GEORGE MASON UNIVERSITY
Center for Evidence-Based Crime Policy
Department of Criminology, Law & Society

Rainier Beach:
A Beautiful Safe Place for Youth

2018 Evaluation Update

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The Center for Evidence-Based Crime Policy (CEBCP) in the Department of Criminology, Law and Society at George Mason University seeks to make scientific research a key component in decisions about crime and justice policies. The CEBCP carries out this mission by advancing rigorous studies in criminal justice and criminology through research-practice collaborations, and proactively serving as an informational and translational link to practitioners and the policy community. Learn more about our work at http://cebcp.org and about the Department of Criminology, Law and Society at http://cls.gmu.edu.

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Contents

List of Tables

List of Figures

Summary of Findings

What is Rainier Beach: A Beautiful Safe Place for Youth?

Rainier Beach: A Beautiful Safe Place for Youth (ABSPY) is an innovative community-led, place-based violence prevention initiative. The goal of the program is to reduce youth victimization and crime in the Rainier Beach neighborhood. The program is named for the vision set out by the Rainier Beach community in its Neighborhood Plan Update, which is to make Rainier Beach a Beautiful Safe Place. ABSPY is happening in five small groups of street blocks in the neighborhood—"hot spots"—where about half of all youth crime incidents in Rainier Beach happened in 2012. The five hot spots are Rose Street, Rainier and Henderson, Rainier Beach Light Rail Station, Lake Washington, and Our Safe Way. This report updates our original 2016 evaluation report and 2017 update.

ABSPY Background

ABSPY is based on a number of research studies, including one from Seattle by David Weisburd and his colleagues, showing that about half of all crime in cities comes from a very small number—typically about 5 percent—of street blocks. Crime involving young people is even more likely to come from a small number of places. Research shows that police efforts to reduce crime at hot spots through crackdowns and arrests are effective at reducing crime, but arrest and prosecution can increase the chance of reoffending among high-risk youth. ABSPY focuses on **non-arrest** strategies to reduce crime, such as building community leadership and capacity to help solve problems and addressing environmental risk factors for crime to promote community safety. ABSPY was originally funded by a $1 million grant from the Byrne Criminal Justice Innovation Program, an initiative of the U.S. Department of Justice's Bureau of Justice Assistance, awarded in 2012, and has been funded by the City of Seattle since 2016. The Byrne Criminal Justice Innovation Program supports partnerships between cities, communities, and researchers to develop community-led, place-based, data-driven problem-solving efforts. ABSPY is advised by a Core Team including representatives from the City of Seattle, the Seattle Neighborhood Group, Seattle Police Department, the Boys and Girls Club of King County, Seattle Public Schools, and the Rainier Beach Action Coalition. However, what makes ABSPY unique is that community members in Rainier Beach itself have taken the lead in developing evidence-informed strategies to address the root causes of youth crime in the neighborhood.

Community-Led Problem Solving

From 2013 through 2016, in an effort overseen by the Core Team, community members from the five Rainier Beach hot spots took the lead in developing evidence-informed strategies to address the root causes of youth crime in the neighborhood. These interventions were tailored to the specific conditions in each hot spot, and continue to be regularly updated and adjusted based on new data and changing conditions in the hot spots. ABSPY's signature interventions include:

- **Corner Greeter** events, led by the Rainier Beach Action Coalition, in which young people from the neighborhood set up stations offering refreshments, information, and fun activities in each hot spot to engage community members and "activate" places that were previously considered to be unsafe.
- **Safe Passage**, led by the Boys and Girls Club of King County, which provides guardianship, supervision, and encouragement to young people as they leave school.

- **Business engagement**, coordinated by Seattle Neighborhood Group and supported by the Rainier Beach Merchants Association, Seattle Police Department, and local community and economic development organizations. This intervention focuses on learning about the concerns facing local businesses, building relationships between businesses and with the police, and increasing business owners' ability to prevent and report crime.
- **Crime Prevention Through Environmental Design (CPTED)** interventions and resources, applied to both public and private property, to improve design, layout, and place management.
- **Positive Behavioral Interventions and Supports (PBIS)** in both school and community settings, overseen by Seattle Public Schools and the ABSPY Core Team, to collaboratively set behavioral expectations for young people, reward good behavior, and support youth in need of services.

Updated Evaluation Findings

The Center for Evidence-Based Crime Policy at George Mason University is the research partner for ABSPY. We tracked calls for police service and reported crime incidents in the five hot spots from September 2011 to August 2018. We paired each Rainier Beach ("treatment") hot spot with a comparison hot spot—a similar location elsewhere in Seattle Police Department's South Precinct—and assessed crime rates in the Rainier Beach neighborhood compared to trends in the South Precinct. We have also conducted four community surveys in the hot spots and comparison areas—one in the summer of 2014 before the interventions began (Wave 1), and follow-ups in the summers of 2016 (Wave 2), 2017 (Wave 3), and 2018 (Wave 4).

Our updated findings for 2018 show that **positive trends relating to ABSPY continue, and we are starting to see some of the longer-term improvements we anticipated in our earlier reports emerge**. Our findings show that:

- The Rainier Beach hot spots continue to get less "hot" over time, especially in terms of youth crime. In particular, there have been substantial reductions in crime at Rainier & Henderson and a modest improvement at Lake Washington, which was a focus for increased intervention last year.
- The Rainier Beach hot spots saw a larger decline in serious violent crime than SPD's South Precinct overall.
- Calls for service and crime incidents were higher in the Rainier Beach hot spots while the interventions were active. This is not necessarily a cause for concern—it could indicate that people are more willing to call the police when something happens and have a greater interest in neighborhood safety.
- More people are noticing the ABSPY interventions after a decrease last year, and satisfaction rates exceed 85%.
- As in our previous reports, people in Rainier Beach are significantly more likely to believe that crime has gotten better in the past year than they were in 2014 and compared to people elsewhere in the South Precinct.
- Community perceptions of collective efficacy and social cohesion in Rainier Beach continue to improve and are significantly higher this year compared with 2014.

- People's impressions of the police in Rainier Beach have significantly improved since 2014 and in comparison to other areas.

Recommendations for 2019

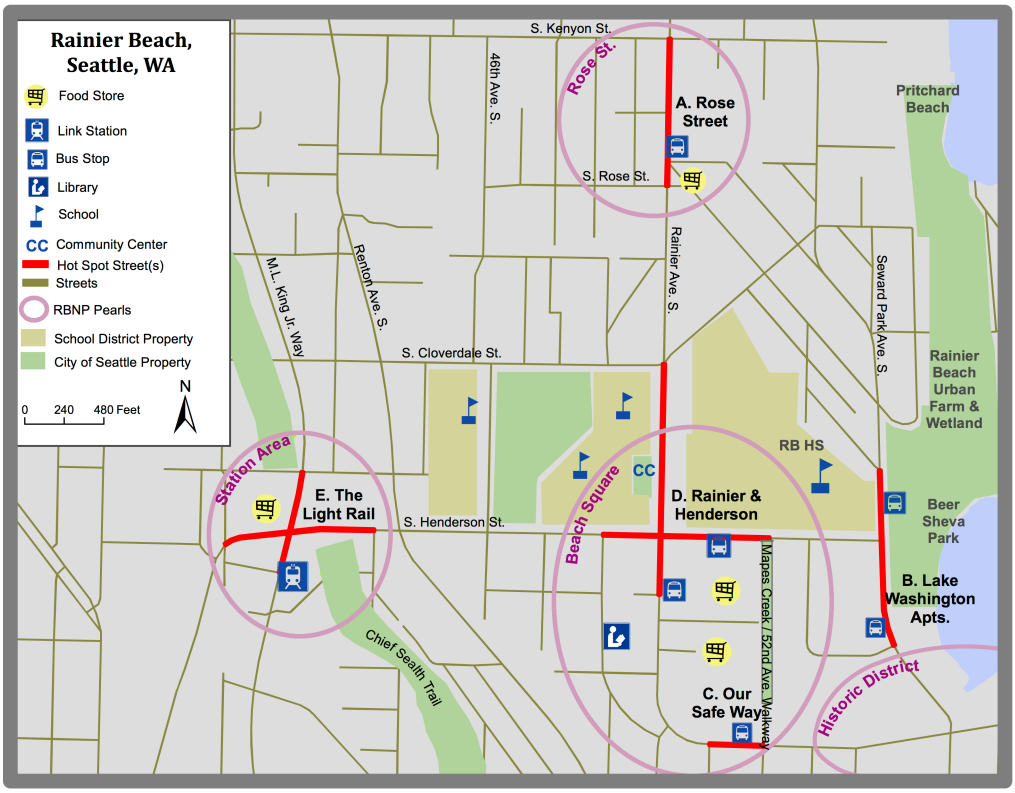
ABSPY continues to move in the right direction! Our findings show that some of the long-term benefits of ABSPY for community safety are starting to be realized and meet the scientific standard of "statistical significance." Some of the improvements we saw in earlier reports, such as awareness of ABSPY interventions and satisfaction with police, have returned according to this year's survey. However, there is still work to do. In addition to maintaining the existing ABSPY interventions, we recommend the following steps to sustain and strengthen these improvements in 2019:

- **Increase community involvement with ABSPY interventions.** Although community satisfaction with ABSPY is very high, it was slightly lower in 2018 compared to last year. This represents an opportunity to revitalize the ABSPY Intervention Team and seek more community involvement, especially from young people in the community.
- **Increase collaboration and intervention development at Safeway.** Crime incidents involving both youth and adults increased at this hot spot in 2018 and are now higher than pre-ABSPY levels. We recommend that the Core Team and Intervention Team work closely with Safeway to understand the reasons behind the changing trends and adjust non-arrest interventions as needed.
- **Investigate the reasons for the increase in Part II (minor) crimes.** Through our continued data analysis and community survey in 2019, the Center for Evidence-Based Crime Policy will look more closely at the across-the-board increases in minor crimes at the hot spots and share more details with the Core Team so that these increases can be understood and addressed.

1 Background

This report updates the original *Rainier Beach: A Beautiful Safe Place for Youth* (ABSPY) Final Evaluation Report (Gill, Vitter, & Weisburd, 2016) and 2017 Evaluation Update (Gill & Vitter, 2017) with new findings from our community survey and crime analysis in 2018. ABSPY is a **community-led, place-based, data-driven, non-arrest based collaboration** focused on preventing crime in five juvenile and youth crime hot spots in the Rainier Beach neighborhood of Seattle (see Figure 1). ABSPY builds on several neighborhood and City processes, including the 2011 Rainier Beach Neighborhood Plan Update (RBNPU) and the Seattle Youth Violence Prevention Initiative, and is grounded in research evidence showing that crime—especially crime involving juveniles and youth[1]—is highly concentrated at small places (e.g. Weisburd, 2015; Weisburd, Bushway, Lum, & Yang, 2004; Weisburd, Morris, & Groff, 2009). This evidence indicates that policing and crime prevention efforts focused at these hot spots are effective (Braga, Papachristos, & Hureau, 2014; Lum, Koper, & Telep, 2011; Weisburd & Majmundar, 2017). However, proactive policing approaches that focus on law enforcement strategies such as crackdowns and "busts" to clear offenders from high-crime areas may not be suitable at hot spots of youth crime, since young people who are arrested and processed through the juvenile justice system—especially those involved in less serious crimes—are more likely to reoffend than those who are diverted. Research suggests that community-led, non-arrest strategies may be more appropriate at such places.

Figure 1: Rainier Beach hot spots identified for ABSPY intervention



[1] ABSPY defines "youth" as individuals aged 25 and under. While the juvenile justice system focuses on young people under the age of 18, ABSPY builds on increasing recognition by researchers and policy makers that the brain does not fully develop until around age 25, directly impacting decision-making and risky behavior (e.g. Steinberg, 2008).

The RBNPU explicitly called for a community-led hot spots approach to address crime and improve neighborhood safety in Rainier Beach, which led to the development of ABSPY. The planning process began in 2012 with the development of a successful $1 million grant proposal to the U.S. Department of Justice, Bureau of Justice Assistance's Byrne Criminal Justice Innovation Program (renamed "Innovations in Community Based Crime Reduction" in 2017). Implementation began in October 2013 with a problem-solving process undertaken by Community Task Force (CTF) teams representing each of the five hot spots, and the subsequent development and implementation of a suite of signature interventions (see below). Federal funding continued through September 2016. Beginning in January 2016, the City of Seattle's Human Services Department also began to fund implementation and evaluation on an annual basis. The initiative is currently funded through 2019. ABSPY planning and implementation is overseen by a cross-sector Core Team and supported by a range of community intervention partners. A detailed description of ABSPY's history, including key partners, hot spot identification process, problem-solving process, and intervention development, can be found in the original evaluation report (Gill et al., 2016).

2 2018 Intervention Update

Following its "rolling start" in May 2014 and several pauses in implementation earlier in the initiative, ABSPY interventions have continued in the hot spots with more stability this year. Our previous evaluation update shows the timeline of ABSPY interventions from October 2013, the beginning of the planning phase, to October 2017 (Gill & Vitter, 2017, p. 3). The interventions continued through the last few months of 2017 and all of 2018.

2.1 Intervention summary

2.1.1 Coordination and planning

The Core Team continues to meet on a monthly basis to oversee ABSPY and related initiatives. Following last year's retreat and peacemaking process, a key focus of the Core Team in 2018 was to use information uncovered during those conversations to improve ABSPY governance and decision-making procedures in order to enhance representation and inclusion. Important Core Team activities and changes in 2018 included:

1. **Change of coordination.** Barb Biondo, the original project coordinator for the Core Team from the Seattle Neighborhood Group (SNG), left SNG in late 2017. Jenny Frankl, who was involved in ABSPY's early planning phase as a former City of Seattle employee, stepped into Barb's role.

2. **Identification of Core Team values.** The 2017 peace circle process described in last year's report resulted in the Core Team identifying and prioritizing a list of key values. These included: cultivating relationships; agreed-upon guidelines for working together; and celebrating frequently. In 2018 the Core Team was intentional in reflecting these values during meetings and interactions. Each agenda item at Core Team meetings now indicates the relevant value(s) it reflects.

3. **Adoption of a decision-making charter for Core Team meetings.** To address concerns about governance and equity/inclusion in decision-making, the Core Team developed and implemented

a decision-making charter in 2018. Key elements of the decision-making protocol include:

- Specified timelines for gathering and sharing information needed for the team to make a decision (minimum 3 days before the Core Team meeting; minimum of 24 hours for quicker decisions needed in between meetings) and space for Q&A within the team;
- Core Team subcommittees make recommendations about decisions where related to subcommittee/workgroup activity; recommendation must have community partner buy-in;
- Team members make decision. Voting follows a light version of Robert's Rules when done in person; majority decisions but minority opinion must be acknowledged.
- Weighted voting: each institution (city, police, university etc) gets one vote; community organizations (RBAC, Boys and Girls Club, SNG) get 2 votes to ensure ABSPY remains community-led. Five of eight votes are needed for a decision (quorum) with community stakeholder votes prioritized.
- Ongoing review and oversight of decisions by the Core Team to assess success or failure.

4. **Collaborative identification of core members.** As part of the peacemaking process and in order to ensure ABSPY remained community-led, Core Team members engaged in an exercise to examine Core Team membership and identify key voting members.
5. **Undoing Institutional Racism training.** In July 2018 the Core Team attended an Undoing Institutional Racism training provided by the People's Institute Northwest to enhance team members' recognition and understanding of the history and current impact of racial inequity affecting communities of color.

2.1.2 Safe Passage/Campus Safety Initiative

Safe Passage is one of the flagship initiatives of ABSPY. Overseen by the Boys and Girls Club of King County, Safe Passage provides supervision, guardianship, and a friendly face on the streets in the afternoons (between 1 and 6pm) when children are leaving schools on the Rainier and Henderson campus and the risk of youth crime at this hot spot is highest. Safe Passage staff work for the Boys and Girls Club and are community members who have grown up in the neighborhood. They are easily recognizable by their bright blue jackets or t-shirts with the "Be Safe" slogan, which (along with "Be Safe Bro!") has become a popular greeting between the Safe Passage team and local young people. While Safe Passage staff are authorized to break up fights, they primarily focus on providing a positive presence and engaging young people as they walk home or head to the bus stop. The Safe Passage initiative continues to engage young people beyond school times by supporting lunch programs and providing participation and support to community events such as the "Get Down" pre-game celebration at Rainier Beach High School in September 2018.

2.1.3 Corner Greeters

The Corner Greeters initiative, overseen by the Rainier Beach Action Coalition (RBAC), is also one of the original ABSPY interventions. The initiative began immediately after the May 2014 kick-off event. The initiative consists of pop-up tents with colorful, eye-appealing canopies, banners, and signs with positive messages, which are set up to host events and activities such as music, dancing, crafts, and other fun and culturally-relevant activities at the hot spots. The goal of the Corner Greeters is to "take back" hot spot spaces for the community and provide residents with an opportunity to come together and participate in a fun activity. The key feature of the Corner Greeters is that the events are completely youth-led. Young people from the neighborhood collaborate with RBAC to plan different activities and staff the events. They are also trained to communicate and share ABSPY data and information, such as neighborhood crime data reports, with visitors to their events to connect community members to ABSPY, build collective efficacy, and empower them to take action in the neighborhood. RBAC is also responsible for the Mobile Discovery Center, a unique community information booth on wheels that sets up at Corner Greeter and other neighborhood events. The Corner Greeters also conduct their own surveys regularly at the Rainier Beach hot spots to track community perceptions of safety and collective efficacy at the hot spots, and support ABSPY at community events including the September and December 2018 Rainier Beach Town Halls.

2.1.4 SPD business and community engagement

SPD's South Precinct Community Policing Team continues to support ABSPY by building relationships with business and community stakeholders in Rainier Beach. SPD's activities include engaging with local businesses to help them learn more about crime reporting, CPTED, and steps they can take to reduce their risk of victimization; and generating opportunities for positive interactions with community members through ice-cream socials at the Lake Washington Apartments and participation in the Town Halls, "Get Down," and other community events.

2.1.5 Crime Prevention Through Environmental Design (CPTED)

Following up on CPTED and Community Appearance Index assessments conducted by the Seattle Neighborhood Group, ABSPY partners have continued to work on improvements to local infrastructure (such as landscaping around sidewalks) and storefront improvements to local small businesses (such as removing security bars, repainting and improving curb appeal, and improving sight lines). Community and city partners in these efforts include South East Effective Development (SEED); The Mission Continues, a veterans' organization; the Rainier Valley Chamber of Commerce; and the Rainier Beach Merchants Association.

2.1.6 Positive Behavioral Interventions and Supports (PBIS) and restorative practices

In 2015 the City received a grant from the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP), to partner with Seattle Public Schools to extend school-based PBIS into community settings through a program called *Rainier Beach: Beautiful!*. PBIS is an evidence-based education

framework that aims to improve school climate and student outcomes by setting school-wide expectations and rewards for positive behavior and offering a tiered support system to respond to student needs. The OJJDP funding supported the development of school- and community-based Tier 1 (whole school/community) PBIS and culminated in a neighborhood vote on shared community values in Rainier Beach: *Be Safe, Be Respectful, Be Responsible* (Be^3), which are shared and communicated across community organizations such as the Rainier Beach community center, public library, stores, Boys and Girls Club, and so on. In 2016 George Mason University and the City received an additional 4-year grant from the U.S. Department of Justice, National Institute of Justice (NIJ) to fully implement all three tiers of PBIS in Rainier Beach schools and community settings and incorporate restorative practices into each tier. While this was not an original ABSPY intervention, the Core Team is providing oversight of the initiative and many Core Team partners are involved in its implementation through the "NIJ Workgroup." In 2018 the workgroup continued the planning phase for this grant, which culminated in the Core Team's approval of implementation plans for community-wide PBIS and restorative practices coordinated by SNG and the Boys and Girls Club of King County. The plans provide strategies to operationalize Be^3 in different community spaces and empower young people with a focus on safety and economic mobility, supported by restorative approaches such as peacemaking circles and conferencing.

3 2018 Evaluation Update: Summary of Methods

A detailed description of the data and methods used for this evaluation can be found in the original evaluation report and the 2017 update. In this section we summarize the most important aspects of our approach and any updates we made in 2018. Our 2018 evaluation is based on monthly police data on calls for service and recorded incidents from January 2011 to August 2018, provided by SPD, and four waves of our community survey, which was conducted by trained local researchers in the summers of 2014, 2016, 2017, and 2018. Our analytic approach matches each Rainier Beach hot spot with a comparison location elsewhere in SPD's South Precinct, which is similar in terms of crime rates and characteristics such as land use, presence of schools, access to public transit etc. Further details about the selection of the hot spots and comparison sites and information about the police data are available in our original report. However, due to concerns we have previously raised about the comparison hot spots being very different from the Rainier Beach hot spots due to gentrification and population change, which affects the conclusions we can draw from our evaluation, we include for the first time in this report additional analyses that just look at changes in Rainier Beach over time, without including the comparison spots.

To make this report easier to read, all of the tables and most graphs are included in the Statistical Appendix at the end of this report. You can look at any of the tables or graphs in more detail in the electronic version of this report by clicking on the blue number next to each reference to a table or figure (e.g. Table A1).

3.1 Police crime data definitions

We use the following information from official police data provided to us by SPD in our analyses. Each measure of crime data can tell us different information about how ABSPY is working.

1. **Calls for police service.** "Calls for service" include both 911 calls from the public to the police, and the logs that police record (usually on their in-car computers) while they are out on patrol. Calls

for service tell us what people in the neighborhood are concerned about, what they are willing to call the police about (which may indicate how much they trust the police), and what the police see or hear about while they are in the neighborhood. But calls for service don't tell us the "true" picture of crime. Sometimes the person calling 911 doesn't know exactly what they are seeing or hearing, but when the police arrive they can determine what type of crime has been committed and record this in their incident report (see below). Multiple people might call 911 about the same problem, like hearing shots being fired. And sometimes, even if a person was worried about an issue and called the police, it might turn out that no crime has been committed or the police can't find whatever was going on. Calls for service also don't tell us who was involved in a crime (e.g. the age, gender, or race of a suspect or victim). This information is verified by police at the scene and included in the incident report.

2. **Police incident reports.** Police write reports when they respond to a call or see something while on patrol and have reason to believe that a crime may have occurred (such as a victim or witness willing to make a report). Although not every call for service turns into a report, incident reports give us a better idea of what happened and who was involved. However, police can decide whether or not to take a report, and sometimes victims don't want the police to take a formal report, so not all crimes make it into the data. This overall category of police incident reports includes the juvenile/youth, violent, and minor crime incidents described in points 3-5 below.

3. **Juvenile/youth incident reports.** Because ABSPY is focused on creating a "beautiful safe place for youth," we also analyze reports of incidents that involve young people (under 18 and age 18-25).

4. **Violent crime incident reports.** ABSPY is also focused on violence prevention, so we look at the effects of the interventions on violent incidents. The four most serious violent crimes, known as "Part I violent crimes" according to the FBI's Uniform Crime Reporting (UCR) program, are homicide, rape, robbery, and aggravated assault.[2] We also use a broader definition of violence that includes the four UCR Part I violent crimes and simple assaults.

5. **Minor crime incident reports.** Minor crimes are incident types that do not fall into one of the eight categories police departments are required to report under Part I the FBI's Uniform Crime Reporting (UCR) program,[3] with the exception of simple assault, which we include with violent crime incidents above. It is useful to look at these less serious crimes because if they increase it may suggest that community members are more likely to call the police and feel more empowered to take action against minor quality of life issues.

3.2 Community survey

We conducted a fourth wave of our in-person community survey in the five Rainier Beach hot spots and five comparison hot spots. The survey was conducted in the summer and fall of 2018, four years after the first (baseline) survey ("Wave 1"), which was conducted in summer 2014, two years after "Wave 2" (summer 2016), and one year after "Wave 3" (summer 2017). We present results from all four waves in this report for comparison. We asked the same questions in each wave of the survey in order to measure and compare community members' views of crime, safety, collective efficacy and social cohesion, the

[2]We are not permitted to report homicide and rape offenses separately.

[3]The eight Part I crimes include the Part I violent crimes described above and burglary, larceny-theft, motor vehicle theft, and arson.

police, and ABSPY itself. We followed the same approach as we described in our previous reports: the surveys were conducted on the street, in people's homes, and in businesses by a team of five researchers, all of whom came from the local area (several members of the team were young adults from Rainier Beach who have been involved with the Corner Greeter program and RBAC). As in previous waves, the majority of surveys were conducted on the street so we did not talk to the same people each year, although we tried to go back to some of the same homes and businesses when possible.

In total, we have obtained 1,192 valid surveys over our four years of research in Rainier Beach: 297 in Wave 1, 300 in Wave 2, 290 in Wave 3, and 305 in Wave 4 (Table A1). Table A2 in the Statistical Appendix shows a full description of the characteristics of survey participants in each wave, as well as the similarities and differences between respondents in the treatment and comparison hot spots at baseline (Wave 1). Overall, across both the Rainier Beach and comparison hot spots, survey participants each year are slightly more likely to be male, aged between 18 and 35, and identify as Black or African American, followed by White. Around two-thirds were born in the United States and just over half had children of any age. Most participants have completed high school or equivalent, or some college classes. Most of the respondents live in the hot spots where they were interviewed; those who did not typically worked there, shopped there, or used public transit. At Wave 1 there were significant differences in age and race between participants in Rainier Beach and the comparison spots, which we control for in our analyses of the survey data. Within the Rainier Beach hot spot participants there were significant differences in race, employment and education status, and main activity at the hot spot across each of the four waves (not shown in a table), so we also control for these factors in our analyses of Rainier Beach-only effects.

3.3 Analytic strategy

We follow the same analytic strategy from our previous reports in this evaluation update. Specifically, we used difference-in-differences analysis with Poisson regression and robust standard errors to assess the effects of ABSPY while the interventions were active and inactive, accounting for clustering within the hot spots and controlling for seasonal and overall crime trends (Berk & MacDonald, 2008; Kondo, Keene, Hohl, MacDonald, & Branas, 2015; see also Gill et al., 2016). In this report we also statistically examine pre-post change in the Rainier Beach hot spots, removing the comparison sites, to address concerns about the differences between the Rainier Beach and comparison locations. The updated timeframe for the police data analysis is January 2011 to August 2018 (96 months).[4] We also present descriptive graphs showing crime incident trends in each hot spot and across all five Rainier Beach hot spots from September 2012 to August 2018, and the percentage change in each crime outcome pre- and post-May 2014 (when the first interventions were rolled out) in the hot spots relative to its comparison site and the South Precinct overall.

For the first time in this report, we include an additional exploratory analysis to assess whether increases in crime incidents can be attributed to increased calls to the police (reflecting improved collective efficacy and trust in police among residents) rather than ABSPY failing to work or even "backfiring." This is an important potential source of bias in analyzing the effects of interventions that aim to decrease crime but increase citizen engagement with crime prevention (which can result in more calls to the police). Weisburd, Gill, Wooditch, Barritt, and Murphy (2018) recently developed a "crime inflation factor" that adjusts the number of incidents by the number of calls for service to account for the bias. The crime inflation factor is calculated by taking the ratio of calls to incidents in the pre-intervention and during-

[4] Refer to the 2017 Evaluation Update for a table showing pre-intervention monthly average numbers for each crime outcome.

intervention periods:

$$\text{Crime Inflation} = \frac{(\text{Calls}_{\text{pre}} - \text{Incidents}_{\text{pre}})}{(\text{Calls}_{\text{during}} - \text{Incidents}_{\text{during}})}$$

We then calculated the inflation factor for both the treatment and comparison hot spots and adjusted the number of incidents in the treatment spots by the difference between the treatment and comparison group inflation factors. This process and its results are described in section 4.3.

As in our previous reports, we used multilevel mixed effects regression models (e.g. Kochel & Weisburd, 2017) to analyze the effects of ABSPY on community member perceptions measured by the surveys, accounting for the clustering of individual within hot spots. These models include a series of interaction terms that allow us to compare the short- and longer-term effects of ABSPY with the original, pre-ABSPY survey findings (Wave 1). As noted above, we controlled for age and race in the models that include both the Rainier Beach and comparison hot spots, and age, employment, education, and main activity at the hot spot in the Rainier Beach-only models. We used linear, logistic, and ordered logistic regression depending on the outcome measure, and regular one-level models when the random effects were unstable (see notes on individual tables in the Statistical Appendix). All Rainier Beach-only analyses use one-level models. As before, we combined individual survey questions into scales to measure concepts such as social cohesion, collective efficacy, fear of crime, and perceptions of police. Table A3 describes each survey outcome included in our analysis; Cronbach's α[5] and the number of questions in the scale, where relevant; and descriptive statistics and number of responses at each wave.

4 Updated Evaluation Findings

4.1 The hot spots continue to get less "hot" over time

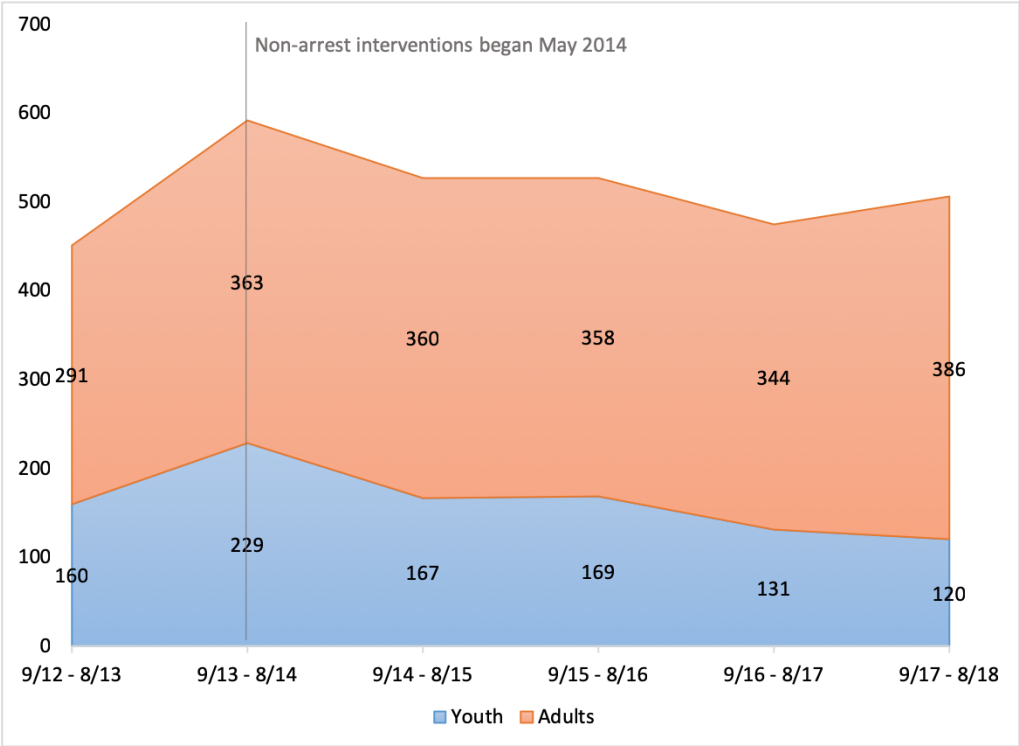
Figure 2 shows a small but steady downward trend in the number of crime incidents between September 2012 and August 2018, which began around the time that the ABSPY interventions first started in May 2014. While there was a slight uptick in incidents involving adults over the age of 26 between 2016-17 and 2017-18, largely driven by trends at Safeway (see below), youth crime has steadily fallen since ABSPY began.

