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

Rainier Beach:
A Beautiful Safe Place for Youth

2017 Evaluation Update

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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.

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 the Rainier Beach neighborhood 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 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 the ABSPY effort. We tracked calls for police service and reported crime incidents in the five hot spots from September 2011 to August 2017. 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 overall compared to trends in the South Precinct. We have also conducted three community surveys in the hot spots and comparison areas—one in the summer of 2014 before the interventions began (Wave 1), a follow-up in the summer of 2016 (Wave 2), and a further follow-up in summer 2017 (Wave 3).

Our updated findings show that the positive trends we saw emerging in 2016 have continued through 2017:

- The hot spots have continued to become less "hot" over time.
- Violent crime decreased more in the hot spots than in Rainier Beach or the South Precinct overall.
- Calls for service and crime incidents were higher in the treatment 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 for police assistance when something happens and have a greater stake in neighborhood safety.
- Survey respondents in the treatment hot spots continue to believe that crime is going down.
- Community perceptions of collective efficacy, social cohesion, and feelings of safety are improving in Rainier Beach.
- ABSPY improved community members' satisfaction with police and perceptions of police legitimacy—at least in the short term.
- Community members in the ABSPY hot spots are satisfied with ABSPY interventions, although fewer were familiar with the interventions compared to last year.

Recommendations for 2018

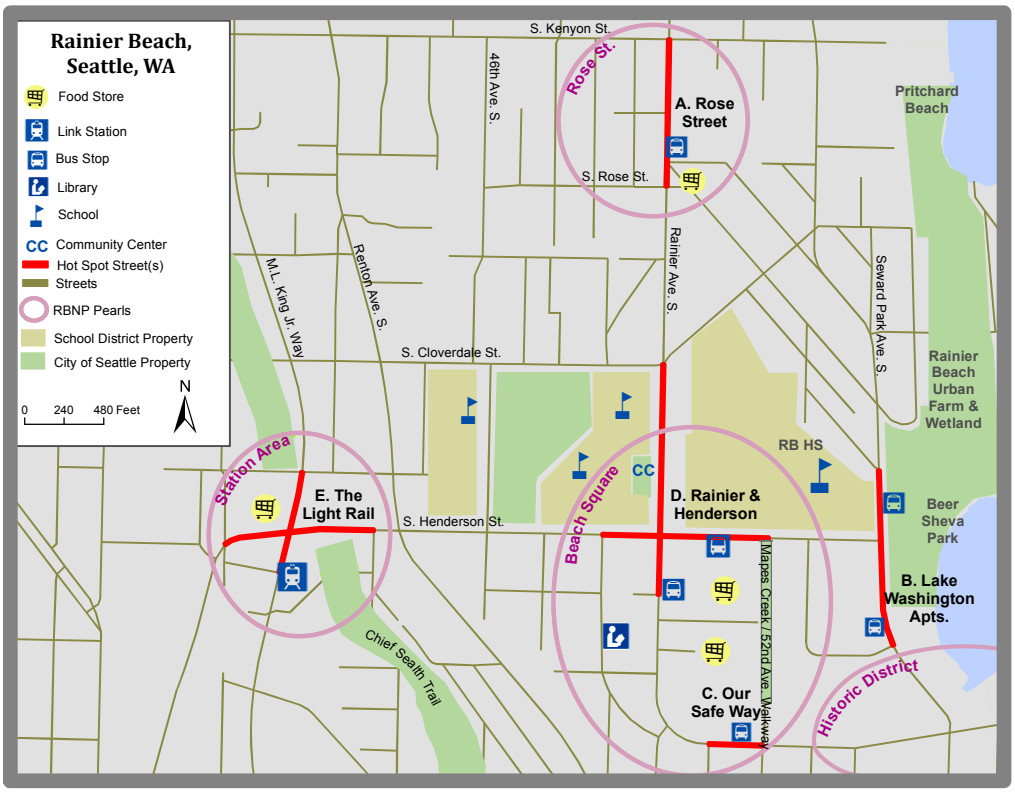
While there is evidence of positive trends in crime reduction and improvements in community outcomes in the Rainier Beach hot spots, our evaluation results do not yet meet the scientific standard of "statistical significance" relative to the comparison locations. It is likely to take several more years before we see strong effects associated with ABSPY. However, the results suggest we are headed in the right direction. To sustain reductions in crime and improvements in community outcomes in 2018 we recommend the following steps, in addition to maintaining the existing ABSPY strategies:

- **Emphasize interventions at Lake Washington and Safeway hot spots.** These hot spots have not seen the same changes in crime as other locations and new or adjusted interventions may be needed.
- **Maintain and strengthen collaboration with SPD's South Precinct Community Policing Team** to regain improvements in police satisfaction and legitimacy seen in 2016.
- **Continue to raise awareness of ABSPY interventions in the neighborhood** through in-person, traditional media, and social media marketing campaigns and neighborhood events and engage community members—especially youth—in the ABSPY coordination and planning process.

