

Trouble in the Marvelous City

Density of Reported Shootouts in Rio de Janeiro, Brazil 2003-2015

Ari Snider • SOC1340 • December, 2017

The Problem

1. Rio de Janeiro, Brazil's 2nd largest city, is home to more than 6 million people and experiences high levels of violence related to the drug trade.
2. Over 20% of the city's population lives in favelas (informal squatter neighborhoods), which experience acute economic, political, and social marginalization.
3. Figure 1 shows the location of every favela in Rio, mapped by the number of reported shootouts from 2003-2015.
4. Since the 1980s, militarized drug gangs have taken control of most of the city's favelas, creating localized authoritarian governments in many cases.
5. In 2008, the city launched a policy known as Pacification, in which specialized police forces occupied dozens of favelas to reduce levels of violence and weaken the grip of drug gangs.
6. Pacification was promoted as a new chapter in the long and fraught relationship between the police and favela residents, and it was received with great hope. However, the policy has stagnated as Pacifying police forces have been accused of corruption and abuse, drug gangs have remained powerful forces in many favelas, and international attention has faded with the conclusion of the 2016 Olympic Games.
7. Despite the shortcomings of Pacification, it is important to quantify its effects on public security, as drug trade-related violence remains a serious problem in Rio and in Brazil at large.

Data Sources:

Joan Monteiro; city of Rio de Janeiro <http://portalgeo-prj.opendata.arcgis.com/>