Looking descriptively at the period pre- and post May 2014, calls for service have decreased by 7% in the hot spots (Figure A1), youth incidents have decreased by 12% (Figure A3), and violent incidents have decreased by 13% (Figure A4). However, comparative decreases in each of these outcomes have been larger across the rest of the South Precinct. Part II (minor) incidents increased by 42% in the Rainier Beach hot spots and decreased 22% elsewhere in the South Precinct pre- and post-ABSPY (Figure A5). As we have noted before, this may be due to residents becoming more involved in crime prevention in the neighborhood and therefore noticing more issues. However, it could also be driven by the large increases in minor crime enforcement at the Rainier Beach Safeway (see below).

Crime and calls for service at Rose Street have generally been lower overall post-ABSPY (Figures A6-A10),

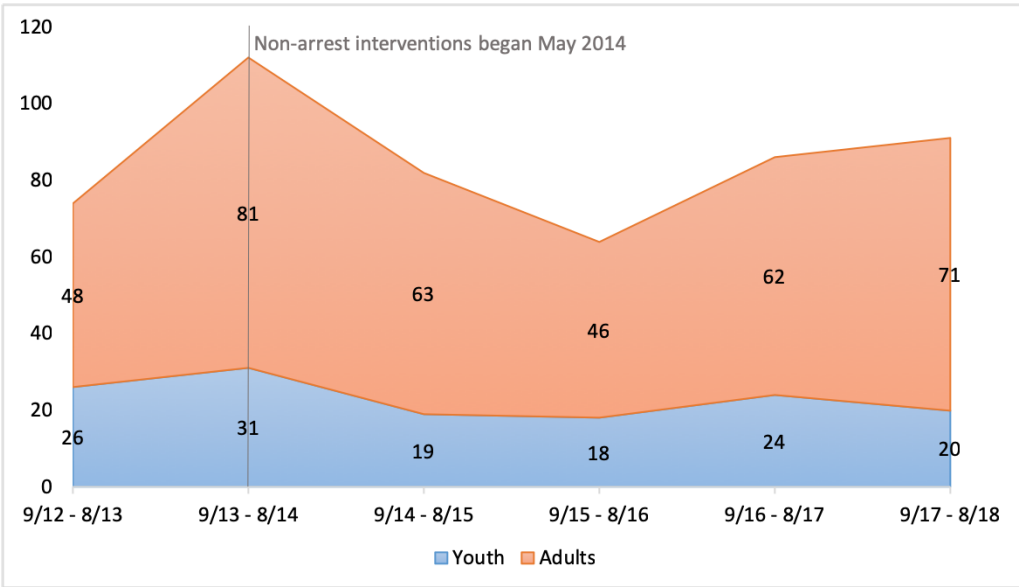
[5] Cronbach's α is a statistic that tells us whether the questions in the scale do a good job of measuring the same concept, e.g. collective efficacy. $\alpha > .75$ indicates that they do.

Figure 2: Crime incidents in all Rainier Beach hot spots, September 2012-August 2018



although there has been an increase in Part II minor incidents more recently and improvements have been greater at the Rose Street comparison spot. Figure 3 suggests that these increases have been driven by adults—youth crime has remained low and relatively steady at Rose Street since ABSPY began.

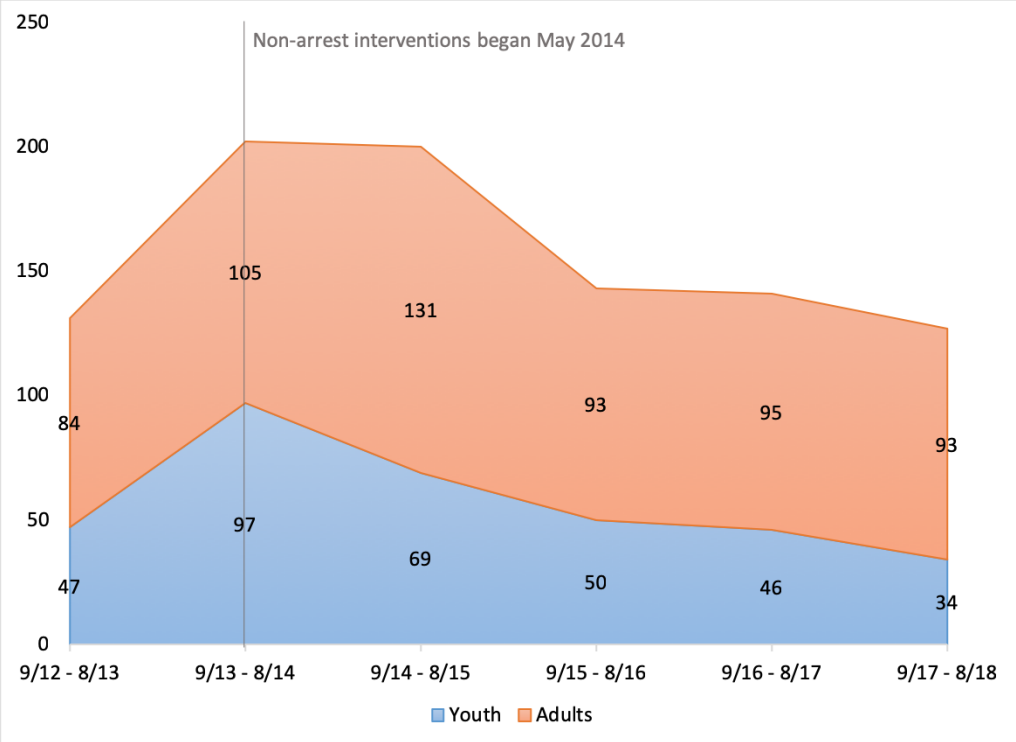
Figure 3: Crime incidents at Rose Street, September 2012-August 2018



Rainier and Henderson, ABSPY's largest and longest-term hot spot where many of the flagship interven-

tions were launched, has seen consistent improvements in both youth and adult crime since ABSPY began (Figure 4). Calls for service have decreased by 17% (Figure A11), incidents by 2% (Figure A12), youth incidents by 21% (Figure A13), and violence by 22% (Figure A14). These changes have been comparable to the reductions in crime seen at Rainier and Henderson's comparison spot. However, Part II minor crimes have again increased at Rainier and Henderson (by 26% relative to the pre-ABSPY rate), although they also increased 21% in the comparison spot (Figure A15).

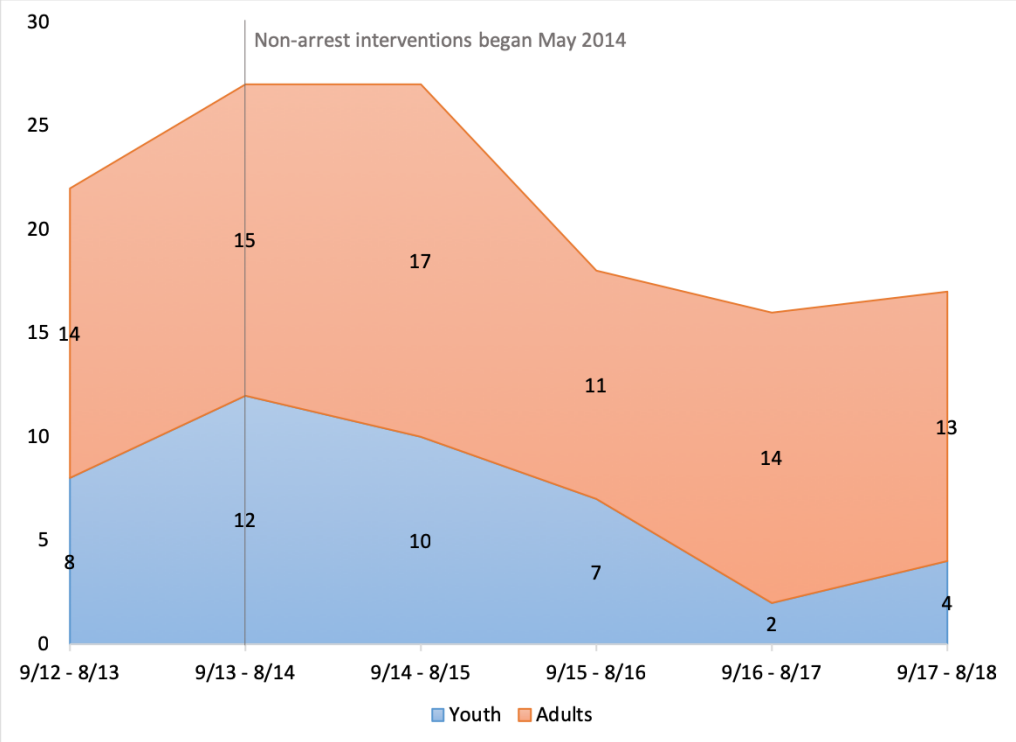
Figure 4: Crime incidents at Rainier & Henderson, September 2012-August 2018



Crime incidents at the Light Rail have also steadily declined since ABSPY began, although there was a slight uptick in youth incidents between 2016-17 and 2017-18 (Figure 5). However, given the very small number of incidents overall at this location, this could just be a random fluctuation. Figure A16 shows that calls for service have decreased by 31% at this spot since ABSPY began, compared to 12% at the comparison site. Violent incidents also decreased by 55% relative to 32% at the comparison site (Figure A19) , although we again caution that the small numbers of incidents could make this change appear larger than it really is. Overall incidents have decreased by 4% (Figure A17) and youth incidents by 11% (Figure A18), but decreases were larger in the comparison site. As in the other sites, Part II minor incidents increased at the Light Rail but decreased in the comparison sites (Figure A20).

At Lake Washington, the overall trend in crime incidents is improving after an increase in both adult and youth-involved incidents (Figure 6). Overall incidents have decreased and there has been a consistent decline in youth incidents. This suggests that our efforts to increase the dosage of interventions at Lake Washington, especially through more police-community engagement and social events, may have been effective. While the changes in calls for service and incidents since ABSPY began are not as strong at Lake Washington as they are in the comparison site (Figures A21-A25), trends are generally going in the right direction. However, violent incidents remain 19% higher post-ABSPY and Part II minor incidents have increased by 49%. Although violent incidents are higher than pre-ABSPY levels, they were 24% higher last

Figure 5: Crime incidents at Light Rail, September 2012-August 2018



year, suggesting there has been an improvement between 2017 and 2018, but Part II incidents continue to increase.

Safeway continues to experience increases in all calls for service and crime outcomes post-ABSPY (Figures A11-A15). Figure 7 shows that recorded incidents rose sharply in the past year after dropping slightly in 2016-17. The increase in youth-involved incidents is also a cause for concern and may reflect changes in the management and a renewed focus on enforcement of minor crimes (supported by the 122% increase in Part II incidents post-ABSPY; Figure A30).

4.2 Serious violent crime declined more in the Rainier Beach hot spots than the South Precinct overall

While there is variability in the effectiveness of ABSPY for various crime outcomes across the hot spots, one very promising finding that we have observed in prior reports and which continued this year is that *serious* violent crime (i.e. Part I violence: homicide, rape, aggravated assault, and robbery) continues to decrease in the hot spots at a higher rate than in the South Precinct as a whole. The rate of Part I violent crimes has decreased by 30% post-ABSPY in the hot spots, compared to 26% in the rest of the precinct (Figure A31 . Given ABSPY's focus on reducing violent crime, this is an important positive finding.

Figure 6: Crime incidents at Lake Washington, September 2012-August 2018

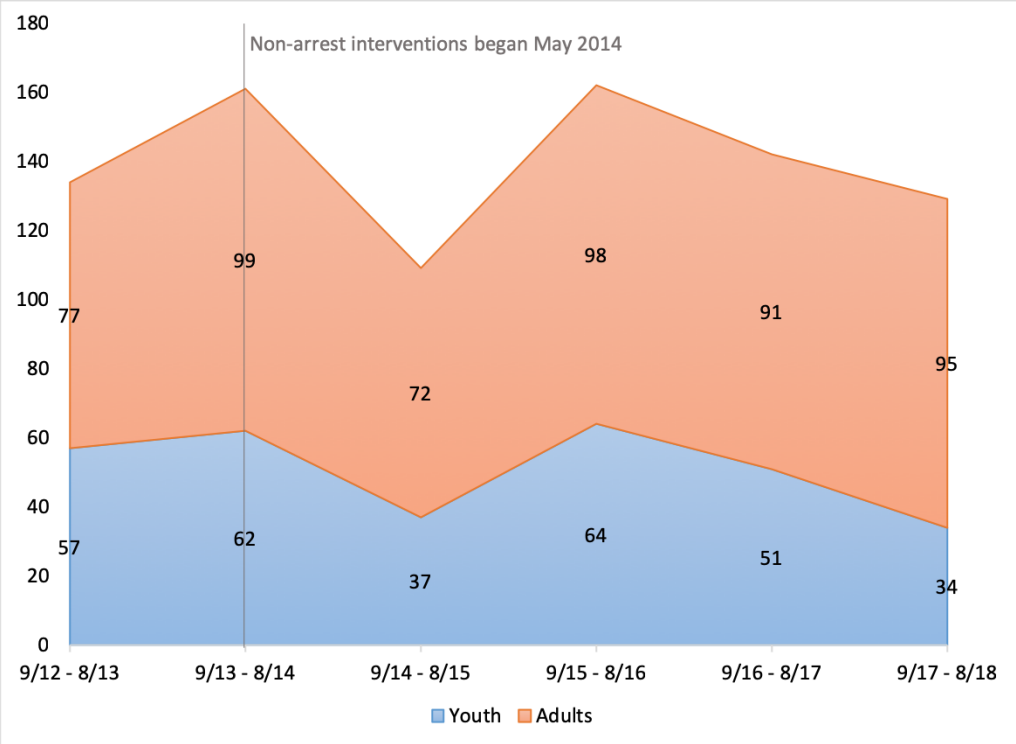
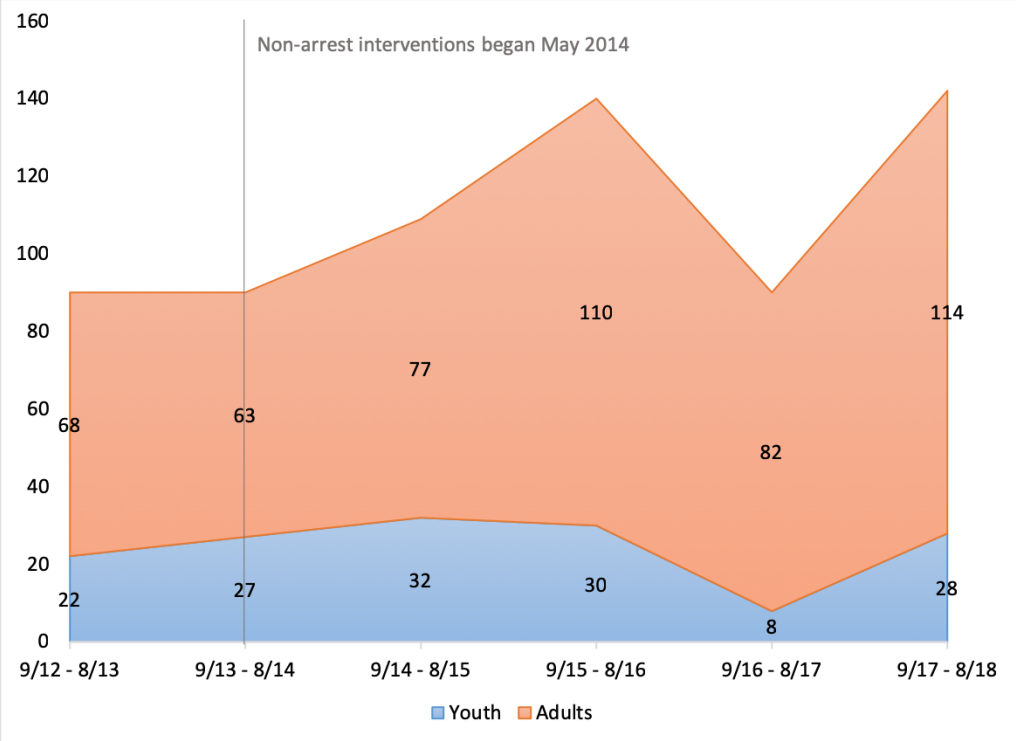


Figure 7: Crime incidents at Safeway, September 2012-August 2018



4.3 Calls for service and crime incidents were higher in the Rainier Beach hot spots while the interventions were active

The difference-in-differences analysis described above allows us to examine whether changes in crime in the Rainier Beach hot spots were *statistically* different from changes in the comparison sites. Statistical significance is a scientific standard used to determine whether changes can be attributed to the interventions or if they just happened by chance. However, it does have several limitations. As we have noted before, it was extremely difficult to find comparison hot spots that were similar to Rainier Beach, especially because many other areas in the South Precinct are experiencing gentrification and economic development that can affect crime rates and people's perceptions of safety. Our statistical results also do not take into account the possibility that a program like ABSPY, which is intended to increase community members' involvement with crime prevention and encourage them to look out for each other and interact more with the police, could increase calls for service, which in turn may lead to higher rates of incidents as the police respond to and take reports for more calls.

Figures A32 and A33 show that while calls for service in the Rainier Beach hot spots appear to be on a downward trend, they are also declining in the comparison spots. Calls for service in Rainier Beach were higher than the comparison sites even when the ABSPY interventions were inactive, but the gap increases when the interventions were active. Active ABSPY interventions are associated with a statistically significant 39% higher rate of calls for service in the Rainier Beach hot spots relative to the controls (Table A4). Similarly, the rate of incidents was 27% higher in Rainier Beach when the interventions were active (Table A5; Figures A34 and A35); youth incidents were 34% higher (Table A6; Figures A36 and A37); and Part II minor incidents were 45.6% higher (Table A8; Figures A40 and A41). The rate of violent incidents was also 22% higher, but this was not statistically significant (Table A7; Figures A38 and A39). Note that the models suggest that there is very little change in crime outcomes in the Rainier Beach hot spots but larger declines in the comparison hot spots, which magnifies the difference in rates.

As we described above, we used a new exploratory approach to see whether the higher rates of crime associated with ABSPY could be a result of increased community engagement and reporting to the police. We calculated a crime inflation factor of 1.17 for the Rainier Beach hot spots (indicating that the ratio of calls to incidents was higher after ABSPY was implemented) and .81 in the comparison hot spots (indicating that the ratio was lower during the same period). The difference between the inflation factors in the treatment and comparison areas is not statistically significant (t=-1.016; p=.340). We then divided the comparison group inflation factor by the treatment group inflation factor and multiplied the total number of post-ABSPY crime incidents in the treatment hot spots by this value to adjust for call inflation. We ran a univariate ANOVA (adjusting for treatment assignment, each "block" or treatment-comparison site pair, and the pre-ABSPY crime rate) with the unadjusted and adjusted incident counts.[6] The unadjusted model showed that crime incidents were higher in the treatment hot spots relative to the comparison spots (F=8.11; p=.065), while the adjusted model predicted a slightly lower and non-significant incident rate in Rainier Beach (F=.55; p=.510). While this analysis is very exploratory and has substantial limitations (for example, it doesn't account for the rolling start and pauses in interventions), this does suggest that while ABSPY did not lead to any changes in crime, the increased rates we see in the statistical models are likely due to increased reporting rather than a "backfire effect." This conclusion is also supported by our survey results, which indicate that people in Rainier Beach believe that crime is improving rather than getting worse.

[6] We used logged values for the pre- and post-ABSPY crime incident rates in this analysis.

4.4 More people are noticing the ABSPY interventions and satisfaction with them is high

The community survey findings, updated for 2018, show that after a slight downturn in people noticing the business improvements and Corner Greeters last year, the numbers are starting to bounce back toward the levels we saw in Wave 2, two years after ABSPY interventions began (Figures A42 and A43), although the recognition of business improvements is still significantly lower than it was in Wave 2 (Table A9). The proportion of people noticing Safe Passage continues to increase (Figure A44).

This year's survey indicated a very small drop in satisfaction with the business improvements and Corner Greeters among those who had noticed these interventions in Rainier Beach (Figures A45 and A46). However, satisfaction is still much higher than it was in 2016 when we first measured it, with over 85% of respondents saying they were satisfied. Satisfaction with Safe Passage remains extremely high and largely unchanged from previous years, with 95% of respondents saying they were satisfied (Figure A47). These improvements are not statistically significant when compared with Wave 2.[7]

4.5 People in Rainier Beach believe crime has gotten better in the past year

Within the Rainier Beach hot spots, people were significantly more likely to say crime had gotten better in the past year. This has been true in every survey wave since ABSPY started (Table A11; Figure A48). Importantly, the improvement between the baseline (Wave 1) survey and the Wave 4 survey remains statistically significant relative to the comparison hot spots (Table A12; Figure A49). People's perceptions of the likelihood that a serious crime will occur on their block have also continued to decrease significantly, both over time in Rainier Beach (Table A13; Figure A50) and in relation to the comparison sites (Table A14; Figure A51). These results suggest that in the long term, people's perceptions of improvement in crime in Rainier Beach can be attributed to the success of ABSPY. In addition, perceived frequency of disorder continues to significantly decrease in the hot spots (Table A15; Figure A52). There was an increase in perceived frequency of disorder in the comparison sites in Wave 4 (Figure A53), but the difference between the treatment and comparison sites is not statistically significant (Table A16).

Although people perceive improvements in crime, we are still seeing mixed findings in people's concerns about crime and disorder and their feelings of safety on their block. Concerns about crime and disorder, which had been rising slightly in Rainier Beach, dropped significantly in Wave 4 (Table A17; Figure A54), while concerns in the comparison spots continue to increase (Figure A55). However, the difference between the treatment and comparison sites is not statistically significant (Table A18). There was a slight decrease in people's reported feelings of safety in Rainier Beach in Wave 4, but this was very small and Rainier Beach residents still feel significantly safer than they did in Wave 1 (Table A19; Figure A56). There was also a similar small decrease in people's feelings of safety in the comparison spots, where people generally feel safer than they do in Rainier Beach (Figure A57). However, the difference between the treatment and comparison hot spots is not statistically significant (Table A20).

[7] Although satisfaction with Safe Passage appears to have dipped slightly according to Figure A47, similar to business improvements and Corner Greeters, note that this is by less than 1% predicted probability.

4.6 Community perceptions of social cohesion and collective efficacy in Rainier Beach are improving

Social cohesion (whether people trust each other and believe that they have adequate community resources to take care of problems) and collective efficacy (the willingness of residents to intervene and deal with community problems) continue to increase in the Rainier Beach hot spots. The difference is not statistically significant year-on-year (social cohesion: Table A21, Figure A58; collective efficacy: Table A23, Figure A60), but both outcomes were significantly better in Rainier Beach in Wave 4 than they were in Wave 1 (results not shown). There were no significant differences in social cohesion or collective efficacy between the Rainier Beach and comparison hot spots (social cohesion: Table A22; collective efficacy: Table A24). These outcomes continue to improve in the comparison sites too (social cohesion: Figure A59; collective efficacy: Figure A61).

4.7 People's impressions of the police in Rainier Beach have significantly improved

Finally, Rainier Beach residents' satisfaction with the police and perception of the police as legitimate both significantly improved in Wave 4 (satisfaction: Table A25, Figure A62; legitimacy: Table A27, Figure A64). This difference holds up when compared to the comparison hot spots, indicating that the improvement can be attributed to ABSPY (satisfaction: Table A26, Figure A63; legitimacy: Table A28, Figure A65). We previously saw a significant improvement in satisfaction in Wave 2 (there were substantial, but not significant, improvements in legitimacy in that wave), but the difference had disappeared in Wave 3. The fact that it has returned and strengthened in Wave 4 indicates that ABSPY has had an important long-term effect on perceptions of the police. It is interesting to note that people in the Rainier Beach hot spots said they were less likely to see the police in all contexts, although this difference was not statistically significant, either within the neighborhood (Table A29; Figure A66) or relative to the comparison sites (Table A30; Figure A67).

5 Conclusions and Recommendations

ABSPY is a community-led, place-based, data-driven approach to reducing crime and public safety in five hot spots of juvenile and youth crime in the Rainier Beach neighborhood of Seattle. This updated evaluation report finds that ABSPY continues to be successful in building capacity among an extensive network of community members, local stakeholders, and local government and police agencies to work together to identify crime problems and develop innovative, evidence-informed responses and contributing to improved community outcomes, such as a belief that crime is decreasing in Rainier Beach, higher levels of social cohesion and collective efficacy, and improved perceptions of the police. The promising trends we identified in our previous reports have been sustained during 2018 and several of our findings now meet the scientific standard of "statistical significance," meaning we can be confident that the improvements are a result of ABSPY and not simply due to chance. As we predicted in our 2017 Evaluation Update (Gill & Vitter, 2017), many of ABSPY's outcomes reflect longer-term improvements that would take time to be realized. Now, in the six years since the program was first awarded federal funding by the Bureau of Justice Assistance, these long-term benefits are starting to be realized.

- **The hot spots have continued to become less "hot" over time.** Overall, there is a downward trend in the number of crime incidents at the Rainier Beach hot spots, and on many measures crime

in Rainier Beach has been lower since ABSPY started than it was before. In particular, crime at Rainier and Henderson, a 30-year youth crime hot spot in Rainier Beach (Weisburd et al., 2009), has consistently decreased since ABSPY began. We also saw a small improvement at Lake Washington, following our recommendation last year to increase intervention dosage at that location. However, there are some trends in the other direction that will require attention in the coming year, including a substantial increase in crime at the Safeway hot spot and an overall higher level of Part II (minor) crimes. Increases in these "quality of life issues" can be an indication that residents are more willing to engage with police and report problems, and that more serious crime is decreasing (since people are less likely to notice minor issues when they have more significant concerns). However, this issue will require further monitoring and assessment in 2019.

- **Serious violent crime is declining more in Rainier Beach than in the South Precinct overall.** ABSPY's original goal was to address serious violent crime, particularly involving young people. While the numbers of youth violent crimes at the hot spot level are too small for analysis, our findings show that the trend we saw in our previous reports—a larger decrease in serious violent crime in the Rainier Beach hot spots compared to the rest of the South Precinct—has continued to hold through 2018. Serious violent crime has decreased by 30% in Rainier Beach since ABSPY began, compared to 26% in the rest of the South Precinct.

- **Calls for service and crime incidents were higher in Rainier Beach while the interventions were active, which could indicate a reporting effect.** As we have previously reported, it is difficult to statistically assess the impact of ABSPY relative to the comparison sites because the Rainier Beach hot spots are unique, and over the past six years the comparison areas have experienced gentrification and economic development—both factors that can impact crime and social outcomes—that has not been present in Rainier Beach. We have previously speculated that the higher rates of crime associated with ABSPY that we observed could be a positive effect of ABSPY, which has been supported by our survey. People are more engaged with the community and have better impressions of the police, so they may be more willing to call the police if they see a problem. In this report we applied a new statistical technique, the Crime Inflation Factor (Weisburd et al., 2018), to assess this problem. We found that the significantly higher crime rates we see associated with ABSPY disappear when we adjust for the possibility that people are calling the police more. While this analysis is exploratory and does not "prove" a reporting effect, it does indicate that the higher crime rates are more likely to be a result of people calling the police more, rather than any negative effects of ABSPY.

- **More people are noticing the ABSPY interventions and satisfaction with them is high.** Recognition of ABSPY's signature interventions—business improvements, Corner Greeters, and Safe Passage—had dropped slightly in 2017, but our survey findings from 2018 showed that recognition improved again. This suggests that our recommendation last year to focus on raising awareness of ABSPY in the neighborhood was taken into account and was successful. However, there has been a very small drop in satisfaction with the interventions this year. While satisfaction remains very high, this indicates an opportunity to get the community more involved in developing these interventions going forward.

- **People in Rainier Beach believe crime has gotten better.** While we have not seen significant decreases in actual crime rates, people in Rainier Beach in 2018 were significantly more likely to say they thought crime had gotten better (i.e. decreased) in the past year and less likely to believe a serious crime would happen on their block. This statistically significant finding holds up relative

to the comparison sites, which indicates that the improvement can be attributed to ABSPY. People in Rainier Beach also feel safe and have fewer concerns about crime and disorder compared to our first survey in 2014.

- **Community perceptions of social cohesion and collective efficacy in Rainier Beach are improving.** Trust, shared values, and recognition of community resources, as well as a perceived willingness to intervene if there is a problem, all continue to improve over time in Rainier Beach. While these findings do not reach the level of statistical significance, we note that it has taken four years to see significant changes in more immediate community perceptions such as improvements in crime. Improvements in social cohesion and collective efficacy are major community-level changes that will likely take many years to achieve significance; however, our findings indicate that they are trending in the right direction.

- **People's impressions of the police in Rainier Beach have significantly improved.** ABSPY has statistically significant long-term effects on satisfaction with the police and perceptions of police legitimacy. This is an extremely interesting finding, because although SPD has been a key partner in ABSPY they do not lead it, unlike many other crime prevention programs that are police-directed. These findings suggest that the police can improve their relationships with the community by collaborating and sharing their expertise with community members, but also allowing the community to take the lead on developing effective approaches.

5.1 Recommendations for 2019

Overall, our conclusions in 2018 indicate that ABSPY interventions continue to move in the right direction, and the positive effects on the community are strengthening over time. Last year we suggested that more time would likely be needed for the impacts of ABSPY to achieve statistical significance. This year, we have seen mixed findings which indicate that some shorter-term effects on community perceptions have now reached this level, but we still need more time to see stronger impacts on community-level outcomes like collective efficacy and social cohesion. This is a typical outcome of interventions designed to create sustainable change at places (e.g. Weisburd et al., 2018). Nonetheless, our findings are extremely promising. In order to continue these successes in 2019 we recommend the following areas of focus:

1. **Increase community involvement with ABSPY interventions.** Although community satisfaction with ABSPY is very high, there was a small drop in 2018 compared with last year. The ABSPY Intervention Team has lost some momentum recently, and the Core Team has had a number of conversations about increasing community representation on the team—particularly representation of the young people of Rainier Beach that ABSPY aims to serve. We suggest that recognition of and satisfaction with ABSPY interventions could be improved if efforts are made to revitalize the Intervention Team and bring in more community and youth involvement to help bring new ideas to ABSPY's signature efforts.

