The Long Island Hispanic Population—Mapping Nativity and Voter-Eligibility

Center for Urban Research
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Background

- Horace Hagedorn Foundation sought a better understanding of the demographics of Hispanics on Long Island
  - Improve grantmaking
  - Assist voter mobilization
- Previous work by Rob Paral allocating large-area population to smaller geographical units
Long Island’s largest sources of legal Hispanic immigration are (a/o 2005)

- El Salvador
- Dominican Republic
- Colombia
- Ecuador
- Perú
- Guatemala

Source: Dept of Homeland Security Profiles on Legal Permanent Residents
Data Challenges

- Small-area data is now eight years old (US Census 2000)
- American Community Survey provides data from 2006 for ~100,000 person units called Public Use Microdata Areas
- Statistical variation in PUMA-level ACS data makes it unreliable for narrowly defined subpopulations (e.g. specific racial/ethnic categories)
- PUMAs do not correlate to geographies of interest such as legislative districts
Conflicting Geographies
## Census Tables of Interest

<table>
<thead>
<tr>
<th>Source</th>
<th>Year</th>
<th>Table Number</th>
<th>Table Name</th>
<th>Smallest Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF1</td>
<td>2000</td>
<td>P11</td>
<td>Hispanic or Latino</td>
<td>Block</td>
</tr>
<tr>
<td>SF1</td>
<td>2000</td>
<td>PCT11</td>
<td>Hispanic or Latino by Specific Origin</td>
<td>Tract</td>
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<tr>
<td>SF3</td>
<td>2000</td>
<td>PCT63H</td>
<td>Place of Birth by Citizenship Status (Hispanic or Latino)</td>
<td>Tract</td>
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<tr>
<td>ACS</td>
<td>2005/06</td>
<td>B/C03001</td>
<td>Hispanic or Latino Origin by Specific Origin</td>
<td>PUMA</td>
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<tr>
<td>ACS</td>
<td>2005/06</td>
<td>B05003I</td>
<td>Sex by Age by Citizenship Status (Hispanic or Latino)</td>
<td>PUMA</td>
</tr>
<tr>
<td>ACS</td>
<td>2005/06</td>
<td>B06004I</td>
<td>Place of Birth by Race (Hispanic or Latino)</td>
<td>PUMA</td>
</tr>
</tbody>
</table>
# Voter Eligibility at the Tract Level

<table>
<thead>
<tr>
<th>Citizenship</th>
<th>Under 18</th>
<th>18 and Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizen</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>Non-Citizen</td>
<td>40%</td>
<td>28%</td>
</tr>
</tbody>
</table>

- Under 18: 30% for Citizen, 12% for Non-Citizen
- 18 and Over: 70% for Citizen, 28% for Non-Citizen
Dealing with Statistical Anomalies

- North Hempstead Pop Est
- 4201 ACS Total Pop
- 4204 ACS Total Pop
- 4201 Hisp Pop
- 4204 Hisp Pop

North Hempstead Pop Est
2000 2001 2002 2003 2004 2005 2006 2007
Allocating Population to Census Tracts

- Assume 2005/06 follows 2000 patterns within each PUMA
- Thus, if the number of foreign-born Hispanics in the PUMA grows by 50%, every tract within it also grows by 50%
Allocating Population to Census Blocks

- Legislative boundaries cross Census Tracts
- Assume foreign/native-born pattern follows pattern of total Hispanic population within each Tract
- Not a bad assumption because many Census Blocks have zero population (parks, transportation rights-of-way)
Aggregate to Legislative Geography

- Legislative Geographies
  - New York State Assembly Districts
  - New York State Senate Districts
  - Nassau and Suffolk County Legislative Districts
Reference Map: eastern Suffolk County

Cartography by the Center for Urban Research, City University of New York, 2007
### Foreign Born Hispanics by New York State Senate District (2005-06 Estimate)

#### Foreign Born Hispanic Population:
- 6,380 - 12,000 persons
- 12,860
- 18,514
- 20,181 - 28,000
- > 28,000

#### Analysis and cartography by the Center for Urban Research, City University of New York, 2007

<table>
<thead>
<tr>
<th>Senate District</th>
<th>Total Hispanics</th>
<th>Native Born</th>
<th>Foreign Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31,249</td>
<td>18,390</td>
<td>12,860</td>
</tr>
<tr>
<td>2</td>
<td>18,276</td>
<td>11,896</td>
<td>6,380</td>
</tr>
<tr>
<td>3</td>
<td>61,997</td>
<td>36,229</td>
<td>25,767</td>
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<tr>
<td>4</td>
<td>50,008</td>
<td>29,653</td>
<td>20,355</td>
</tr>
<tr>
<td>5</td>
<td>24,548</td>
<td>13,353</td>
<td>11,195</td>
</tr>
<tr>
<td>6</td>
<td>42,361</td>
<td>20,047</td>
<td>22,313</td>
</tr>
<tr>
<td>7</td>
<td>36,789</td>
<td>16,608</td>
<td>20,181</td>
</tr>
<tr>
<td>8</td>
<td>39,705</td>
<td>18,975</td>
<td>20,730</td>
</tr>
<tr>
<td>9</td>
<td>39,647</td>
<td>21,133</td>
<td>18,514</td>
</tr>
</tbody>
</table>
Hispanics Eligible to Vote by New York State Senate District (2005-06 Estimate)