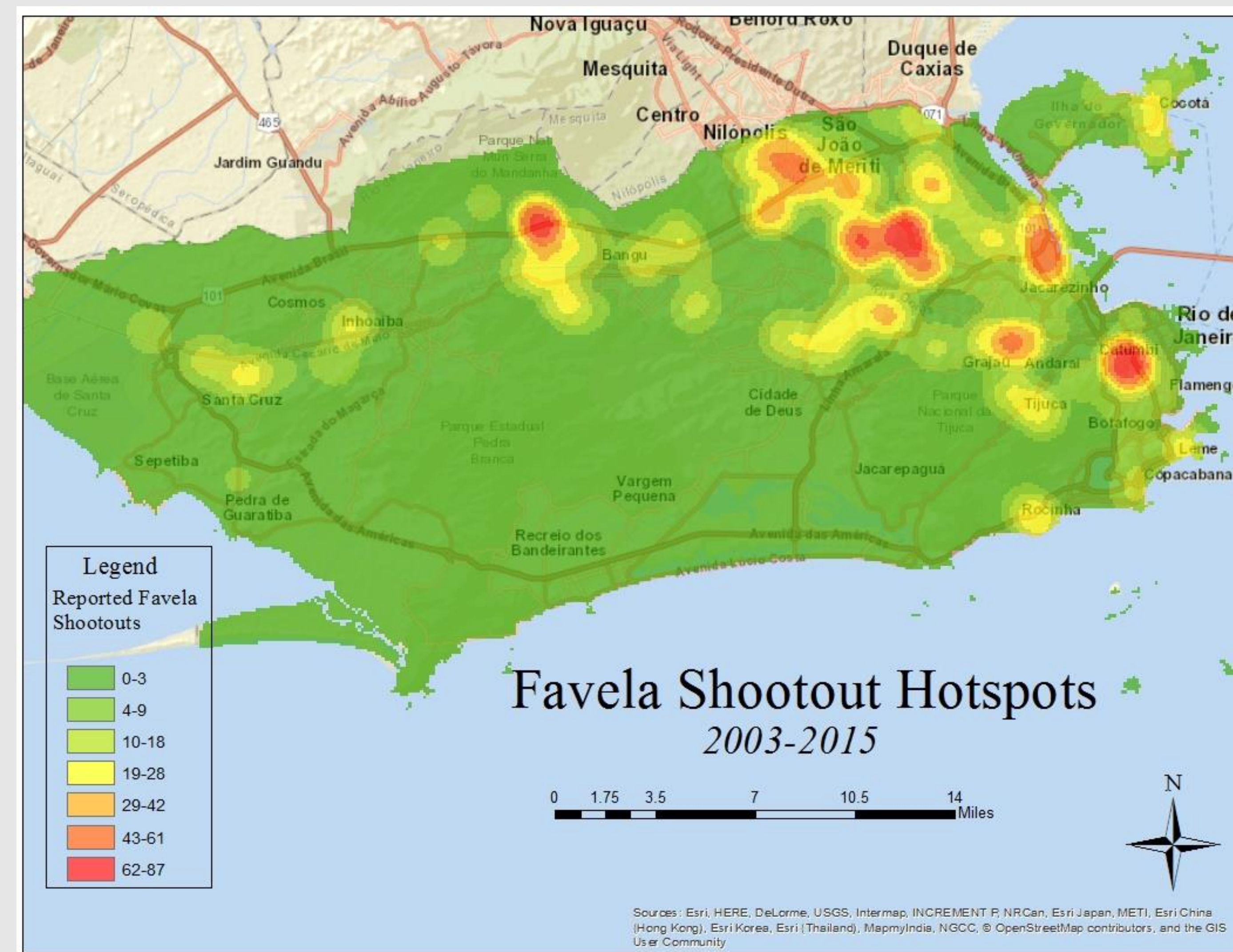


Figure 2

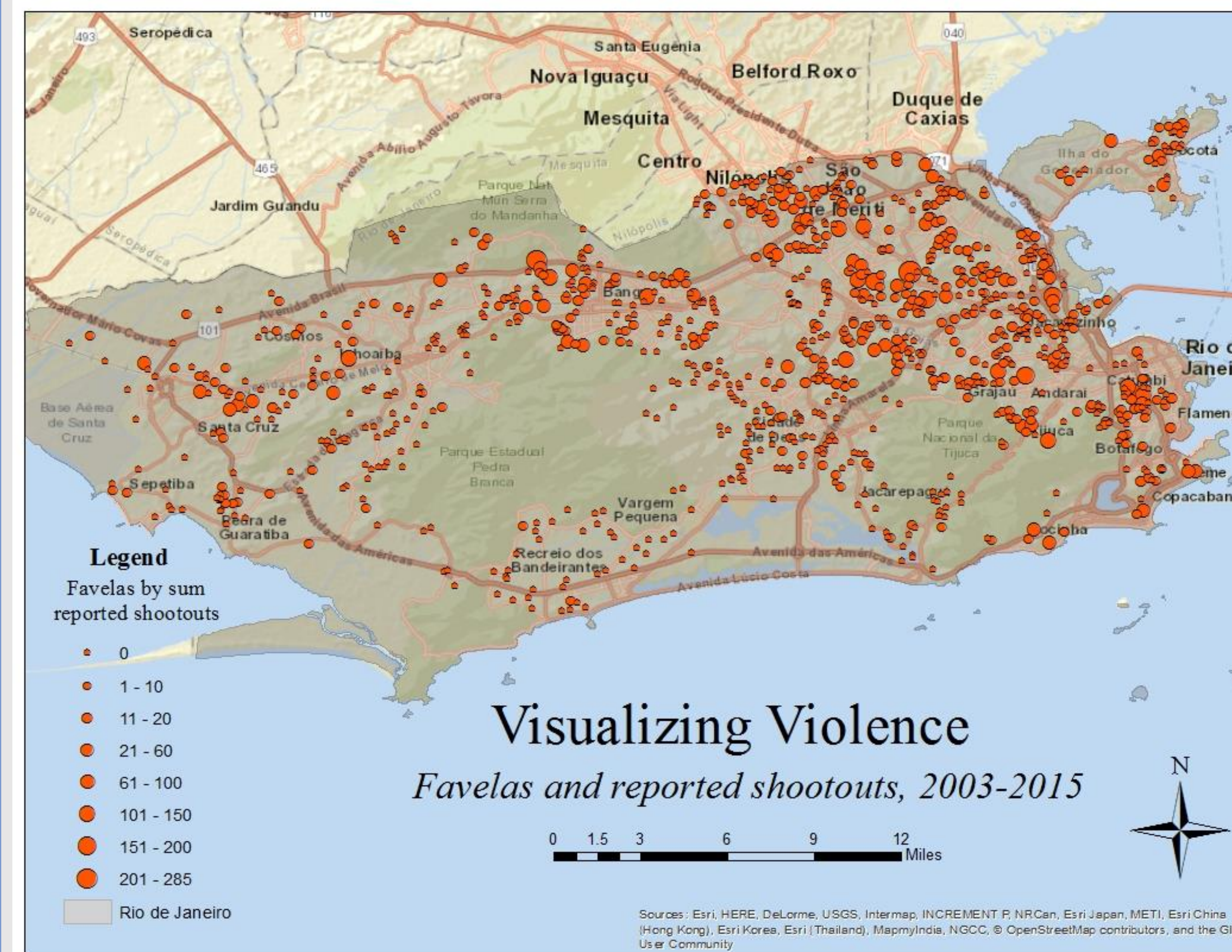


Figure 1

The Question

Which parts of the city have had the highest density of favela-based shootouts, and have those hotspots changed since the policy of Pacification began in 2008?