2. **Increase collaboration and intervention development at Safeway.** Crime incidents involving both youth and adults are higher than pre-ABSPY levels at Safeway. Changes in management and different approaches to addressing and enforcing minor youth crime and shoplifting at the store have varied over the course of the intervention, so 2019 represents an opportunity to increase collaboration and build relationships with place managers at this hot spot, understand the reasons behind the changing trends, and adjust the non-arrest interventions as needed.

3. **Investigate the reasons for the increase in Part II (minor) crimes.** Our evaluation this year indicated that Part II minor crimes, apart from simple assault, have increased substantially in all of the hot spots. As we have noted this could indicate an increased interest in the community in looking out for problems and calling the police when they see an issue. It could also be an impact of falling violent crime—as more serious problems go away, people may become more concerned with minor issues that nonetheless affect their quality of life. Through our data analysis and community survey in 2019, the Center for Evidence-Based Crime Policy will look more closely at this issue and share more details with the Core Team so that these increases can be understood and addressed.

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Rainier Beach:
A Beautiful Safe Place for Youth

2018 Evaluation Update

Statistical Appendix

Table A1: Number of surveys completed, by site and wave

	Wave			
	1	2	3	4
Treatment Sites				
Rose St	27	32	29	29
Rainier & Henderson	36	30	28	33
Light Rail	25	31	30	25
Lake Washington	26	26	27	30
Safeway	31	35	32	30
Total	145	154	146	147
Comparison Sites				
Rose St Comparison	27	21	27	31
Rainier & Henderson Comparison	42	26	28	34
Light Rail Comparison	31	33	30	28
Lake Washington Comparison	28	32	29	33
Safeway Comparison	24	34	30	32
Total	152	146	144	158

Table A2: Sample characteristics by wave and by group at baseline (wave 1)

	Wave				Treatment at wave 1	Comparison at wave 1
	1	2	3	4		
Survey setting (%)						
Household	23.9	9.7	8.3	19.7	24.2	23.6
Street	70.0	83.3	85.5	63.3	69.1	70.8
Business	6.1	7.0	6.2	17.0	6.7	5.6
Gender (%)						
Female	43.5	49.7	43.2	46.6	43.8	43.2
Male	56.1	50.3	56.4	52.4	55.6	56.8
Other	0.4	0.0	0.4	1.0	0.7	0.0
Age* (%)						
18-25	22.1	23.5	24.3	15.6	17.2	27.9
26-35	24.3	22.8	26.8	26.9	23.4	25.4
36-45	15.4	17.0	17.5	20.4	13.1	18.0
46-55	15.4	15.9	12.5	18.4	18.6	11.5
56-65	15.4	14.5	13.9	12.2	16.6	13.9
Over 65	7.5	6.2	5.0	6.5	11.0	3.3
Race*** (%)						
Black/African-American	36.6	41.7	33.0	30.4	31.2	42.7
African immigrant/refugee	7.5	11.9	8.1	17.1	5.0	10.5
White	24.9	23.0	26.7	22.5	34.0	14.5
Asian	12.5	6.5	11.0	16.0	17.7	6.5
Native American/Pacific islander	3.4	3.2	2.9	3.4	3.5	3.2
Hispanic	4.9	5.4	2.9	0.0	2.8	7.3
Other/More than one race	10.2	8.3	15.4	10.6	5.7	15.3
Born in United States (%)	63.1	70.8	68.3	64.3	65.3	60.5
Has children (%)	56.3	61.4	51.7	55.1	57.6	54.8
Education (%)						
Primary/elementary school	3.0	1.7	0.7	0.4	0.7	5.6
Some middle/high school	7.5	5.5	6.0	6.0	7.1	8.0
High school diploma/GED	26.4	21.1	29.1	24.2	22.1	31.2
Some college	23.0	33.6	27.6	27.0	24.3	21.6
Associate's degree	15.5	12.8	9.0	10.7	17.1	13.6
Bachelor's degree	16.2	15.2	16.0	20.6	18.6	13.6
Masters/graduate/professional degree	8.3	10.0	11.6	11.0	10.0	6.4
Employment (%)						
Full-time	42.5	43.3	54.4	60.8	44.5	40.0
Part-time	18.7	23.9	21.0	13.4	17.5	20.0
Not working	29.0	19.0	14.0	13.1	27.0	31.3
Retired	9.9	10.0	7.0	8.1	10.9	8.7

Sample characteristics by wave and by group at baseline (continued)

	Wave				Treatment at wave 1	Comparison at wave 1
	1	2	3	4		
Currently in school (%)						
Full-time	36.9	11.7	13.7	10.0	50.0	28.2
Part-time	63.1	10.0	12.2	7.5	50.0	71.8
Main activity at hot spot (%)						
Live	47.8	35.7	36.3	40.7	46.1	49.7
Work	13.1	10.0	11.4	23.6	9.9	16.6
School	0.3	0.3	1.0	0.7	0.0	0.7
Own business	1.7	1.3	2.1	1.0	2.6	0.7
Own property/land	0.3	0.7	0.3	0.3	0.7	0.0
Shop	12.8	22.3	17.0	13.4	11.2	14.5
Use public transit	15.5	15.7	17.6	10.8	18.4	12.4
Use local resources	1.7	6.0	6.6	1.6	1.3	2.1
Walk/drive through	4.0	6.3	4.8	3.9	5.9	2.1
Other	2.7	1.7	2.8	3.9	3.9	1.4
Duration of main activity (%)						
Less than 1 year	20.6	22.0	21.5	23.0	21.1	20.1
1 year or more, but less than 5 years	36.8	37.3	39.2	35.3	35.4	38.2
5 years or more, but less than 10 years	18.6	13.9	16.0	19.3	22.4	14.6
10 years or more	24.1	26.8	23.3	22.3	21.1	27.1

Significant differences between treatment and comparison group at baseline:
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A3: Descriptive statistics for survey outcomes

		Wave 1			Wave 2			Wave 3			Wave 4		
	α (Items)	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Noticed improvements to businesses[a,e]	-	-	-	-	138	2.88	0.70	124	2.69	0.77	124	2.69	0.75
Noticed Corner Greeters[a,e]	-	-	-	-	119	2.58	0.79	125	2.38	0.74	122	2.55	0.83
Noticed Safe Passage[a,e]	-	-	-	-	120	2.84	0.78	125	2.84	0.76	123	2.93	0.85
Satisfied with business improvements[a,f]	-	-	-	-	97	2.94	0.67	73	3.12	0.58	74	3.04	0.65
Satisfied with Corner Greeters[a,f]	-	-	-	-	64	2.89	0.69	46	3.20	0.69	65	3.15	0.69
Satisfied with Safe Passage[a,f]	-	-	-	-	76	3.18	0.63	74	3.32	0.60	80	3.38	0.62
Has crime here gotten better in past year[b]	-	241	3.22	1.11	239	3.70	0.99	235	3.56	1.05	225	3.86	0.99
Likelihood of crime[c]	0.943 (11)	265	3.00	0.64	266	2.83	0.67	272	2.73	0.66	275	2.66	0.75
Frequency of disorder[a]	0.936 (9)	266	2.52	0.98	264	2.22	0.91	274	2.03	0.88	275	2.21	0.97
Feelings of safety[a]	0.892 (9)	290	2.85	0.58	284	2.93	0.48	284	2.99	0.59	297	2.97	0.63
Concerns about crime and disorder[a]	0.890 (15)	282	2.71	0.58	274	2.71	0.53	279	2.75	0.44	291	2.73	0.51
Social cohesion/community resources[a]	0.846 (11)	295	2.72	0.52	288	2.73	0.43	289	2.76	0.50	301	2.81	0.45
Collective efficacy[d]	0.785 (4)	280	2.45	0.71	278	2.53	0.64	280	2.54	0.72	277	2.64	0.70
Satisfaction with police[a]	0.806 (3)	255	2.59	0.80	255	2.71	0.67	253	2.64	0.73	247	2.79	0.69
Police legitimacy[a]	0.888 (3)	244	2.64	0.85	247	2.72	0.70	251	2.64	0.72	244	2.81	0.71
Frequency of police activity[c]	0.811 (6)	269	2.34	0.75	268	2.34	0.73	267	2.27	0.78	263	2.35	0.76

The "mean" is the average score across all respondents in each wave. SD is the standard deviation, which is a statistical measure of how spread out all the response values are from the mean.

[a] Outcomes based on a 4-point agreement scale (1 = strongly disagree, 4 = strongly agree)

[b] Outcomes based on a 5-point scale (1 = much worse, 5 = much better)

[c] Outcomes based on a 4-point frequency scale (1 = less than once a month, 4 = every day)

[d] Outcomes based on a 4-point likelihood scale (1 = very unlikely, 4 = very likely)

[e] These questions asked only to respondents in treatment sites in Waves 2-4

[f] These questions asked only to respondents in treatment sites in Waves 2-4 who said they had noticed these interventions

Table A4: Difference-in-differences Poisson regression on calls for service

	Calls for service	
	IRR	Robust SE
Active	.776***	.056
Treatment	1.185***	.056
Active × Treatment	1.390***	.093
Month (ref:Jan)		
Feb	.983	.101
Mar	1.160	.107
Apr	1.142	.096
May	1.286**	.114
Jun	1.219*	.098
Jul	1.304**	.115
Aug	1.155	.106
Sep	1.085	.094
Oct	1.073	.094
Nov	.961	.089
Dec	.909	.074
Trend	.995***	.001
Constant	109.806***	8.123
Log pseudolikelihood	-1056.270	
Pseudo R^2	.373	
Wald χ^2	260.832***	
N	184	

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

Table A5: Difference-in-differences Poisson regression on all incidents

	All incidents	
	IRR	Robust SE
Active	.768***	.052
Treatment	1.310***	.061
Active × Treatment	1.266***	.079
Month (ref:Jan)		
Feb	1.042	.070
Mar	1.196*	.085
Apr	1.123	.075
May	1.261**	.095
Jun	1.138	.092
Jul	1.230*	.104
Aug	1.131	.086
Sep	1.070	.092
Oct	1.074	.080
Nov	.943	.072
Dec	.993	.077
Trend	1.000	.001
Constant	28.859***	1.966
Log pseudolikelihood	-635.373	
Pseudo R^2	.196	
Wald χ^2	228.336***	
N	184	

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A6: Difference-in-differences Poisson regression on youth incidents

	Youth incidents	
	IRR	Robust SE
Active	.797	.093
Treatment	1.511***	.101
Active × Treatment	1.344**	.145
Month (ref:Jan)		
Feb	1.113	.153
Mar	1.314*	.150
Apr	1.254	.155
May	1.419*	.195
Jun	1.462**	.193
Jul	1.373*	.210
Aug	1.143	.165
Sep	.984	.149
Oct	1.216	.161
Nov	1.035	.140
Dec	1.049	.138
Trend	.994**	.002
Constant	9.587***	1.262
Log pseudolikelihood	-501.469	
Pseudo R^2	.195	
Wald χ^2	209.247***	
N	184	

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A7: Difference-in-differences Poisson regression on violent incidents

	All violence (Part I/simple assault)	
	IRR	Robust SE
Active	.805	.096
Treatment	1.357***	.117
Active × Treatment	1.218	.147
Month (ref:Jan)		
Feb	.938	.155
Mar	1.176	.204
Apr	1.142	.182
May	1.168	.174
Jun	1.133	.191
Jul	1.079	.171
Aug	1.110	.173
Sep	.944	.144
Oct	.914	.145
Nov	.949	.179
Dec	.930	.167
Trend	.997	.002
Constant	6.660***	1.153
Log pseudolikelihood	-446.768	
Pseudo R^2	.080	
Wald χ^2	85.362***	
N	184	

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A8: Difference-in-differences Poisson regression on Part II (minor) incidents

	Part II incidents	
	IRR	Robust SE
Active	.633***	.065
Treatment	1.219***	.071
Active × Treatment	1.456***	.130
Month (ref:Jan)		
Feb	1.282*	.159
Mar	1.437**	.173
Apr	1.532***	.148
May	1.608***	.182
Jun	1.439***	.158
Jul	1.453**	.191
Aug	1.247*	.123
Sep	1.294*	.150
Oct	1.343**	.154
Nov	1.114	.133
Dec	1.201	.142
Trend	1.009***	.002
Constant	6.204***	.660
Log pseudolikelihood	-496.978	
Pseudo R^2	.164	
Wald χ^2	151.241***	
N	184	

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A9: Survey participants who noticed interventions

	Noticed business improvements		Noticed Corner Greeters		Noticed Safe Passage	
	b	Robust SE	b	Robust SE	b	Robust SE
Wave 3	-.795**	.296	-.868**	.293	-.065	.337
Wave 4	-.663*	.321	.077	.304	-.064	.364
Hot spot (ref:Rainier & Henderson)						
Rose St	.255	.425	-.677	.405	-.801	.471
Light Rail	-.788*	.389	-.548	.394	-.494	.445
Lake Washington	-.269	.439	-.467	.429	-1.133*	.504
Safeway	.267	.413	-.837*	.400	-.897*	.438
Survey location (ref:Household)						
Street	.126	.518	.446	.486	-.654	.704
Business	.582	.698	.356	.635	-.818	.786
Race (ref:Black/African-American)						
African immigrant/refugee	.014	.394	-.058	.389	-.116	.459
White	-.311	.307	-.336	.306	-1.258***	.338
Asian	-.156	.460	-.770	.485	-1.532**	.554
Other/more than one race	.362	.378	.116	.357	-.527	.417
Employment status (ref:Full-time)						
Part-time	-.542	.353	.094	.359	-.779	.416
Not working/retired/other	-1.185***	.299	-.205	.287	-1.112**	.342
Attending school (ref:Full-time)						
Part-time	-.247	.561	-.710	.530	-.860	.696
Not attending	-.157	.426	-.725	.389	-.894	.517
Main activity at hot spot (ref:Live)						
Work	-.683	.454	-.753	.453	-.578	.476
Shop	-1.065**	.413	-.839*	.400	-1.016*	.462
Use public transit	-.499	.470	-.260	.447	-1.391**	.534
Other	-.339	.372	-.706	.389	-1.459**	.457
Constant	2.097**	.759	1.479*	.737	4.793***	1.063
Log pseudolikelihood	-208.616		-213.588		-174.736	
Pseudo R^2	.099		.084		.149	
Wald χ^2	39.101**		34.041*		52.222***	
N	355		338		338	

Logistic regression

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A10: Survey participants who were satisfied with interventions

	Satisfied with business improvements		Satisfied with Corner Greeters		Satisfied with Safe Passage	
	b	Robust SE	b	Robust SE	b	Robust SE
Wave 3	.911	.504	1.404*	.696	1.059	.835
Wave 4	.258	.532	.799	.614	.533	.726
Hot spot (ref:Rainier & Henderson)						
Rose St	.132	.634	-1.081	.848	-1.412	.840
Light Rail	1.001	.794	-.023	.872	.797	1.272
Lake Washington	-.985	.708	-.827	.742	-.166	.961
Safeway	-.119	.599	-.586	.842	.848	1.072
Survey location (ref:Household)						
Street	-1.705*	.789	-.286	.810	-1.328	1.258
Business	-1.383	.978	-2.269*	1.006	-2.501	1.593
Race (ref:Black/African-American)						
African immigrant/refugee	-.414	.526	.273	.610		-
White	1.792*	.816	.234	.716		-
Asian	-.742	.763	-.583	1.109		-
Other/more than one race	.687	.648	.644	.798		-
Race (African-American)[a]					-.845	- .605
Employment status (ref:Full-time)						
Part-time	-.813	.504	-1.198	.626	1.010	.813
Not working/retired/other	-.680	.498	-.774	.618	-.035	.797
Attending school (ref:Full-time)						
Part-time	-1.136	.908	-.507	.996	-.751	.952
Not attending	-1.187	.647	.200	.646	.624	1.009
Main activity at hot spot (ref:Live)						
Work	-.443	.668	.786	.772	1.419	1.196
Shop	-.063	.585	.129	.801	-.892	.912
Use public transit	-.657	.772	-1.020	.860	.585	1.395
Other	.221	.759	1.778	1.131	.565	1.004
Constant	4.310***	1.248	2.117	1.139	3.551*	1.769
Log pseudolikelihood	-85.111		-63.350		-43.929	
Pseudo R^2	.128		.155		.159	
Wald χ^2	26.275		27.638		38.480**	
N	227		164		222	

a The full race variable predicted success perfectly in the Safe Passage model, so we used a binary variable (Black/African-American vs. other) instead.

Logistic regression

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A11: Has crime gotten better, worse, or stayed the same in the past year? (Rainier Beach only)

	Change in crime in past year (Rainier Beach)	
	b	Robust SE
Wave 2	1.346***	.329
Wave 3	1.045***	.298
Wave 4	1.822***	.320
Hot spot (ref:Rainier & Henderson)		
Rose St	-.294	.361
Light Rail	-.097	.323
Lake Washington	-.166	.384
Safeway	-.254	.321
Survey location (ref:Household)		
Street	-.791	.430
Business	-.485	.539
Race (ref:Black/African-American)		
African immigrant/refugee	.433	.361
White	-.582*	.251
Asian	-.408	.424
Other/more than one race	.458	.295
Employment status (ref:Full-time)		
Part-time	-.574*	.264
Not working/retired/other	-.516*	.250
Attending school (ref:Full-time)		
Part-time	-.123	.451
Not attending	-.429	.360
Main activity at hot spot (ref:Live)		
Work	-.220	.379
Shop	-.460	.359
Use public transit	.592	.406
Other	.141	.351
Cut 1	*-2.457****	*.572*
Cut 2	*-.593*	*.556*
Log pseudolikelihood	-385.596	
Pseudo R^2	.094	
Wald χ^2	64.965***	
N	438	

Note: Outcome was recoded to a three-level variable for analysis (got worse, stayed the same, got better)
Ordered logistic regression
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A12: Has crime gotten better, worse, or stayed the same in the past year? (Rainier Beach vs. comparison spots)

	Change in crime in past year	
Fixed effects	b	SE
Wave 2	.564*	.268
Wave 3	.224	.263
Wave 4	.464	.264
Treatment	-.860**	.280
Wave 2 × Treatment	.529	.376
Wave 3 × Treatment	.770*	.372
Wave 4 × Treatment	1.314***	.390
Race (ref:Black/African-American)		
African immigrant/refugee	.617*	.259
White	-.392*	.171
Asian	-.050	.233
Other/more than one race	.291	.204
Age (ref:18-25)		
26-35	-.090	.209
36-45	-.296	.224
46-55	-.374	.224
56-65	-.509*	.233
Over 65	-.732*	.300
Cut 1	*-2.071****	*.269*
Cut 2	*-.275*	*.257*
Random effects	σ	SE
Hot spot	.027	.031
Log pseudolikelihood	-816.782	
Wald χ^2	76.392***	
N	900	

Note: Outcome was recoded to a three-level variable for analysis (got worse, stayed the same, got better)
Multilevel mixed-effects ordered logistic regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A13: Perceived likelihood of crime (Rainier Beach only)

	Likelihood of crime (Rainier Beach)	
	b	Robust SE
Wave 2	-.236**	.090
Wave 3	-.323***	.091
Wave 4	-.560***	.098
Hot spot (ref:Rainier & Henderson)		
Rose St	-.125	.104
Light Rail	-.158	.103
Lake Washington	-.172	.109
Safeway	-.040	.107
Survey location (ref:Household)		
Street	.417***	.117
Business	.633***	.151
Race (ref:Black/African-American)		
African immigrant/refugee	-.300**	.109
White	.054	.083
Asian	-.172	.130
Other/more than one race	-.065	.084
Employment status (ref:Full-time)		
Part-time	-.138	.086
Not working/retired/other	-.040	.077
Attending school (ref:Full-time)		
Part-time	-.153	.147
Not attending	-.074	.123
Main activity at hot spot (ref:Live)		
Work	-.261*	.120
Shop	-.150	.108
Use public transit	-.323**	.107
Other	-.267*	.106
Constant	3.142***	.196
F	4.40***	
R^2	.161	
RMSE	.678	
N	489	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A14: Perceived likelihood of crime (Rainier Beach vs. comparison spots)

	Likelihood of crime	
Fixed effects	b	SE
Wave 2	-.177*	.086
Wave 3	-.288***	.083
Wave 4	-.202*	.082
Treatment	.133	.096
Wave 2 × Treatment	.016	.122
Wave 3 × Treatment	.026	.120
Wave 4 × Treatment	-.258*	.119
Race (ref:Black/African-American)		
African immigrant/refugee	-.218**	.074
White	.096	.056
Asian	-.078	.073
Other/more than one race	.129*	.061
Age (ref:18-25)		
26-35	-.007	.062
36-45	-.004	.069
46-55	.023	.070
56-65	-.029	.073
Over 65	-.178	.099
Constant	2.923***	.083
Random effects	σ	SE
Hot spot	.004	.004
Residual	.441	.020
Log pseudolikelihood	-1037.153	
Wald χ^2	77.341***	
N	1024	

Multilevel mixed-effects linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A15: Perceived frequency of disorder (Rainier Beach only)

	Frequency of disorder (Rainier Beach)	
	b	Robust SE
Wave 2	-.364**	.132
Wave 3	-.468***	.131
Wave 4	-.382**	.133
Hot spot (ref:Rainier & Henderson)		
Rose St	-.138	.150
Light Rail	-.174	.144
Lake Washington	-.174	.153
Safeway	-.049	.139
Survey location (ref:Household)		
Street	.555***	.164
Business	.627**	.210
Race (ref:Black/African-American)		
African immigrant/refugee	-.212	.145
White	-.090	.118
Asian	-.179	.158
Other/more than one race	-.053	.119
Employment status (ref:Full-time)		
Part-time	-.144	.121
Not working/retired/other	-.069	.105
Attending school (ref:Full-time)		
Part-time	.086	.184
Not attending	-.061	.148
Main activity at hot spot (ref:Live)		
Work	-.163	.159
Shop	-.230	.142
Use public transit	-.323*	.156
Other	-.285	.146
Constant	2.516***	.259
F	2.59***	
R^2	.089	
RMSE	.931	
N	493	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A16: Perceived frequency of disorder (Rainier Beach vs. comparison spots)

	Frequency of disorder	
Fixed effects	b	SE
Wave 2	-.262*	.118
Wave 3	-.532***	.113
Wave 4	-.248*	.112
Treatment	.118	.155
Wave 2 × Treatment	-.068	.166
Wave 3 × Treatment	.130	.162
Wave 4 × Treatment	-.042	.161
Race (ref:Black/African-American)		
African immigrant/refugee	-.134	.101
White	-.017	.076
Asian	-.094	.099
Other/more than one race	.113	.083
Age (ref:18-25)		
26-35	-.212*	.085
36-45	-.115	.094
46-55	-.096	.095
56-65	-.187	.099
Over 65	-.548***	.134
Constant	2.587***	.128
Random effects	σ	SE
Hot spot	.026	.015
Residual	.815	.036
Log pseudolikelihood	-1358.150	
Wald χ^2	63.531***	
N	1026	

Multilevel mixed-effects linear regression
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A17: Concerns about crime and disorder (Rainier Beach only)

	Concerns about crime and disorder (Rainier Beach)	
	b	Robust SE
Wave 2	-.017	.078
Wave 3	.005	.073
Wave 4	-.057	.075
Hot spot (ref:Rainier & Henderson)		
Rose St	.022	.085
Light Rail	.075	.079
Lake Washington	.065	.086
Safeway	-.039	.081
Survey location (ref:Household)		
Street	.352***	.091
Business	.418***	.113
Race (ref:Black/African-American)		
African immigrant/refugee	-.098	.074
White	.068	.064
Asian	.114	.090
Other/more than one race	.013	.069
Employment status (ref:Full-time)		
Part-time	-.079	.065
Not working/retired/other	-.026	.058
Attending school (ref:Full-time)		
Part-time	.141	.111
Not attending	-.014	.092
Main activity at hot spot (ref:Live)		
Work	-.124	.088
Shop	-.109	.082
Use public transit	-.279***	.080
Other	-.179*	.080
Constant	2.537***	.155
F	2.10**	
R^2	.073	
RMSE	.517	
N	504	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A18: Concerns about crime and disorder (Rainier Beach vs. comparison spots)

	Concerns about crime and disorder	
	b	Robust SE
Wave 2	.017	.066
Wave 3	.042	.059
Wave 4	.091	.061
Treatment	.087	.074
Wave 2 $\times$ Treatment	.006	.099
Wave 3 $\times$ Treatment	.006	.092
Wave 4 $\times$ Treatment	-.127	.095
Race (ref:Black/African-American)		
African immigrant/refugee	-.010	.053
White	.072	.041
Asian	.148**	.054
Other/more than one race	.175***	.049
Age (ref:18-25)		
26-35	-.057	.046
36-45	-.014	.050
46-55	-.034	.052
56-65	.045	.059
Over 65	-.095	.080
Constant	2.610***	.060
F	1.98*	
R^2	.032	
RMSE	.512	
N	1059	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A19: Feelings of safety (Rainier Beach only)

	Feelings of safety (Rainier Beach)	
	b	Robust SE
Wave 2	.113	.070
Wave 3	.138	.079
Wave 4	.145*	.073
Hot spot (ref:Rainier & Henderson)		
Rose St	-.189*	.087
Light Rail	.118	.079
Lake Washington	-.110	.091
Safeway	-.156	.084
Survey location (ref:Household)		
Street	-.071	.092
Business	-.172	.129
Race (ref:Black/African-American)		
African immigrant/refugee	-.072	.070
White	-.219**	.068
Asian	-.274**	.102
Other/more than one race	-.090	.072
Employment status (ref:Full-time)		
Part-time	-.027	.068
Not working/retired/other	-.192***	.058
Attending school (ref:Full-time)		
Part-time	-.125	.109
Not attending	-.096	.078
Main activity at hot spot (ref:Live)		
Work	-.069	.094
Shop	-.069	.085
Use public transit	-.098	.083
Other	-.105	.082
Constant	3.250***	.139
F	3.05***	
R^2	.107	
RMSE	.540	
N	512	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A20: Feelings of safety (Rainier Beach vs. comparison spots)

	Feelings of safety	
Fixed effects	b	SE
Wave 2	.101	.069
Wave 3	.175**	.068
Wave 4	.173**	.066
Treatment	-.044	.095
Wave 2 × Treatment	-.033	.099
Wave 3 × Treatment	-.055	.098
Wave 4 × Treatment	-.048	.096
Race (ref:Black/African-American)		
African immigrant/refugee	-.064	.060
White	-.067	.045
Asian	-.311***	.059
Other/more than one race	-.095	.050
Age (ref:18-25)		
26-35	.038	.051
36-45	-.017	.056
46-55	-.050	.057
56-65	-.034	.059
Over 65	-.046	.079
Constant	2.951***	.078
Random effects	σ	SE
Hot spot	.010	.006
Residual	.305	.013
Log pseudolikelihood	-897.962	
Wald χ^2	45.562***	
N	1079	

Multilevel mixed-effects linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A21: Social cohesion/community resources (Rainier Beach only)

	Social cohesion (Rainier Beach)	
	b	Robust SE
Wave 2	.074	.062
Wave 3	.080	.067
Wave 4	.107	.062
Hot spot (ref:Rainier & Henderson)		
Rose St	-.127	.074
Light Rail	-.077	.072
Lake Washington	-.038	.074
Safeway	-.214**	.066
Survey location (ref:Household)		
Street	.013	.084
Business	.042	.116
Race (ref:Black/African-American)		
African immigrant/refugee	-.108	.069
White	-.077	.054
Asian	-.130	.076
Other/more than one race	-.039	.059
Employment status (ref:Full-time)		
Part-time	.002	.058
Not working/retired/other	-.052	.048
Attending school (ref:Full-time)		
Part-time	-.113	.104
Not attending	-.065	.082
Main activity at hot spot (ref:Live)		
Work	.034	.088
Shop	-.060	.069
Use public transit	-.157*	.075
Other	-.094	.073
Constant	2.961***	.127
F	1.68*	
R^2	.067	
RMSE	.453	
N	512	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A22: Social cohesion/community resources (Rainier Beach vs. comparison spots)

	Social cohesion/community resources	
Fixed effects	b	SE
Wave 2	.056	.058
Wave 3	.052	.056
Wave 4	.127*	.055
Treatment	.059	.068
Wave 2 × Treatment	-.023	.082
Wave 3 × Treatment	.006	.081
Wave 4 × Treatment	-.022	.080
Race (ref:Black/African-American)		
African immigrant/refugee	-.000	.049
White	-.035	.037
Asian	-.017	.049
Other/more than one race	-.058	.042
Age (ref:18-25)		
26-35	-.050	.042
36-45	-.063	.046
46-55	-.017	.047
56-65	-.007	.049
Over 65	.065	.066
Constant	2.719***	.058
Random effects	σ	SE
Hot spot	.003	.002
Residual	.212	.009
Log pseudolikelihood	-700.924	
Wald χ^2	18.331	
N	1084	

Multilevel mixed-effects linear regression
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A23: Collective efficacy (Rainier Beach only)

	Collective efficacy	
	b	Robust SE
Wave 2	.081	.091
Wave 3	.103	.095
Wave 4	.115	.094
Hot spot (ref:Rainier & Henderson)		
Rose St	-.011	.104
Light Rail	-.038	.107
Lake Washington	-.014	.108
Safeway	-.240*	.103
Survey location (ref:Household)		
Street	.121	.115
Business	.112	.145
Race (ref:Black/African-American)		
African immigrant/refugee	-.047	.094
White	-.144	.087
Asian	-.226	.118
Other/more than one race	-.083	.087
Employment status (ref:Full-time)		
Part-time	-.098	.079
Not working/retired/other	-.121	.075
Attending school (ref:Full-time)		
Part-time	-.130	.140
Not attending	-.139	.105
Main activity at hot spot (ref:Live)		
Work	-.115	.111
Shop	-.217*	.105
Use public transit	-.119	.115
Other	-.135	.104
Constant	2.794***	.177
F	1.66*	
R^2	.068	
RMSE	.676	
N	500	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A24: Collective efficacy (Rainier Beach vs. comparison spots)

