# Vulnerability to Displacement

## in Post Peace Accord Colombia

#### **Introduction:**

Colombia has one of highest rates of internal displacement in the world with over seven million people displaced. This is the result of over 60 years of protracted civil conflict, including guerilla warfare, paramilitary armies, counterinsurgency and drug war operations, and general militarization of everyday life. In 2016, Colombian President Juan Manuel Santos signed a peace agreement with the Revolutionary Armed Forces of Colombia (FARC), Colombia's largest armed group. Unfortunately, this Peace Deal has not secured the end of violence, and Colombians have continued to be displaced. Between January 1st and December 31st, 2018, 145,000 new conflict and violence displacements were recorded by the Internal Displacement Monitoring Center (IDMC). This project focuses on identifying which Departments (Level 1) are most vulnerable to continued displacement trough the creation of a vulnerability score. This project aims to further understanding about post-peace accord displacement in Colombia. This spatial analysis will help the Colombian government and Humanitarian organizations address the continued absence of peace in some Departments which is resulting in displacement. Identifying which Departments are the most likely to experience conflict and therefore most vulnerable to displacement will allow Colombian authorities and humanitarian organizations to target peacebuilding and humanitarian response efforts in a more precise and effective manner.

### **Methodology and Techniques:**

To create the vulnerability index, I selected indicators identified in the literature that are correlated with conflict and displacement. My indicators fall under three categories. 1) migration history, 2) conflict history, and 3) structural indicators. These indicators were calculated using the 2018 Colombian data tabulated by Administrative Level 1 census (Departments). The majority of the data came from the Colombian Statistical Agency and was joined to the administrative boundaries. The small maps below show some of the 10 indicator maps I created in building a vulnerability index. Each indicator was assigned a score and tabulated into a total score for each of the above 3 categories. The score ranges for each indicator differed depending on the indicator, I used a weighted average to create each category score. The three categories were then tabulated to create the vulnerability Index; A low score indicates a low vulnerability to future

conflict-based displacement and a high score indicates a high vulnerability to future conflict-based displacement. In the final map I overlaid all instances of displacement in Colombia between April 2019 and April 2020 (Data from IDMC) over the vulnerability index map to compare which regions had actually experienced displacement compared to which were vulnerable to Displacement. You can see these two large maps to the right.

### **Results:**

The areas with the highest vulnerability are also the areas that have experienced large numbers of displacement in the last year. These are primarily regions with dense forest cover, are on the periphery of the country, have experienced large Coca cultivation, and have the highest percentage of minority populations. However, the vulnerability score takes into account historic displacement and conflict causing some departments to receive mediumlow vulnerability scores that actually should have received almost no risk to conflict-induced displacement. One example is Bogota which experienced many instances of violent conflict historically but is not currently vulnerable to conflict-induced displacement.

### **Limitations:**

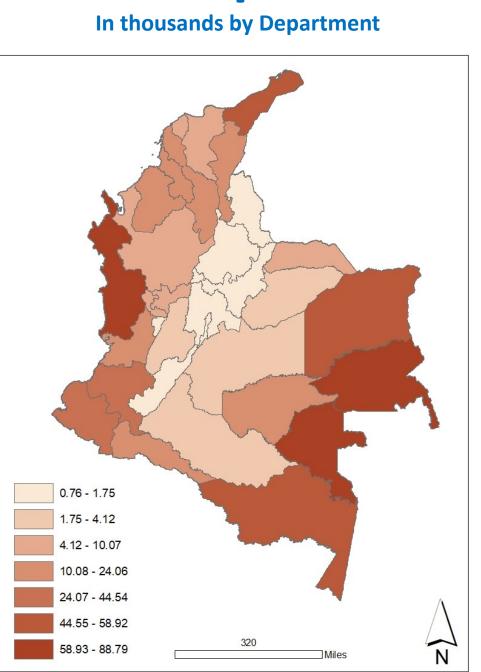
The primary limitations are in my own design of the vulnerability index. However, the data that was available was primarily from the Colombian census. Given that Colombia experienced 60 years of Civil war and continued violence it seems that even the census data could be incomplete. The population data likely does not include anyone who is part of one of the many Non-State Armed groups actively working against and hiding from the Colombian government. Additionally, because people are constantly being displaced and displacement in Colombia is often experience multiple times it is hard to truly capture the full picture. The data also only captures those who are displaced in "mass displacements" of 6 or more people and not when Armed actors forcibly steal land from an individual. Changes in the Colombian census website necessitated that I change my project from Municipal (level 2) analysis which would have been 1122 data points to Department Level (Level 1) analysis which is only 33 data points. This greatly simplified the Index and reduced the utility. If I were to repeat this analysis. I would have included other obvious indicators such as poverty rate, and territory contested by Non-State Armed groups.

