

Introduction

In early February of this year, the AP released a secret document detailing the joint plans of the New York Police Department (NYPD) and Central Intelligence Agency (CIA) to covertly surveil and infiltrate Shi'a mosques throughout the New York City Metropolitan area. The report, entitled "US-Iran Conflict: The Threat to New York City" and dated May 15, 2006, called for the increased monitoring of Islamic congregations, including the canvassing of neighborhoods, the identification of "hot spots" of activity, and the installation of surveillance cameras surrounding certain mosques. In addition, the report outlined eight Shi'a mosques within the confines of New York City that deserved particular attention. In a *USA Today* article on the report, an anonymous former police official was quoted as saying that, while "generally, the recommendations were followed, [I cannot say] for sure whether these mosques were infiltrated."

In the wake of the report, numerous leaders of New York City's Islamic community have called for a formal investigation of its recommendations and the NYPD's subsequent actions. However, Mayor Michael Bloomberg vehemently defended the report:

"It's very cute to do and to blame everybody and say we should stay away from anything that smack of intelligence gathering. The job of our law enforcement if to make sure that they prevent things."

Other NYPD officials claimed that "everything we're doing is done constitutional" and that "officers may go wherever the public goes and collect intelligence." Yet while the police openly admitted to enlisting informants and plainclothes officers to secretly collect data on Shi'a mosques and catalog the surrounding neighborhoods, they did not admit to directly targeting the mosques, specifically with regards to uniformed officers.

This study attempts to quantify the increase in surveillance of Shi'a Mosques in New York City following the release of the report. While data are not available on the activities of undercover agents or the location and dates of installation of surveillance cameras, data are available on instances and locations when police officers stop, question, and frisk (SQF) people under supposedly justified suspicions of guilt for a variety of crimes. These data have been used in other situations to show the preponderance of racial profiling in certain areas, especially African American and Hispanic communities. However, they have not yet been used as a proxy for the activities of plainclothes or even undercover agents.

Data and Methodology:

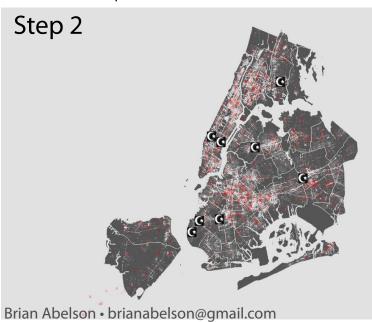
As mentioned above, this study utilizes SQF data as a proxy for the surveillance of Shi'a mosques in New York City. However, one cannot merely look at police activity before and after the report and make conclusions. It is necessary to also control for intra-precinct activity around similar locations so as to ensure that, controlling for localized factors, activity around mosques increased significantly. By taking a sample of 32 two churches within New York City – four for each of the eight precincts in which the mosques are located – this study attempts to isolate the effect of the report of police surveillance of Shi'a mosques. On the following pages, I detail the specifics of the methodology through four maps:

METHODOLOGY

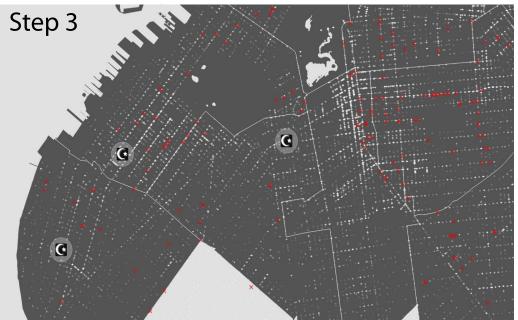
We began by obtaining and mapping SQF data from 2006. This constituted over 500,000 stops throughout New York City.