	Collective efficacy	
Fixed effects	b	SE
Wave 2	.086	.087
Wave 3	.063	.085
Wave 4	.244**	.084
Treatment	.049	.098
Wave 2 × Treatment	.002	.123
Wave 3 × Treatment	.078	.122
Wave 4 × Treatment	-.087	.121
Race (ref:Black/African-American)		
African immigrant/refugee	.058	.076
White	-.093	.056
Asian	-.074	.075
Other/more than one race	-.121	.062
Age (ref:18-25)		
26-35	-.060	.064
36-45	-.153*	.070
46-55	-.125	.071
56-65	-.026	.074
Over 65	-.056	.101
Constant	2.529***	.085
Random effects	σ	SE
Hot spot	.005	.004
Residual	.465	.020
Log pseudolikelihood	-1082.884	
Wald χ^2	27.989*	
N	1042	

Multilevel mixed-effects linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A25: Satisfaction with police (Rainier Beach only)

	Satisfaction with police (Rainier Beach)	
	b	Robust SE
Wave 2	.300**	.102
Wave 3	.225*	.105
Wave 4	.381***	.104
Hot spot (ref:Rainier & Henderson)		
Rose St	.295**	.111
Light Rail	.267*	.110
Lake Washington	.105	.131
Safeway	.015	.105
Survey location (ref:Household)		
Street	-.040	.132
Business	-.060	.182
Race (ref:Black/African-American)		
African immigrant/refugee	.213*	.107
White	-.039	.088
Asian	-.091	.141
Other/more than one race	.091	.100
Employment status (ref:Full-time)		
Part-time	.060	.088
Not working/retired/other	.128	.081
Attending school (ref:Full-time)		
Part-time	.109	.145
Not attending	.013	.118
Main activity at hot spot (ref:Live)		
Work	-.025	.126
Shop	-.057	.113
Use public transit	-.057	.125
Other	.000	.118
Constant	2.346***	.192
F	2.63***	
R^2	.099	
RMSE	.698	
N	465	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A26: Satisfaction with police (Rainier Beach vs. comparison spots)

	Satisfaction with police	
Fixed effects	b	SE
Wave 2	-.089	.092
Wave 3	-.049	.089
Wave 4	.027	.089
Treatment	-.111	.103
Wave 2 $\times$ Treatment	.368**	.131
Wave 3 $\times$ Treatment	.222	.129
Wave 4 $\times$ Treatment	.309*	.128
Race (ref:Black/African-American)		
African immigrant/refugee	.238**	.080
White	-.154*	.060
Asian	-.014	.079
Other/more than one race	-.026	.067
Age (ref:18-25)		
26-35	-.085	.068
36-45	.002	.074
46-55	.061	.075
56-65	.107	.079
Over 65	.232*	.107
Constant	2.651***	.090
Random effects	σ	SE
Hot spot	.005	.005
Residual	.487	.022
Log pseudolikelihood	-1028.018	
Wald χ^2	58.641***	
N	967	

Multilevel mixed-effects linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A27: Perceived legitimacy of police (Rainier Beach only)

	Police legitimacy (Rainier Beach)	
	b	Robust SE
Wave 2	.243*	.112
Wave 3	.131	.115
Wave 4	.337**	.114
Hot spot (ref:Rainier & Henderson)		
Rose St	.172	.129
Light Rail	.195	.123
Lake Washington	.074	.130
Safeway	-.076	.114
Survey location (ref:Household)		
Street	-.009	.131
Business	-.081	.182
Race (ref:Black/African-American)		
African immigrant/refugee	.083	.113
White	.114	.095
Asian	-.054	.144
Other/more than one race	.037	.105
Employment status (ref:Full-time)		
Part-time	.016	.093
Not working/retired/other	.081	.088
Attending school (ref:Full-time)		
Part-time	.246	.146
Not attending	.148	.131
Main activity at hot spot (ref:Live)		
Work	.066	.131
Shop	-.102	.119
Use public transit	-.186	.146
Other	-.132	.123
Constant	2.319***	.214
F	1.62*	
R^2	.066	
RMSE	.741	
N	458	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A28: Perceived legitimacy of police (Rainier Beach vs. comparison spots)

	Police legitimacy	
Fixed effects	b	SE
Wave 2	-.073	.100
Wave 3	-.039	.096
Wave 4	.007	.095
Treatment	-.105	.104
Wave 2 $\times$ Treatment	.251	.140
Wave 3 $\times$ Treatment	.107	.138
Wave 4 $\times$ Treatment	.282*	.137
Race (ref:Black/African-American)		
African immigrant/refugee	.175*	.085
White	.045	.064
Asian	.084	.083
Other/more than one race	-.031	.071
Age (ref:18-25)		
26-35	-.052	.072
36-45	.026	.079
46-55	.150	.080
56-65	.098	.083
Over 65	.118	.113
Constant	2.618***	.092
Random effects	σ	SE
Hot spot	.002	.004
Residual	.539	.025
Log pseudolikelihood	-1049.837	
Wald χ^2	31.433*	
N	944	

Multilevel mixed-effects linear regression
$^{*}\ p < 0.05, ^{**}\ p < 0.01, ^{***}\ p < 0.001$

Table A29: Perceived frequency of police activity (Rainier Beach only)

	Frequency of police activity (Rainier Beach)	
	b	Robust SE
Wave 2	.053	.104
Wave 3	.015	.106
Wave 4	-.052	.107
Hot spot (ref:Rainier & Henderson)		
Rose St	-.174	.121
Light Rail	.019	.125
Lake Washington	-.047	.123
Safeway	-.015	.105
Survey location (ref:Household)		
Street	.202	.131
Business	.324*	.154
Race (ref:Black/African-American)		
African immigrant/refugee	-.122	.116
White	-.390***	.091
Asian	-.412**	.135
Other/more than one race	-.171	.104
Employment status (ref:Full-time)		
Part-time	-.137	.099
Not working/retired/other	-.027	.087
Attending school (ref:Full-time)		
Part-time	.221	.151
Not attending	.027	.122
Main activity at hot spot (ref:Live)		
Work	-.225	.130
Shop	-.192	.114
Use public transit	-.343*	.145
Other	-.276*	.122
Constant	2.539***	.208
F	2.60***	
R^2	.088	
RMSE	.756	
N	488	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A30: Perceived frequency of police activity (Rainier Beach vs. comparison spots)

	Frequency of police activity	
	b	Robust SE
Wave 2	-.050	.091
Wave 3	-.078	.086
Wave 4	.082	.091
Treatment	.058	.093
Wave 2 $\times$ Treatment	.080	.131
Wave 3 $\times$ Treatment	.083	.132
Wave 4 $\times$ Treatment	-.073	.132
Race (ref:Black/African-American)		
African immigrant/refugee	-.119	.085
White	-.216***	.060
Asian	-.321***	.081
Other/more than one race	-.059	.070
Age (ref:18-25)		
26-35	-.296***	.070
36-45	-.149	.079
46-55	-.111	.079
56-65	-.164*	.083
Over 65	-.353**	.113
Constant	2.564***	.089
F	3.69***	
R^2	.055	
RMSE	.736	
N	1018	

Linear regression
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A1: Percent change in calls for service in hot spots and South Precinct, pre/post May 2014

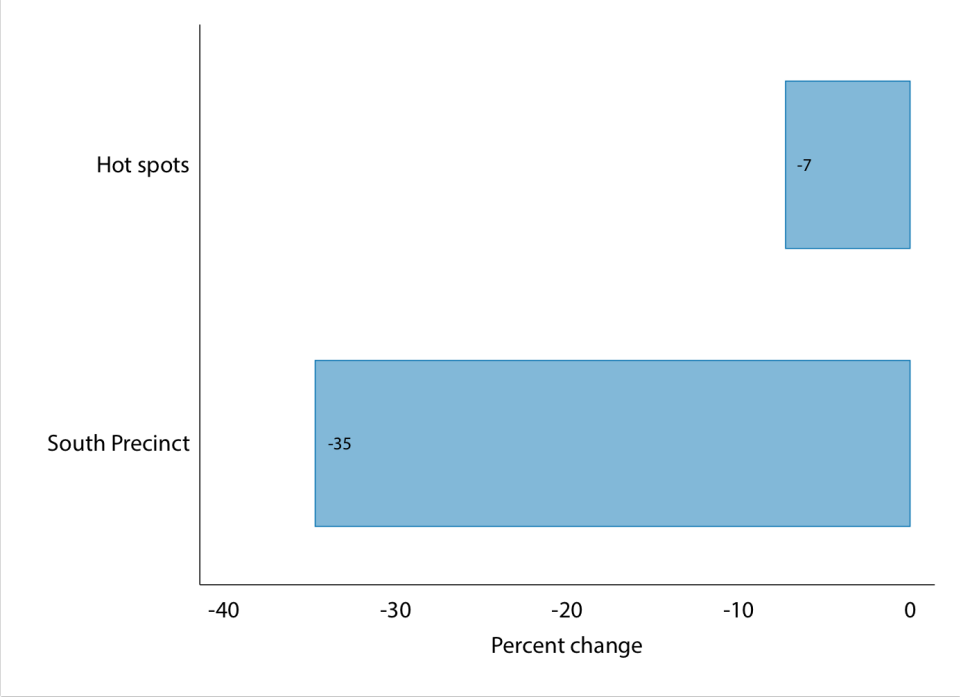

Figure A2: Percent change in incidents in hot spots and South Precinct, pre/post May 2014

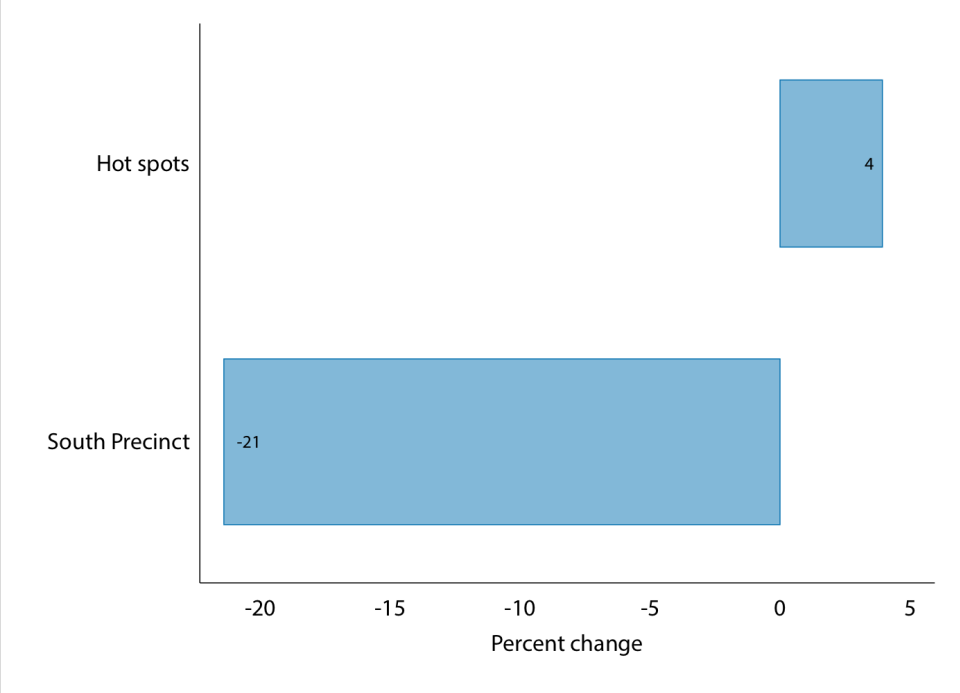

Figure A3: Percent change in youth incidents in hot spots and South Precinct, pre/post May 2014

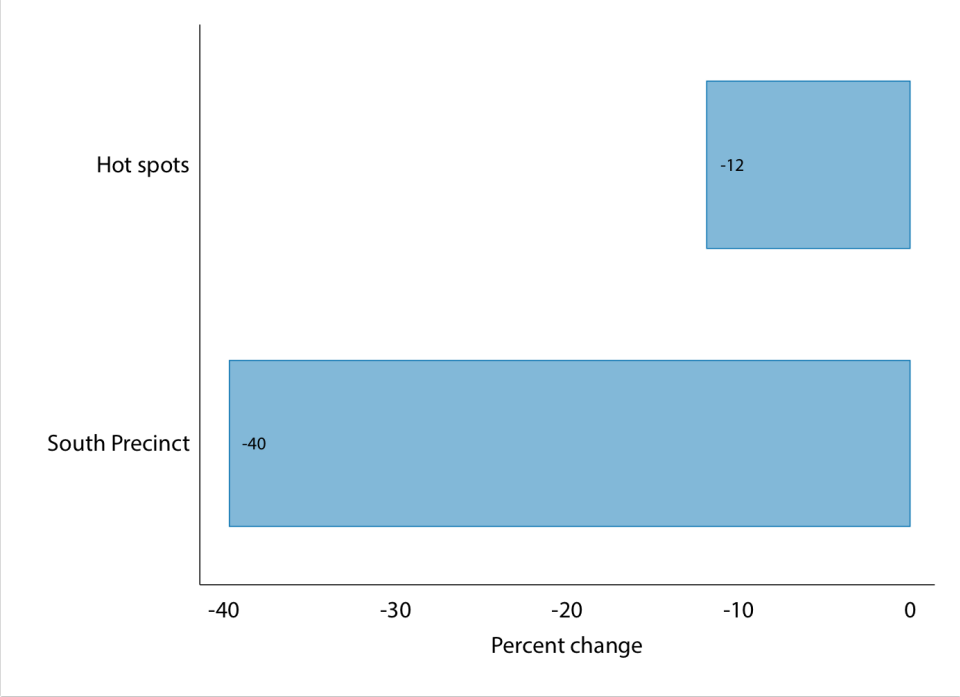

Figure A4: Percent change in violent incidents in hot spots and South Precinct, pre/post May 2014

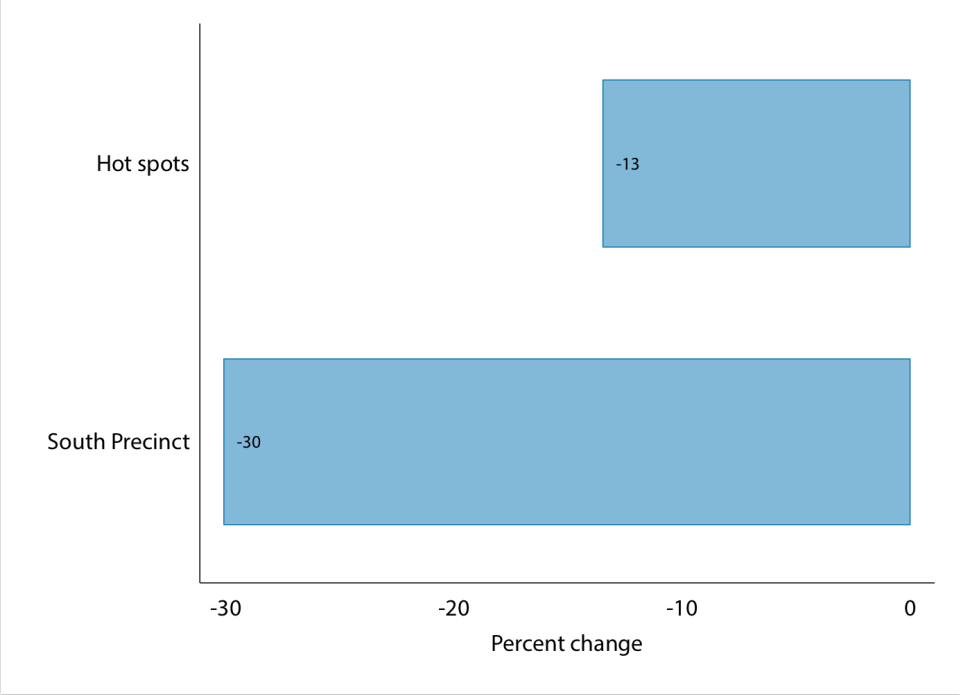

Figure A5: Percent change in Part II incidents at in hot spots and South Precinct, pre/post May 2014

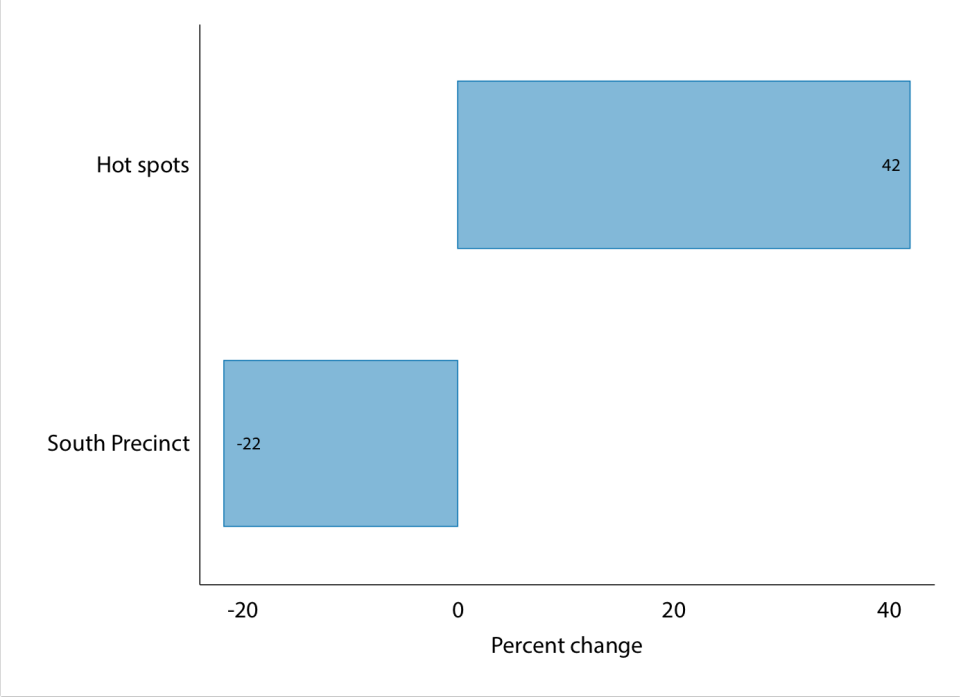

Figure A6: Percent change in calls for service at Rose Street and its comparison site, pre/post May 2014

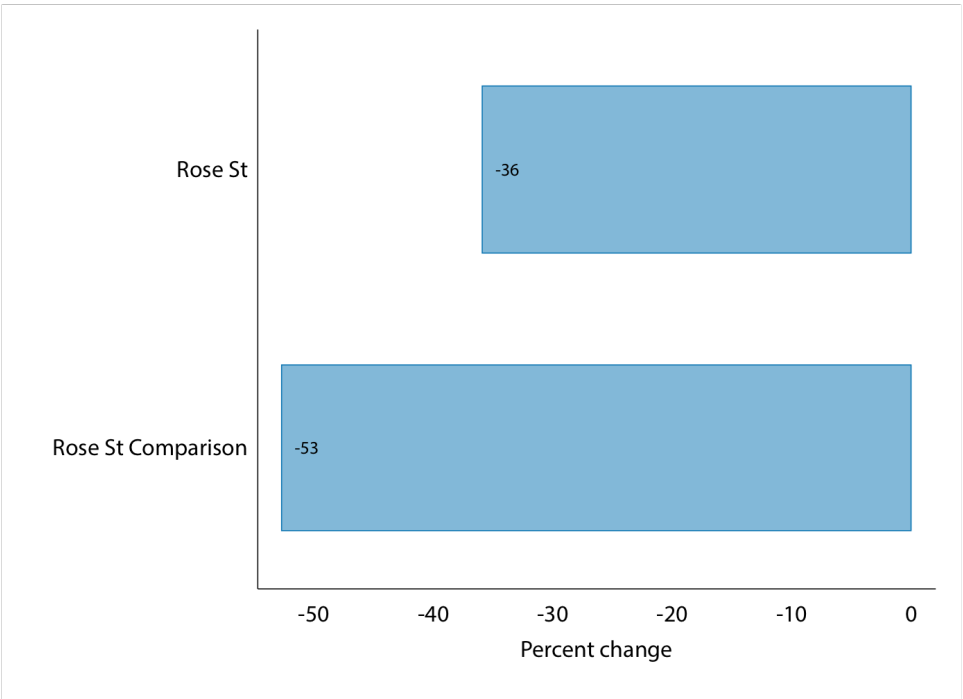

Figure A7: Percent change in incidents at Rose Street and its comparison site, pre/post May 2014

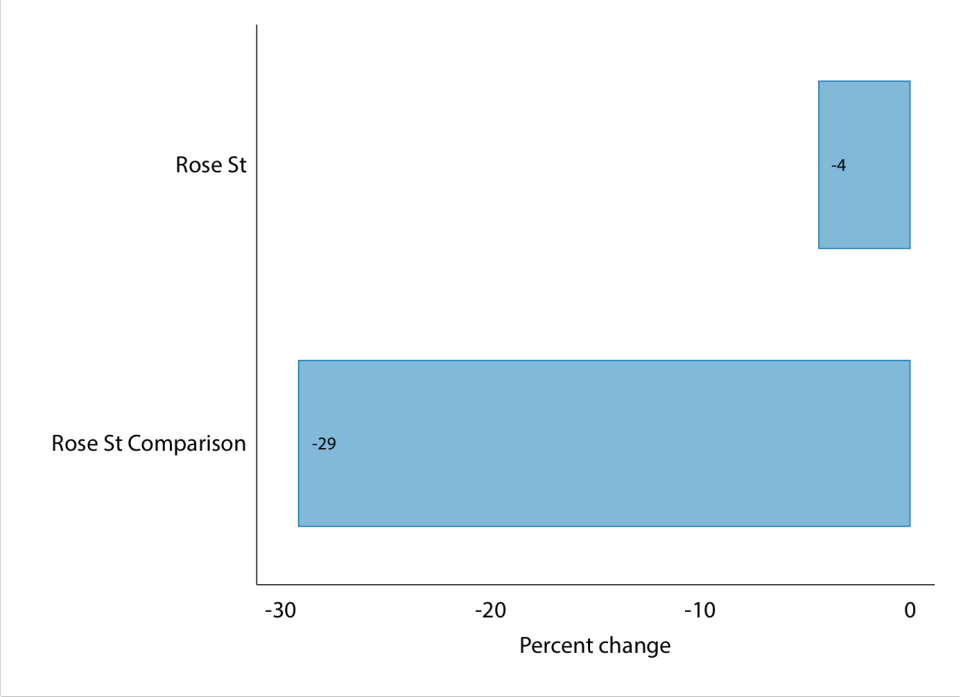

Figure A8: Percent change in youth incidents at Rose Street and its comparison site, pre/post May 2014

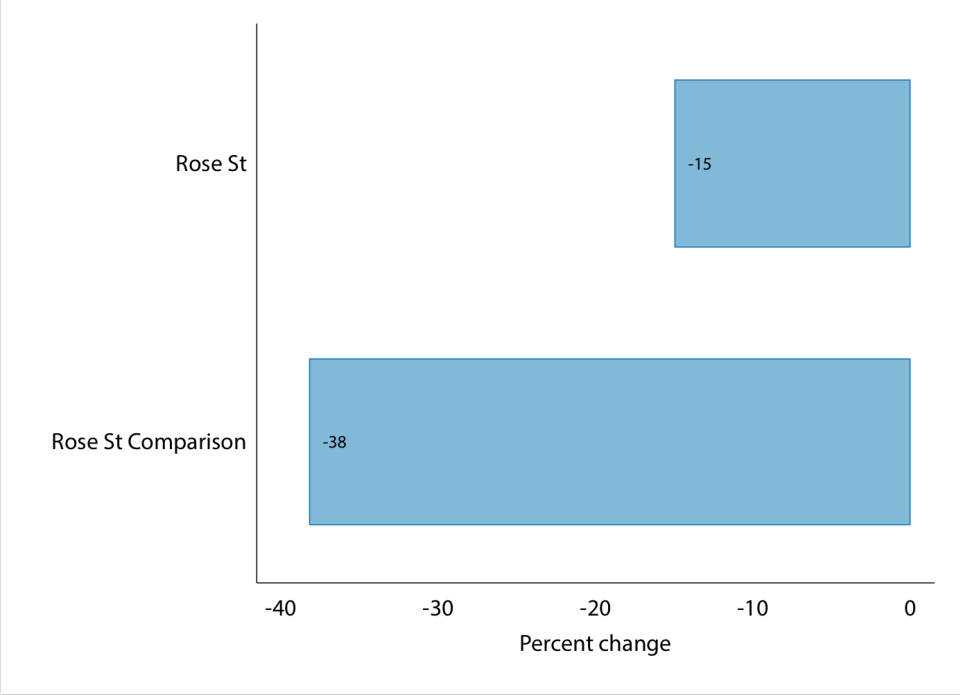

Figure A9: Percent change in violent incidents at Rose Street and its comparison site, pre/post May 2014

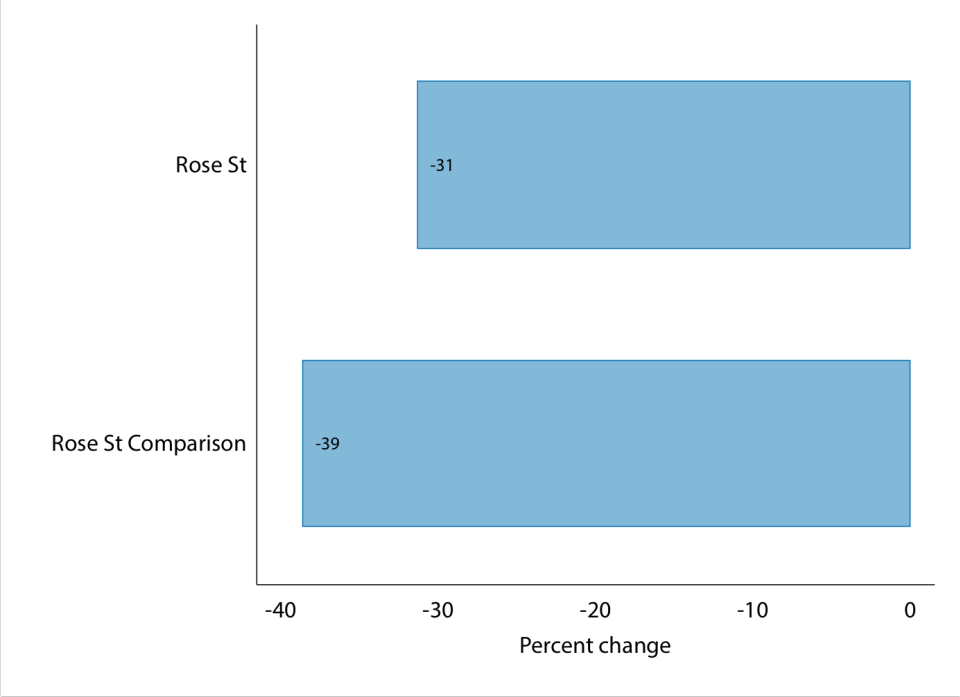

Figure A10: Percent change in Part II incidents at Rose Street and its comparison site, pre/post May 2014

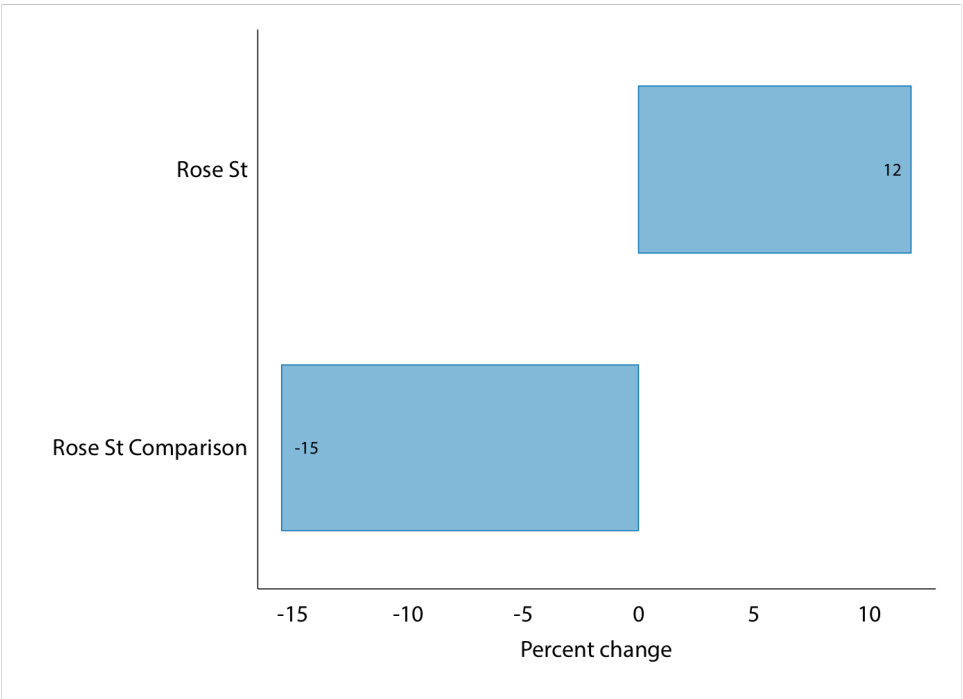

Figure A11: Percent change in calls for service at Rainier & Henderson and its comparison site, pre/post May 2014

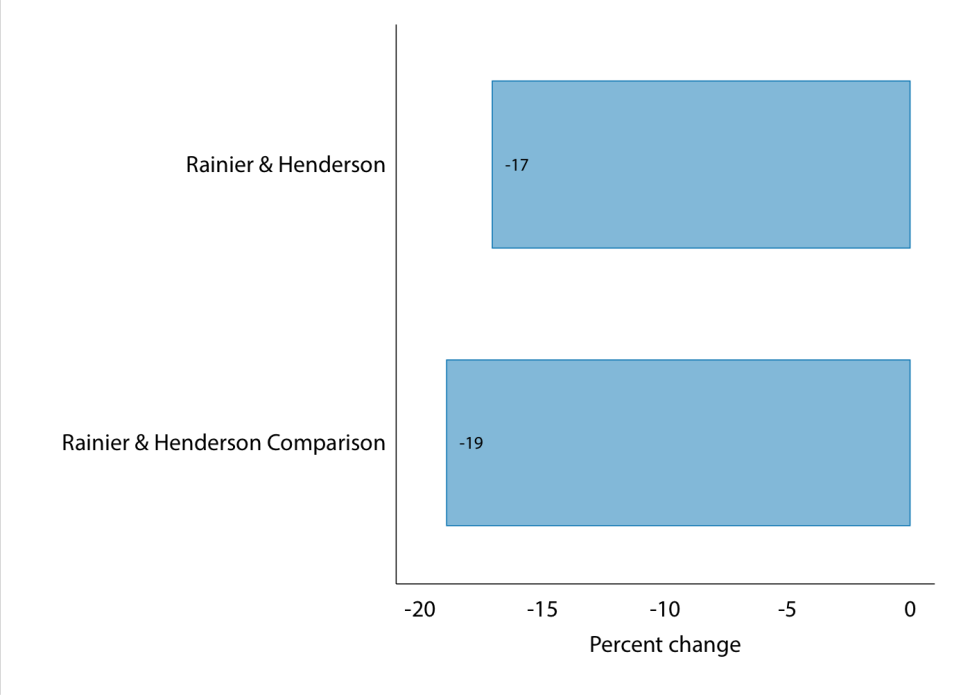

Figure A12: Percent change in incidents at Rainier & Henderson and its comparison site, pre/post May 2014

