

Linguistic Demographics in the United States

K. Wang, M. Kuhn, N. Dieck | 1.13.2020

Introduction

- 290 million Americans over 5 in 2013 according to the US Census
- 60 million speak a language other than English at home
- The Census tracks 380 languages spoken in the US
 - From Afrikaans to Zuni
- What can the Census tell us about non-English speaking households in the US?

Research Questions

- What languages are spoken here in Cook County?
- “Deep Dive” for French, Chinese and Spanish
 - Where do speakers of these languages congregate?
 - How many are there in various US metropolitan areas?
- Do speakers of foreign languages tend to aggregate in larger metropolitan areas?

Census Methodology

- Sample populations are surveyed to predict the total number of speakers in the statistical area
- Three statistical levels / areas in the US -
 - United States
 - Each of 50 states plus DC and Puerto Rico
 - 155 counties covering 100 metropolitan areas in 37 states
- Research Question: Do you speak English at home?
 - If not, what do you speak?
- Response as respondent gave it: Chinese ≠ Mandarin
- Coded into one of 380 language categories

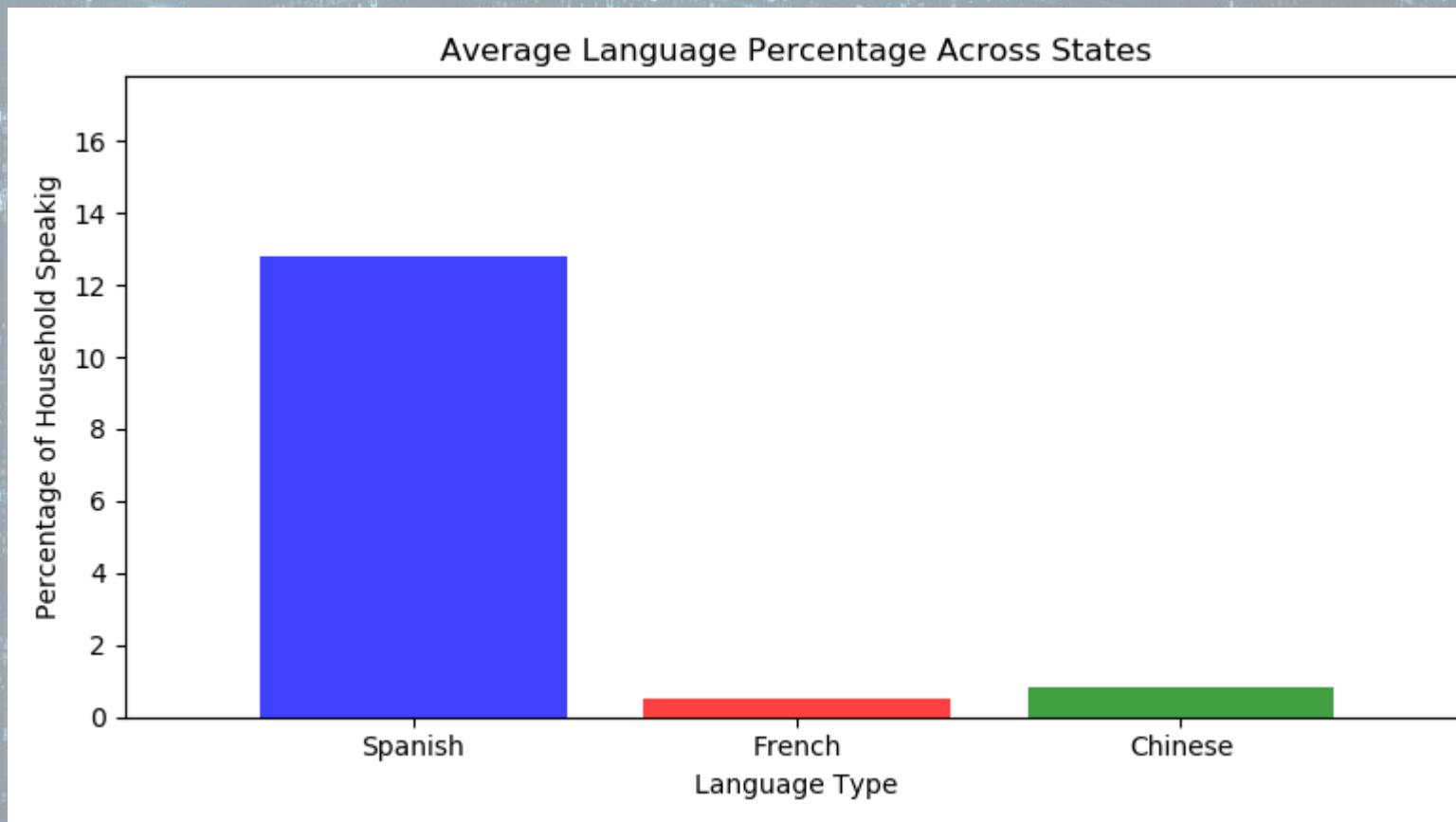
Data Collection Process

- US Census data accessible via API request
 - Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over
- Data drawn from the 2013 American Community Survey
- County-level data were analyzed for all research questions
- Automation used to download applicable data
 - Number of French, Spanish and Chinese speakers for all counties in the survey
 - Number of speakers of all surveyed languages located in Cook County