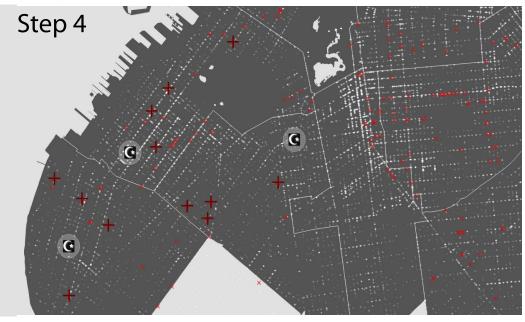
The locations of the eight mosques were geocoded and mapped. We then obtained a list of 2200 churches in New York City provided by Community Board Three in the Bronx. The addresses of these churches were then geocoded and added to the map.



Next, we drew a buffer of 1000 feet around the eight mosques. All churches within this range were removed from the sample.

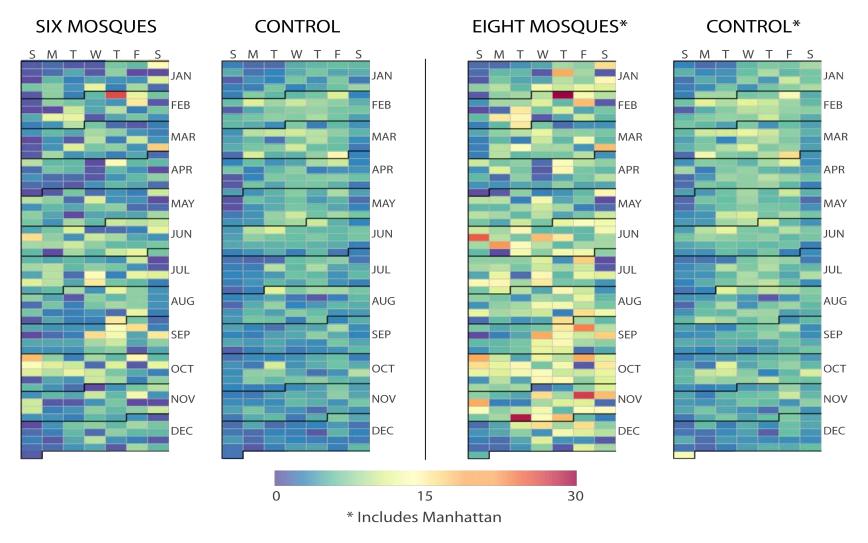


Within each precint, four churches were selected from the remaining sample as controls. We ensure that these churches did not fall along the border of precincts so as to isolate intra-precint police activity. Finally, we count the number of stops per day around the mosques and churches during 2006.