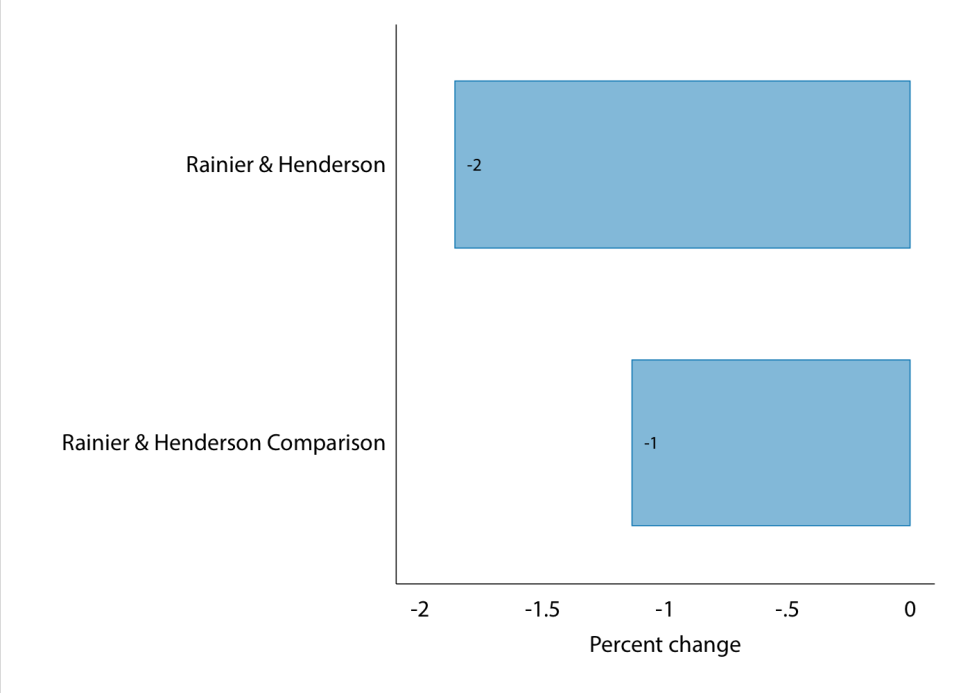

Figure A13: Percent change in youth incidents at Rainier & Henderson and its comparison site, pre/post May 2014

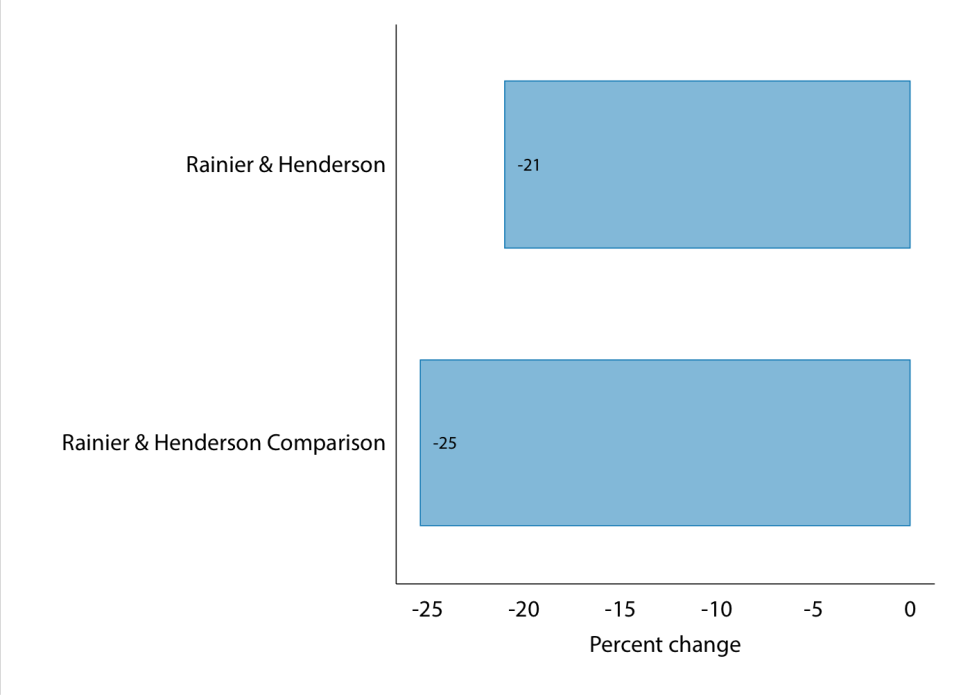

Figure A14: Percent change in violent incidents at Rainier & Henderson and its comparison site, pre/post May 2014

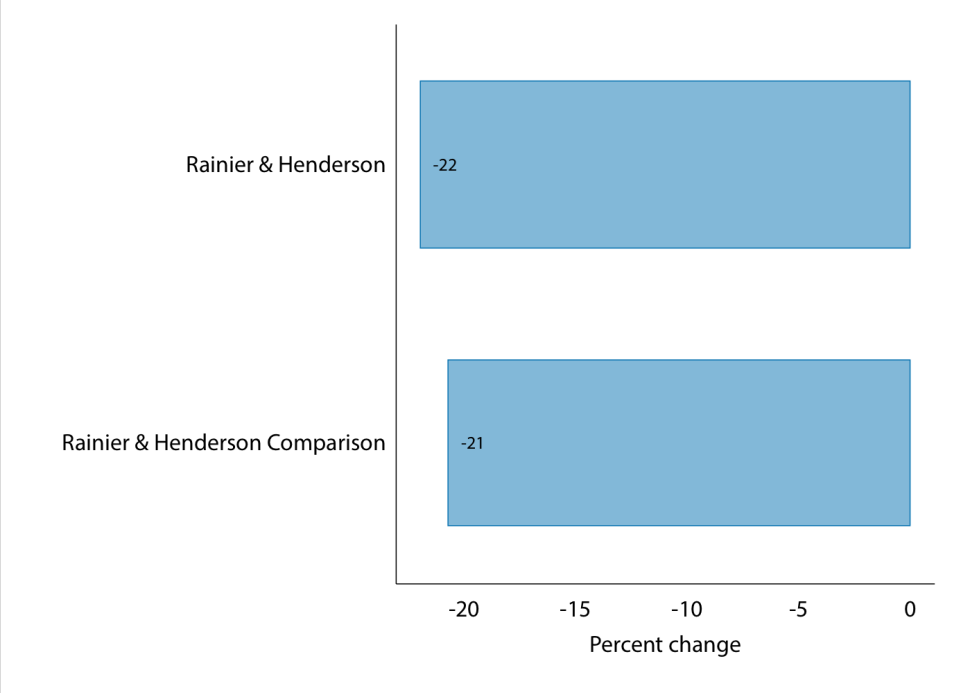

Figure A15: Percent change in Part II incidents at Rainier & Henderson and its comparison site, pre/post May 2014

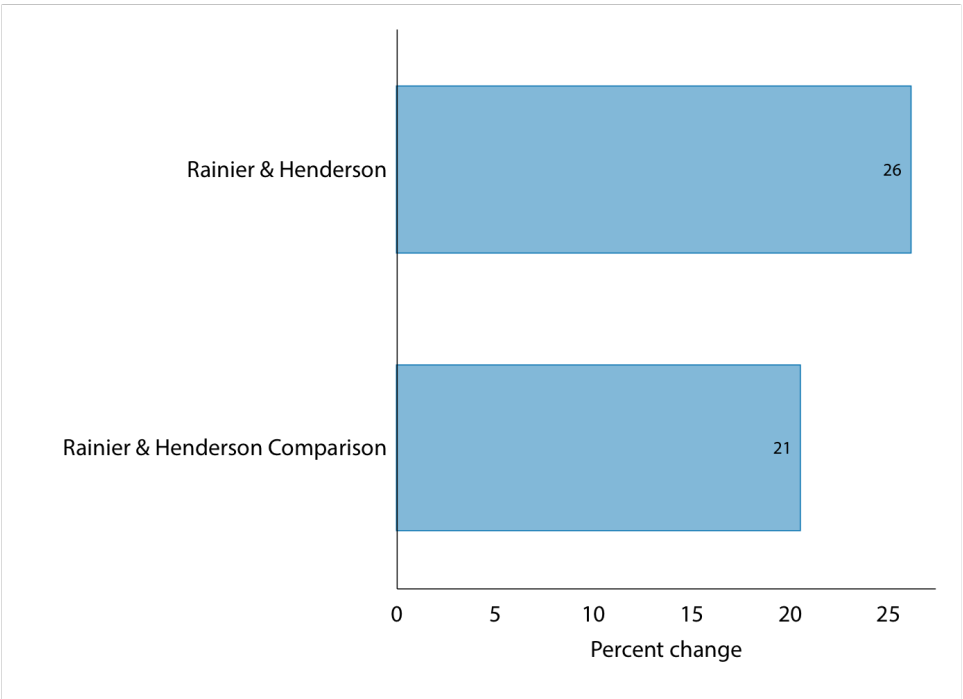

Figure A16: Percent change in calls for service at the Light Rail and its comparison site, pre/post May 2014

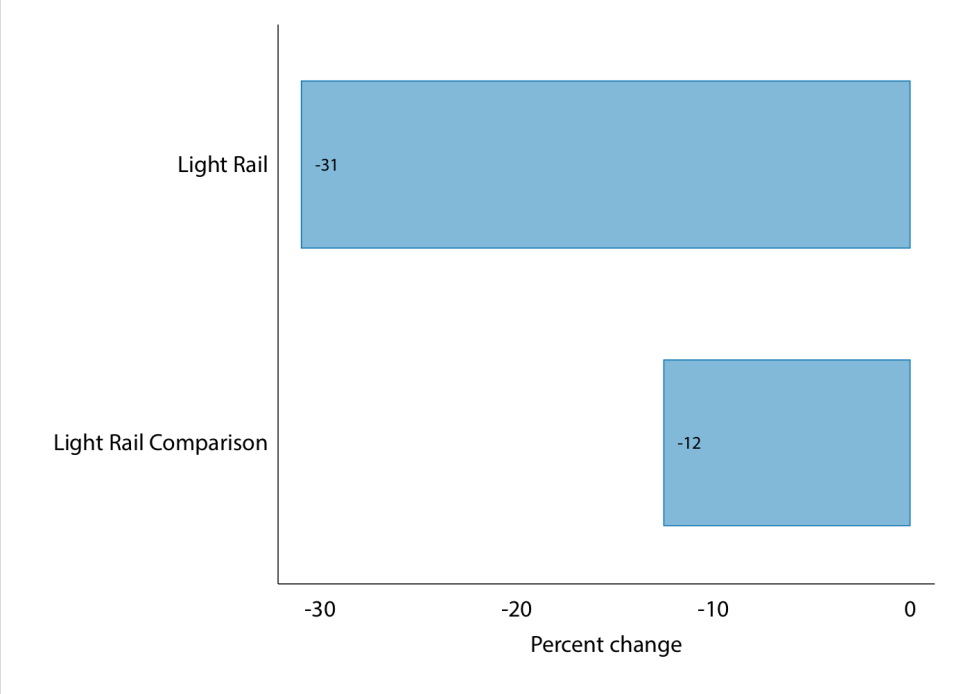

Figure A17: Percent change in incidents at the Light Rail and its comparison site, pre/post May 2014

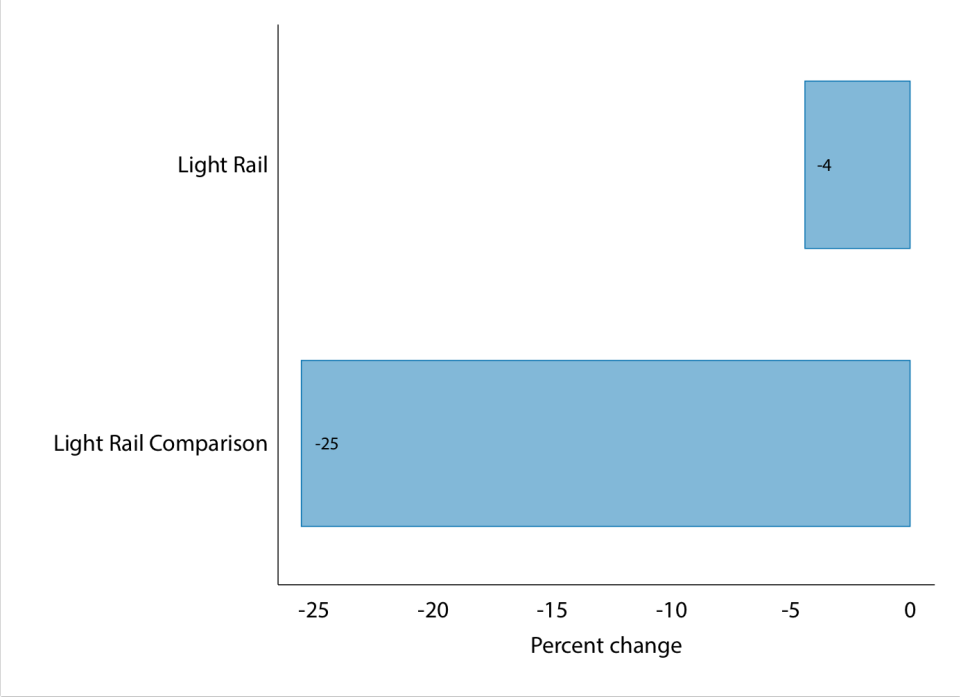

Figure A18: Percent change in youth incidents at the Light Rail and its comparison site, pre/post May 2014

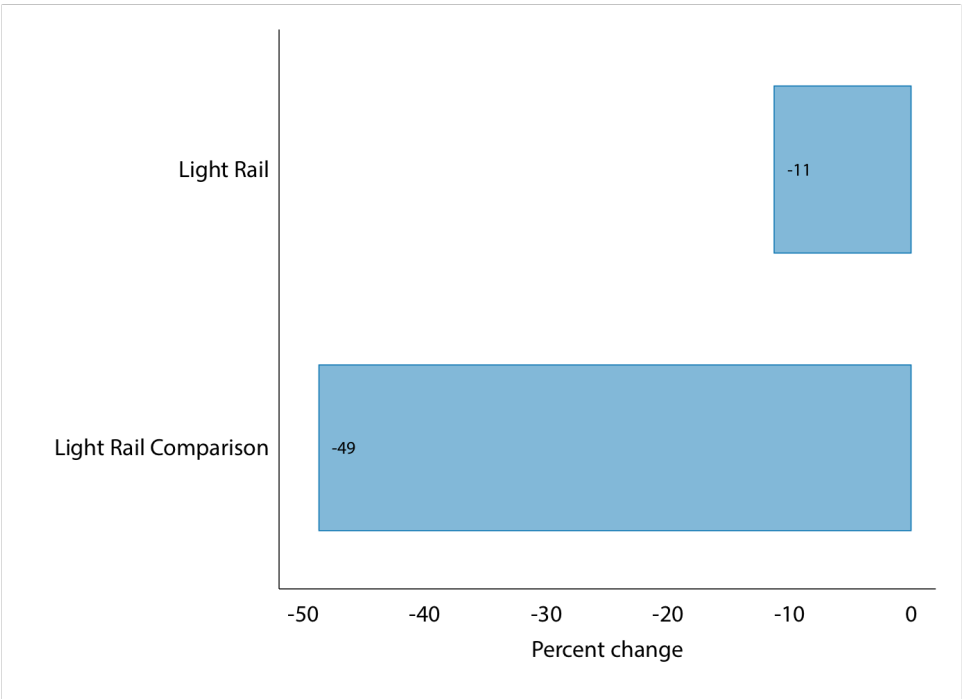

Figure A19: Percent change in violent incidents at the Light Rail and its comparison site, pre/post May 2014

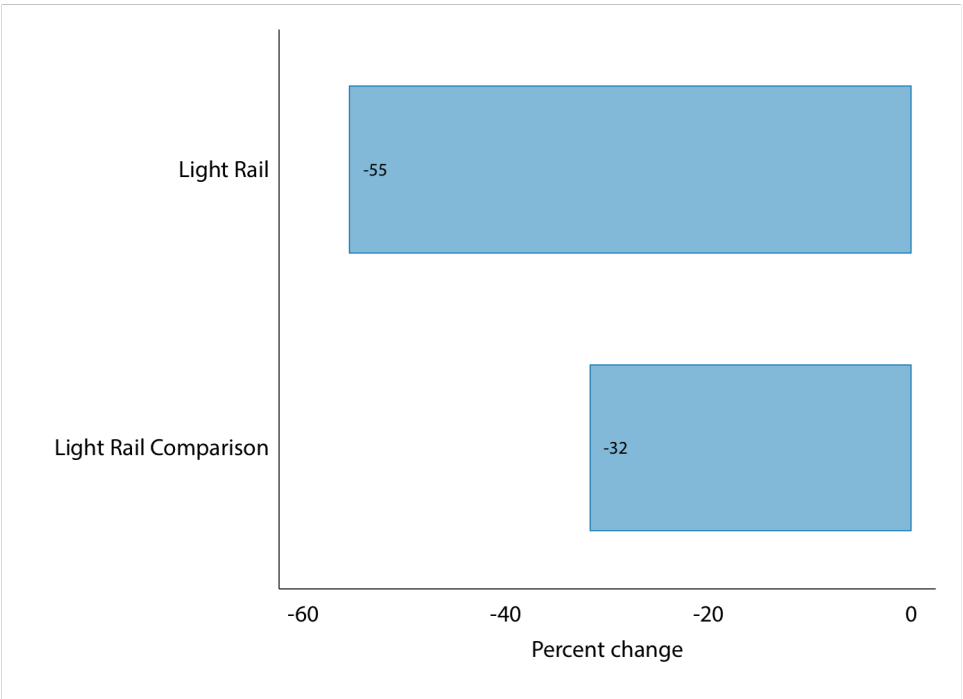

Figure A20: Percent change in Part II incidents at the Light Rail and its comparison site, pre/post May 2014

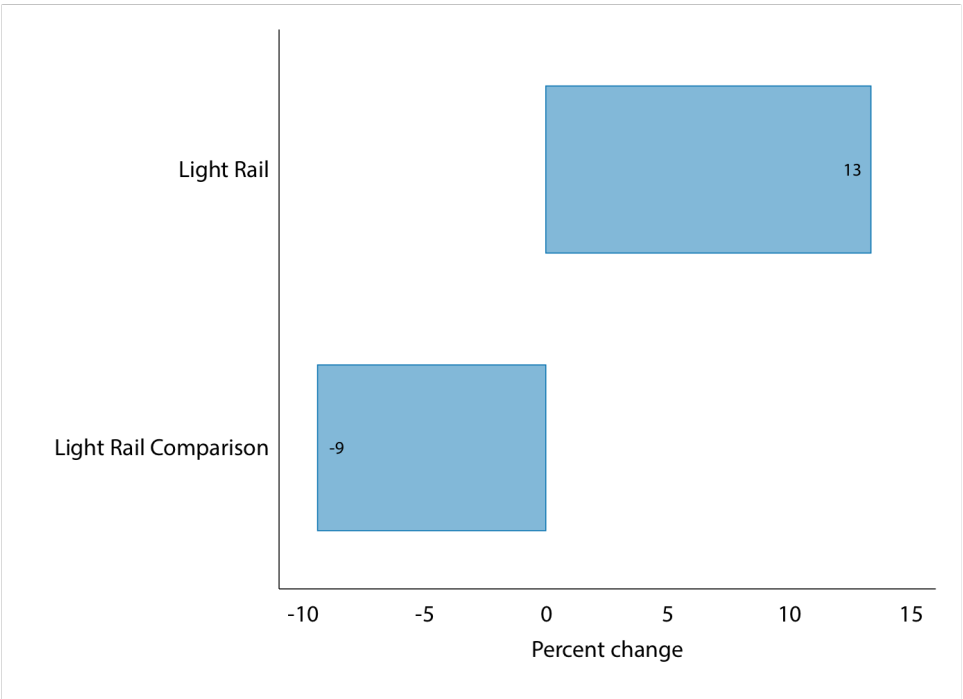

Figure A21: Percent change in calls for service at Lake Washington and its comparison site, pre/post May 2014

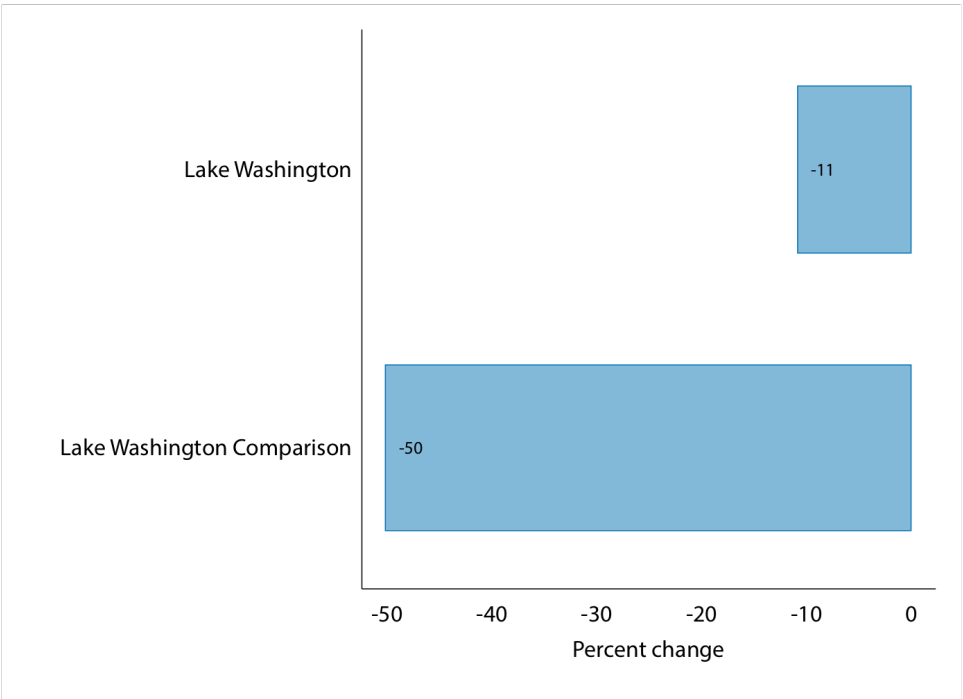

Figure A22: Percent change in incidents at Lake Washington and its comparison site, pre/post May 2014

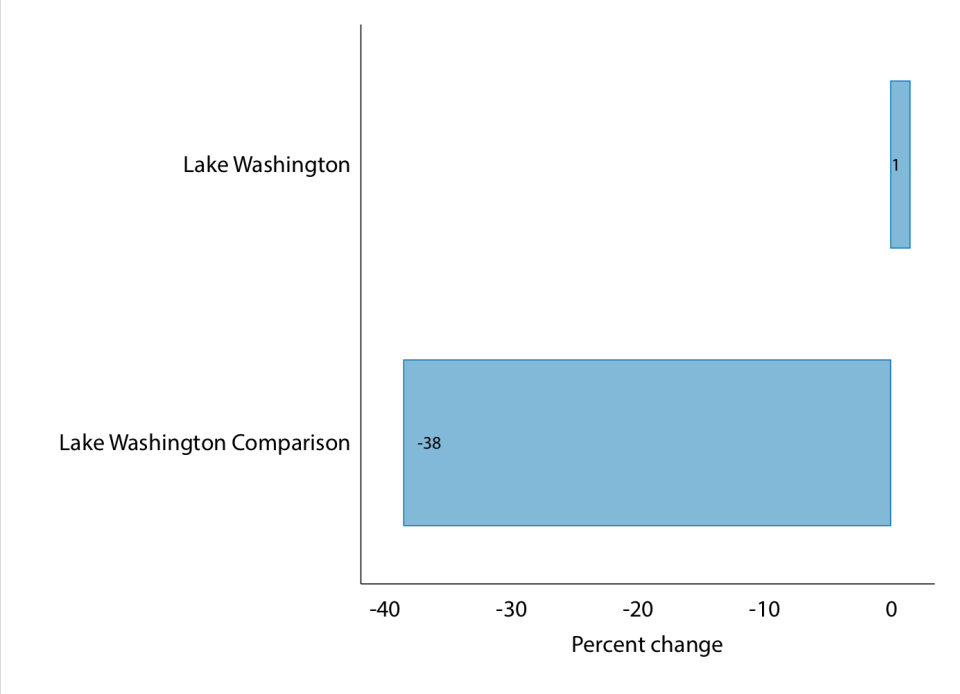

Figure A23: Percent change in youth incidents at Lake Washington and its comparison site, pre/post May 2014

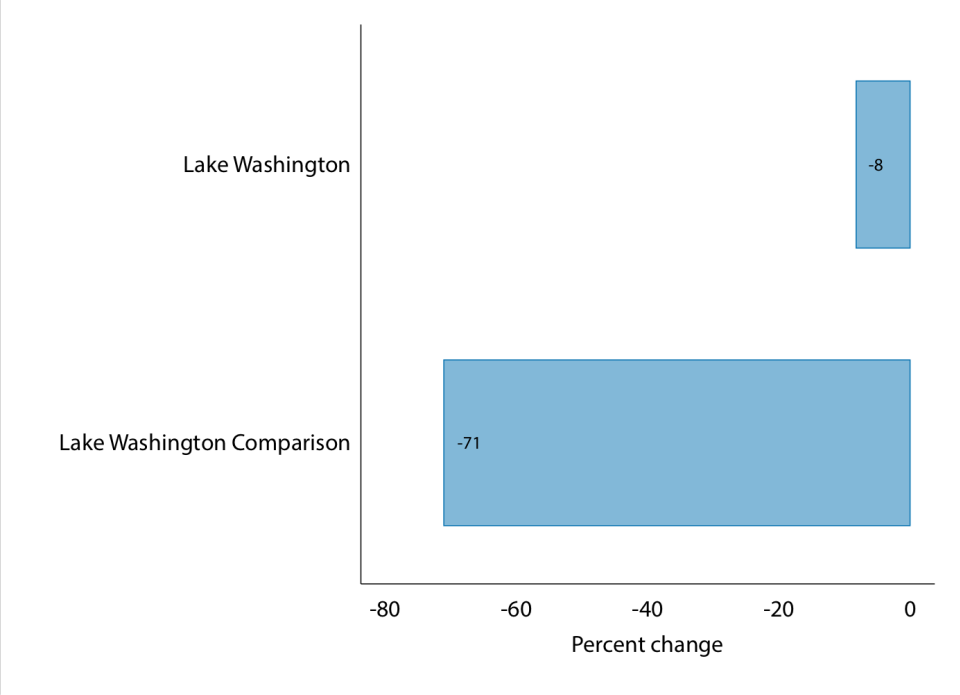

Figure A24: Percent change in violent incidents at Lake Washington and its comparison site, pre/post May 2014

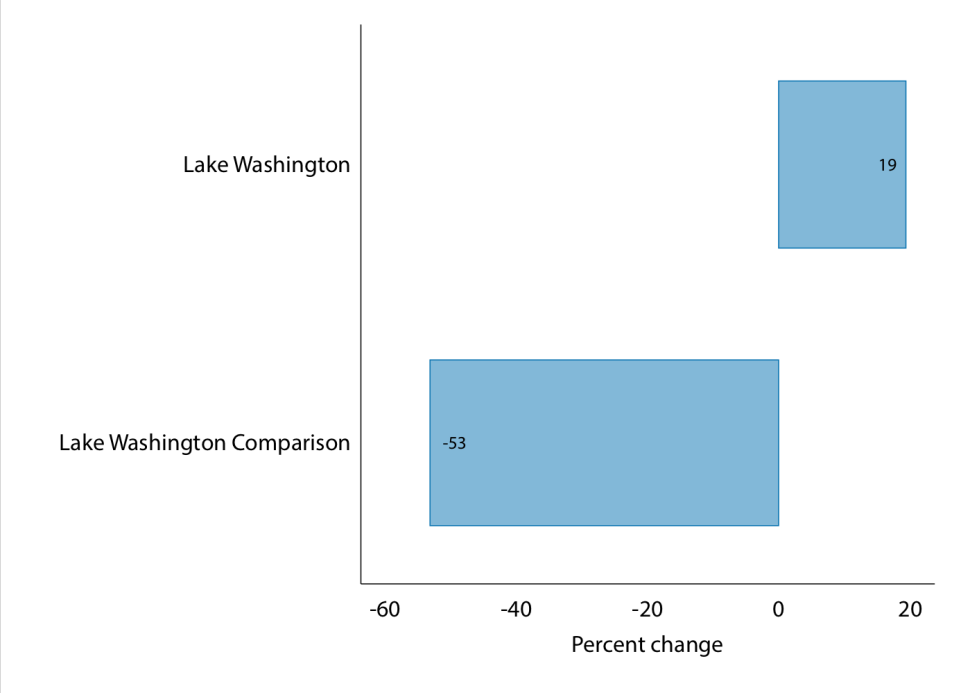

Figure A25: Percent change in Part II incidents at Lake Washington and its comparison site, pre/post May 2014

