

# Comparing Broadband Speed with Crime Rates in Atlanta, Georgia By Census Tracts

## Project Description

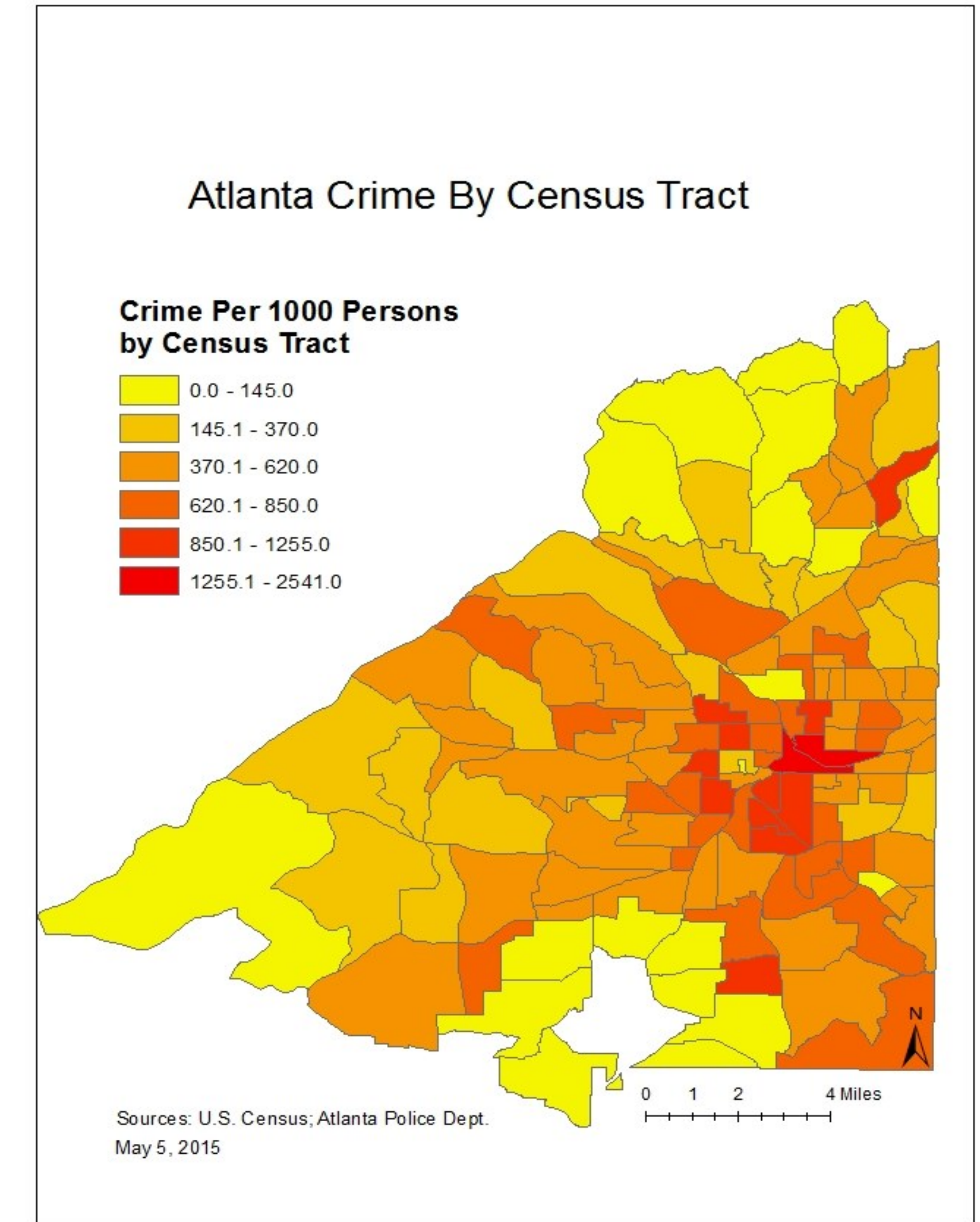
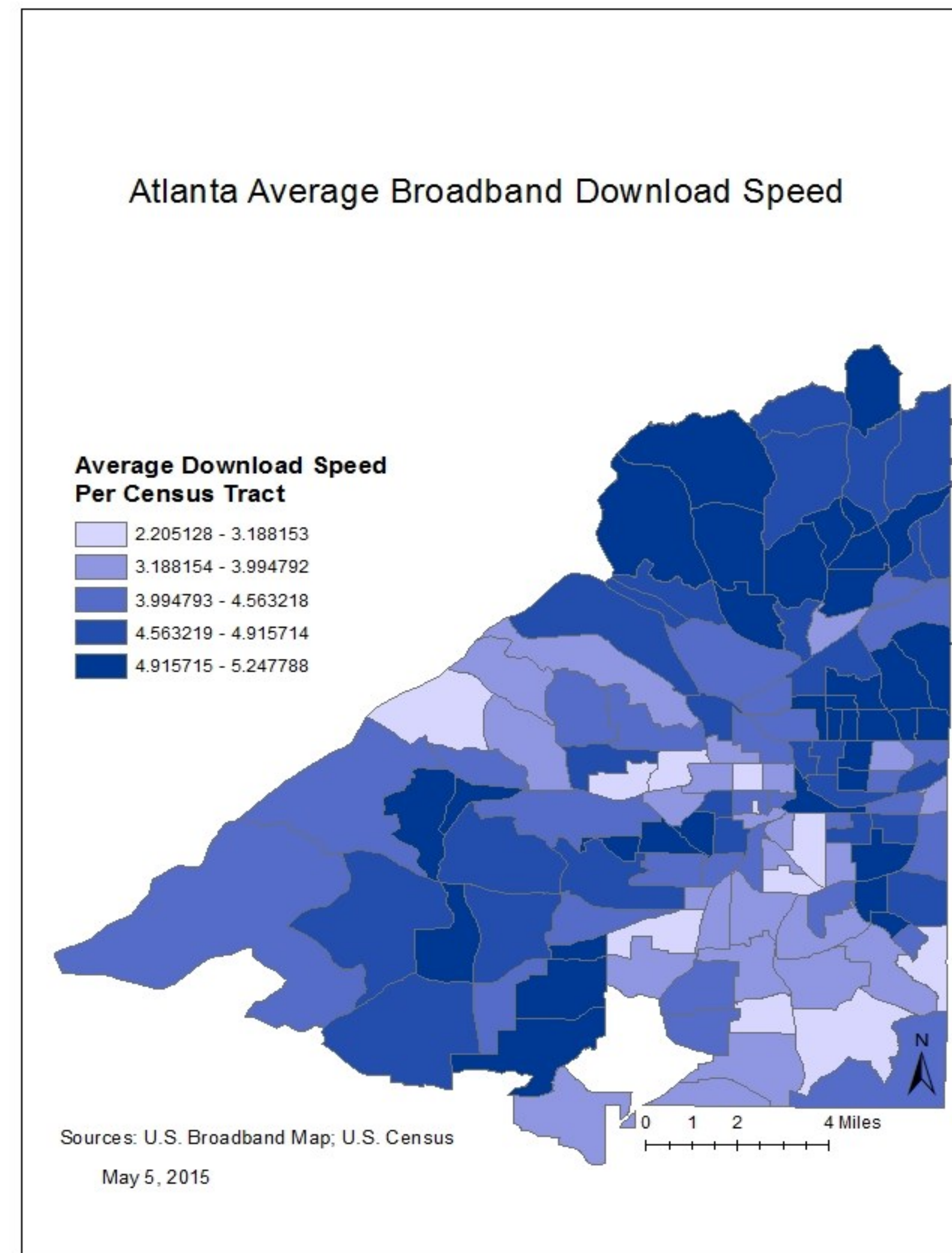
This project examines how communication technology correlates with crime rates. In particular, it determines whether or not there is lesser crime in areas that have faster broadband speeds.