# 30000 - 76642

### **2018 Population**

1555597 - 3789874

3789875 - 7181469



**Percent Minority** 

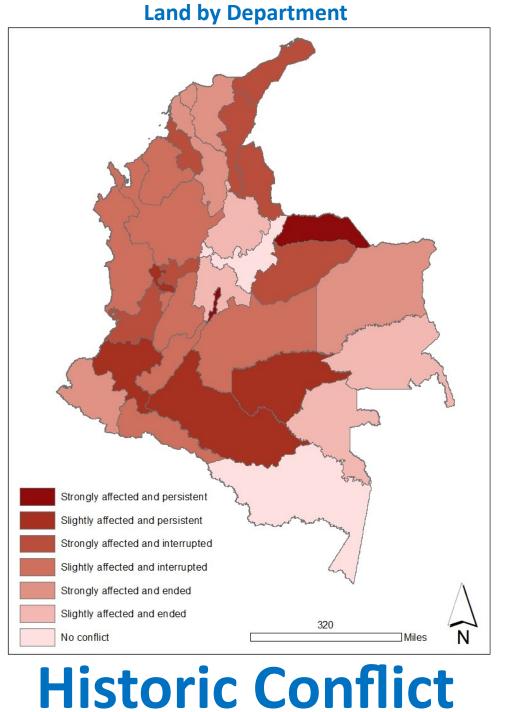
**Population by Department** 

## **Percent Forested**

27.96 - 34.80%

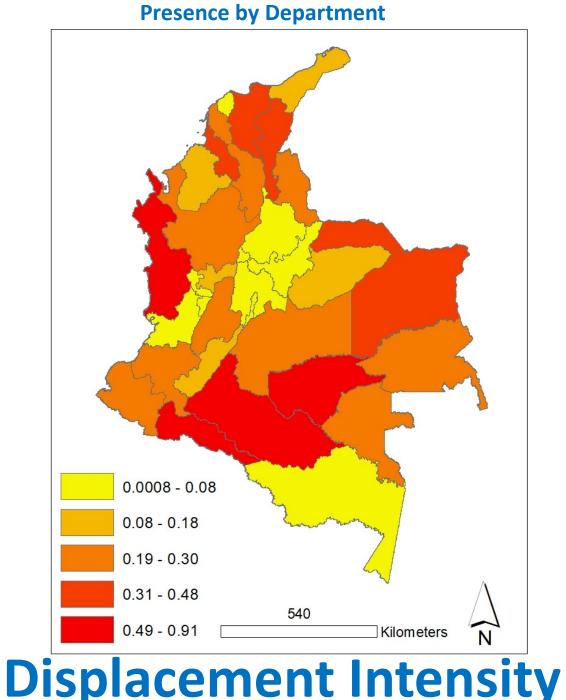
34.81 - 57.67%

57.68 - 97.49%



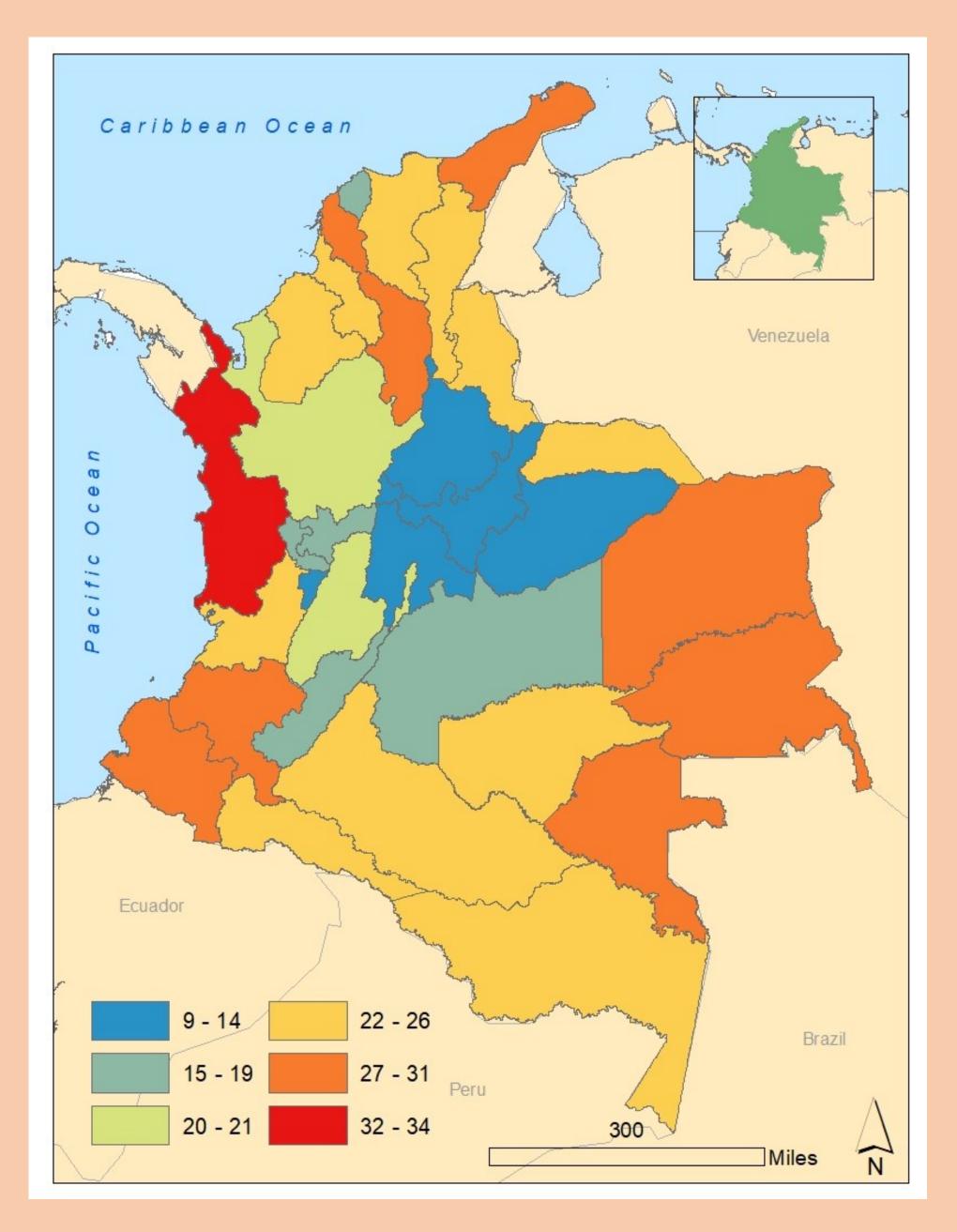
