Estimating Superstorm Sandy’s Impact on Renters

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Superstorm Sandy’s Surge Area in New York City

Source: FEMA Modeling Task Force, New York City Department of City Planning
Housing Units in Sandy’s Surge Area in New York City

Single family – 11%
Housing Units in Sandy’s Surge Area in New York City

Single family – 11%
2 – 4 family – 19%
Housing Units in Sandy’s Surge Area in New York City

Single family – 11%
2 – 4 family – 19%
Multifamily – 70%
up to $31,900 from FEMA for each household
up to $31,900 from FEMA for each household

owners and renters
- temporary housing
- personal property damage
- moving and storage
- medical expenses
  - home repairs
    - owners only
Data

- FEMA Individual Assistance Registrations (HUD)
  - Block group level
  - Total number of individual assistance registrations
    - Renters
    - Owners
  - Total number of damage assessments
    - Renters
    - Owners
FEMA Individual Assistance Registrations

New York City

- Rental Share of Registrations: 53%
- Rental Share of Damage: 32%
- CDBG-DR Rental Allocation: 47%
FEMA Individual Assistance Registrations

New York City
- Rental Share of Registrations: 53%
- Rental Share of Damage: 32%
- CDBG-DR Rental Allocation: 47%

New Jersey
- Rental Share of Registrations: 47%
- Rental Damage: 19%
NY – Coney Island, Brooklyn

Damage Rate

- 0% - 25%
- 26% - 50%
- 51% - 75%
- 76% - 100%
NY – Coney Island, Brooklyn

Damage Rate

- Yellow: 0% - 25%
- Green: 26% - 50%
- Blue: 51% - 75%
- Dark Blue: 76% - 100%
NY – Coney Island, Brooklyn

<table>
<thead>
<tr>
<th>BG</th>
<th>Homeownership Rate</th>
</tr>
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<tbody>
<tr>
<td>0328-3</td>
<td>20.0%</td>
</tr>
<tr>
<td>0328-2</td>
<td>93.9%</td>
</tr>
<tr>
<td>0328-4</td>
<td>59.2%</td>
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</tbody>
</table>

Damage Rate:
- Yellow: 0% - 25%
- Green: 26% - 50%
- Blue: 51% - 75%
- Deep Blue: 76% - 100%
NJ – Bergen County

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>0292-6</td>
<td>23.0%</td>
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<tr>
<td>0292-2</td>
<td>52.5%</td>
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<tr>
<td>0292-4</td>
<td>78.9%</td>
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<td>0292-5</td>
<td>53.2%</td>
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<tr>
<td>0362-1</td>
<td>85.2%</td>
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Damage Rate

- Yellow: 0% - 25%
- Green: 26% - 50%
- Blue: 51% - 75%
- Dark Blue: 76% - 100%
Compare Census Block Groups within Census Tracts
Data

- **FEMA Individual Assistance Registrations (HUD)**
  - Block group level
  - Total number of individual assistance registrations
    - Renters
    - Owners
  - Total number of damage assessments
    - Renters
    - Owners
Data

- FEMA Individual Assistance Registrations (HUD)
- ACS 2007 – 2011
  - Homeownership Rate
  - Multifamily Share (5+ Units)
  - Tenure by Units in Building
Dependent Variable: Share of Households with FEMA Assessed Damage

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeownerships Rate</td>
<td>0.2364***</td>
<td>-0.3319***</td>
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<tr>
<td></td>
<td>(0.0459)</td>
<td>(0.0372)</td>
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<tr>
<td>Census Tract Fixed Effects</td>
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<td>X</td>
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<tr>
<td>Observations</td>
<td>1,617</td>
<td>1,617</td>
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Clustered standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.
## Dependent Variable: Share of Households with FEMA Assessed Damage

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<td>-0.2967***</td>
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Census Tract Fixed Effects: X X X

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### Detailed Tenure (Omitted Category: Single Family Homeowners)

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<tbody>
<tr>
<td>Multifamily Owner Share</td>
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<tr>
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<tr>
<td>Single Family Renter Share</td>
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<td>-0.1025**</td>
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<tr>
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<tr>
<td>Multifamily Renter Share</td>
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<td>-0.3704***</td>
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<tr>
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- CDBG-DR Rental: 22%
- CDBG-DR Rental (Revised): 30%