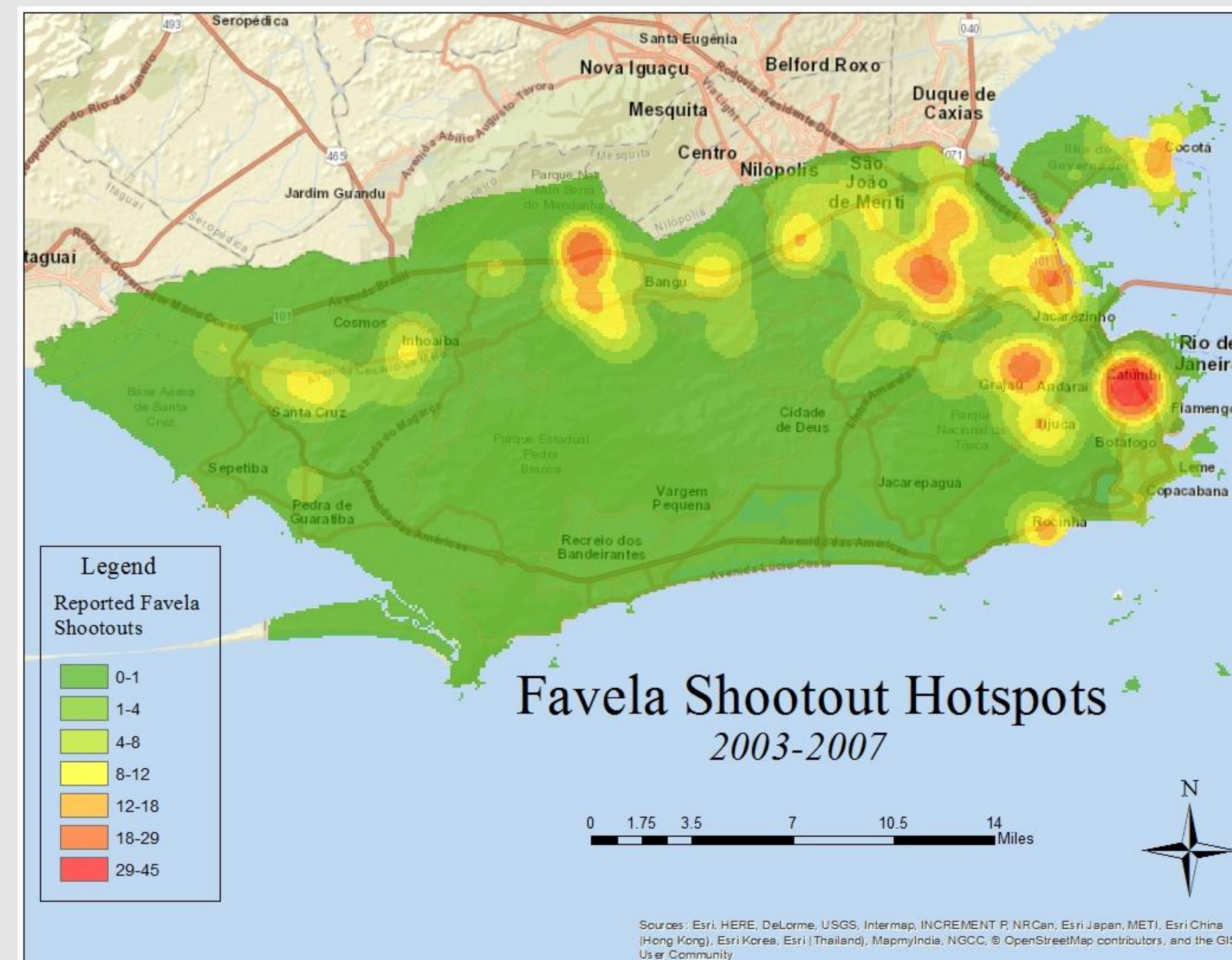


Figure 3

The Methodology

1. Using reported shootouts from favelas from 2003-2015, I created three kernel density maps showing density of reported favela shootouts, and one map showing the distribution of favelas in Rio. It is important to note that shootouts that did not take place in a favela, or that went unreported, are not included in this study.
2. Figure 2 shows shootout density for the entire period, giving an overarching perspective on where the most favela shootouts have been occurring. Figure 3 shows shootout density for the pre-Pacification period, and Figure 4 shows the density since Pacification began.

