Tracking the Incidence of Terrorism in Pakistan 1995 - 2015

Introduction
This project analyses and tracks terrorist attacks in Pakistan across a twenty-year time period: the analysis looks at the clustering and centers of fatalities as a result of terror incidents pre- and post-9/11 in an attempt to understand the density and spread of terrorism at the district level. This has been a politically turbulent time for Pakistan with regime changes and the US invasions of Iraq and Afghanistan putting Pakistan in the middle of the conflict due to its geopolitical location. To further delve into the spatial aspect of terrorism, the project uses regression analysis to understand whether there is a spatial relationship between poverty and terror incidents over time. As shown by the Shifting Center of Terrorism map, the mean center of terror incidents in Pakistan has shifted to show the domestic and political situation changing over the past twenty years. It can be seen that the mean center of violence has shifted from near Karachi in 1995 to near the Afghan border in 2015.

Data & Methodology
This analysis used data spread across twenty years. Two datasets in particular were invaluable – BFRS Political Violence in Pakistan and the Armed Conflict Location & Event Data (ACLED). Both collect incident-level data on political violence and terror incidents in Pakistan. This allowed for a granular approach to data cleaning as those incidents specifically classified as terror incidents perpetrated by domestic or international terror actors that resulted in fatalities were able to be selected. This included incidents such as suicide bomb blasts, IED explosions, shootings etc. Both ACLED and BFRS data use news reports from various news agencies in Pakistan to collect information on terrorist incidents. Additionally, data on population and social security beneficiaries were collected from the Pakistani government sources. The data was extensively cleaned for relevance before any kind of spatial analysis was undertaken.

This analysis used a series of spatial and attribute joins to ensure that the data was uniformly available for analysis at the district level (the most granular level that all data was available at). First, the Global Moran’s I tool was used to determine if there was spatial clustering for all five years that comprise the study. The findings suggested that spatial clustering of terror incidents did exist. The Anselin Local Moran’s I tool was then used to determine if there was spatial clustering of terror incidents for all five years. This can be observed in the maps displayed to the right as the Fatality Cluster maps for 1995-2015.

Results & Conclusion
The regression analysis undertaken for 2010 and 2015 use health and education facilities per district to explain a relationship between the location of fatalities as a result of terrorism and the location of these fatalities. This was done to formulate a proxy for poverty/service provision in districts. It can be seen that for 2015, that the number of education facilities per district are significant. This implies that terror incidents decrease when there is a higher number of education facilities in a district. Other observations from the concentration of fatalities show that terrorism has increased over the post-9/11 period as the US Invasion of Afghanistan intensified and terrorist organizations found an increasing foothold in the regions on the Afghan border.

In conclusion, the search for data for this project found large amounts of data, research and literature on terrorism and violence in Pakistan. There was scarce spatial data on other socioeconomic and development indicators. Therefore, the analysis must acknowledge the fact that existing available data creates further research on related topics. The narrative of Pakistan has been inextricably tied with terrorism and violence and perhaps, the fact that easily available data is related to these topics may fuel that narrative’s pervasiveness.