## What is Broadband?

Broadband is an internet transmission technique using a high number of frequencies. This allows for multiple and continuous transmission. Internet speeds typically exceed 1.5 Mbps.

## Social Benefits of Broadband

The deployment of broadband networks creates jobs and influences the economy through multiple means. Access to information means better access to capital, markets, and training. People need these resources in order to pursue a career or education. Broadband helps to increase participation in political processes. It also encourages the recognition of young people as responsible citizens in today's society. Broadband allows for the facilitation of social media. A tool which enables civil protest, giving voice to the disenfranchised.



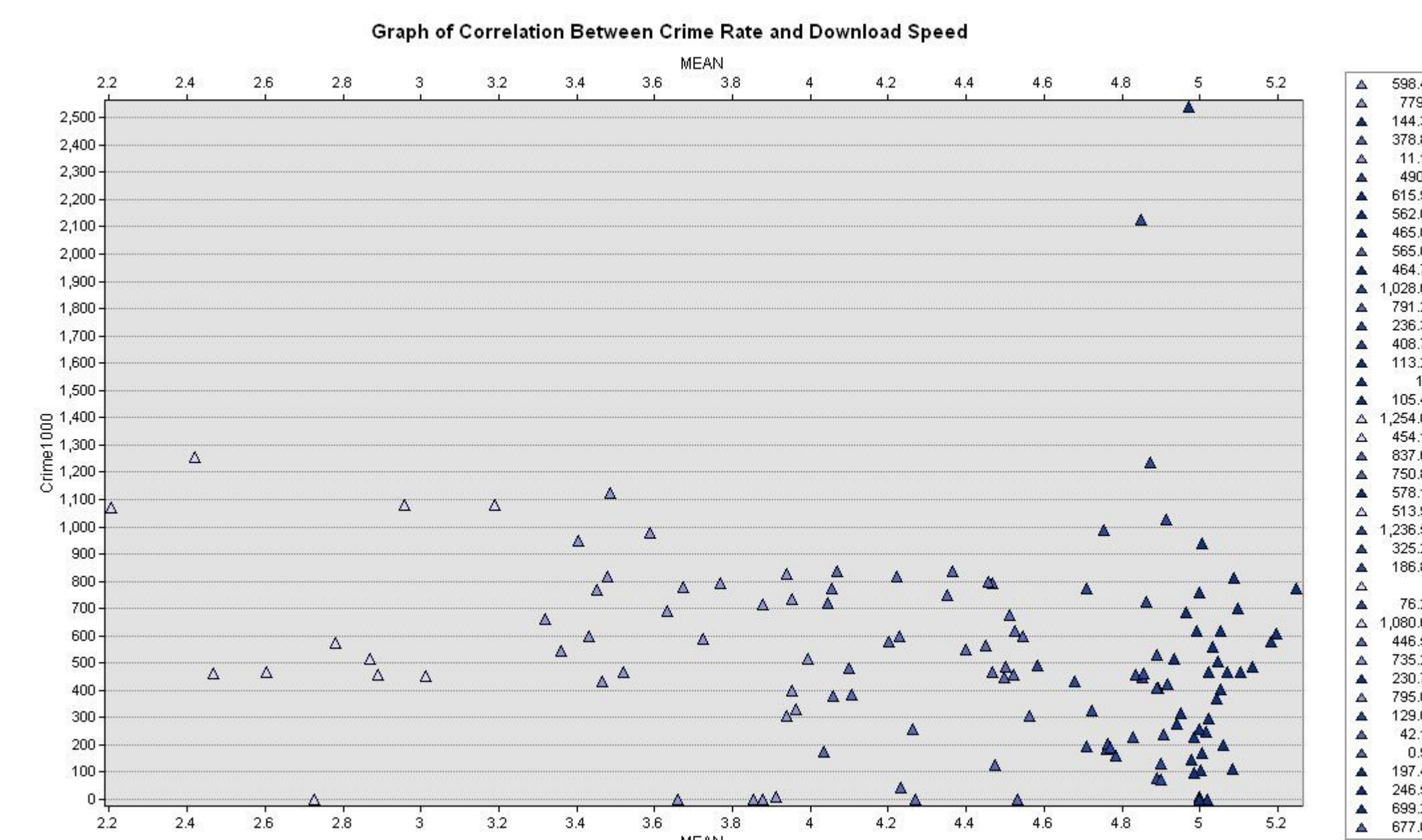
Protests in Atlanta following incidents in Ferguson, Missouri.

## Broadband and CCTV

The effectiveness of CCTV as a deterrent has been mixed at best; however, studies have shown that increased numbers of CCTVs in certain areas have served as a crime deterrent. CCTV requires high broadband speeds to function properly. CCTV cannot function if downloads are running at low rates.

## Methodology

To investigate correlations, I used census data and U.S. broadband map data to examine broadband speeds in census tracts. I then used Atlanta crime rate data that I received from the Atlanta police department. The rates are compared to the total population. I then used a scatter plot to check for correlations.



Inverse correlation between crime and broadband speeds (above).

## Results

A side by side comparison of the maps will show that the center of the city has slower broadband rates and higher crime rates. In the northern portion of the city, there are higher broadband speeds and higher broadband rates. The graph also shows an inverse correlation that demonstrates that crime rates are higher where there are lower broadband speeds.

## Limitations

This study does not take into account other factors that could affect crime rates and broadband speeds, such as income, education, etc.

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