**Presence by Department** 

### **Coca Production**



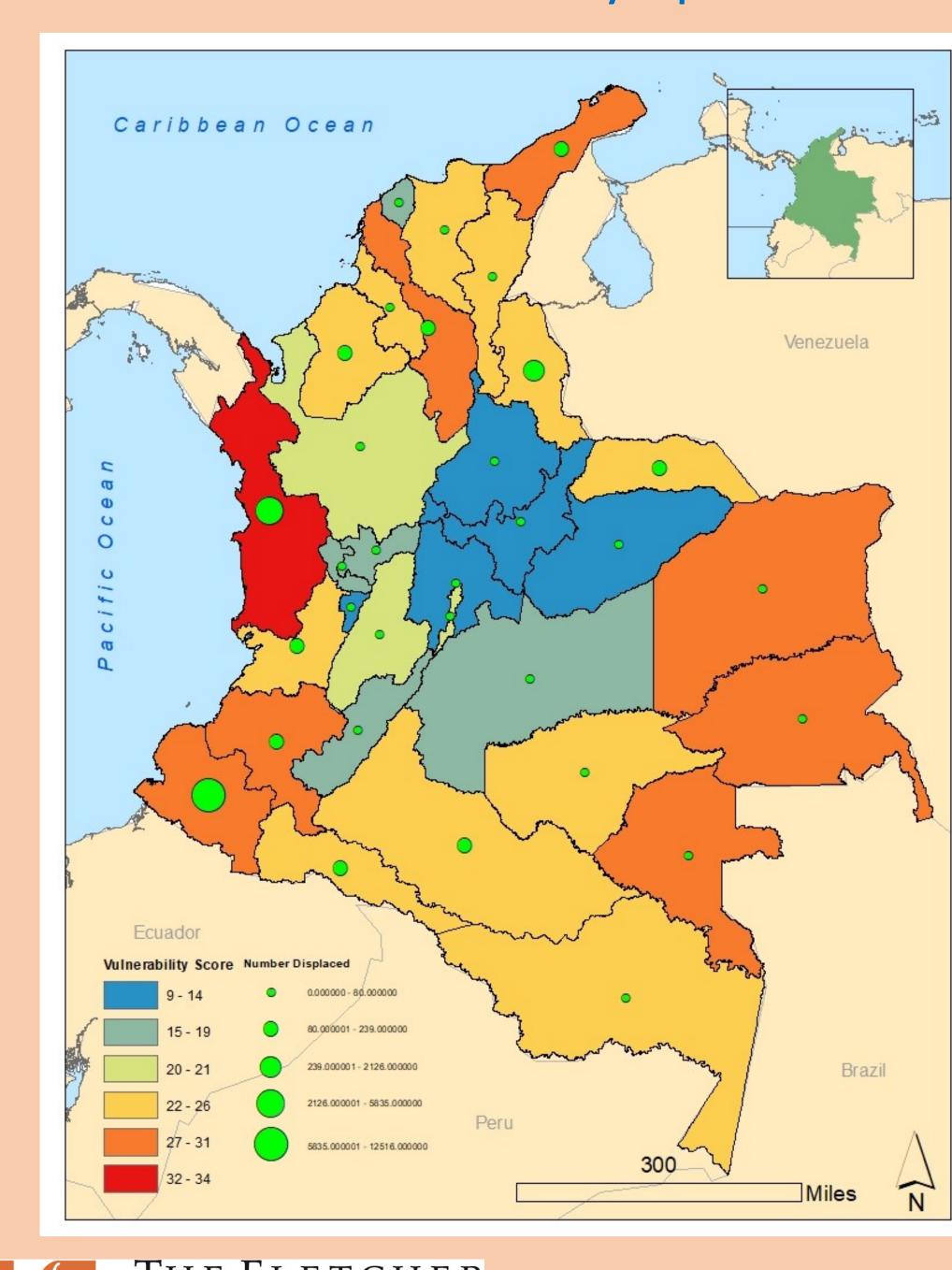
## Vulnerability Score

**By Department** 



## Number of People Displaced

Between 2019 and 2020 by Department



THE FLETCHER Cartographer: Hallie E Westlund, May 2020 SCHOOL

DHP P207: GIS for International Applications

TUFTS UNIVERSITY

Coordinate System: Bogota\_UTM\_Zone\_18N

Projection: Traverse\_Mercator

Data Sources: National Statistic Office of Colombia (Dane.gov.co), International Displacement Monitoring Network (IDMC), Indepaz,

UNODC, National Victims Registry of Colombia, CERAC, and ESRIDataMaps10

Presence by Department