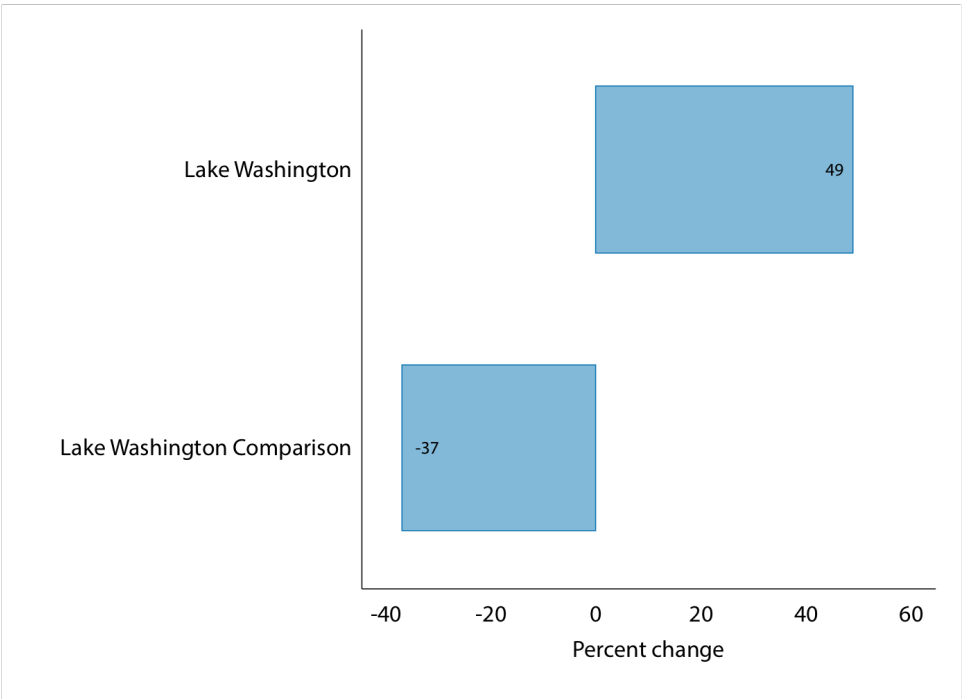

Figure A26: Percent change in calls for service at Safeway and its comparison site, pre/post May 2014

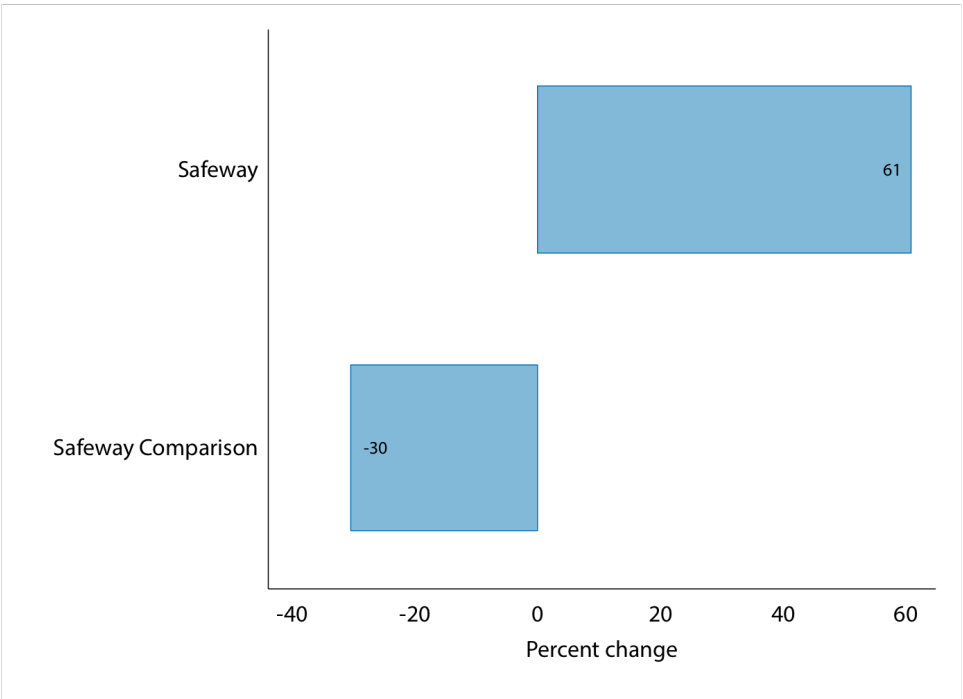

Figure A27: Percent change in incidents at Safeway and its comparison site, pre/post May 2014

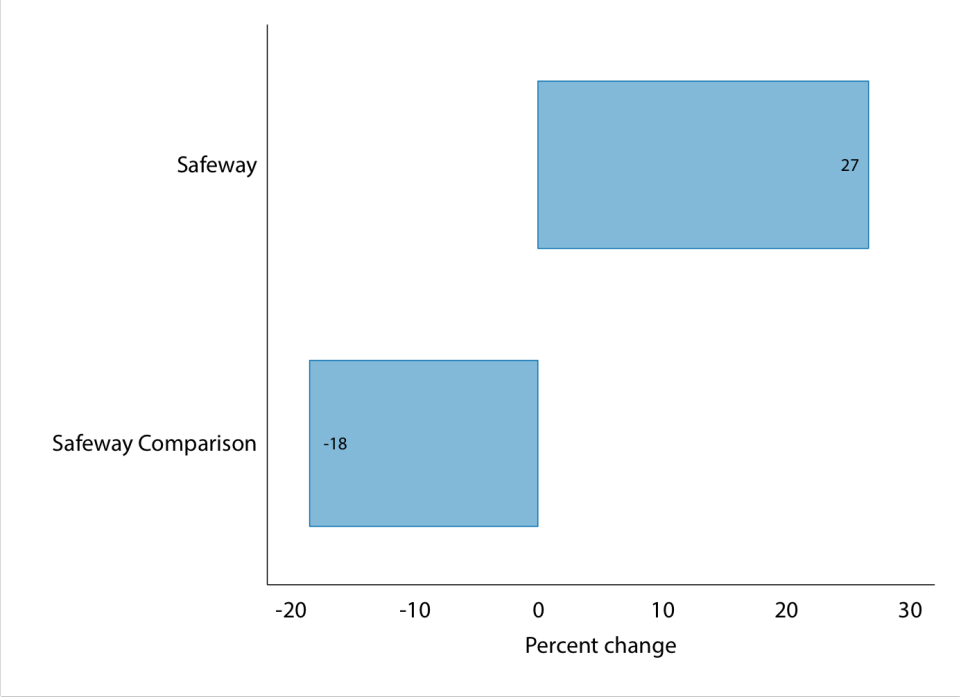

Figure A28: Percent change in youth incidents at Safeway and its comparison site, pre/post May 2014

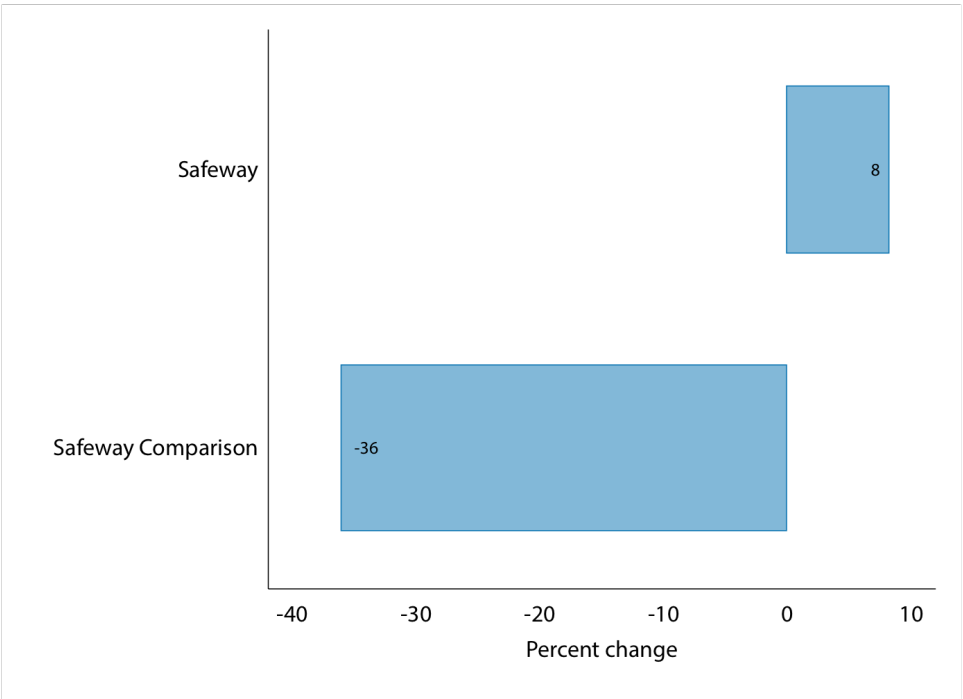

Figure A29: Percent change in violent incidents at Safeway and its comparison site, pre/post May 2014

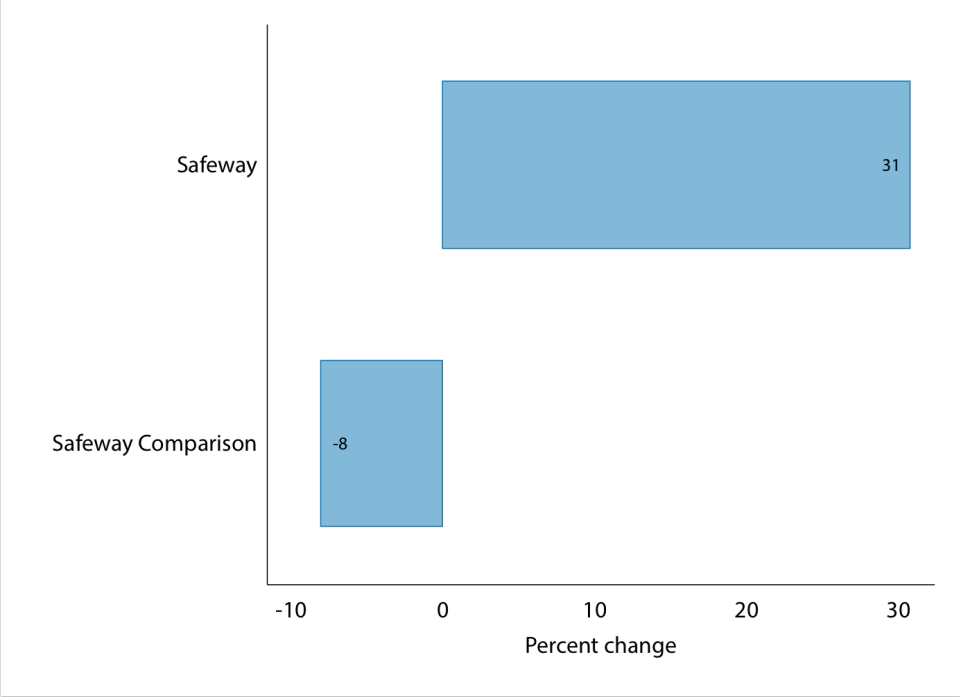

Figure A30: Percent change in Part II incidents at Safeway and its comparison site, pre/post May 2014

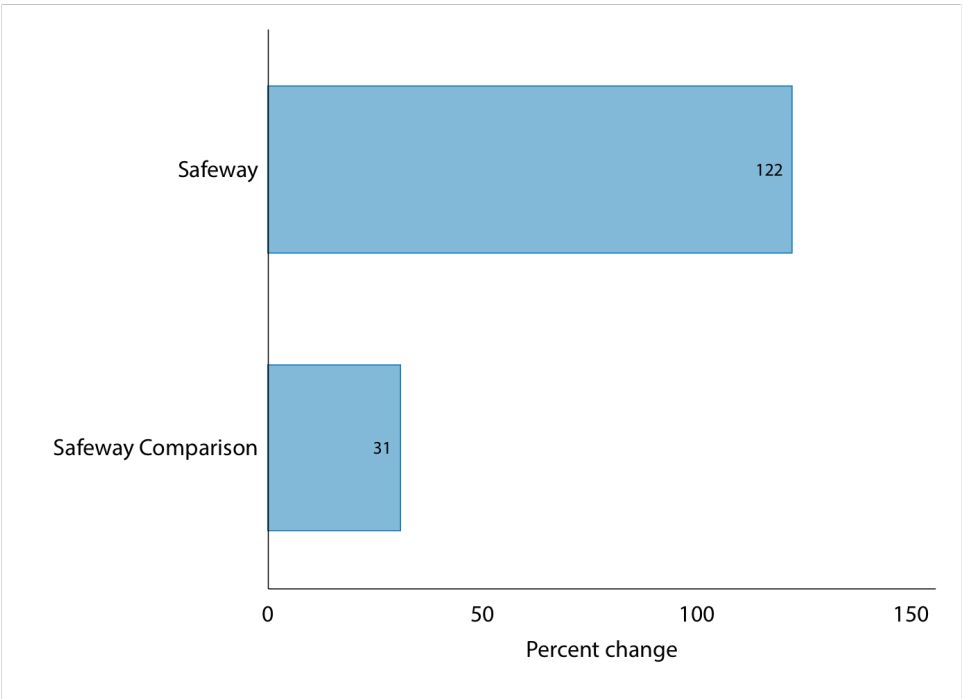

Figure A31: Percent change in serious violent incidents in hot spots and South Precinct, pre/post May 2014

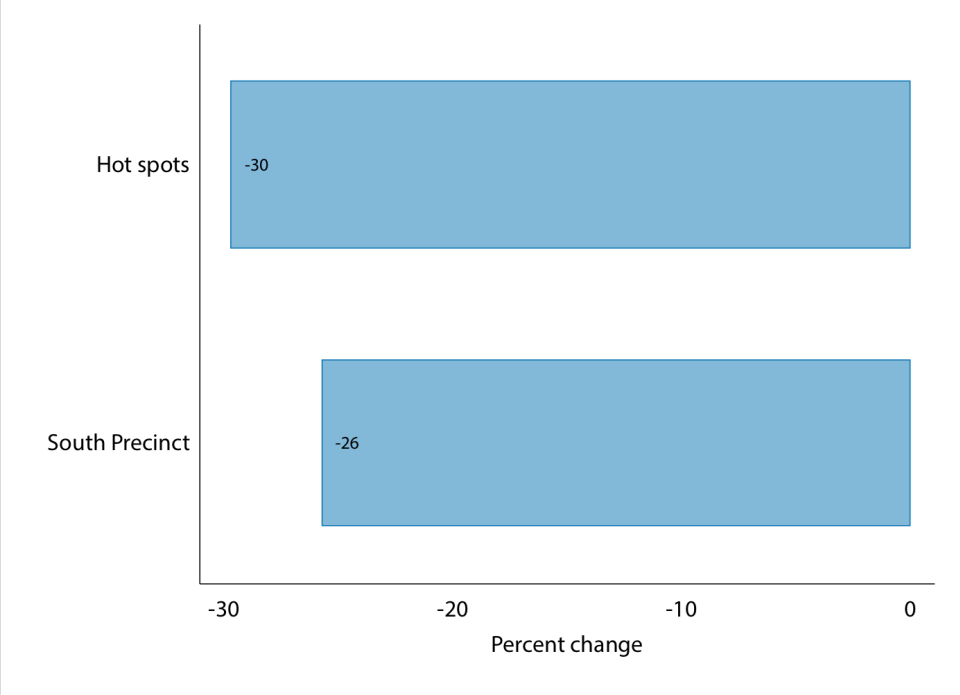

Figure A32: Calls for service in treatment and comparison sites, January 2011-August 2018

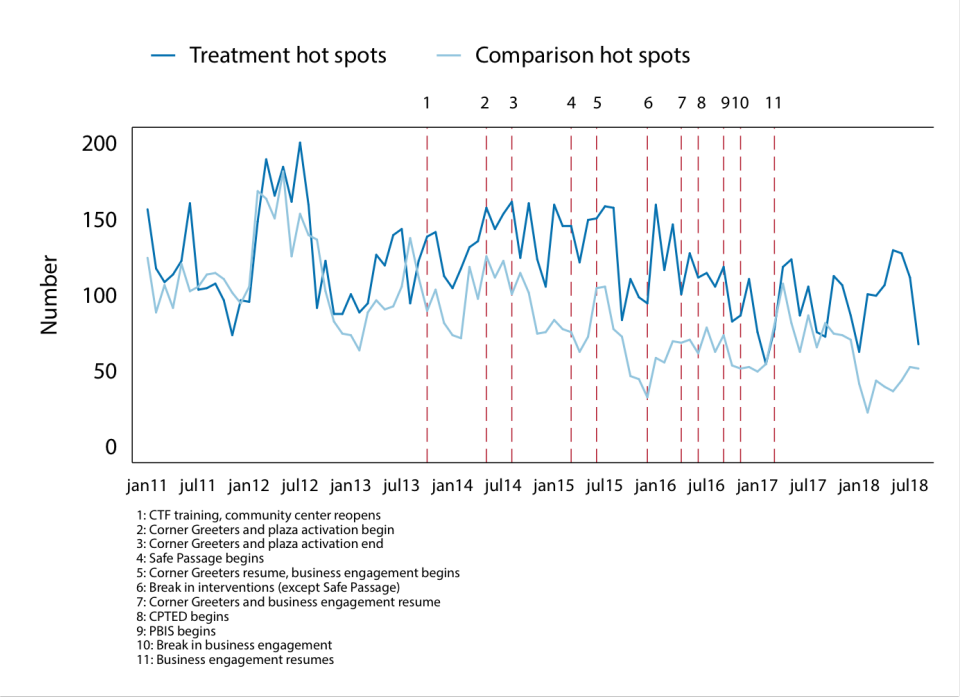

Figure A33: Predicted number of calls by treatment assignment and intervention status

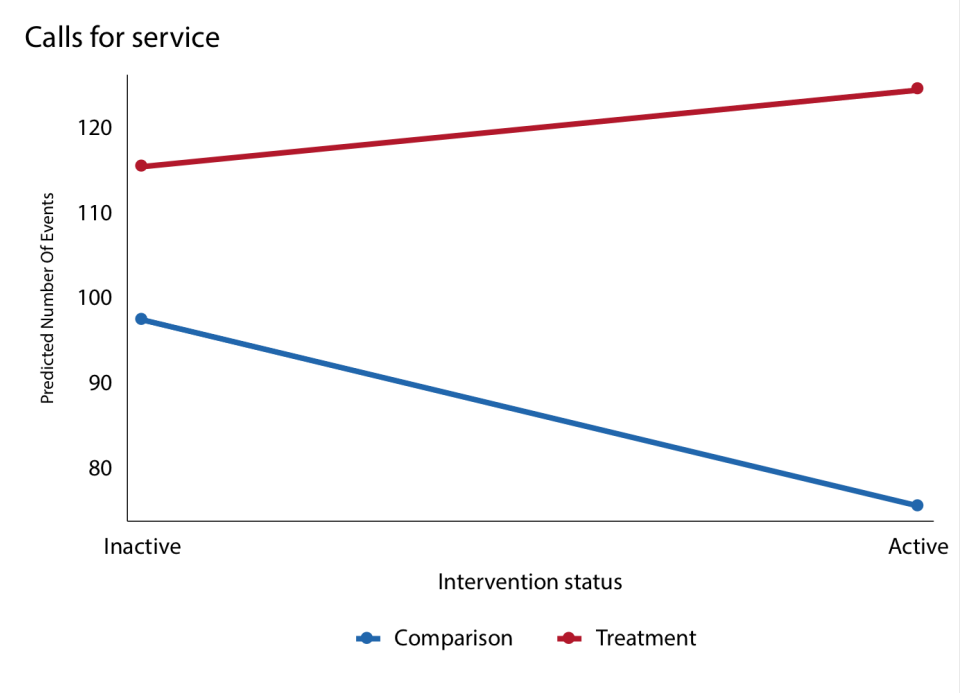

Figure A34: Crime incidents in treatment and comparison sites, January 2011-August 2018

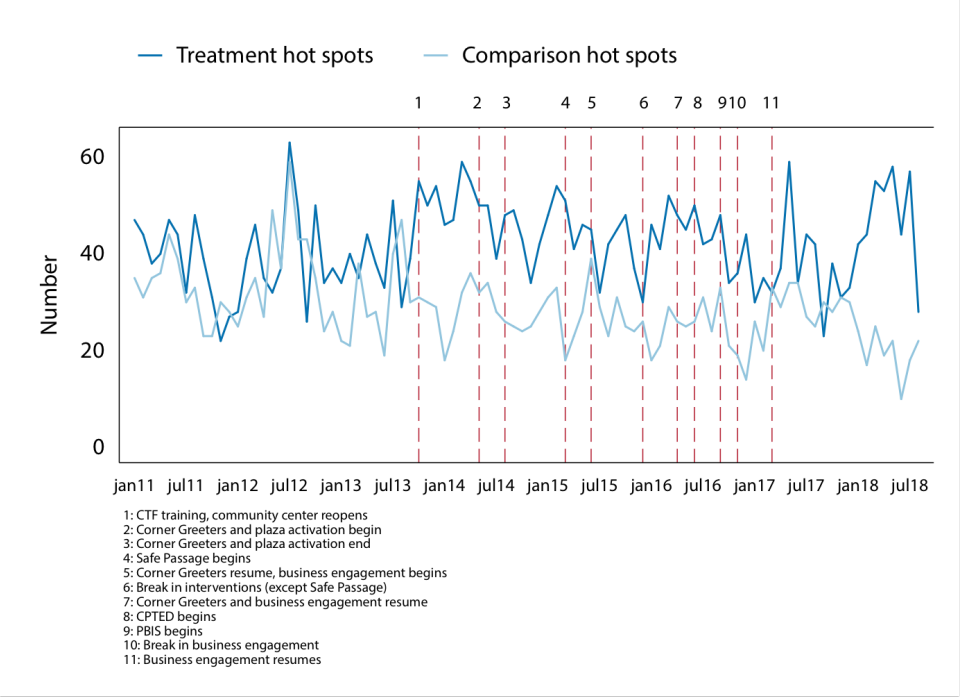

Figure A35: Predicted number of incidents by treatment assignment and intervention status

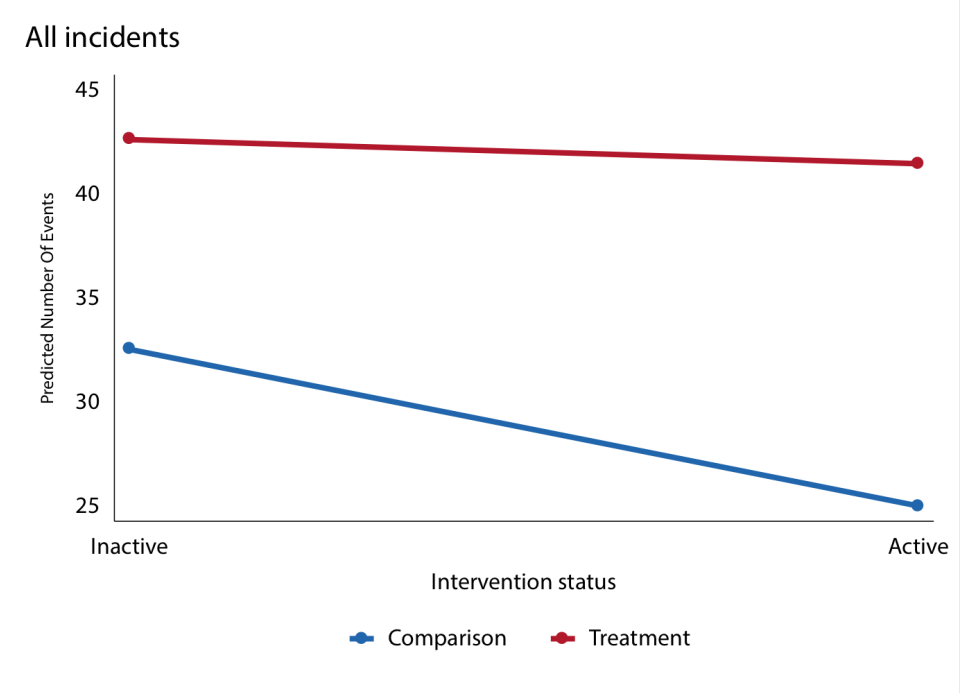

Figure A36: Youth incidents in treatment and comparison sites, January 2011-August 2018

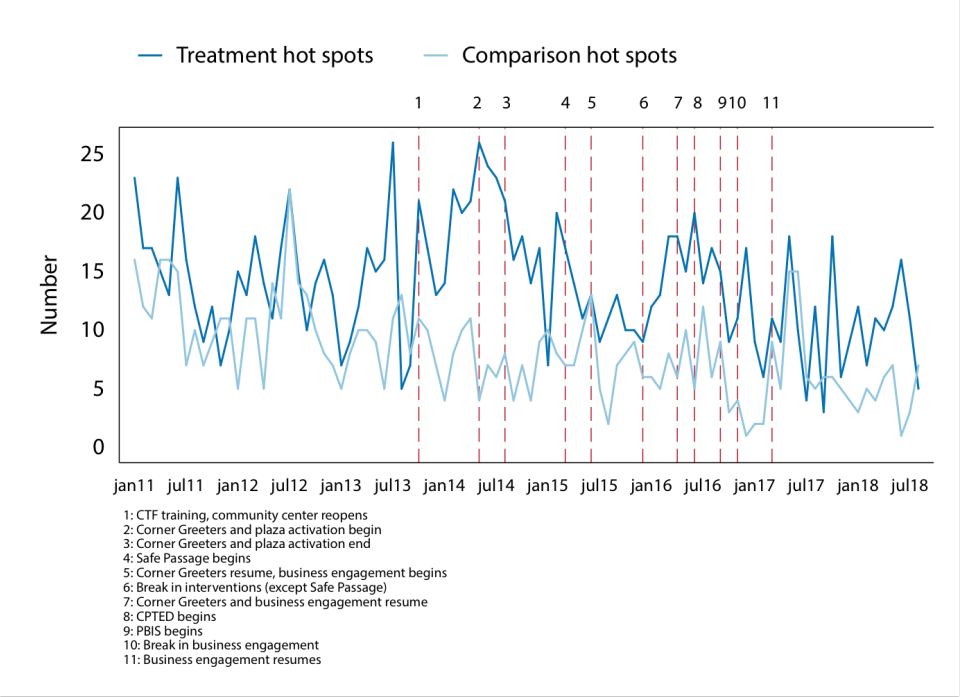

Figure A37: Predicted number of youth incidents by treatment assignment and intervention status

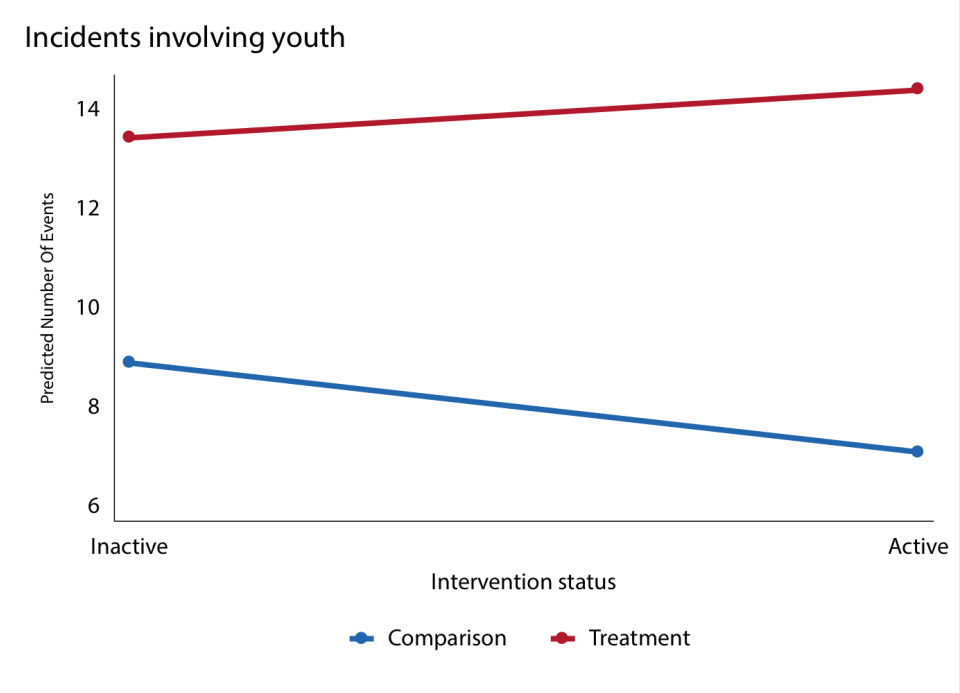

Figure A38: Violent incidents in treatment and comparison sites, January 2011-August 2018

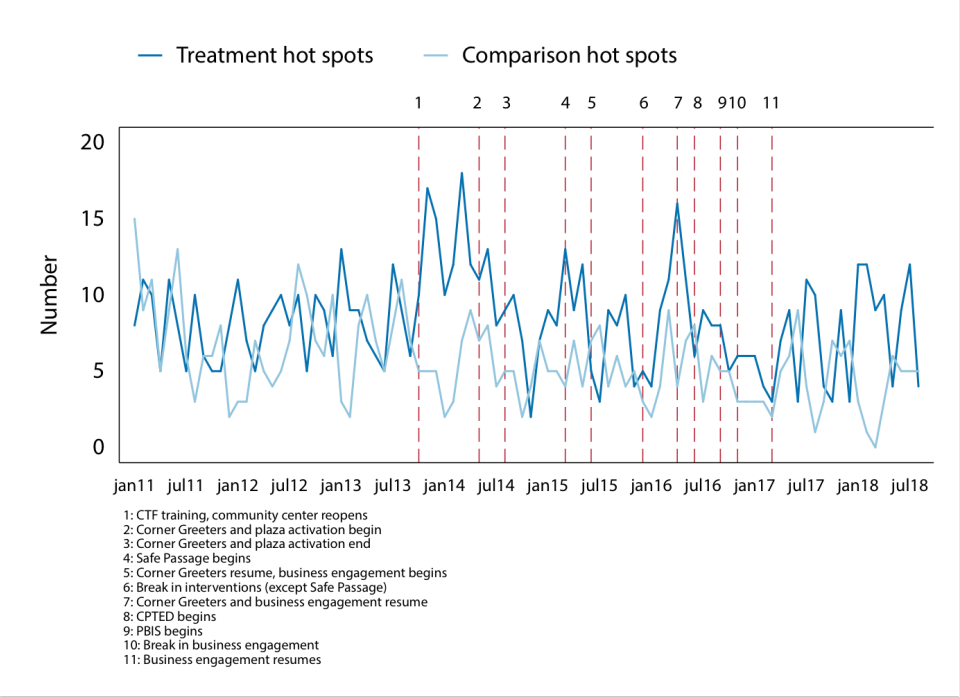

Figure A39: Predicted number of violent incidents by treatment assignment and intervention status