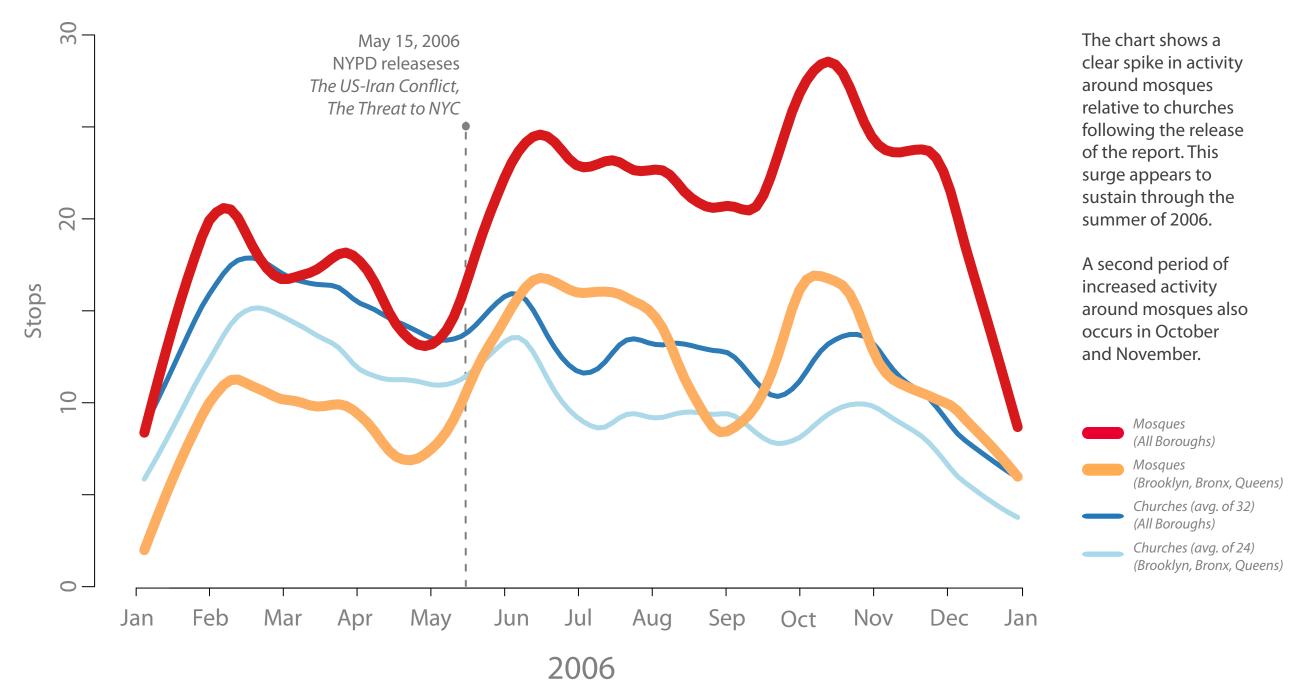


Descriptive Statistics:

From these locations of mosques, controls, and stops, we then calculate the count of stops per day within 400 meters of the mosques and the churches. Next, we average the counts of the four control churches within each precinct to estimate average activity around religious institutions within a given locality. These data are visualized below in a calendar heatmap. On the next page, these counts are shown with lowess-smoothed line charts.

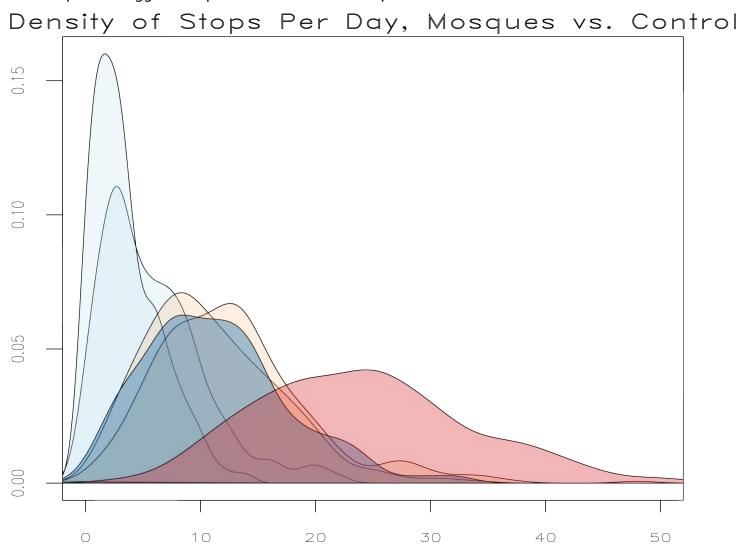


Stops By Day Within 1000 Feet of Mosques and Churches



Model Selection and Specification

Since the data in question are counts within a limited geographic range, we should expect that the data follow a poisson or negative binomial distribution. Density plots of the counts (below) and goodness-of-fit tests (not included here) confirm this suspicion. The higher level of dispersion suggest that poisson models are inadequate.



However, since there are a significant number of zero-counts in the data, particularly when we try to isolate the relationship at the precinct-level, we choose to employ zero-inflated negative binomial regression so as to control for the influence that zero-counts have on the data. In addition, we use Vuong tests to assess the degree to which the addition of zero-inflation represents an improvement over the normal negative binomial models.