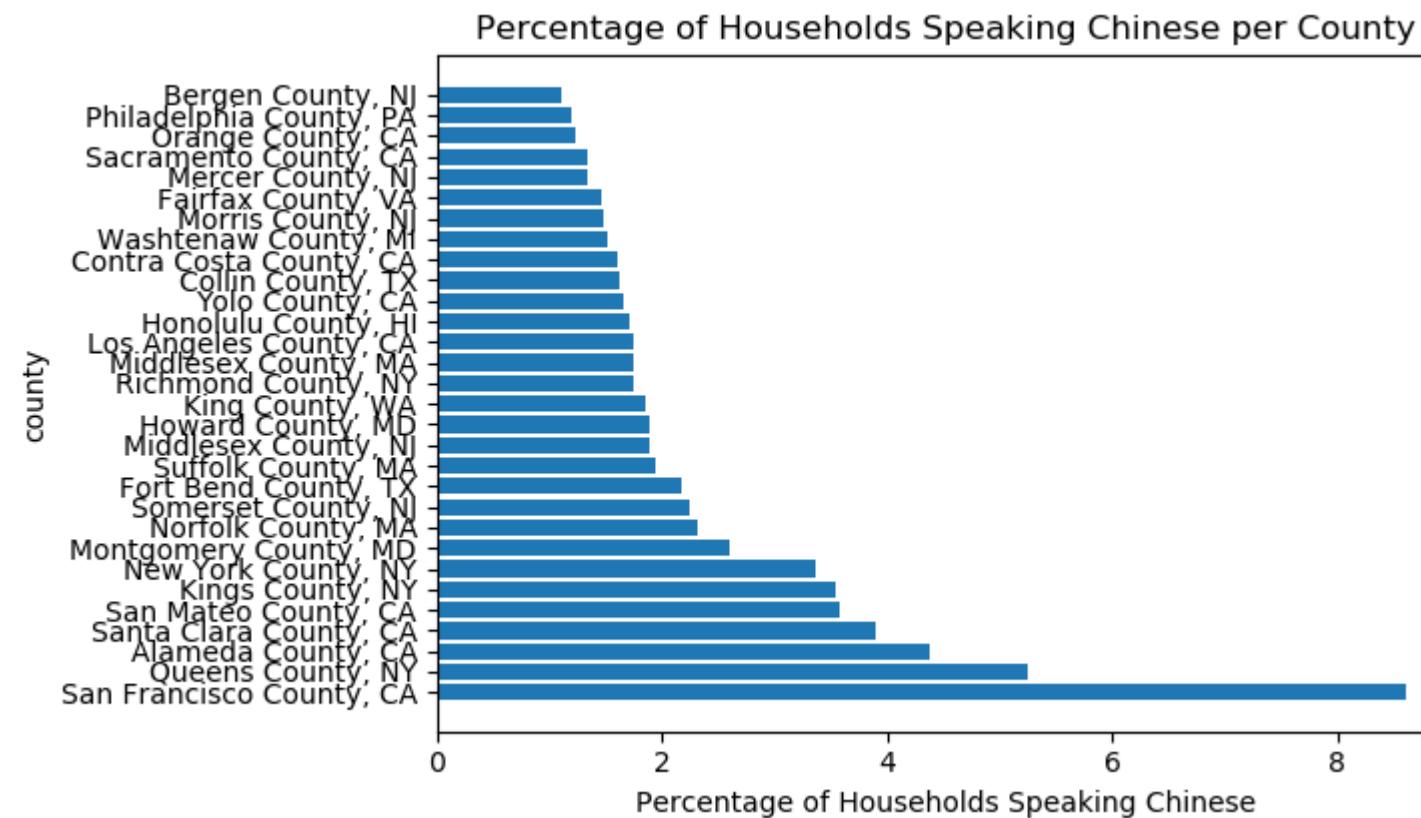
Totals for Surveyed Languages

- API requests yielded total population sizes and percentages speaking the 380 languages
- Three languages were selected for “deep dives” – Chinese, French, and Spanish
- Level of analysis is the 155 counties
- Overall findings were:
 - Chinese: 0.84% of the surveyed population
 - French: 0.49% of the surveyed population
 - Spanish: 12.79% of the surveyed population.