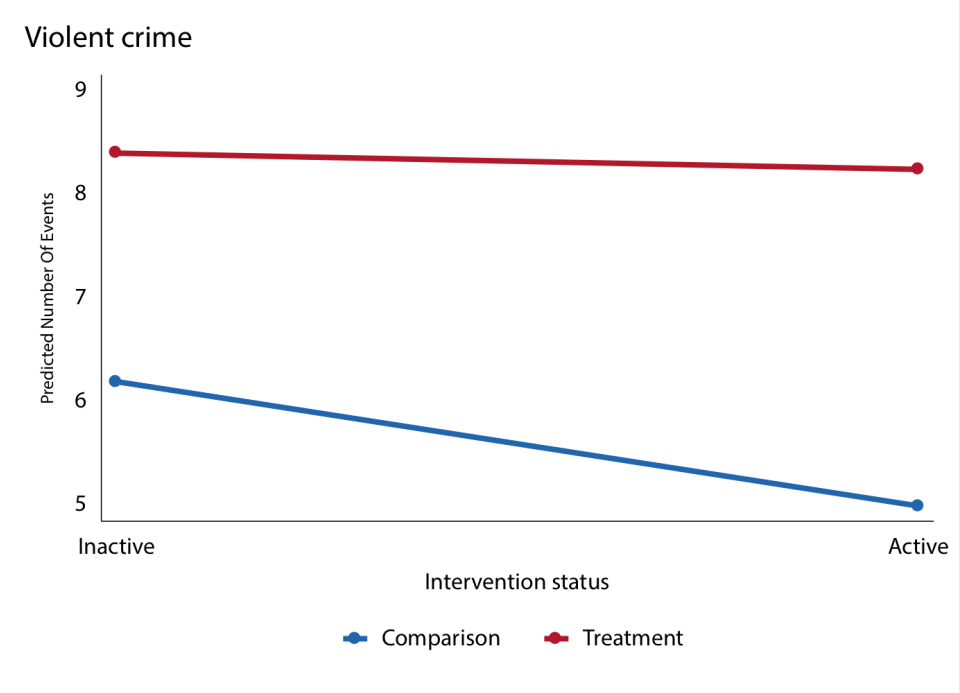

Figure A40: Part II incidents in treatment and comparison sites, January 2011-August 2018

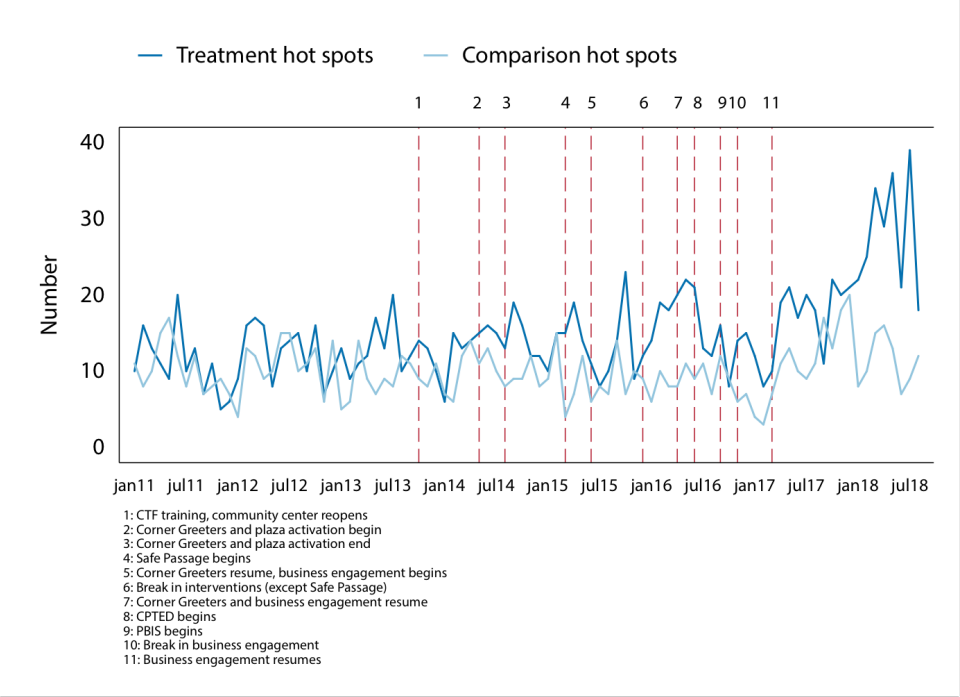

Figure A41: Predicted number of Part II incidents by treatment assignment and intervention status

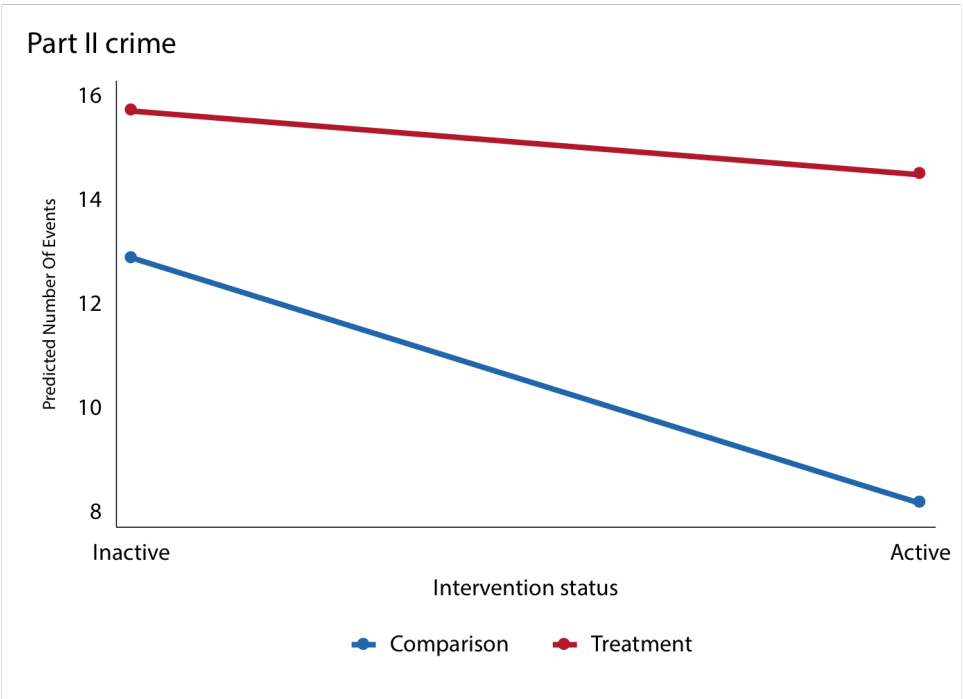

Figure A42: Noticed improvements to businesses, 2016 vs. 2018 (%)

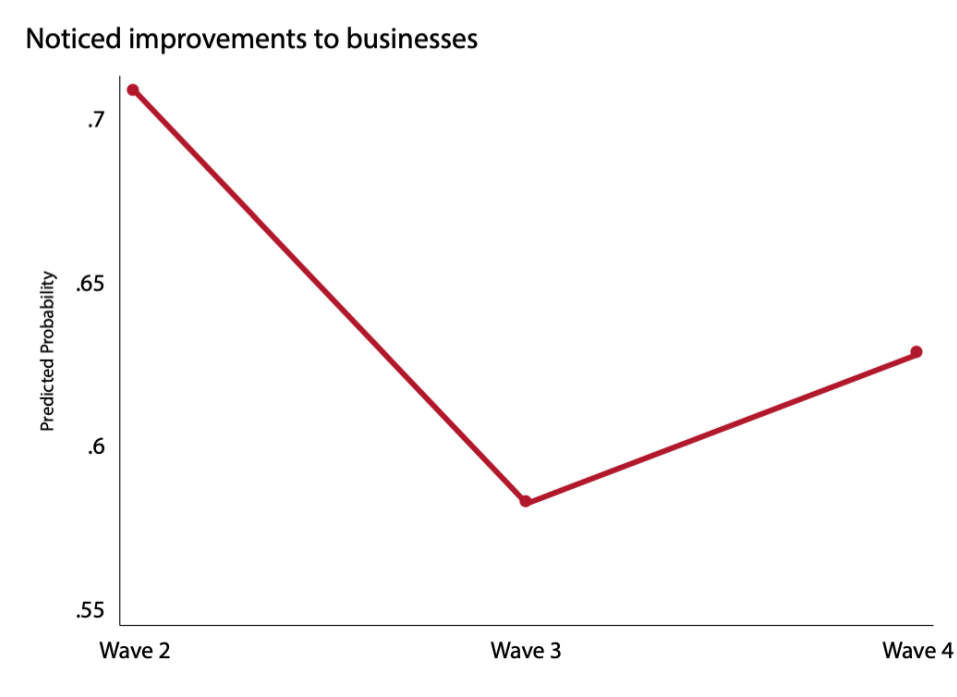

Figure A43: Noticed Corner Greeters, 2016 vs. 2018 (%)

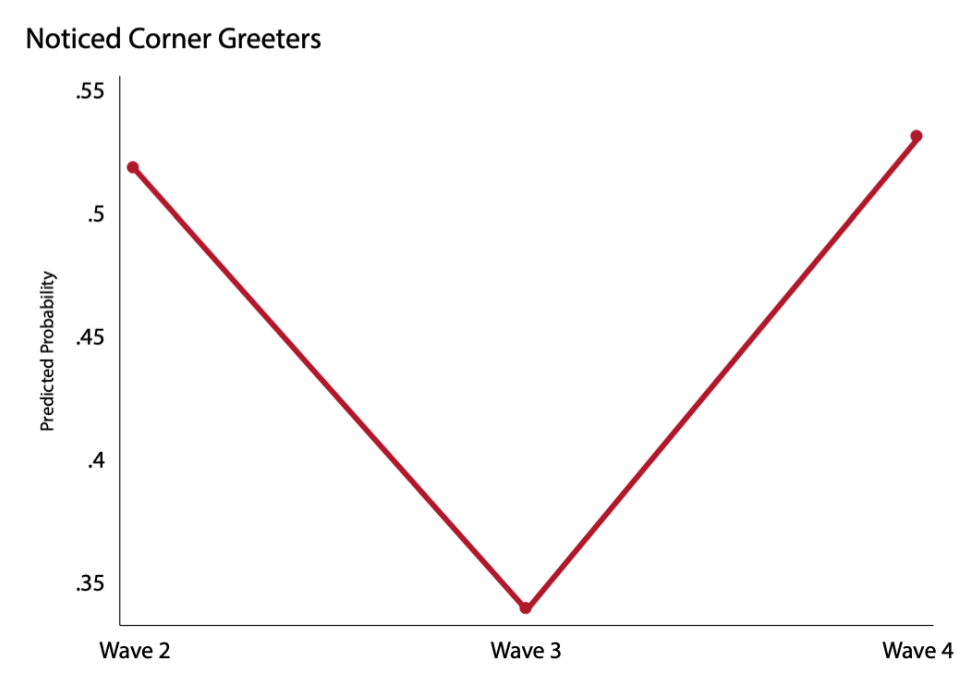

Figure A44: Noticed Safe Passage, 2016 vs. 2018 (%)

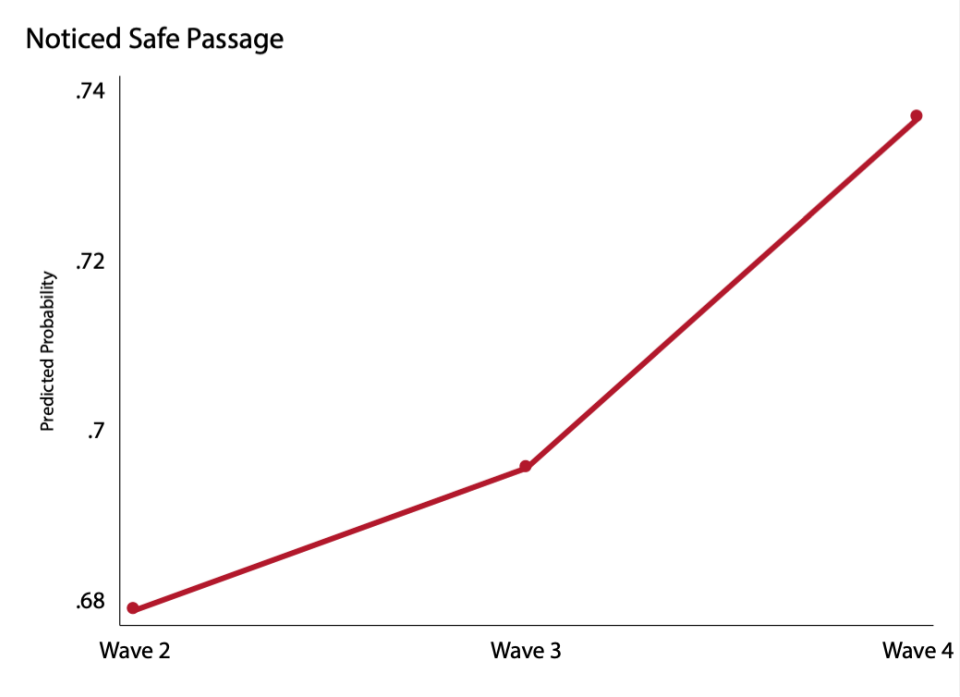

Figure A45: Satisfied with improvements to businesses, 2016 vs. 2018 (%)

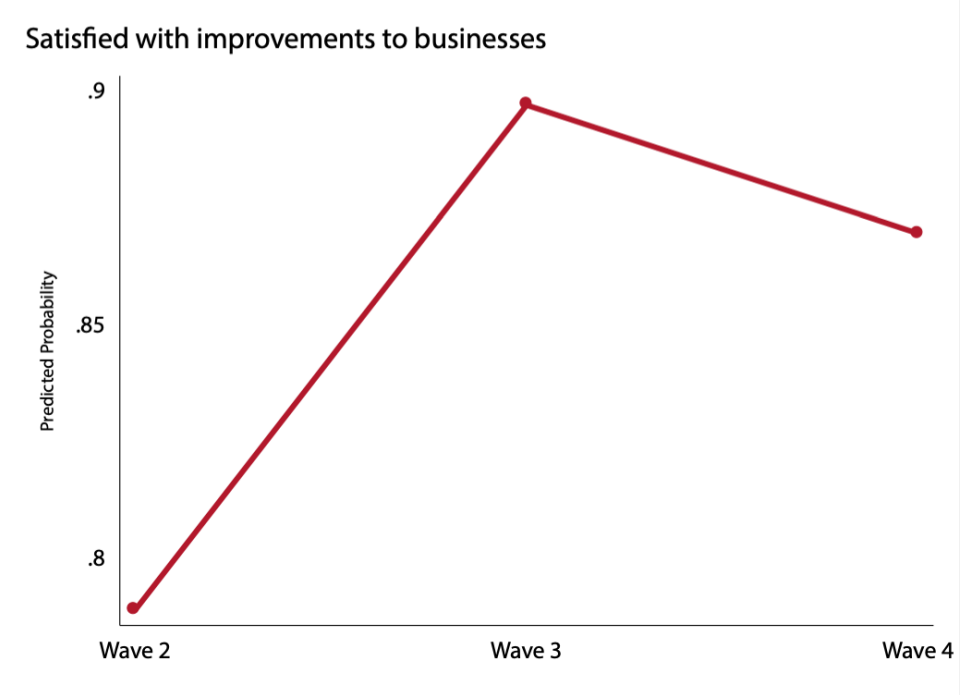

Figure A46: Satisfied with Corner Greeters, 2016 vs. 2018 (%)

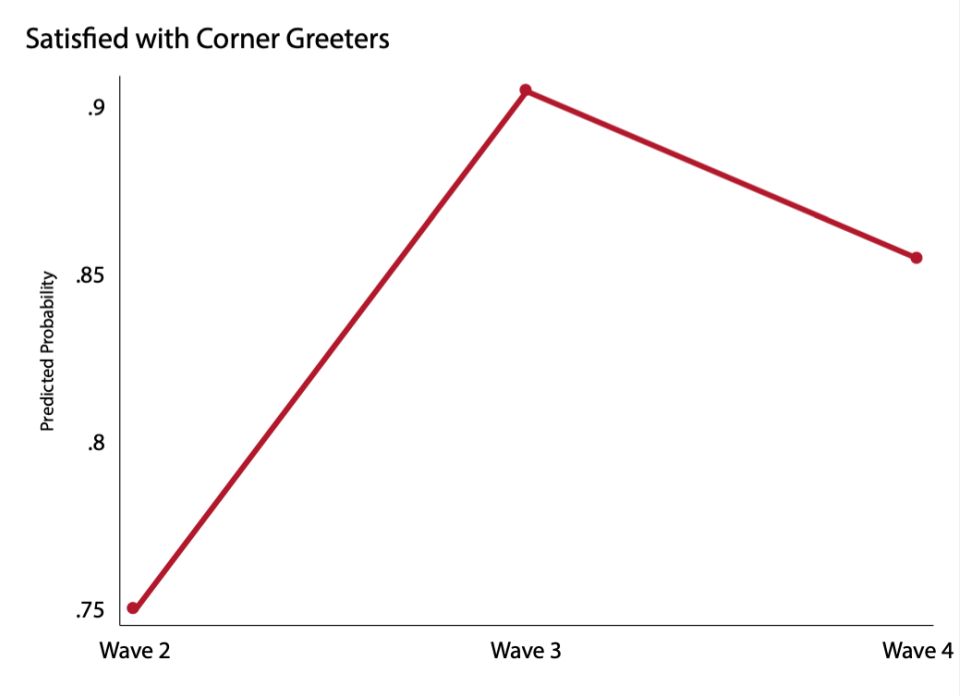

Figure A47: Satisfied with Safe Passage, 2016 vs. 2018 (%)

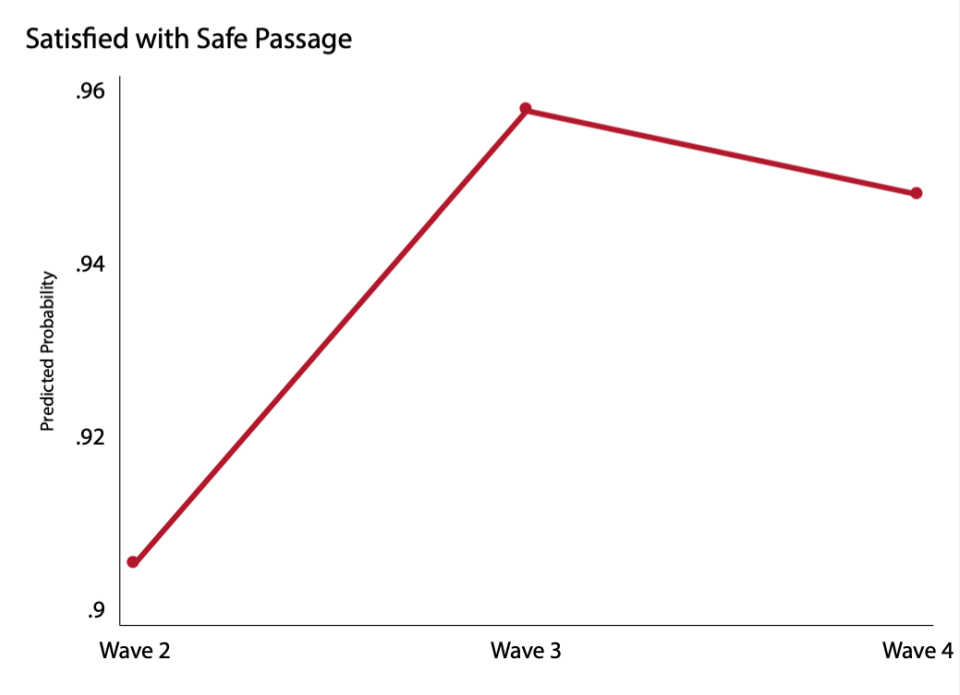

Figure A48: In the past year, has crime gotten worse, stayed the same, or gotten better? (Rainier Beach hot spots)

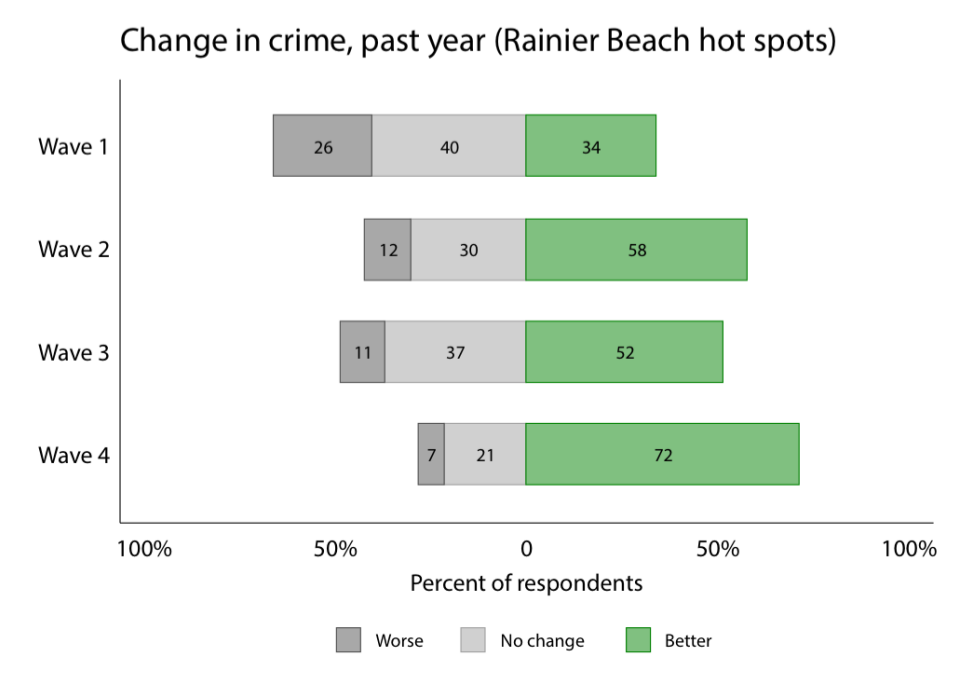

Figure A49: In the past year, has crime gotten worse, stayed the same, or gotten better?

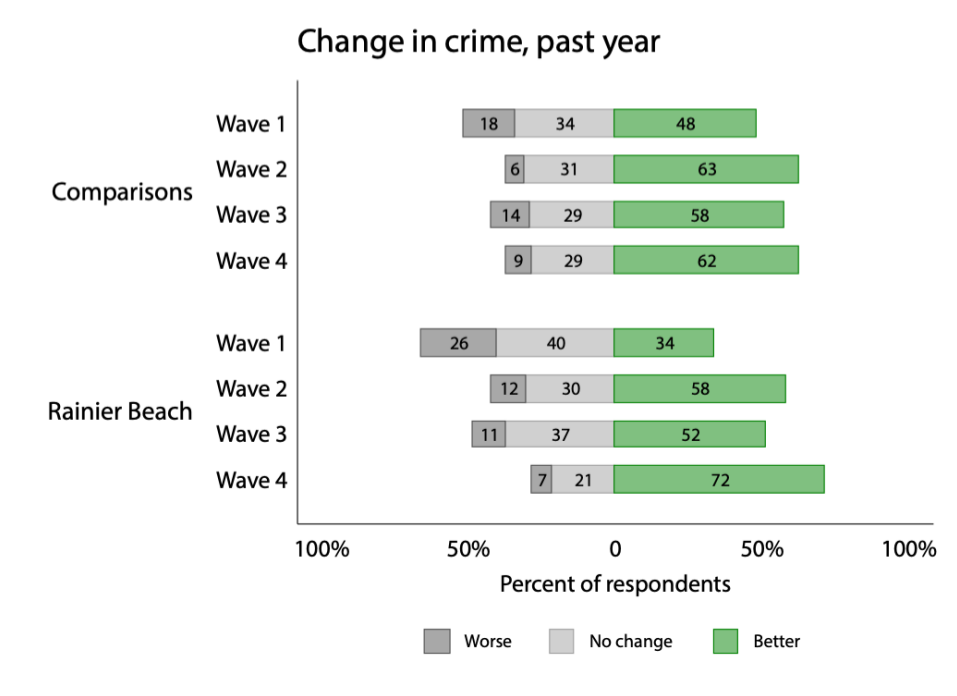

Figure A50: Change in perceived likelihood of crime in the Rainier Beach hot spots, 2014-2018

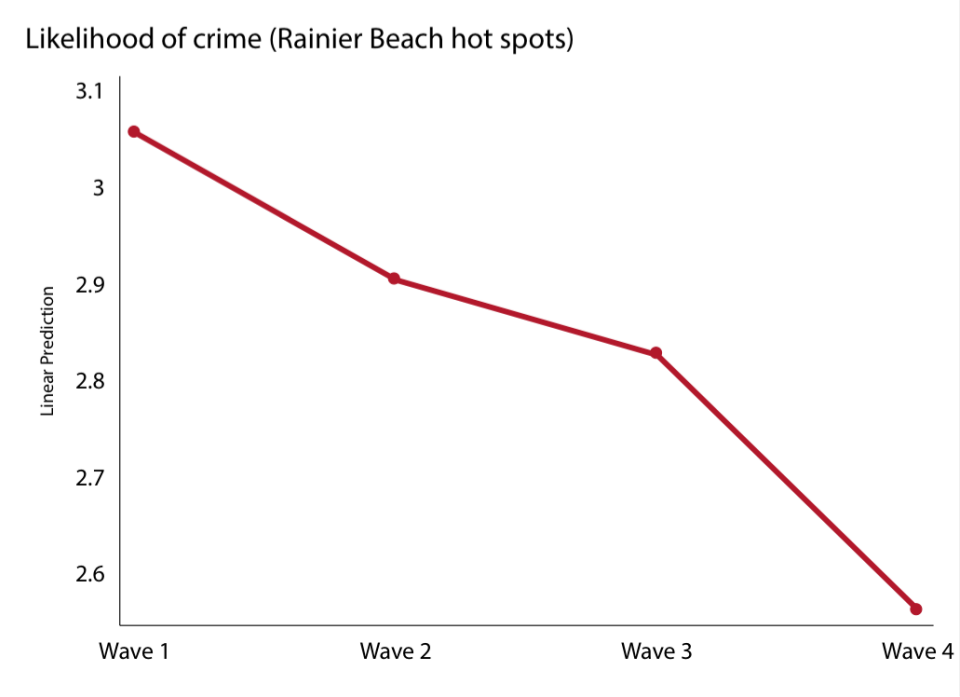

Figure A51: Change in perceived likelihood of crime in the hot spots and comparison spots, 2014-2018

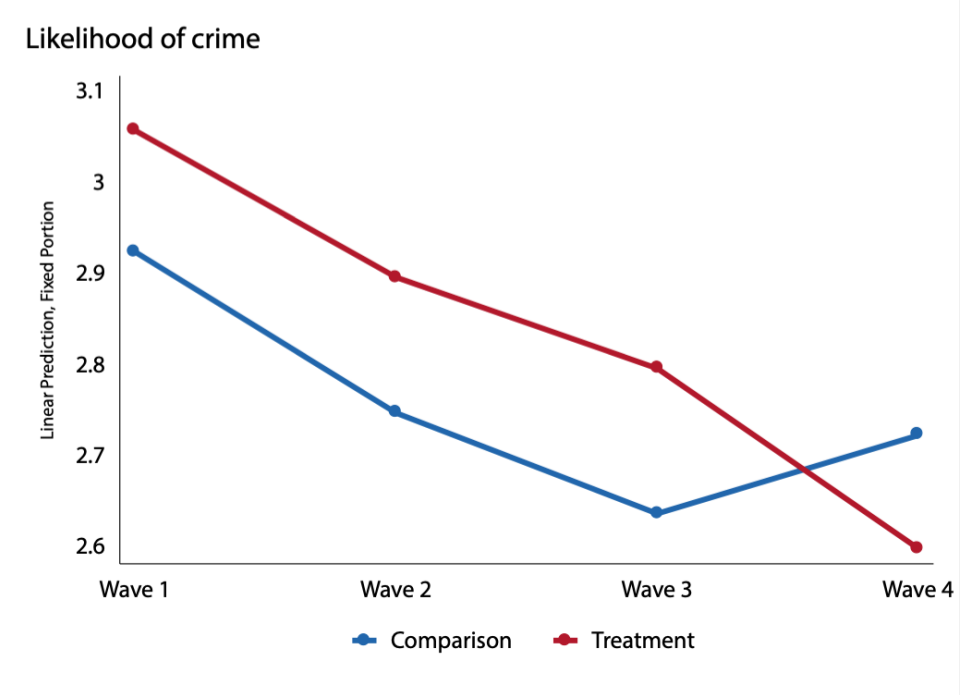

Figure A52: Change in perceived frequency of disorder in the Rainier Beach hot spots, 2014-2018

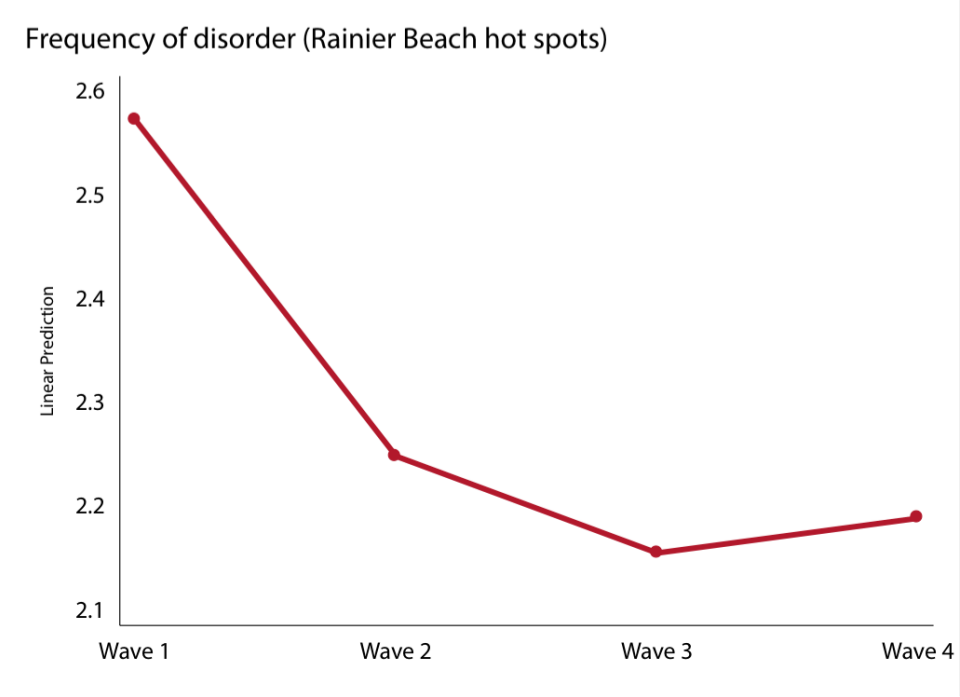

Figure A53: Change in perceived frequency of disorder in the hot spots and comparison spots, 2014-2018

