



The Effect of Virtual Civic Engagement on Crime: SeeClickFix in New Haven



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WHAT WE LEARNED

The use of SeeClickFix is significantly associated with decreased crime rates for each neighborhood in New Haven, Connecticut.

BACKGROUND

- Mobile virtual communities are an emerging space for improving social cohesiveness and promoting collective efficacy.
- The application SeeClickFix is a smartphone and web application developed in New Haven, Connecticut, where users report issues in their communities including non-violent crimes.
- SeeClickFix posts can be supported and commented on by other users, and local government agencies acknowledge and address issues.
- SeeClickFix data are publicly available, providing a data-rich and transparent venue for monitoring the interaction of individuals with each other and city representatives.

OBJECTIVE

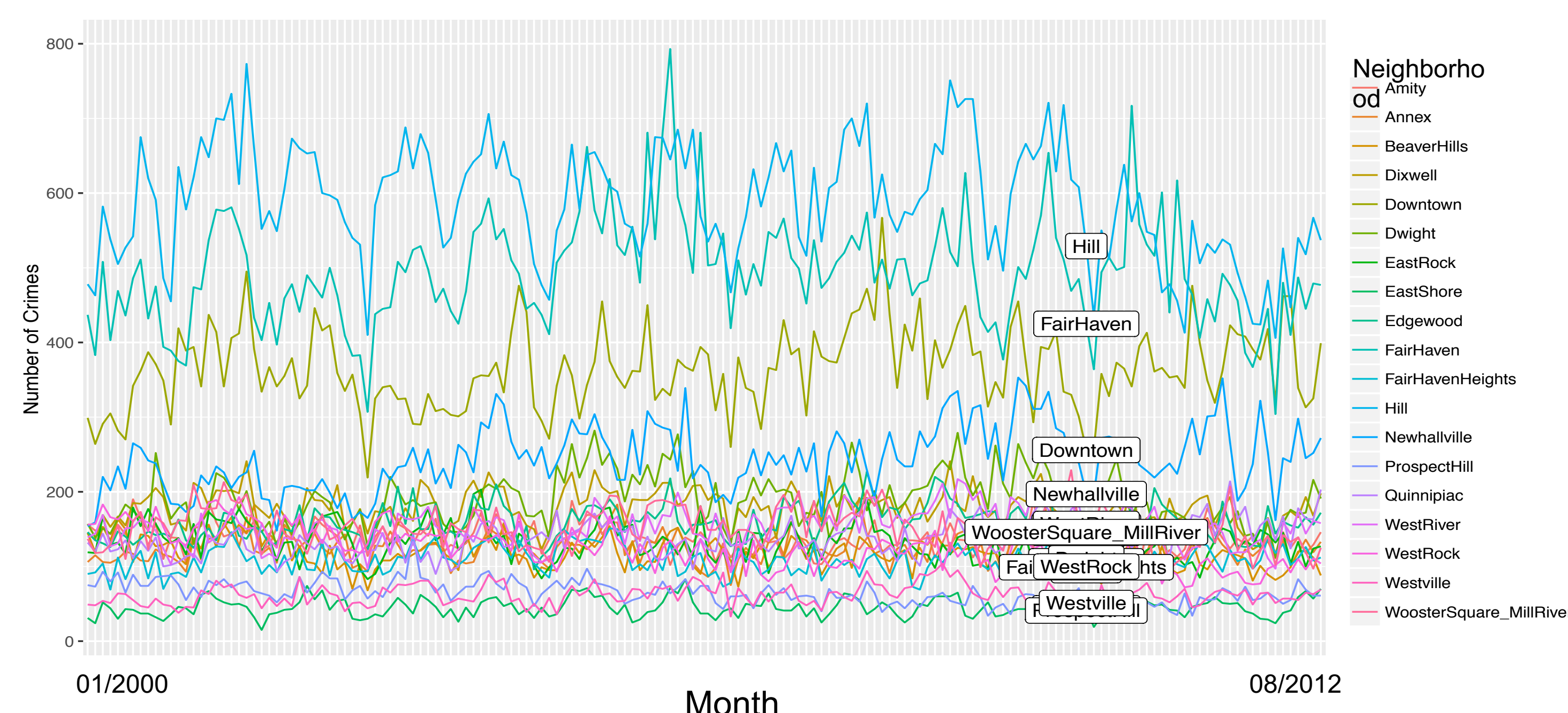
- To determine correlations between SeeClickFix use and crime by neighborhood

