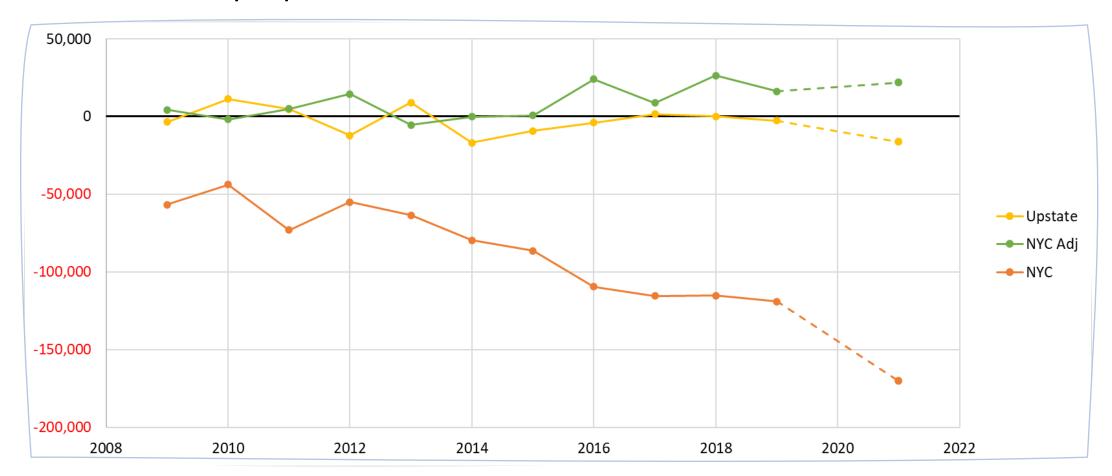




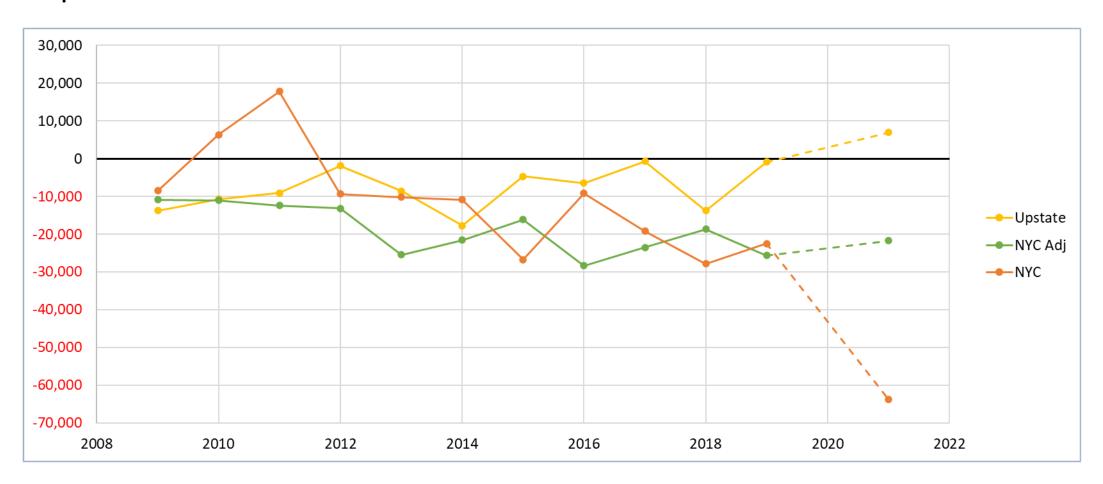
# Net domestic migration Household population by household type



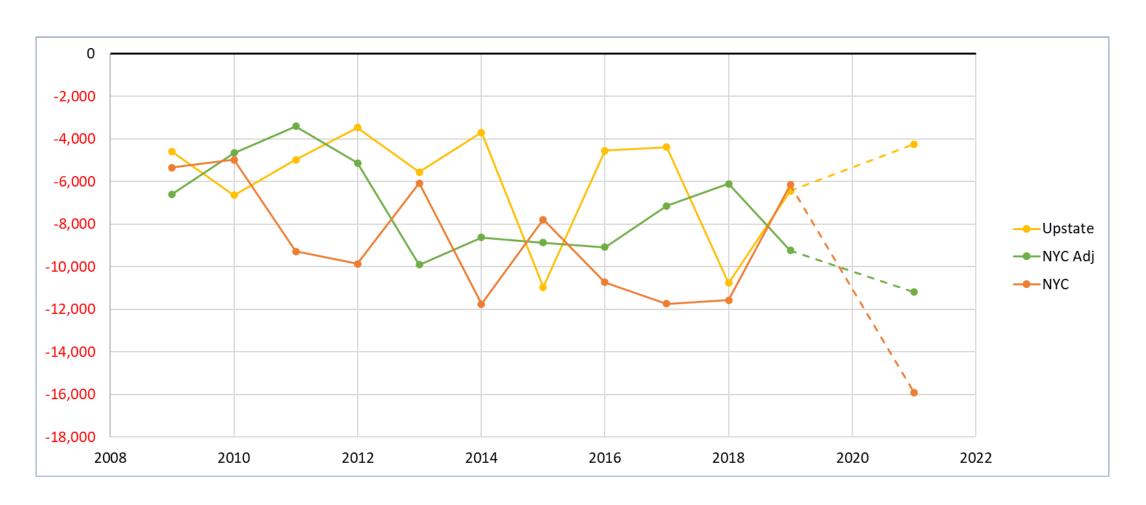
# Net domestic migration by region Household population in families with children



