

# REFUGEE ARRIVALS AND STATE LEVEL CRIME CHANGE: Deconstructing the Myth that Refugees Increase Crime Rates

Vishakha Ramakrishnan, May 2016, PH 262: GIS for Public Health

## BACKGROUND

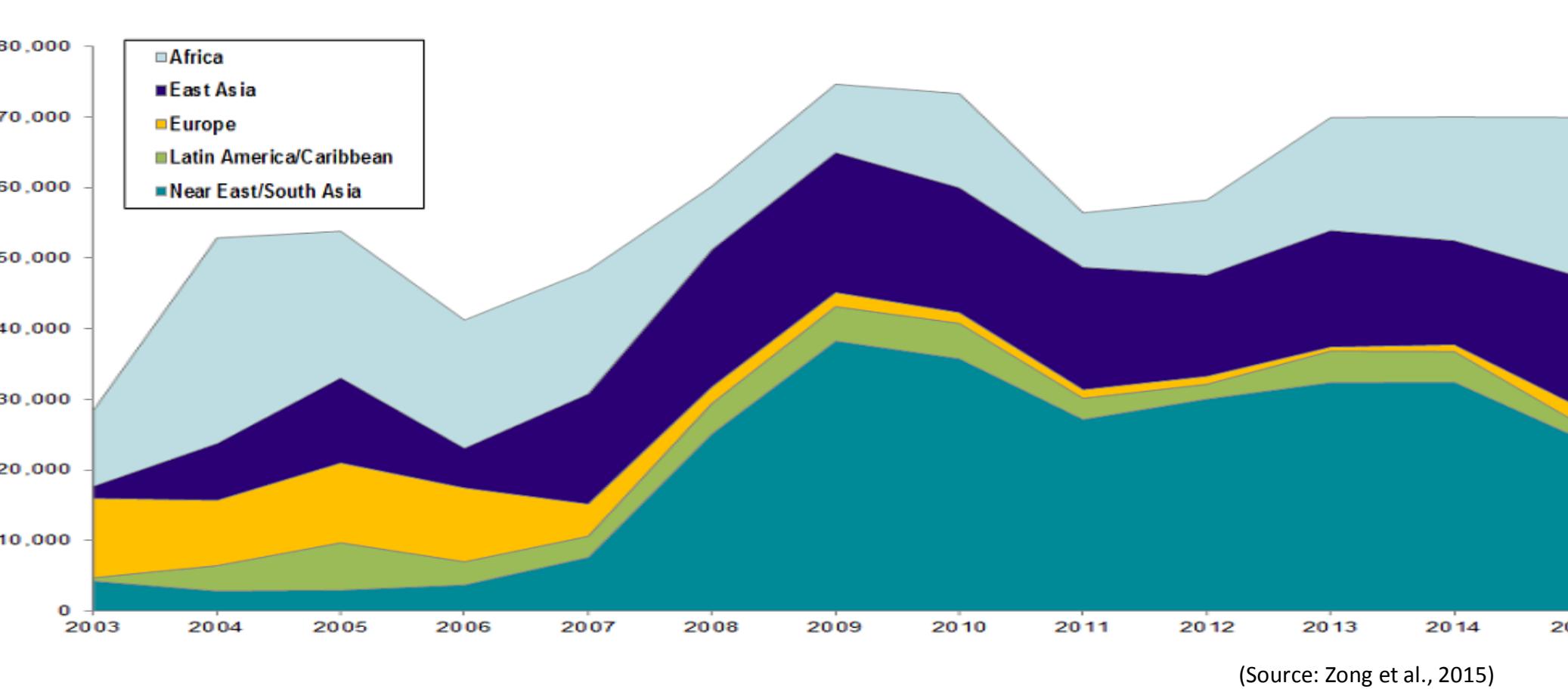
The myth that refugees increase crime rate in their location of resettlement has been asserted by politicians as a fear tactic to rally support during this election season. This project seeks to demonstrate visually that this is not the case. In my analysis, I will determine whether there is a spatial and geographic relationship between the states where refugees are resettled and the areas with high violent crime rates in the United States, and their relationship with governors' stances on refugees.