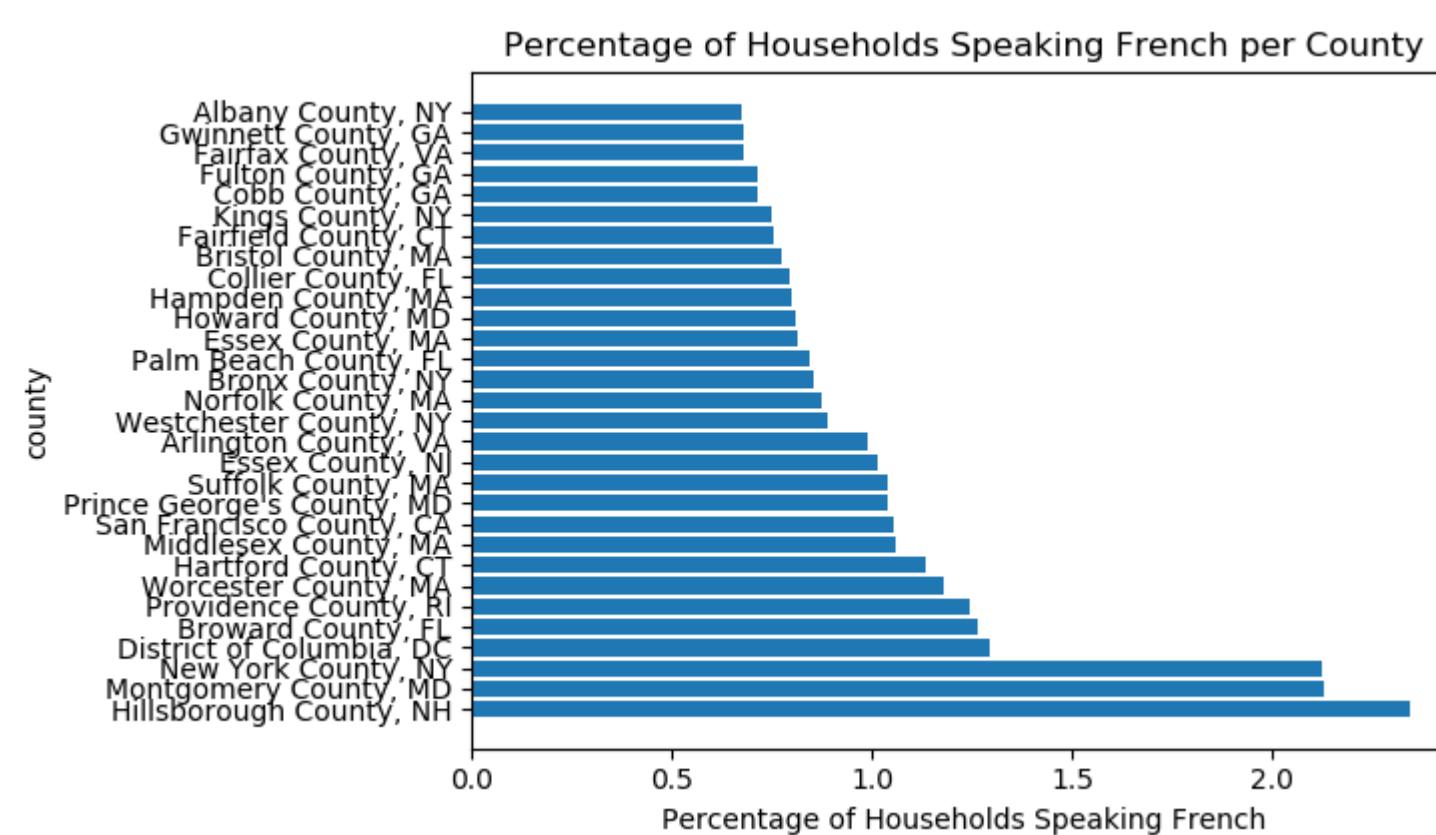
Totals for Surveyed Languages



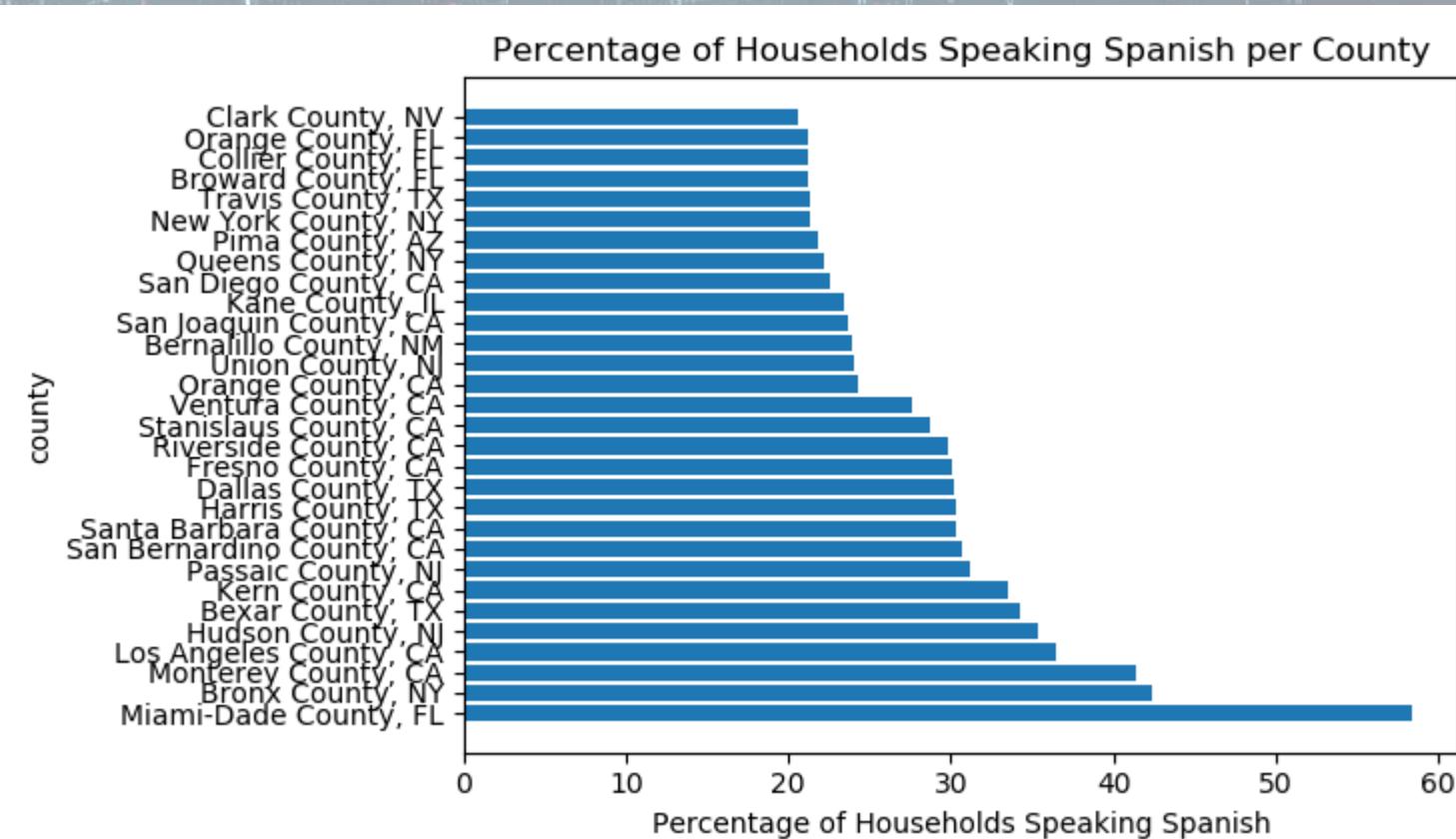
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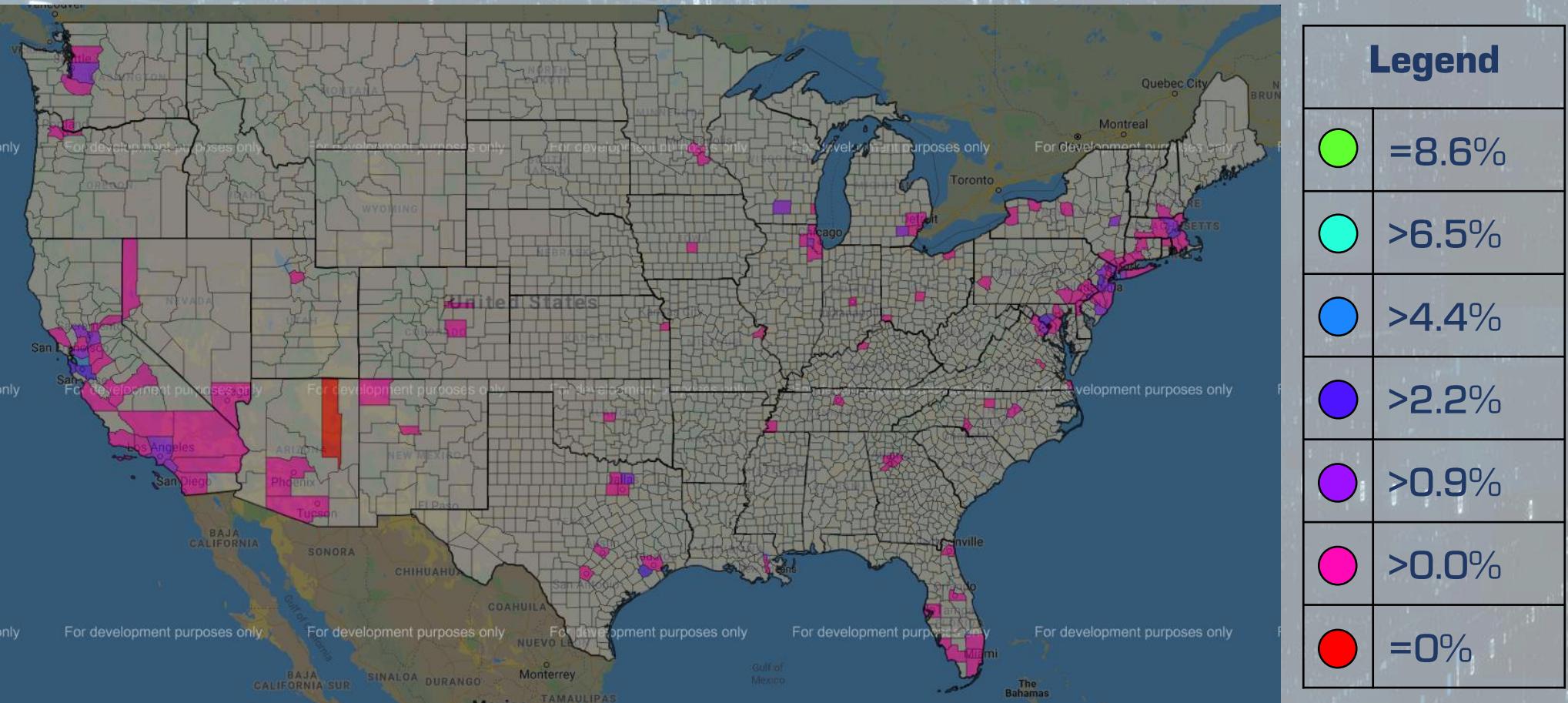
Totals for Surveyed Languages