METHODS

- Aggregated SeeClickFix posts over time by neighborhood (n = 19) from 2007-2015
- Aggregated the number of crimes from 2000-2013. Crime rates were calculated using the 2014 ACS 5-year population estimates
- Interrupted time series linear mixed effects regression was used to examine the change in crime pre- and post-introduction of SeeClickFix (Jan 2007) with an autoregressive order of one and a moving average order of two

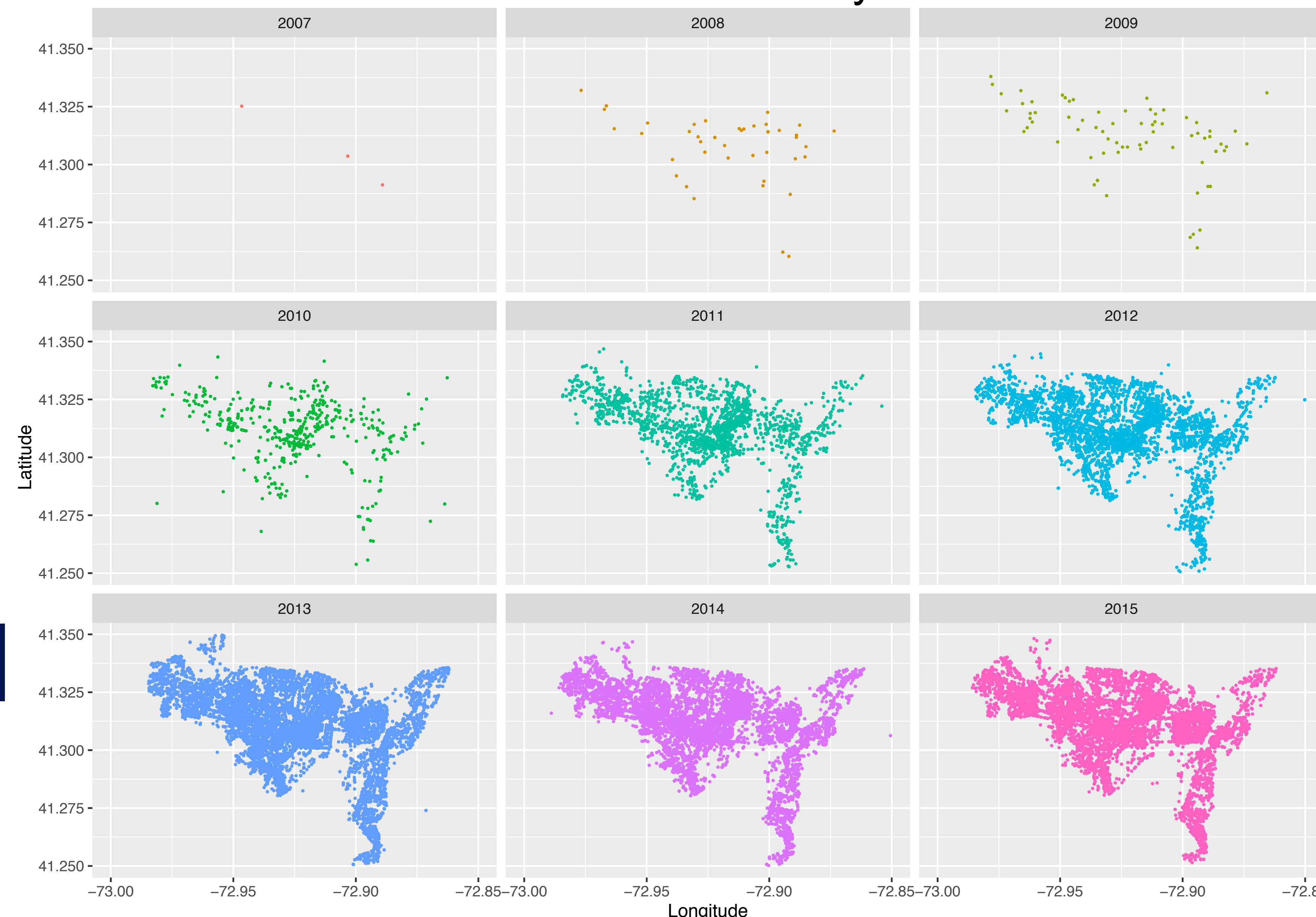