This topic is especially relevant today as the international refugee crisis intensifies; the number of refugees globally increased by 8.3 million between 2013 and 2014, and is the largest increase in refugees ever reported in the span one year. This dramatic increase can be attributed to the recent war in Syria, which is the largest cause of forced displacement worldwide. (United Nations High Commissioner for Refugees 2015). Though roughly only 1% of refugees worldwide are relocated to a third country (Bureau of Population, Refugees, and Migration, n.d.), the United States is the largest country for third country relocation in the world (Office of Refugee Resettlement, 2015). Resettlement occurs in all 50 states and Puerto Rico, but certain states are chosen more often to house refugees due to their greater ability to accommodate and provide for refugee populations. In the fiscal year 2013, the top three states where refugees were relocated were Texas with 7,475 refugees, California with 6,383, and Michigan with 4,651. (Office of Refugee Resettlement, 2015).

Though ultimately the decision of where to resettle refugees is made by the federal government, several United States governors have begun to voice their disapproval of refugee entry in the past year and have attempted to pass legislation that would block resettlement in their states. Thus, examining these variables at a state level has public health and political relevance; governors have the ability to influence and often reflect the knowledge and opinions of the people in their states, which can negatively impact the quality of life of refugees upon their settling.

## DEMOGRAPHIC TRENDS

In the past 30 years, the demographic of refugees entering the United States has changed dramatically. Most notable is the reduction in Asian refugees over this time period, and the emergence of Near East/South Asian refugee resettlers as a majority group in recent years. The greatest number of refugees were originally from Iraq, with 19,332 refugees entering in the 2013 Fiscal Year. Following Iraq is Burma with 16,295 refugees and Bhutan with 89,045 refugees resettling in the United States.



## DATA & LIMITATIONS

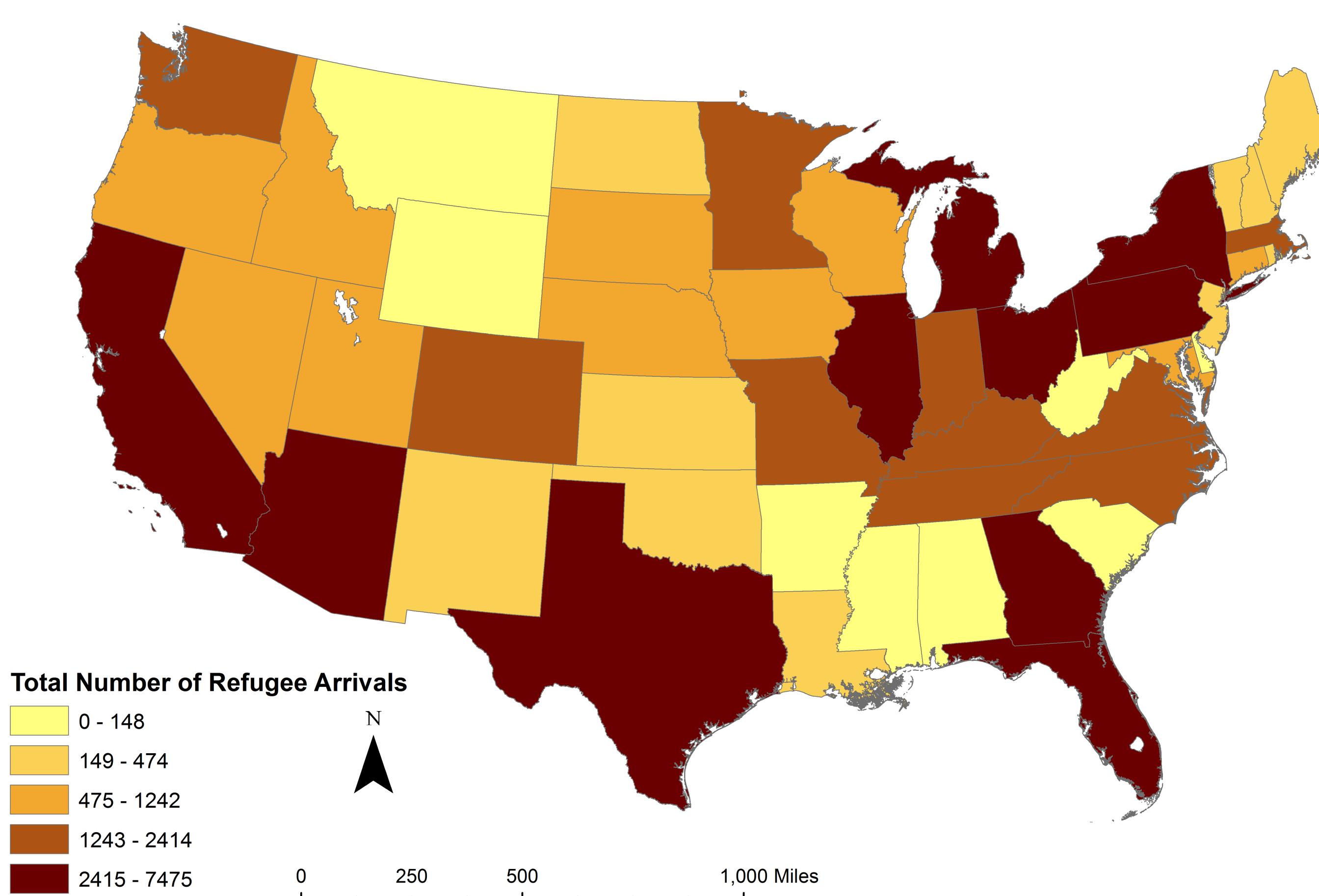
In this project, I am using data that is available from the Office of Refugee Resettlement website, the FBI US Crime Database, and a recent CNN news article. The Office of Refugee Resettlement provides a data repository of refugee arrival information, detailing country of origin and US state of resettlement. The FBI Crime Database provides detailed information on crime rates across the country dating back to 1995. The CNN news article provides a compilation of the states whose governors have spoken out against refugee resettlement as of November 2015. Using this data, I have created three descriptive choropleth maps that demonstrate the spatial and geographical relationship between refugee arrivals, crime rate, and governor attitudes towards refugees.