The Results

1. Pacification resulted in the displacement of favela shootout hotspots within Rio.
2. Figure 3 shows that before Pacification began, several of the largest shootout hotspots were located in the southeastern sector of the city.
3. Figure 4 shows that during Pacification, the hotspots moved to the north and western zones.
4. The southeastern sector of the city, which is home to Rio's business district and its wealthiest neighborhoods, received some of the first Pacifying units in the lead-up to the 2014 World Cup, whereas the poorer and more distant western and northern zones were located farther from the public eye and received fewer pacifying units.
5. Though Pacification cannot be entirely explained as a public relations stunt in preparation for the World Cup and the Olympics, it had the effect of decreasing shootouts in the wealthier, more touristy zones of the city while pushing drug gangs (and shootouts) to poorer, more neglected regions.

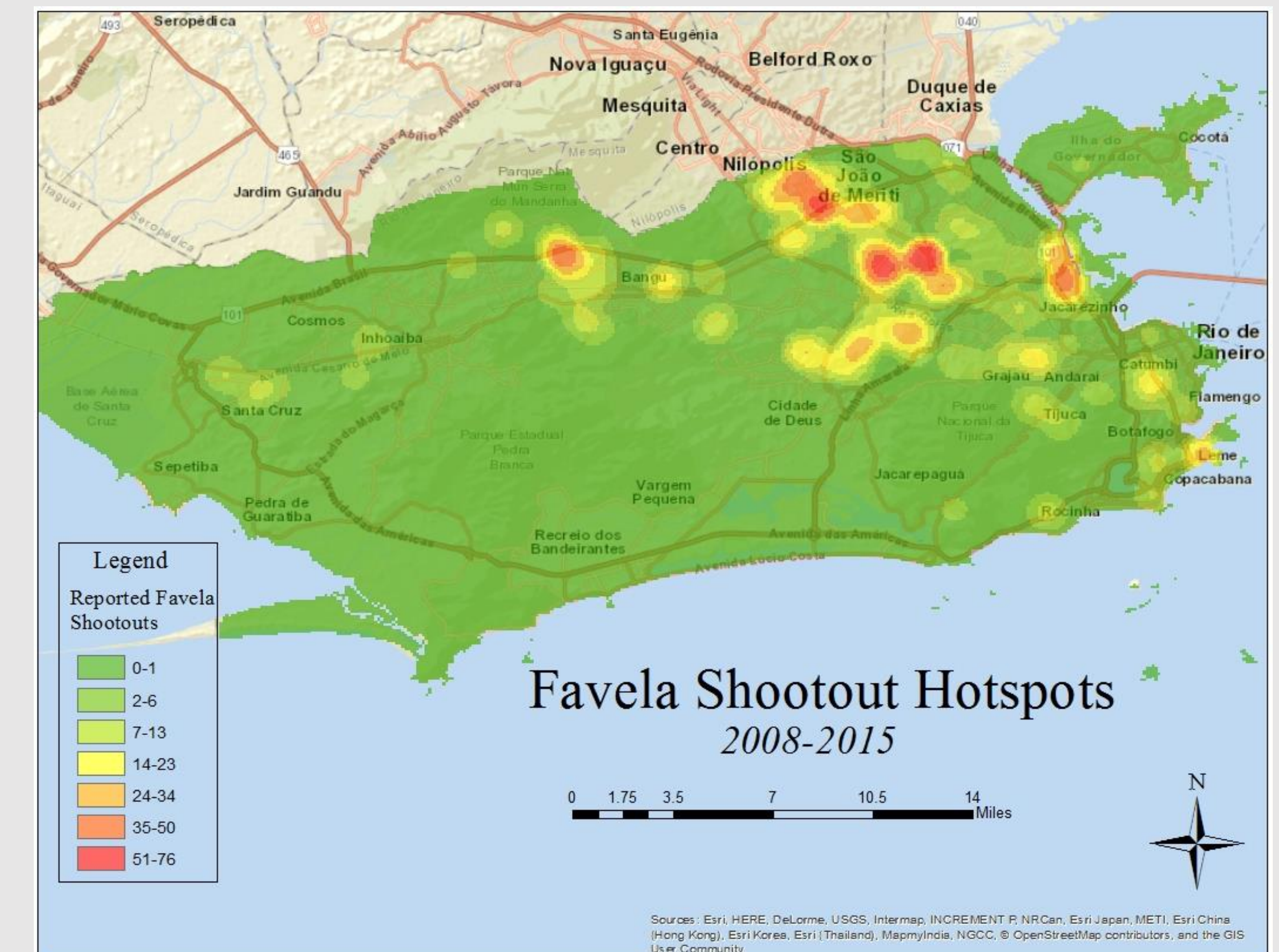


Figure 4