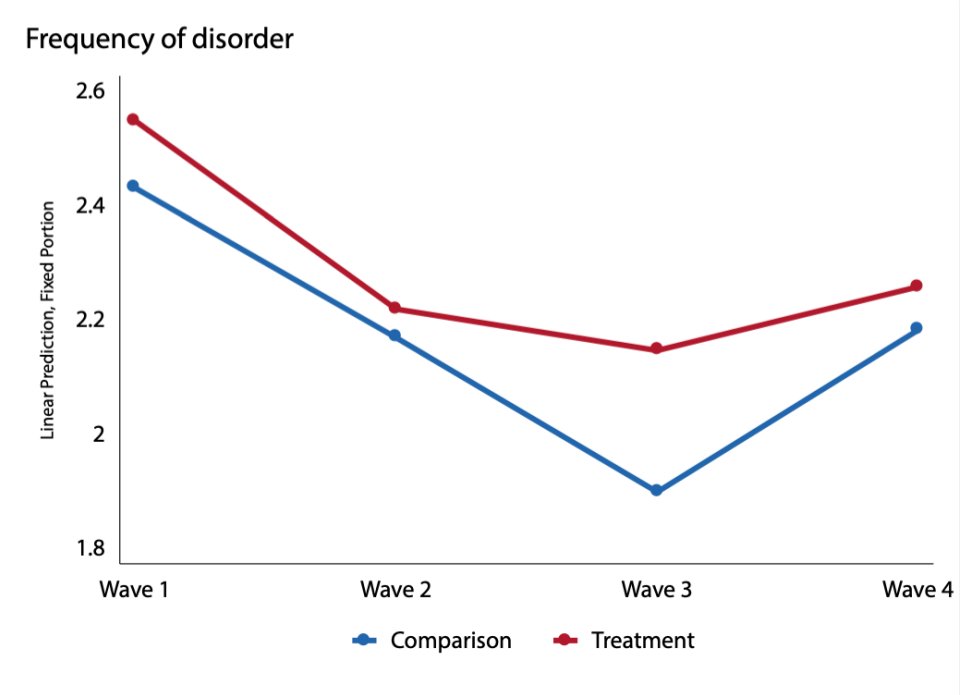

Figure A54: Change in concerns about crime and disorder in the Rainier Beach hot spots, 2014-2018

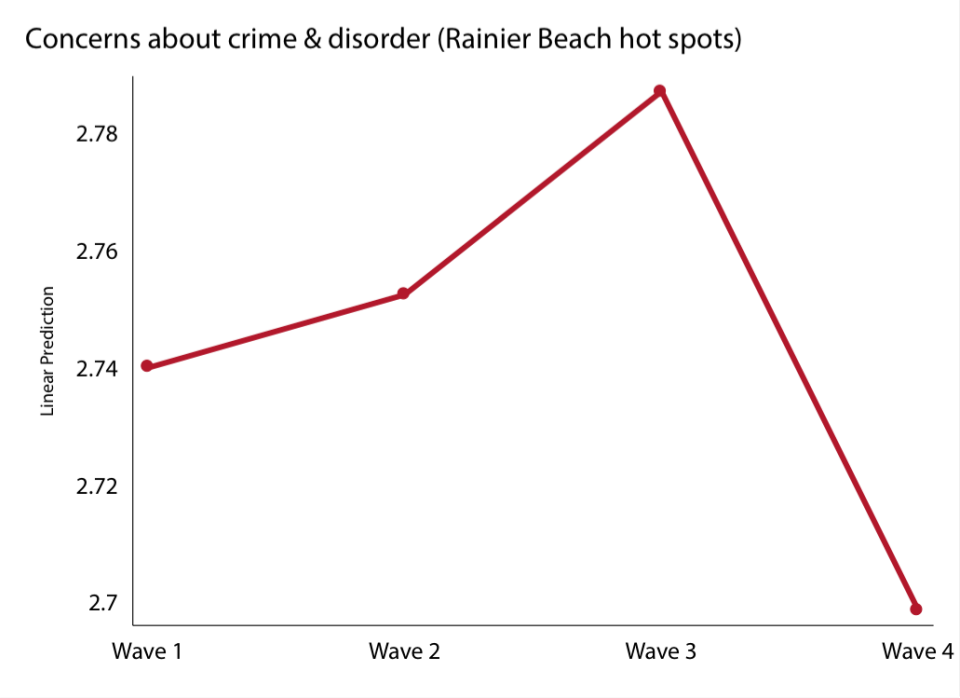

Figure A55: Change in concerns about crime and disorder in the hot spots and comparison spots, 2014-2018

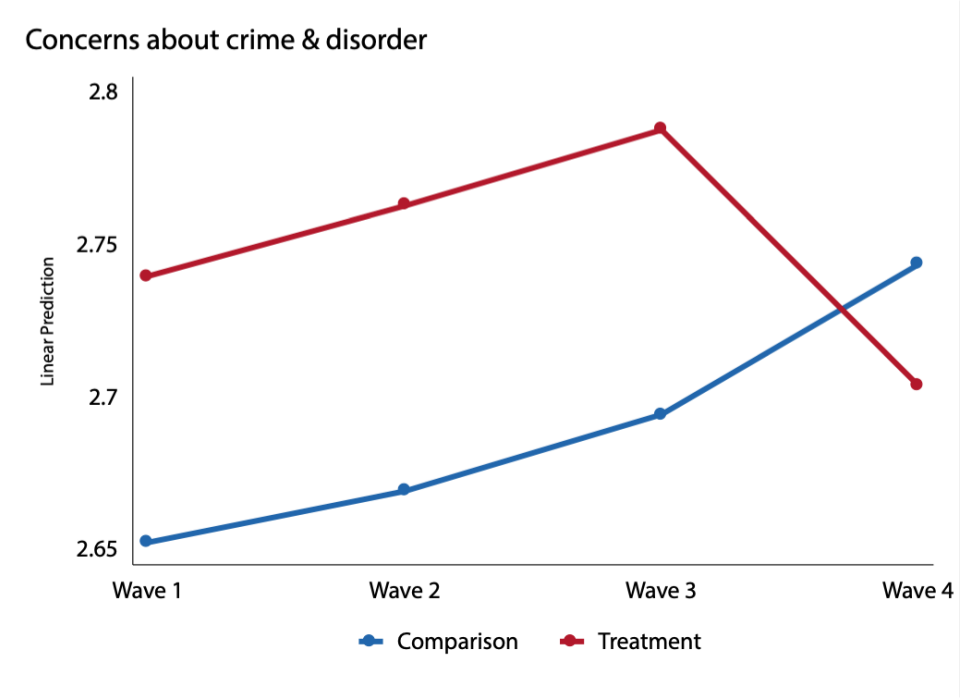

Figure A56: Change in feelings of safety in the Rainier Beach hot spots, 2014-2018

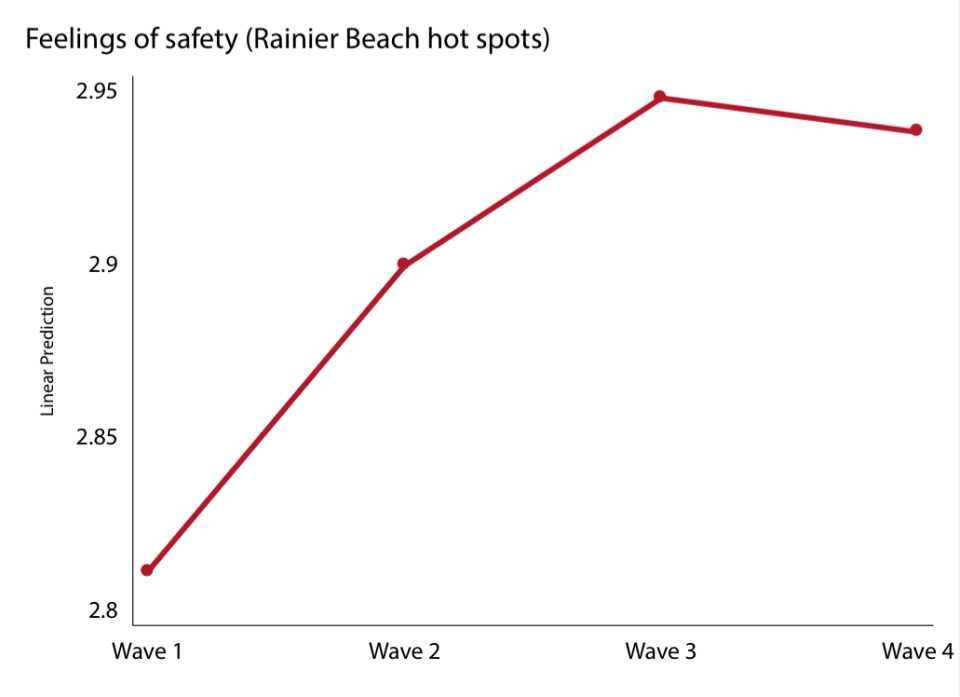

Figure A57: Change in feelings of safety in the hot spots and comparison spots, 2014-2018

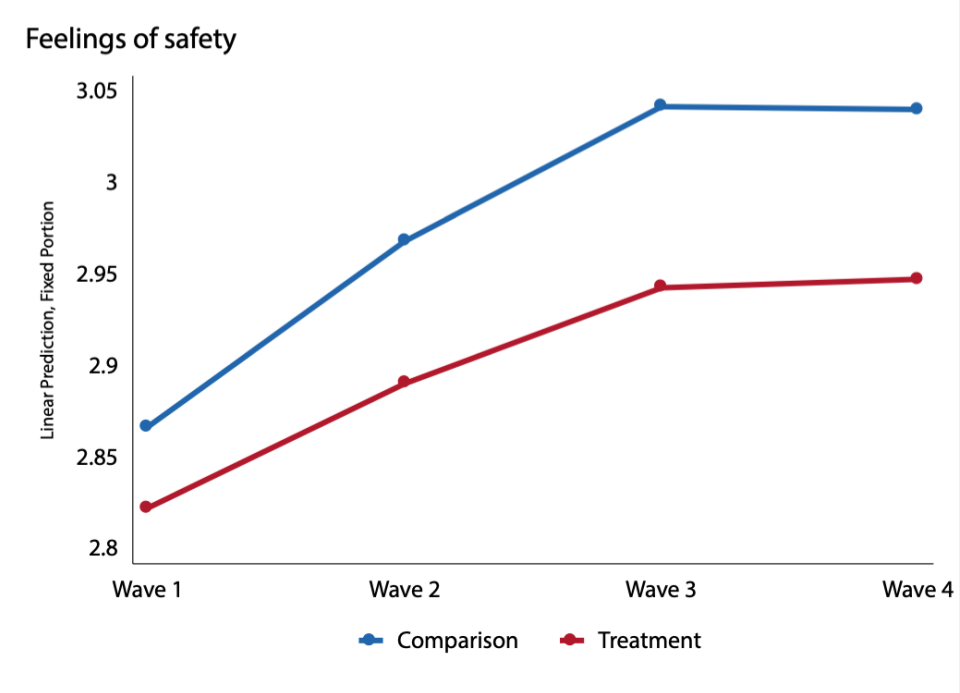

Figure A58: Change in social cohesion in the Rainier Beach hot spots, 2014-2018

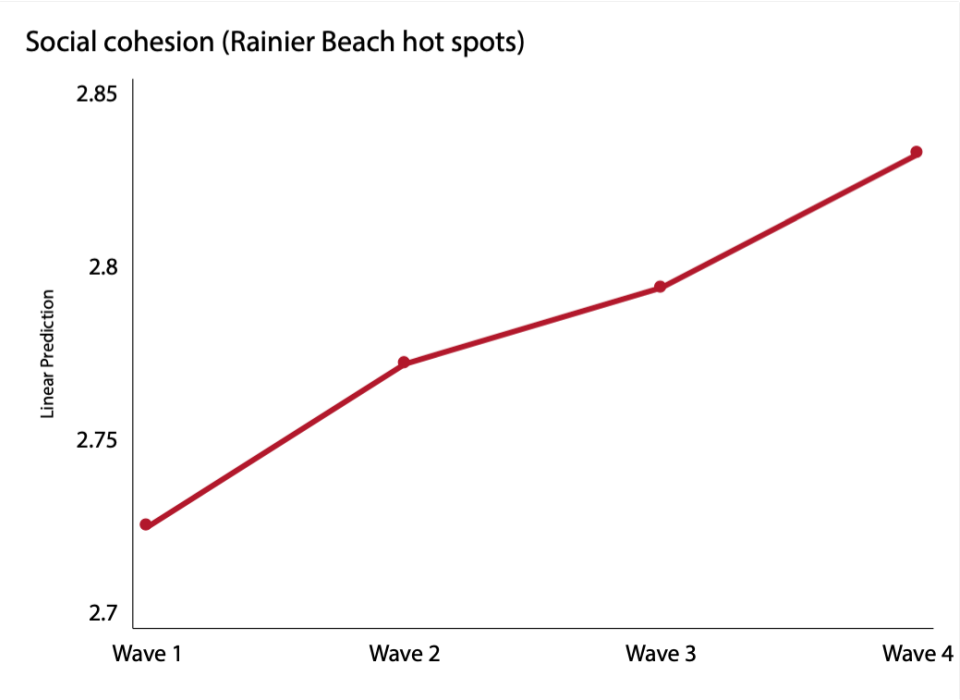

Figure A59: Change in social cohesion in the hot spots and comparison spots, 2014-2018

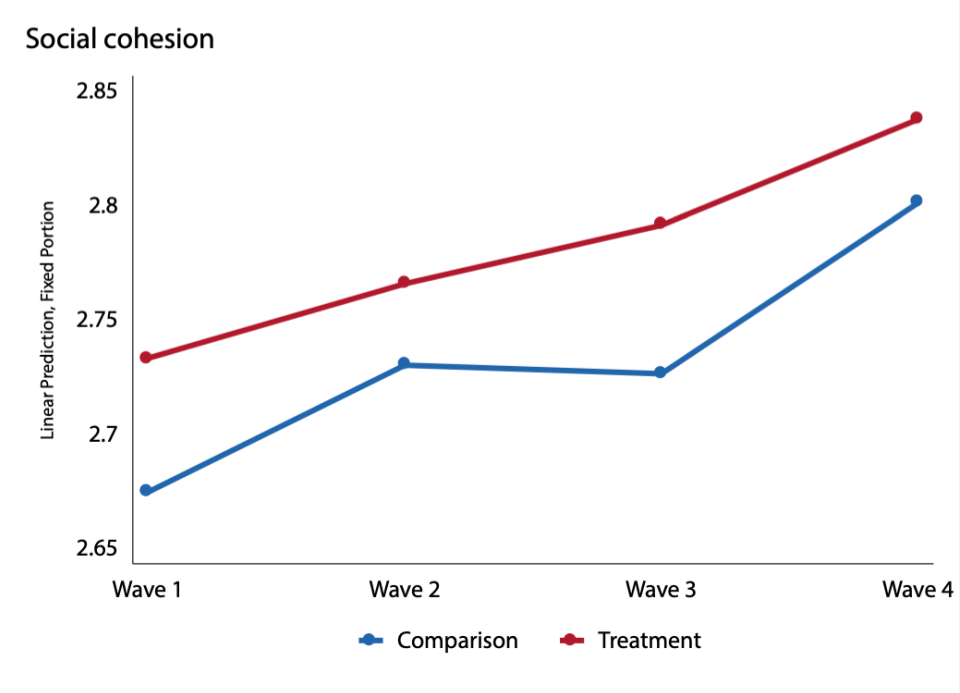

Figure A60: Change in collective efficacy in the Rainier Beach hot spots, 2014-2018

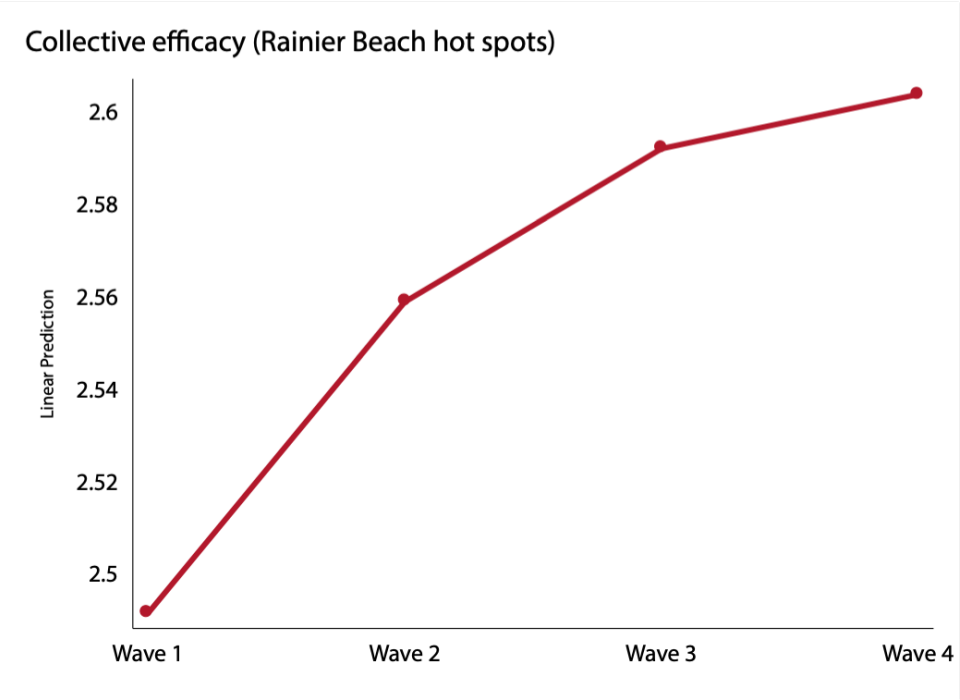

Figure A61: Change in collective efficacy in the hot spots and comparison spots, 2014-2018

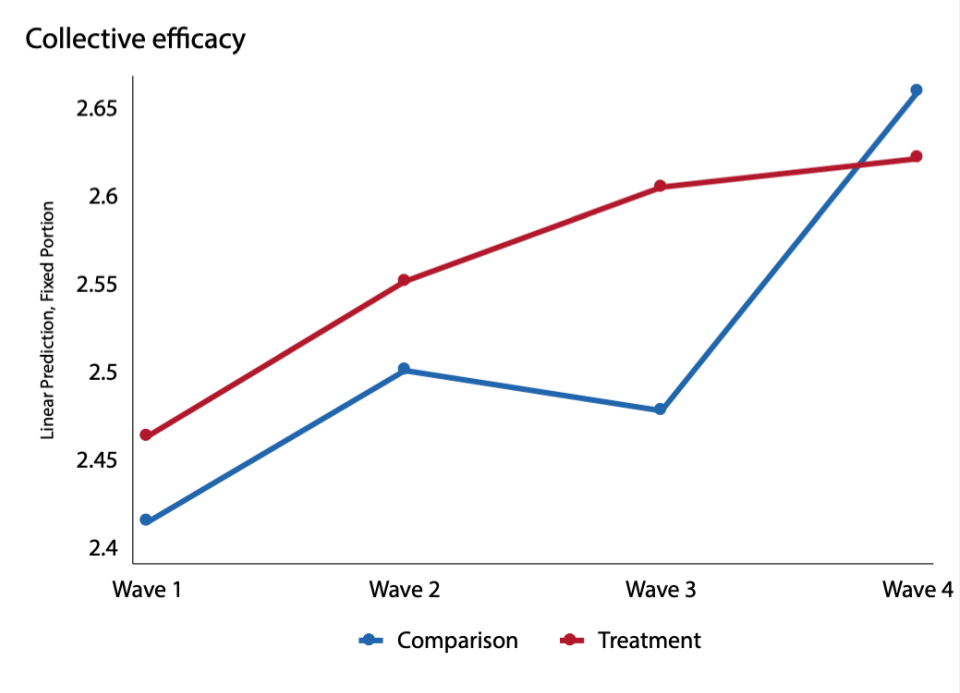

Figure A62: Change in satisfaction with police in the Rainier Beach hot spots, 2014-2018

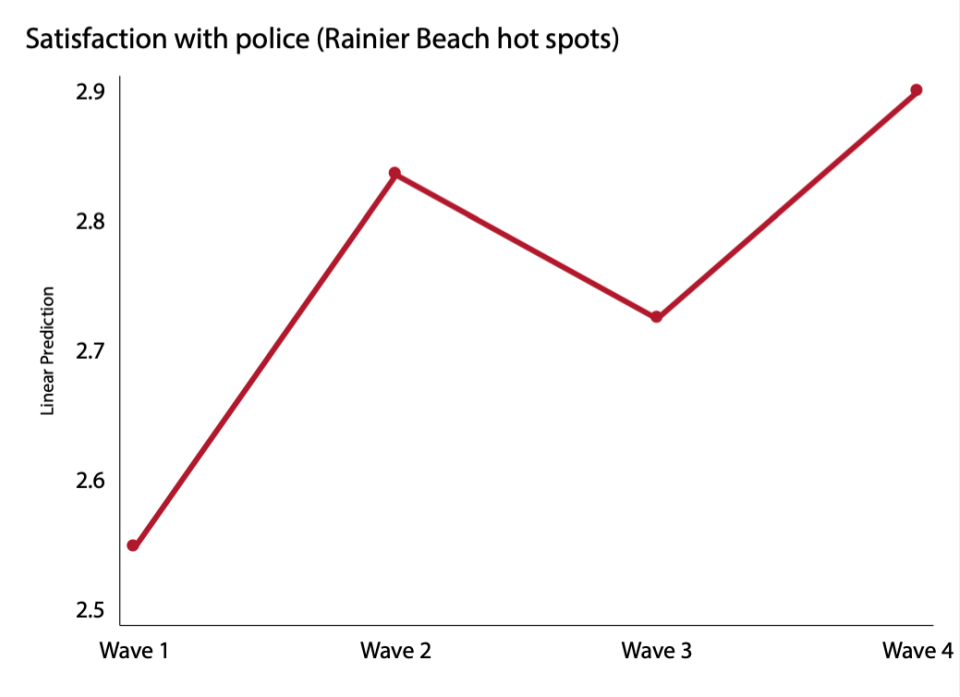

Figure A63: Change in satisfaction with police in the hot spots and comparison spots, 2014-2018

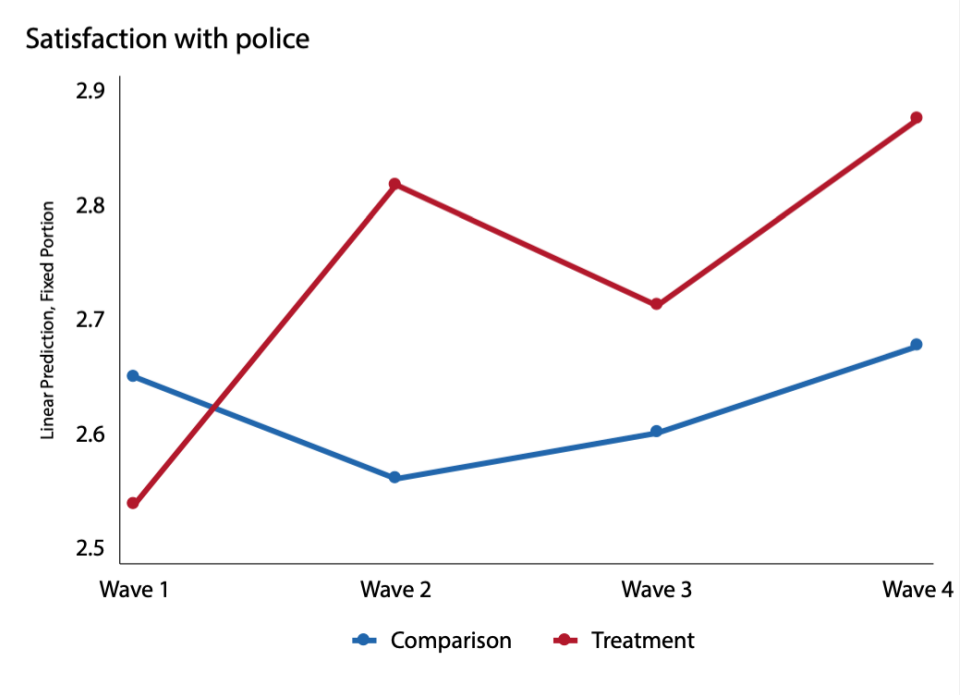

Figure A64: Change in perceived police legitimacy in the Rainier Beach hot spots, 2014-2018

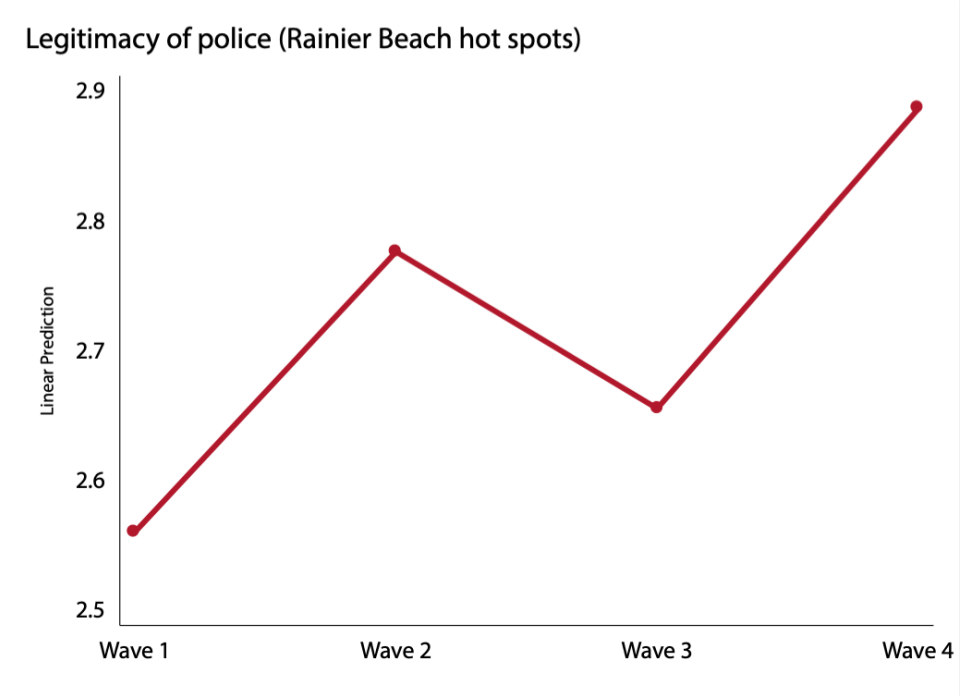

Figure A65: Change in perceived police legitimacy in the hot spots and comparison spots, 2014-2018

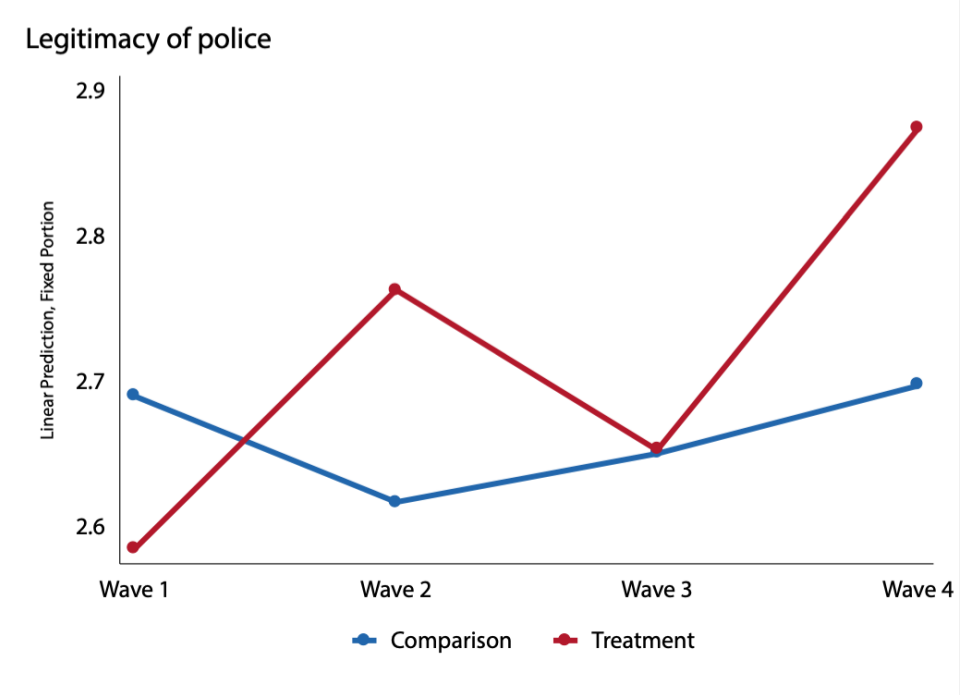

Figure A66: Change in perceived frequency of police activity in the Rainier Beach hot spots, 2014-2018

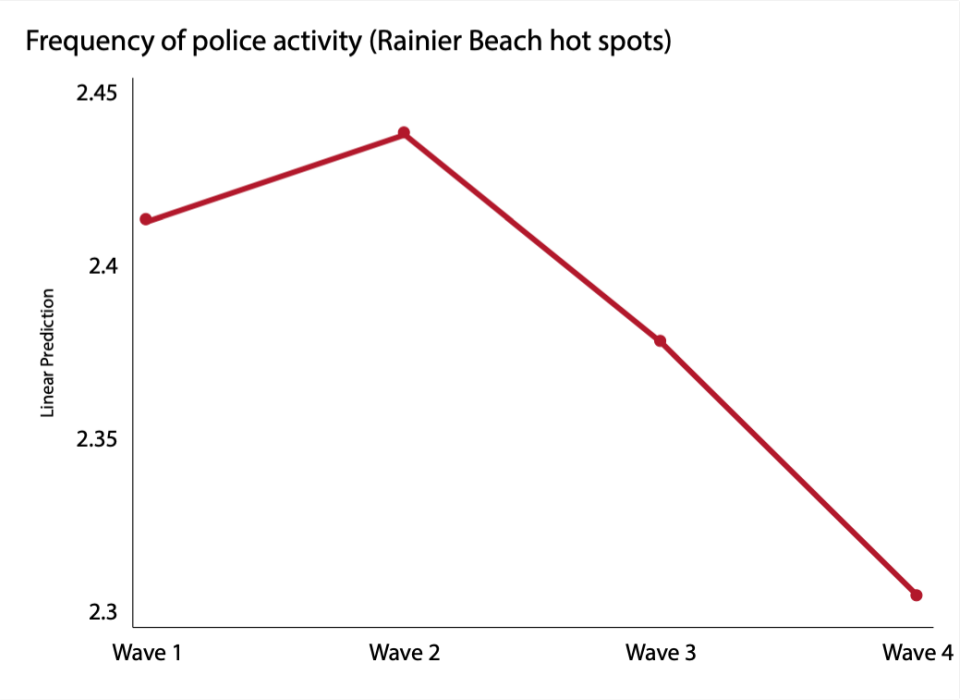

Figure A67: Change in perceived frequency of police activity in the hot spots and comparison spots, 2014-2018