RESULTS

Crime Rate in Each Neighborhood Over Time

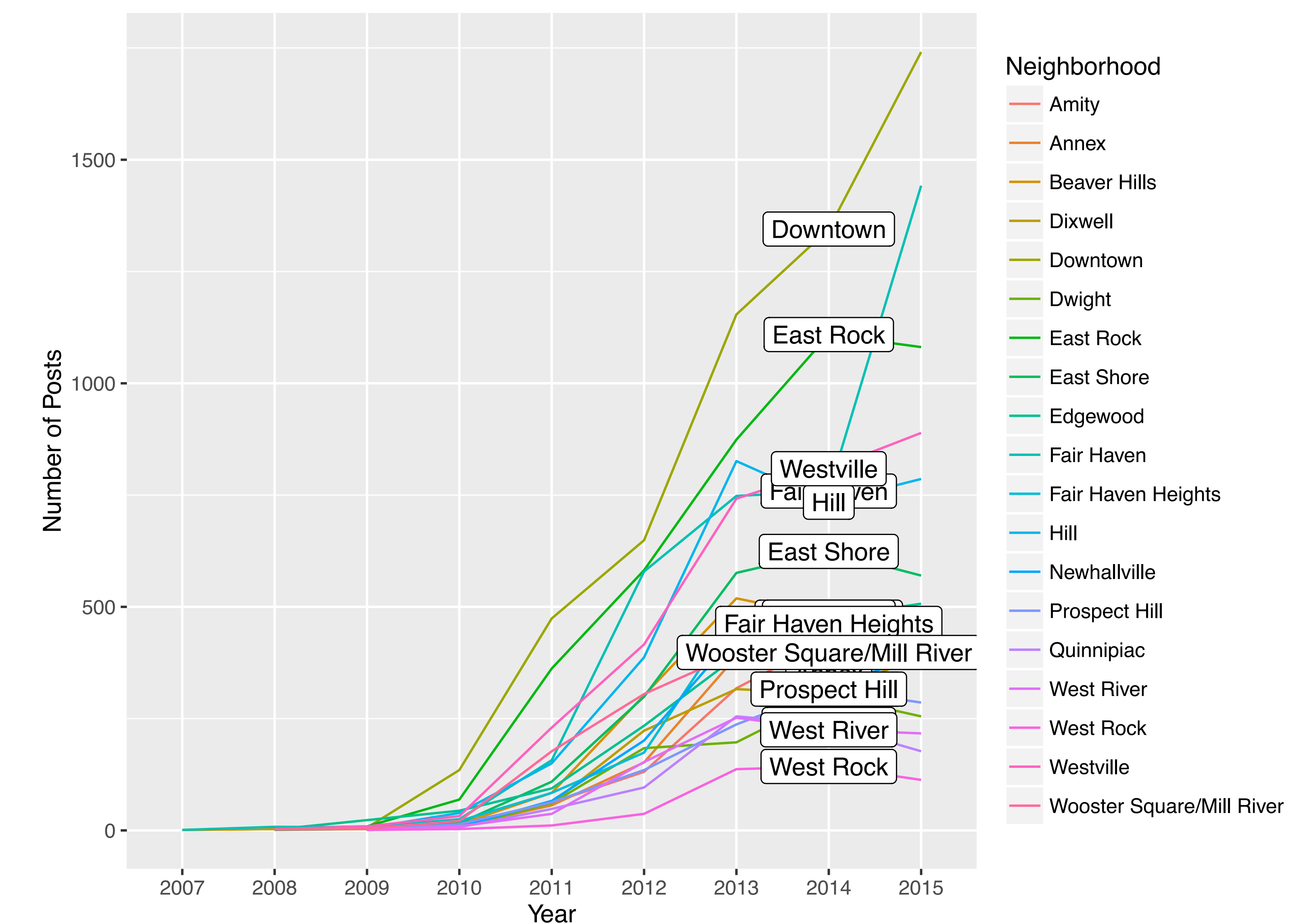


RESULTS

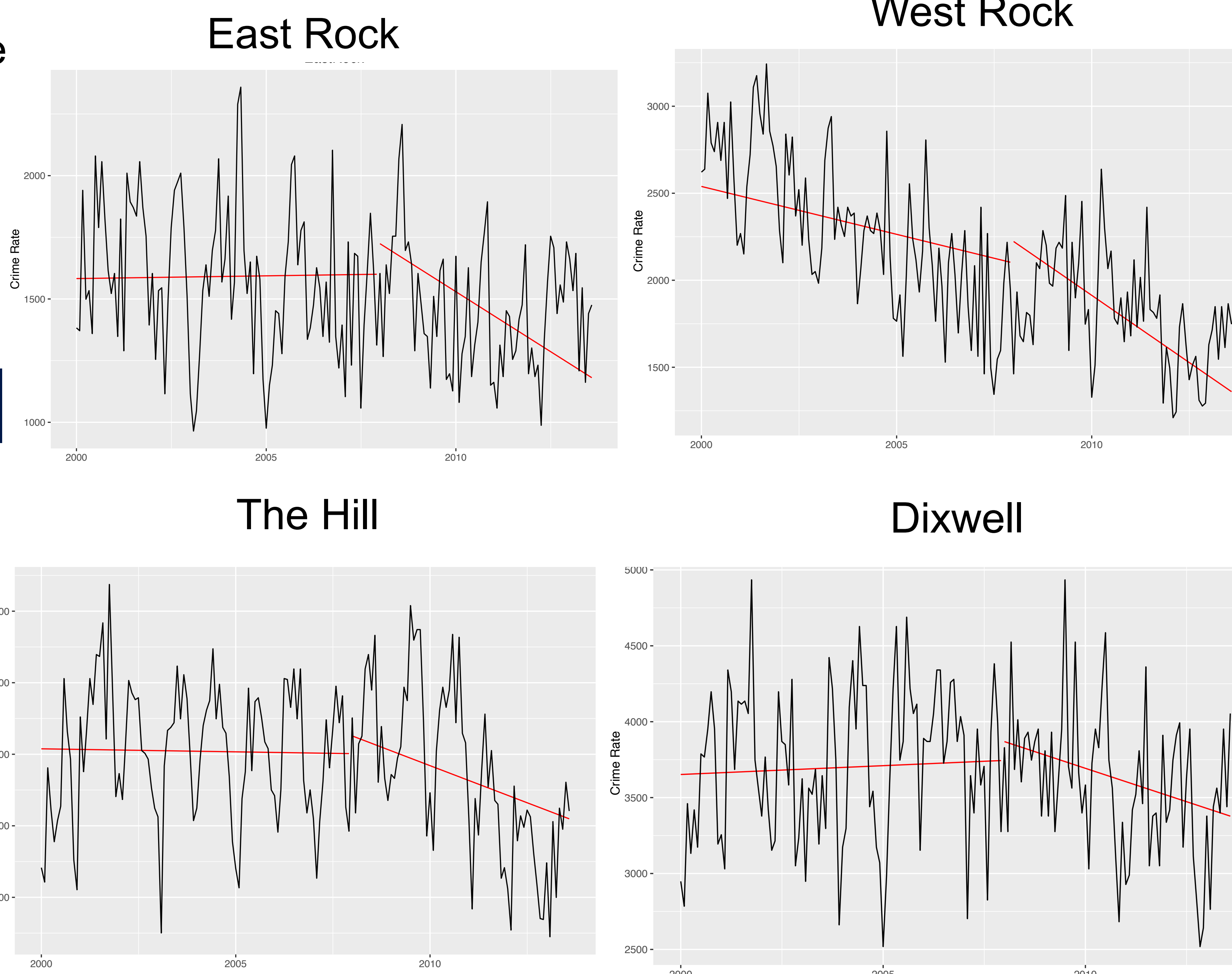
SeeClickFix Posts Over Time By Location



SeeClickFix Posts Over Time By Neighborhood



Effect of SeeClickFix on Crime for Representative Neighborhoods



	Value	Std. Error	p-value
Intercept	2846.00	269.35	0.00
Slope before breakpoint	0.05	0.03	0.06
Change in intercept at breakpoint	129.52	34.30	0.00
Slope after breakpoint	-0.26	0.03	0.00

CONCLUSIONS

- Within each neighborhood, months with more SeeClickFix posts tend to have fewer crimes.
- Crime rate is lower after the introduction of SeeClickFix overall and for each neighborhood

IMPLICATIONS

- This work has the potential to suggest a method by which communities can increase transparency and reduce crime through an open data platform.
- Future studies should address whether there is a causal relationship and if so by what mechanism.