Limitations of this data include the fact that this analysis examines spatial and temporal associations and correlations, which makes it difficult to draw conclusions about causal relationships. Additionally, this data may be subject to ecological bias where the information about a state is used to make inferences about the nature of the people within the state as a whole.

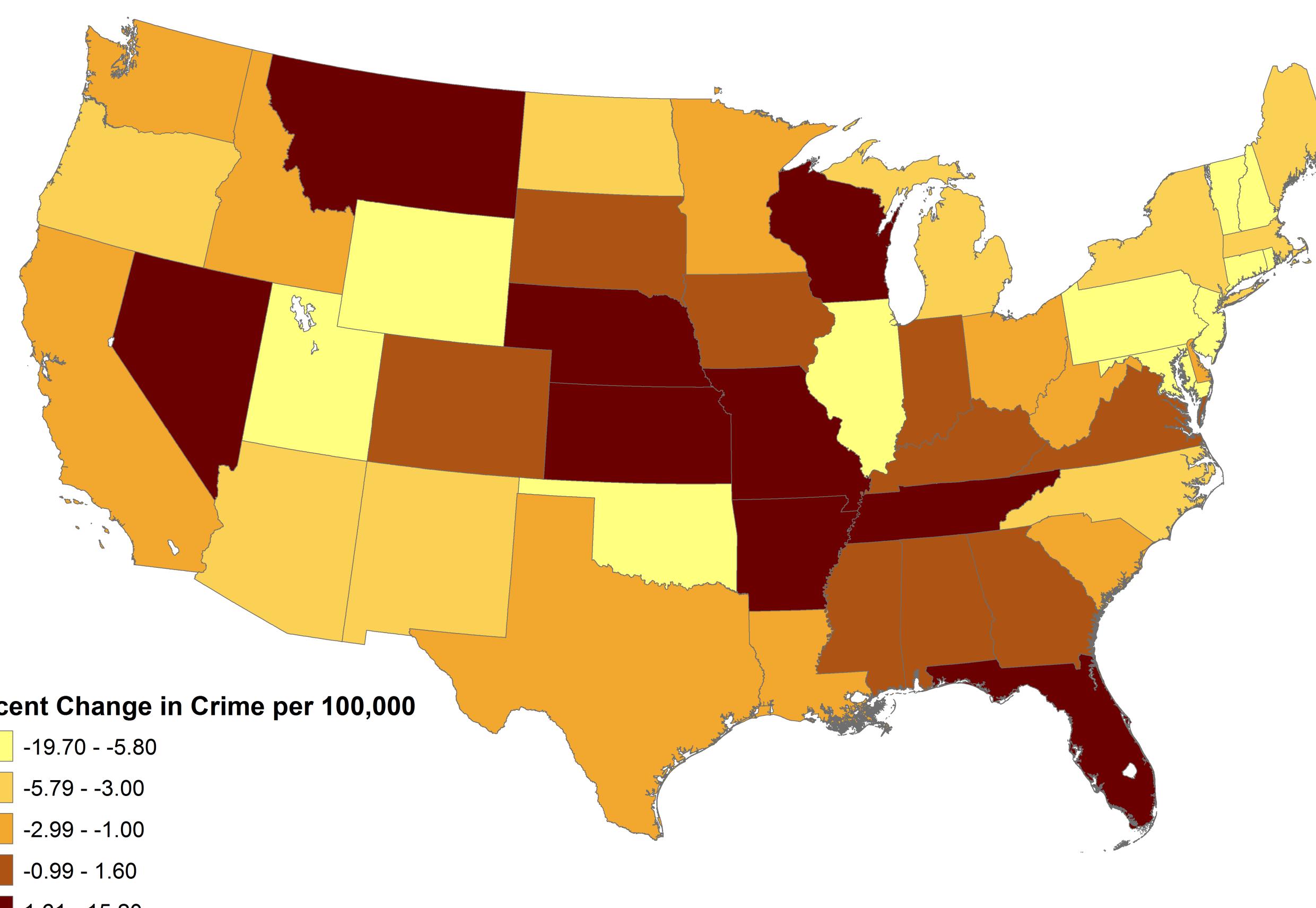
## METHODS

The first map demonstrates refugee arrivals by state in the 2013 fiscal year. This information was downloaded as a table in an Excel file from the Refugee Resettlement website, and was joined to a 2010 United States Census shapefile provided on the Tufts GIS M: drive. The second map represents the change in crime rate between the end of 2013 and the end of 2014 in each state in the US; this duration of time captures the impact that the refugee arrivals