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Distribution of Chinese Speakers



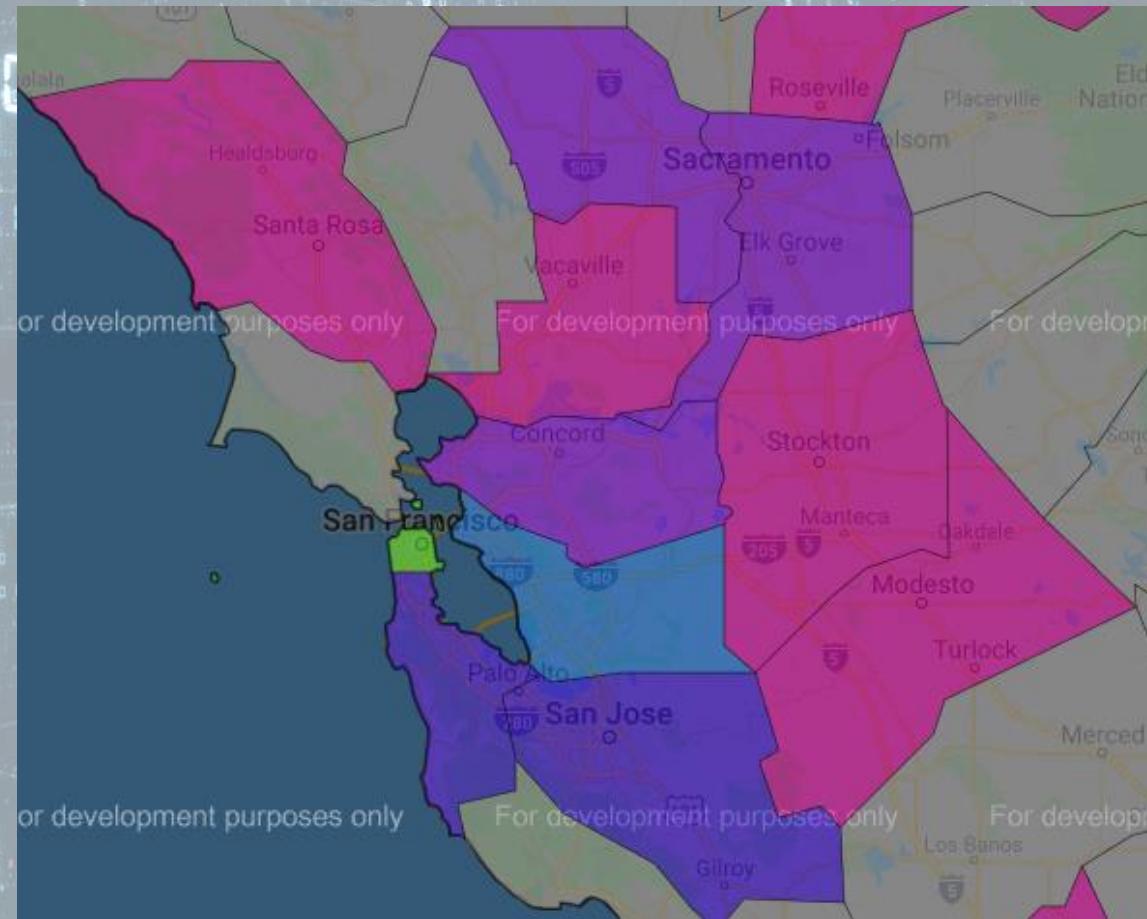
Distribution of Chinese Speakers

San Francisco County

- Population: 837,442
- % Chinese Speaking: 8.6%
- # of Chinese Speakers: 72,135

Next Up:

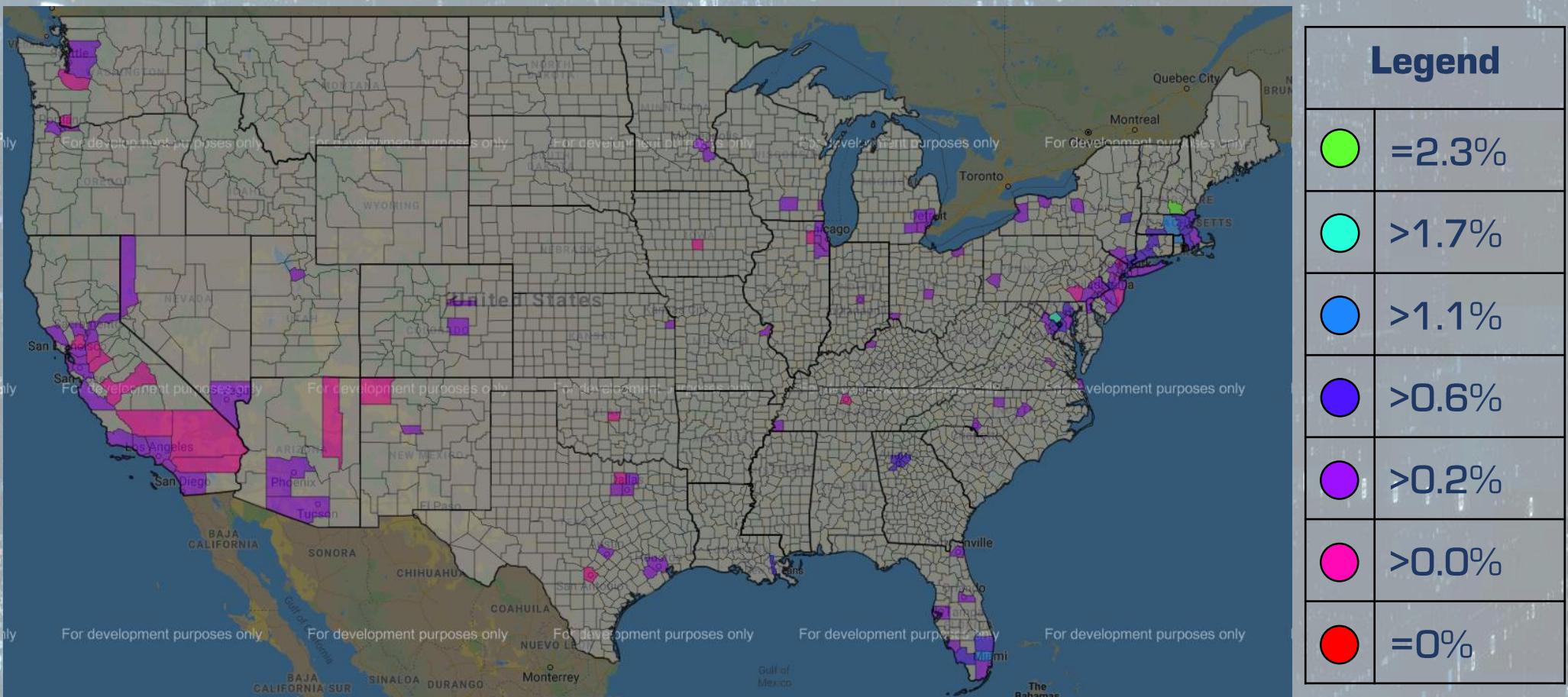
- Queens County, New York
- % Chinese Speaking: 5.2%
- # of Chinese Speakers: 120,505