1 Background

This report updates the original *Rainier Beach: A Beautiful Safe Place for Youth* (ABSPY) Final Evaluation Report (Gill, Vitter, & Weisburd, 2016) with 2017 Seattle Police Department (SPD) and community survey data. 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 2018. 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 2017 Intervention Update

As we noted in our original report, ABSPY is a complex and multifaceted set of interventions requiring coordination across a range of agencies. The initiative had a "rolling start" in May 2014, and each intervention has progressed at a different rate and in different locations since that date. Interventions have also occasionally paused and started up again for various reasons, including contracting delays and seasonal variation. Figures 2 and 3 show the timeline of interventions, including the months during which each strategy was active or inactive, updated through October 2017. This timeline also forms the basis for our evaluation of ABSPY's effectiveness.

Figure 2: ABSPY implementation timeline, October 2013-September 2015

		Planning Phase (BCJI)			Implementation Phase (BCJI)																			
		2013			2014													2015							
Activities	**Location**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**
Core Team Activities																									
Core Team support and project coordination																									
Preliminary data analysis																									
"The Gathering"-- implementation kick off event																									
Planning and contracting																									
Community Mobilization (includes Community Task Force, Campus Safety Team																									
CTF training																									
Interventions																									
Corner Greeters	All																								
Plaza activation	Rainier & Henderson																								
Safe Passage	Rainier & Henderson																								
Business Engagement	Rose St, Light Rail, Safeway																								
CPTED storefront improvements	Rose St, Light Rail																								
PBIS	Rainier & Henderson																								

Figure 3: ABSPY implementation timeline, October 2015-October 2017

		Implementation Phase (BCJI to September 2016; City from January 2016)																							
		2015			2016													2017							
Activities	**Location**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**
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2.1 Coordination and planning

In 2017 the Core Team continued to meet monthly to oversee ABSPY and related initiatives, while the Intervention Team met monthly to discuss implementation progress and concerns. The primary focus of the Core Team this year has been sustaining the ABSPY effort while at the same time managing the growth and development of the initiative, its partners, and the team itself. One approach to managing this growth was the development of different ABSPY "workgroups," or subcommittees of the Core Team, in which small groups of team members focused on a specific issue and brought information and final decisions back to the full team. Workgroup topics included Lake Washington Apartments, which was identified in the previous year as a hot spot in need of more focused intervention; data and analysis; SPD activities; and Core Team development and sustainability. Core Team members also participated in a 2-day retreat and peacemaking process in October 2017 to address concerns about leadership, representation, and inclusion and to develop a set of expectations and guidelines for Core Team meetings and activities.

The current set of core interventions overseen by the ABSPY Core Team is described below (the original evaluation report details the evidence and reasoning behind the development of each strategy and describes pre-2017 activities). Note that the interventions are not static—they are continually updated and improved based on data and implementation experience. Both the overall Core Team and the workgroups have used the findings of our original evaluation report (Gill et al., 2016) and regular seasonal and quarterly data reporting to guide these improvements. For example, the Lake Washington workgroup helped to facilitate several special events at the location, including a "cooking with a cop" event. The Corner Greeters adjusted the timing of their activities based on data showing the highest risk times for crimes. Emerson and Martin Luther King elementary schools were added to PBIS activities based on their need and Seattle Public Schools' assessment of their readiness. Finally, the Safe Passage team expanded their activities to include a Tuesday youth group and a lunch program, which recognized the significant role hunger and lack of food can play in youth crime and risky behavior.

2.2 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. In 2017, the Safe Passage initiative expanded its coverage to vacation times when young people were hanging out at the community center, and began a lunch program to increase engagement and help young people who do not have consistent access to food at home with a nutritious free meal.

2.3 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. About a week ahead of each Corner Greeter event, a team of youth workers engage in "scouting," where they visit local businesses to inform them of the upcoming event, encourage them to participate, and share news about local neighborhood community-building activities. 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.

2.4 SPD business and community engagement

SPD's South Precinct Community Policing Team has continued to be a key ABSPY partner in 2017. Their work focuses on 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. SPD has also connected with community members at the hot spots through activities such as "cooking with a cop" and ice-cream socials at the Lake Washington Apartments.

2.5 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.