through the end of 2013 might have had on crime rate in their first year of living in the United States. The data is available online through the FBI crime rate database and was downloaded into a table in Excel, detailing states and the percent change in rate of violent crime per 100,000 people. The third map used data from a CNN news article that discusses the number of governors in the United States who have spoken out against refugee resettlement, and the states that they govern. I inputted this data into an Excel sheet, indicating the states whose governor is in opposition to refugee arrival. I then read this data into GIS and choropleth mapped the governor's opinions so this could be compared to the states where refugees are entering and the states where crime rate is increasing.

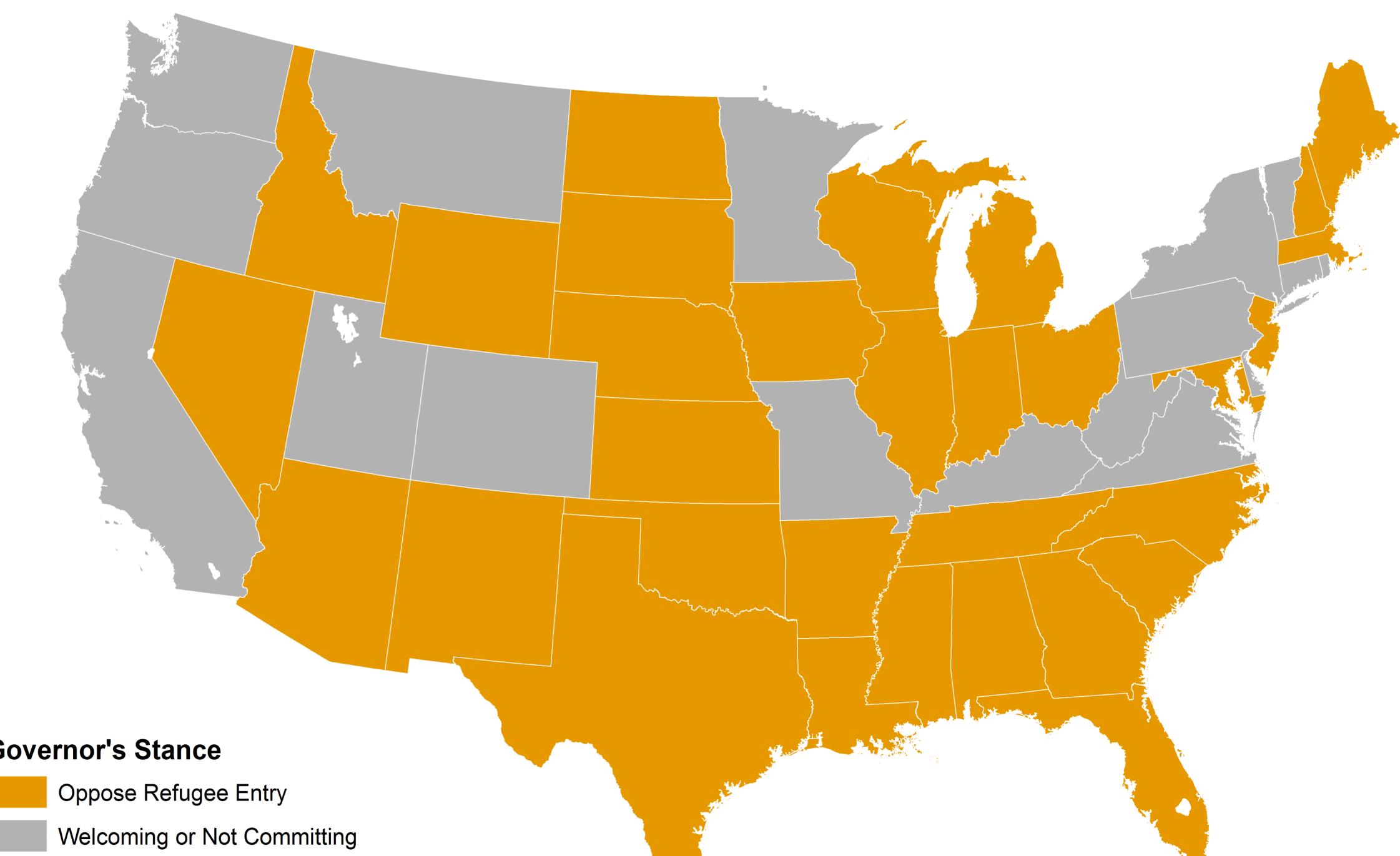
### Refugee Arrivals by State in the Fiscal Year 2013