Legend

●	=8.6%
●	>6.5%
●	>4.4%
●	>2.2%
●	>0.9%
●	>0.0%
●	=0%

Distribution of French Speakers



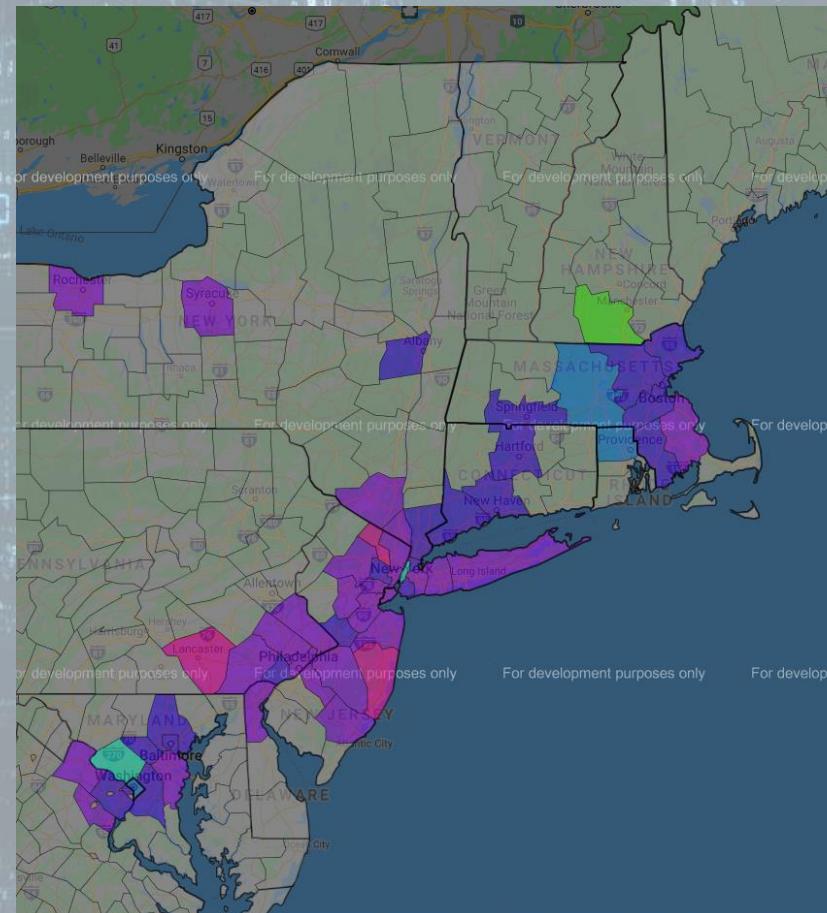
Distribution of Chinese Speakers

Foxborough County, NH

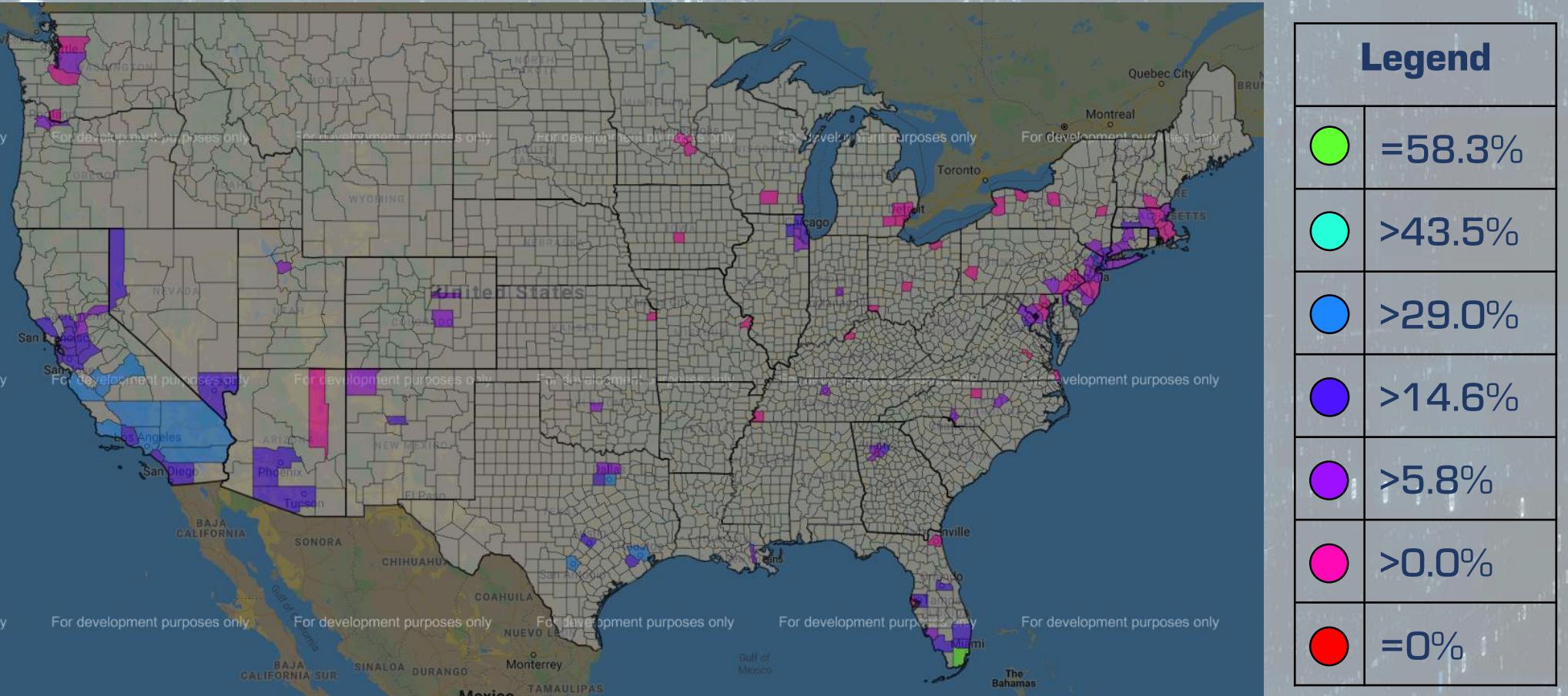
- Population: 403, 986
- % French Speaking: 2.3%
- # of French Speakers: 9,465

Next Up:

- Montgomery County, MD
- % French Speaking: 2.1%
- # of Chinese Speakers: 21,660