Across all the models, two sets of variables are included to show the difference before-and-after the report. In one set of models, a spline is added at the week following the release of report. In a second set of models, dummies are included for each month of 2006, with January excluded because of collinearity. In the latter case, the particular month of interest is June, being the month immediately following the release of the report. In addition, models are also included which remove mosques and churches in Manhattan so as to avoid the influence of outliers. Finally, in order to isolate the relationship at the precinct-level and identify particular areas where activity was significantly high, we test each mosque against the average of four churches within the same precinct.

ZERO INFLATED NEGATIVE BINOMIAL REGRESSION RESUTS:

| Zero-Infl (spline) | All Mosques | | Pct 17 | Pct 18 | Pct 43 | Pct 66 | Pct 68 | Pct 72 | Pct 103 | Pct 108 |
|-----------------------------|---|---|---------|---|----------------|--------|---|---------------|---|---|
| Spline | 0.32*** | 0.26*** | 0.80*** | -0.22 | 0.74* | 0.47* | -0.39 | -0.43** | 0.81*** | -0.21 |
| All Controls | 0.06*** | | | | | | | | • | |
| - Manhattan | | 0.06*** . | | | | | | | | |
| Pct 17 | | | 0.27* | | | | | | • | • |
| Pct 18 | | | | 0.16 | | | | | • | |
| Pct 43 | | | | | | | | | • | |
| Pct 66 | | | | | | | | | • | |
| Pct 68 | • | | | | | | | | • | |
| Pct 72 | • | | | | | | • | | . 0.08* | • |
| Pct 103 | • | • | | | | | | | | 0.21 |
| Pct 108 | 1.49*** | 1.23*** | 1.40 | -2.24* | -1.35 | 0.49 | -1.43 | -0.2 | 0.64** | 0.21 0.86 |
| Log(theta) Zero-inflated | | -4.456*** | -15.03 | -2.24" -10.54 | -1.55 -3.58 | -0.45 | -1.43 -0.60 | -0.2 -8.00 | -2.91** | -0.93 |
| Vuong Test (p-value) | | 0.34 | 0.18 | 0.40 | 0.39 | 0.39 | 0.43 | -8.00 0.48 | 0.30 | 0.23 |
| vuolig lest (p-value) | 0.42 | 0.54 | 0.16 | 0.40 | 0.59 | 0.59 | 0.43 | 0.40 | 0.50 | 0.23 |
| Zero-Infl (month) | All Mosques | - Manhattan | Pct 17 | Pct 18 | Pct 43 | Pct 66 | Pct 68 | Pct 72 | Pct 103 | Pct 108 |
| All Controls | 0.06*** | | | | | | | | • | |
| - Manhattan | | 0.05** . | | | | | | | • | • |
| Pct 17 | | | 0.17 | | | | | | | |
| Pct 18 | | | | 0.12 | | | | | • | • |
| Pct 43 | | | | | 0.23 | | | | • | |
| Pct 66 | | | | | | 0.17* | | | • | |
| Pct 68 | | | | | | | | | . | |
| Pct 72 | | | | | | | | | | • |
| Pct 103 | • | | | • | | | | | . 0.08 | |
| Pct 108 | | | | | | | | | | 0.13 |
| Feb | 0.11 | 0.32 | 0.25 | -0.74 | 0.76 | 0.29 | 1.14 | 0.42 | -0.26 | 1.96*** |
| Mar | -0.11 | 0.05 | 0.11 | -0.60* | -0.09 | -0.10 | 0.14 | 0.23 | -0.35 | 1.59** |
| Apr | -0.18 | -0.12 | -0.87* | -0.74 | 0.57 | 0.75 | -0.09 | 0.00 | -1.03*** | 1.46** |
| May | -0.09 | 0.12 | -0.48 | -0.61 | -1.17 | 0.54 | -0.40 | 0.02 | -0.24 | 1.87*** |
| Jun | 0.39** | 0.49** | 0.64* | -0.02 | 1.04 | 0.67 | -0.18 | -0.21 | 0.72** | 1.40** |
| Jul | 0.21 | 0.44* | -0.47 | -0.52 | 1.12 | 1.31** | -1.18 | -0.21 | 0.51* | 1.54** |
| Aug | 0.15 | 0.21 | 0.60* | -0.19 | 0.98 | 0.65 | 0.29 | -1.01 | 0.46 | 1.28* |
| Sep | 0.25 | 0.39* | 0.31 | -0.23 | 0.99 | 0.40 | 0.44 | -0.31 | 0.58* | 1.37** |
| Oct | 0.42** | 0.54** | 0.87** | -0.84* | 0.77 | 0.40 | -0.27 | -0.04 | 0.91*** | 0.97 |
| Nov | 0.45** | 0.21 | 1.32*** | -0.13 | 1.20 | 0.24 | 0.18 | -0.26 | 0.29 | 1.23* |
| Dec | -0.01 | 0.03 | 0.58* | -1.85*** | 1.11 | 0.14 | -0.06 | -0.27 | -0.08 | 1.04* |
| Log(theta) | 1.63*** | 1.36*** | 0.57 | 0.63 | -1.27 | 2.12 | -1.17 | -0.13 | 0.85 | 0.90 |
| Zero-inflated | -5.0*** | -4.18*** | -4.34 | -1.13 | -4.87 | 0.01 | -1.90 | -4.89 | -2.97** | -1.25 |
| Vuong Test (p-value) | 0.30 | 0.29 | 0.22 | 0.26 | 0.47 | 0.23 | 0.48 | 0.49 | 0.30 | 0.33 |