### Percent Change in Crime Rate by State 2013 - 2014



## States Whose Governors Oppose Refugee Entry



## STATISTICAL ANALYSIS

	Refugee Arrivals r (sig)	Change in Crime r (sig)
Change in Crime r (sig)	0.0886 (0.5366)	
Governor Stance r (sig)	0.137 (0.9238)	0.1318 (0.3564)

Quantitative analyses were run on the data to determine the strength of possible associations between the number of refugee arrivals and the change in crime rate, between the number of refugee arrivals and governor's stance, and between the change in crime rate and the governor's stance. Three two-way correlations were run to determine the direction and statistical significance of these relationships using Stata/IC 14.0.

## RESULTS & DISCUSSION

**SPATIAL PATTERNS:** The GIS analysis reveals no spatial pattern across the three maps. The states with a higher number of refugee arrivals are not spatially related to the states where there is an increase in crime; in fact, the three states with the highest refugee arrivals in 2013 (Texas, California, and Michigan) saw a decrease in crime rate between 2013 and 2014. There is also no spatial pattern between the states where governors oppose refugee entry and states with high refugee entry or states with crime rate increases.

**STATISTICAL RESULTS:** The results of the statistical analysis reveal no significant correlation between refugee arrivals, crime rate increase, and state governor stance on refugee entry; this supports the spatially drawn conclusion of no significant correlation.

**FURTHER RESEARCH:** This research suggests that the claims that refugee entry and crime rate are related are false, and also suggests that the governor's opinions on refugee entry are based on some factor other than refugee entry and crime rate. Further research should be conducted to determine the relationship between political leanings of a particular governor and their stance on refugee entry. Research that assesses the spatial patterns of acceptability of refugees in state populations should also be examined, as the opinion of the governor of a state does not necessarily predict the actions of the people within the state.

## SOURCES

- Bureau of Population, Refugees, and Migration, *Refugee Admissions*. US Department of State, n.d. Web. 11 Apr. 2016. <<http://www.state.gov/j/prm/ra/>>.
- Fantz, Ashley, and Ben Brumfield. "Syrian Refugees Not Welcome in 31 U.S. States." Cable News Network, 19 Nov. 2015. Web. 03 May 2016. <<http://www.cnn.com/2015/11/16/world/paris-attacks-syrian-refugees-backlash/>>.
- Federal Bureau of Investigation. "Uniform Crime Reports: 2014 Crime in the United States." Federal Bureau of Investigation, 2014. Web. 03 May 2016. <<http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s./2014/crime-in-the-u.s./2014/tables/table-4>>.
- Office of Refugee Resettlement. *Fiscal Year 2013 Refugee Arrivals*. US Department of Health and Human Services, 11 Feb. 2015. Web. 11 Apr. 2016. <<http://www.acf.hhs.gov/programs/oir/resource/fiscal-year-2014-refugee-arrivals>>.
- United Nations High Commissioner for Refugees. *Worldwide displacement hits all-time high as war and persecution increase*. UNHCR, 18 June 2015. Web. 11 Apr. 2016. <<http://www.unhcr.org/558193896.html>>.
- Zong, Jie, and Jeannine Batalova. "Refugees and Asylees in the United States." Migration Policy Institute, 28 Oct. 2015. Web. May 2016. <<http://www.migrationpolicy.org/article/refugees-and-asylees-united-states>>.