Distribution of Spanish Speakers



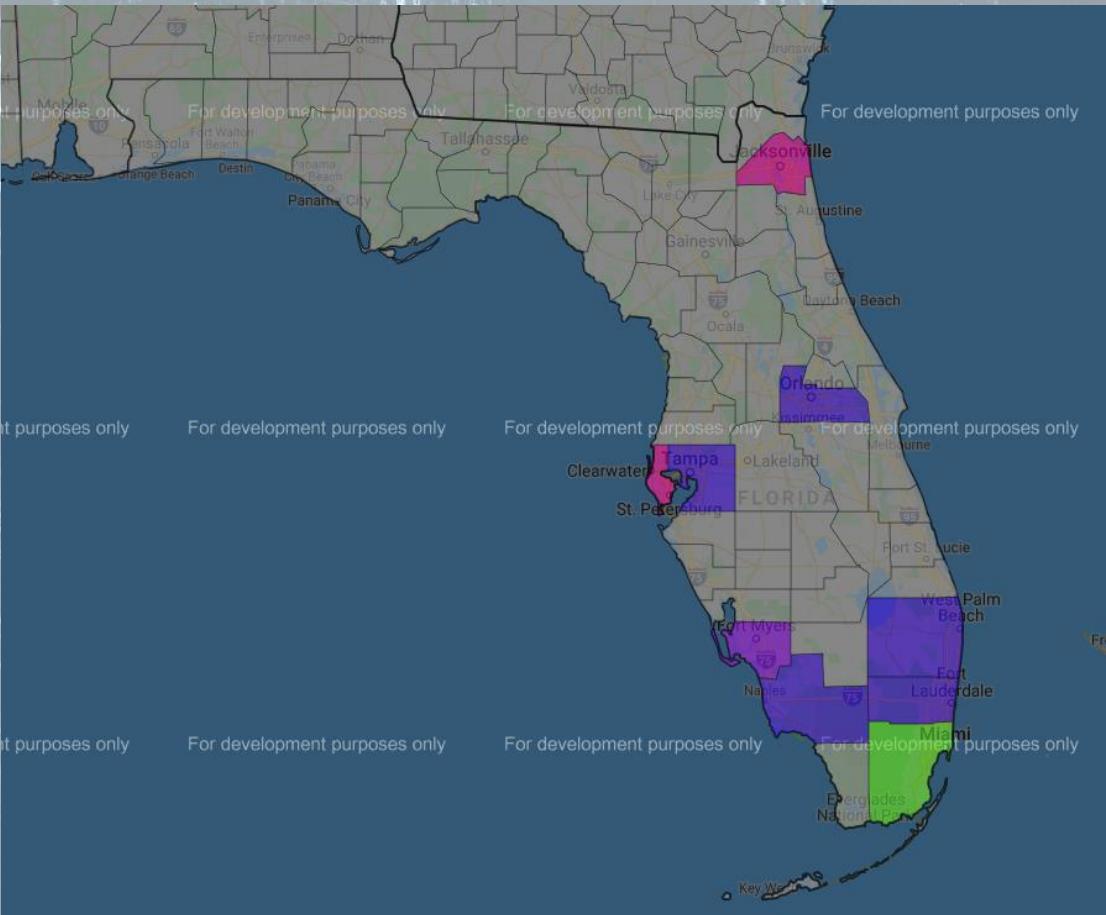
Distribution of Spanish Speakers

Miami-Dade County, FL

- Population: 2,617,176
- % Spanish Speaking: 58.3%
- # of Spanish Speakers: 1,526,290

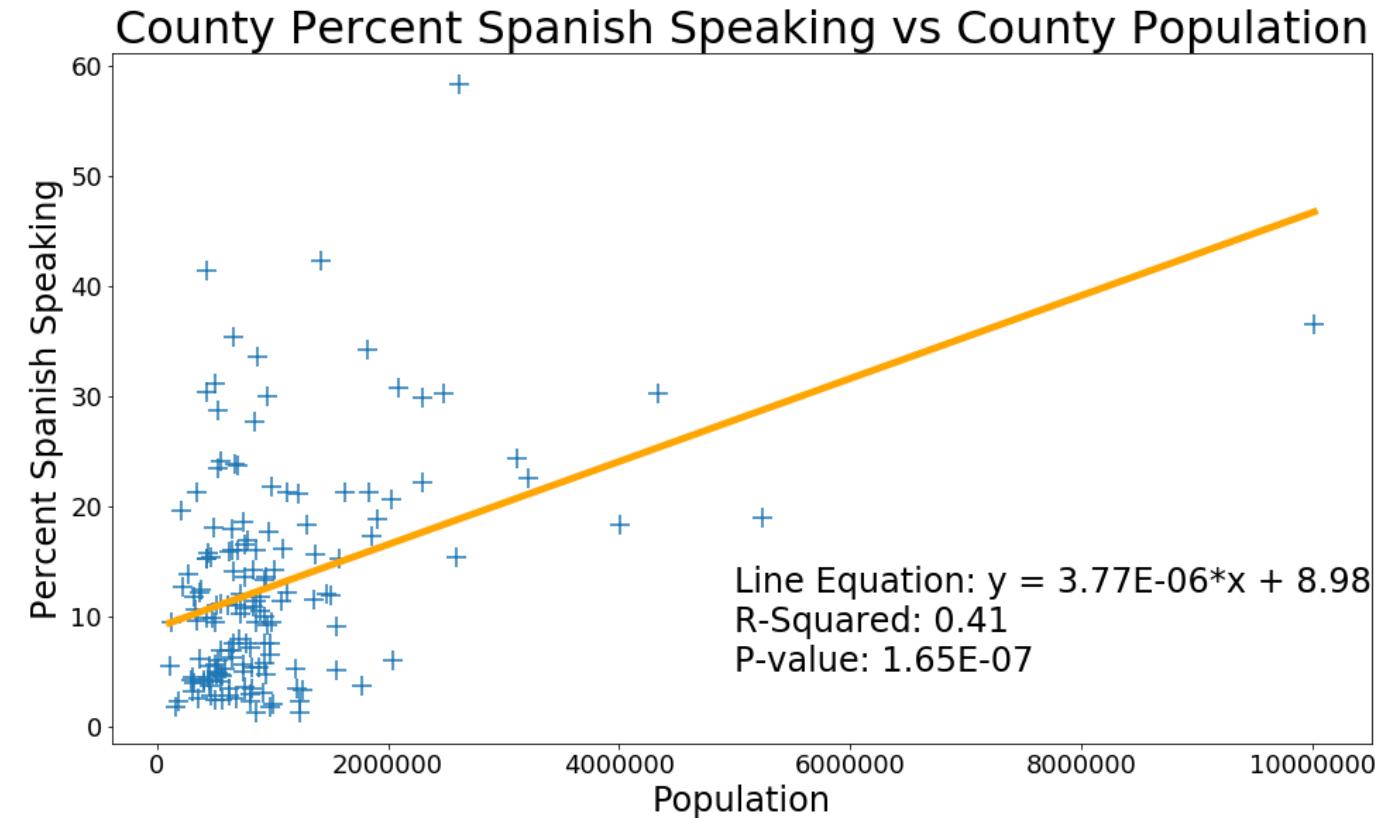
Next Up:

- Bronx County, NY
- % Spanish Speaking: 42.4%
- # of Spanish Speakers: 600,930

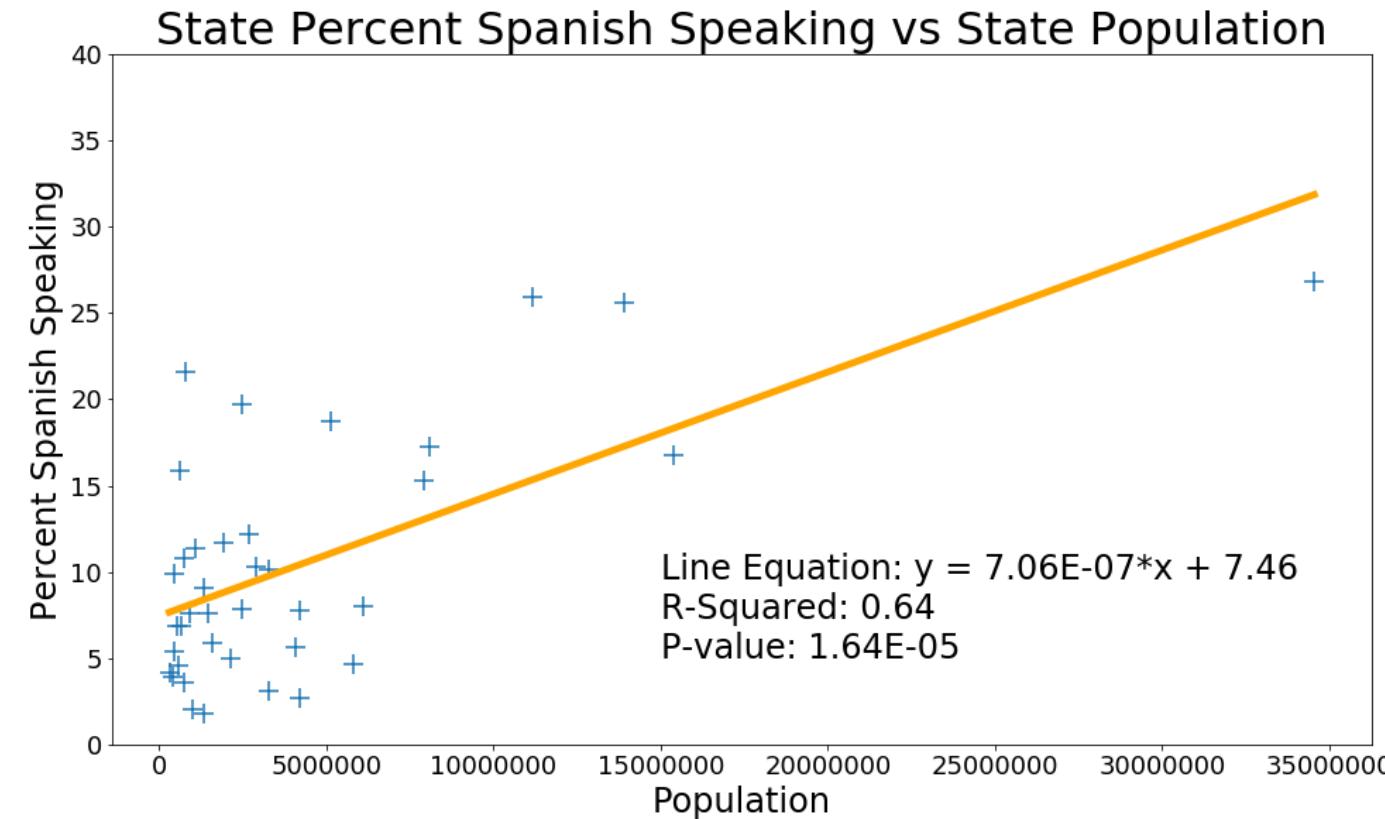


Legend	
●	=58.3%
●	>43.5%
●	>29.0%
●	>14.6%
●	>5.8%
●	>0.0%
●	=0%

Linear Regressions for Research Questions



Linear Regressions for Research Questions



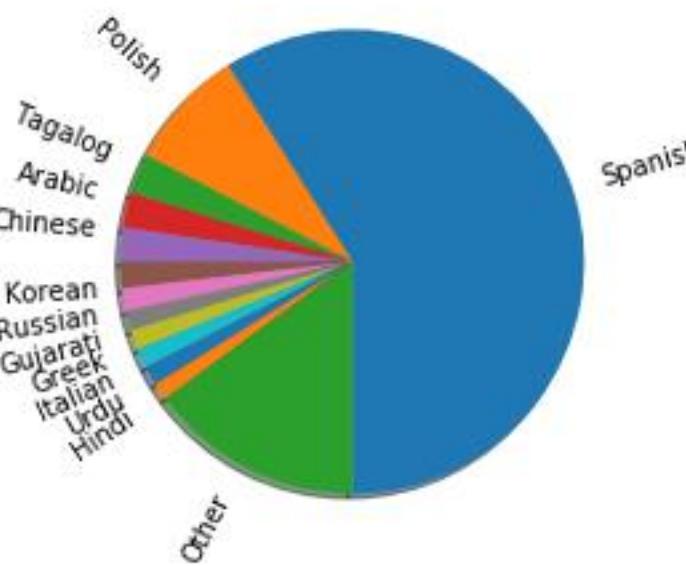
Cook County

- 115 languages are spoken at home in Cook County.
- 1 in 3 people speak a language other than English at home
- 60% of people who do not speak English at home speak Spanish.
 - Less than 9% speak the next most spoken language, Polish

	Spanish Speakers	Polish Speakers	Tagalog Speakers	Arabic Speakers	Chinese Speakers	Korean Speakers	Russian Speakers
	991,495	141,431	46,510	41,460	39,185	31,321	26,215
	Gujarati Speakers	Greek Speakers	Italian Speakers	Urdu Speakers	Hindi Speakers	Other Speakers	
	232,50	23,031	22,651	22,583	20,180	250,953	

Cook County

Breakdown of Languages Spoken in Cook County



Research Questions

- What languages are spoken here in Cook County?
 - Major language groups include Spanish, Polish, Tagalog, Arabic, Chinese, Korean, and Russian

Research Questions

- “Deep Dive” for French, Chinese and Spanish
- Where do speakers of these languages congregate?
 - French: The northeast and mid-Atlantic
 - Chinese: San Francisco Bay area
 - Spanish: Dispersed w/ large percentages in Miami and New York City
- How many are there in various US metropolitan areas?

Research Questions

- Do speakers of foreign languages tend to aggregate in larger metropolitan areas?
 - The percentage of Spanish speakers does increase somewhat by the size of the urban area

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