Discussion and Model Assessment

In general, the models reveal a significant increase in police activity around Mosques following the release of the report in May 2006. The spline model suggests that, even when controlling for activity around 32 churches inside the precincts of the Mosques, the log count of stops per day increased by 0.3. The second model shows that this increase was especially strong in June, October and November. This general relationship holds true even when removing mosques and churches in Manhattan. At the precinct-level, there seems to be an especially strong spike in activity within precincts 17, 43, 66, and 103, with the first and the last showing significance for the key predictors in both models.

Across all models, the dispersion parameter – Log(theta) - measures whether a negative binomial model is more appropriate than a Poisson model. We see that this is only true in the case of our city-wide models. At the precinct-level, where counts are lower, dispersion is also lower, thus Poisson models may be preferable. However, when when we run Poisson models, we do not see a large difference in the coefficients or levels of significance. Thus, we leave the zero-inflated negative binomial tests here.

Vuong tests are used to assess whether the zero-inflated models are a significant improvement over the normal negative binomial regressions. These suggest, in all cases, that the zero-inflated models are not significantly better than the normal models. Once again, we compared the coefficients and levels of significance in both sets of models and did not see a wide difference. As a result, we only present the zero-inflated models.

Finally, the "Zero-inflated" coefficients indicate whether the zero counts have a strong influence on the model. While we initially included the predictors so as to assess the degree to which they correlate with zero-counts around mosques, there were no significant results except for some cases where the spline or a particular month predicted fewer counts around mosques. Suggesting that there were fewer zero-counts around mosques following the report, this finding only further supports our hypothesis that activity around mosques. Thus, we assume that no factors significantly influence zero counts and merely control for their effect. In the cases where the inflated model is significant, the interpretation is that the zero-counts have a significant influence on the mode. However, since the Vuong tests are not significant, we leave the models as-is.

Conclusions

These findings suggest strong evidence for the NYPD's increase surveillance of Shi'a Mosques following the release of the report on May 15, 2006. While we cannot necessarily conclude that the report's mandates resulted in increased stops of Muslims, we do find strong a temporal correlation between the issuing of the report and an increase in police activity within the vicinity of Shi'a mosques, even when controlling for localized rates of stops around churches. Further research is required before causal claims are possible. In particular, in order to isolate the supposed focus on Shi'a muslims, the study should include comparisons of stops around Sunni mosques during the same period.