Hispanic Citizens 18 and Over
- 8,555 - 12,000 persons
- 12,001 - 16,000
- 16,001 - 22,000
- 22,001 - 28,000
- > 28,000

<table>
<thead>
<tr>
<th>Senate District</th>
<th>Total Hispanics</th>
<th>Eligible Voters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31,249</td>
<td>11,646</td>
</tr>
<tr>
<td>2</td>
<td>18,276</td>
<td>8,950</td>
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<td>8</td>
<td>39,705</td>
<td>15,546</td>
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<tr>
<td>9</td>
<td>39,647</td>
<td>19,970</td>
</tr>
</tbody>
</table>

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Foreign Born Hispanics by New York State Assembly District (2005-06 Estimate)

NYS Assembly District
Foreign Born Hispanic Population
- 1,194 - 3,000 persons
- 3,001 - 6,000
- 6,001 - 9,000
- 9,001 - 12,000
- 12,001 - 30,071

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Hispanics Eligible to Vote by New York State Assembly District (2005-06 Estimate)

Hispanic Citizens 18 and Over
- < 3,000 persons
- 3,001 - 6,000
- 6,001 - 9,000
- 9,001 - 12,000
- 25,711

Analysis and cartography by the Center for Urban Research, City University of New York, 2007

<table>
<thead>
<tr>
<th>Assembly District</th>
<th>Total Hispanics</th>
<th>Eligible Voters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9,534</td>
<td>4,146</td>
</tr>
<tr>
<td>2</td>
<td>17,191</td>
<td>5,653</td>
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<td>18,212</td>
<td>7,758</td>
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<tr>
<td>4</td>
<td>11,427</td>
<td>4,953</td>
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<tr>
<td>5</td>
<td>9,671</td>
<td>5,354</td>
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<tr>
<td>6</td>
<td>63,776</td>
<td>25,711</td>
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<tr>
<td>7</td>
<td>5,484</td>
<td>3,364</td>
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<td>8</td>
<td>10,060</td>
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<tr>
<td>9</td>
<td>7,343</td>
<td>3,416</td>
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<tr>
<td>10</td>
<td>14,785</td>
<td>5,209</td>
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<tr>
<td>11</td>
<td>22,243</td>
<td>9,236</td>
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<tr>
<td>12</td>
<td>16,778</td>
<td>6,020</td>
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<td>13</td>
<td>7,729</td>
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<td>3,451</td>
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<tr>
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<td>10,166</td>
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<td>10,430</td>
<td>4,897</td>
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<tr>
<td>18</td>
<td>34,425</td>
<td>9,823</td>
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<tr>
<td>19</td>
<td>13,320</td>
<td>5,751</td>
</tr>
<tr>
<td>20</td>
<td>12,797</td>
<td>6,463</td>
</tr>
<tr>
<td>21</td>
<td>20,272</td>
<td>9,813</td>
</tr>
</tbody>
</table>
**Foreign Born Hispanics by County Legislative District (2005-06 Estimate)**

**County Legislative Districts**

- Nassau County
  - Legislative District
  - Total Hispanics
  - Native Born
  - Foreign Born

- Suffolk County
  - Legislative District
  - Total Hispanics
  - Native Born
  - Foreign Born

**NOTE:** District numbers are unique within a county only. Each county numbers districts beginning with District 1.

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Hispanics Eligible to Vote by County Legislative District (2005-06 Estimate)

County Legislative Districts
Hispanic Citizens 18 and Over
- 749 - 2,000 persons
- 2,001 - 4,000
- 4,001 - 6,000
- 6,001 - 10,000
- 17,160

NOTE: District numbers are unique within a county only. Each county numbers districts beginning with District 1.

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Foreign Born Hispanics by Census Tract in Nassau County and Western Suffolk County (2005-06 Estimate)

Foreign Born Hispanic Population
- 3 - 180 persons
- 181 - 420
- 421 - 750
- 751 - 1,320
- 1,321 - 4,253
- 0

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Hispanics Eligible to Vote by Census Tract in Nassau County and Western Suffolk County (2005-06 Estimate)

Hispanic Citizens 18 and Over
- 8 - 180 persons
- 181 - 420
- 421 - 750
- 751 - 1,320
- 1,321 - 1,858
- 0

Major villages labelled by name

Analysis and cartography by the Center for Urban Research, City University of New York, 2007
Foreign Born Hispanics by Census Tract in Eastern Suffolk County (2005-06 Estimate)

Major villages labelled by name
Foreign Born Hispanic Population
- 3 - 180
- 181 - 420
- 421 - 750
- 751 - 1,320
- 1,321 - 4,253
- 0

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Major villages labelled by name

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