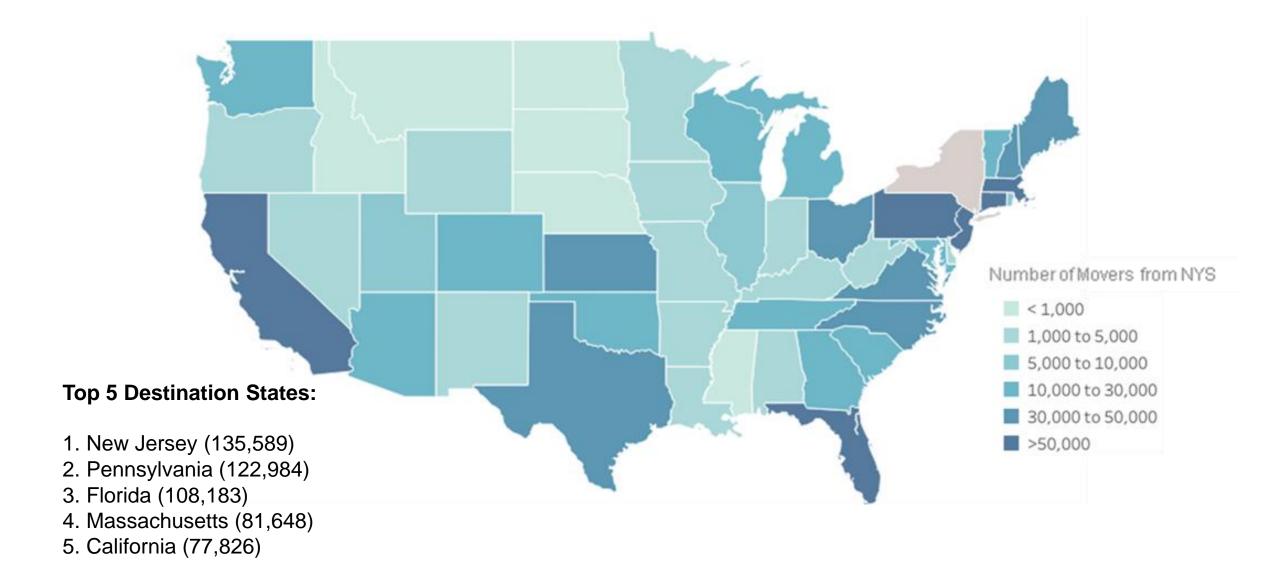
# Net domestic migration by region Population in households with householder < 60



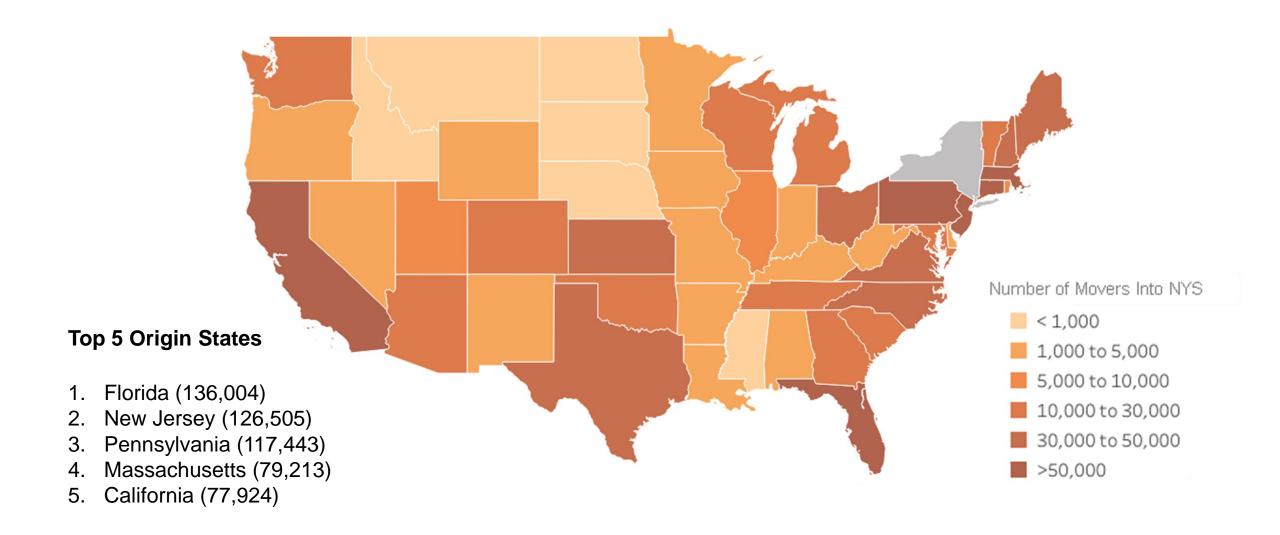
# Net domestic migration by region Population in households with householder over 60



## Number of Movers From New York into Other States, 2015-2019



## Number of Movers Into New York From Other States, 2015-2019



#### Net Migration Rate by Income Group, 2009 to 2021