2.6 Positive Behavioral Interventions and Supports (PBIS)

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, 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. The "NIJ Workgroup" meets weekly during the planning phase of the NIJ grant, which will last through July 2018, and reports on its activities to the Core Team.

3 2017 Evaluation Update: Data and Methods

In this section we describe our updated evaluation of crime trends and community member perceptions related to ABSPY. We follow a similar approach as the one described in our original evaluation report. We examine monthly police data from January 2011 to August 2017, and conducted a third wave of our community survey in July and August 2017. Each Rainier Beach hot spot is matched with a comparison location elsewhere in SPD's South Precinct, which was selected for the original evaluation based on similarity in crime rates and other characteristics (such as land use, schools, and access to public transit). Further details about the selection of the hot spots and comparison sites and information about the police data are available in the original report.

3.1 Police crime data

Under a broad data-sharing agreement with SPD, covering multiple projects, the Center for Evidence-Based Crime Policy (CEBCP) receives monthly data on police calls for service and incident reports. We assess the impact of ABSPY on several different outcomes at the hot spot, neighborhood, and precinct level. Below we describe each outcome and discuss what they can help us to understand and what they don't tell us about crime.

1. **Calls for police service.** Calls for service data include both 911 calls from the public and logs recorded by police in the course of their patrol. Calls for service data best reflect the concerns of the neighborhood, as they give us a sense of what people call the police about and even whether or not they are willing to call (which may indicate community members' trust in the police). However, they do not always paint a "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). For example, someone might call 911 after hearing strange noises in their neighbor's yard, which might be recorded as "suspicious circumstances," but when the police arrive they find a burglary in progress. On the other hand, they might find no evidence of a crime—just because someone calls 911 it does not mean that a crime has happened. Calls for service also cannot 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 take incident 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). As discussed above, not every call for service becomes an incident report, but 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 (this is common in domestic violence cases).

3. **Juvenile/youth incident reports.** We looked separately at all police incident reports that involve a juvenile (under 18 years old) or youth (age 18-25) as a suspect, arrestee, or victim. We do not separate out the under-18 and 18-25 age groups in this report because of small numbers, which can cause problems for statistical analysis.

4. **Violent crime.** Given ABSPY's specific focus on reducing violent crime, we separately examine

incident reports involving violence. The "violent crime" category includes the four most serious violent crimes (homicide, rape, robbery, and aggravated assault),[2] as well as simple assault, which is considered less serious.

5. **Part II crimes.** This category includes crimes (except for simple assault) 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] These are typically less serious crimes. It is useful to look at Part II crimes because if ABSPY reduces serious crime but increases collective efficacy we might see increases in these less serious crimes. This might be a positive outcome because it suggests that community members are more likely to call the police and feel more empowered to take action against minor quality of life issues. Note that although we use the term "Part II crimes," we do not know the exact set of incident types considered by SPD to fall into Part II.

3.2 Community survey

We conducted a third wave of our in-person community survey in the five Rainier Beach hot spots and five comparison hot spots, following the same methodology described in our original report. The survey was conducted in the summer of 2017, three years after the first (baseline) survey, referred to here as "Wave 1," which was conducted in summer 2014, and one year after the "Wave 2" survey. We present results from all three waves in this report for comparison. The survey allows us to assess and compare community members' views of crime, safety, collective efficacy and social cohesion, the police, and ABSPY itself.

Like the previous surveys, the Wave 3 survey was conducted in a variety of settings: household, street, and business. We hired a team of six researchers, made up of both students at local universities and young adults from the Rainier Beach neighborhood. Two of the most experienced team members acted as team coordinators and were responsible for organizing schedules, setting up street survey booths (including refreshments to encourage people to stop and take the survey) and managing access to residential areas, and ensuring paper surveys and consent forms were properly documented and stored. All researchers were trained according to existing data collection and safety protocols developed by CEBCP, which included a requirement to work in pairs and communicate by text message when they entered and left someone's residence. Following the training day and practice interviews, the team knocked on doors, entered businesses, or stopped passers-by on the street in each of the ten treatment and comparison hot spots to conduct the surveys. We sampled the same households each year, although we were not always able to get surveys at the same house in multiple waves. Several of the local researchers, including the young people from the neighborhood, were fluent in languages commonly spoken in the Rainier Beach neighborhood, including Spanish and Somali, and were able to use their language skills to obtain participation from a larger and more representative group.

Table 1 shows the number of valid surveys conducted in each wave and at each hot spot. In total, we obtained 297 valid surveys in Wave 1, 300 in Wave 2, and 290 in Wave 3.[4] Table 2 shows 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, in each wave respondents were slightly more likely to be male than female and the majority were aged between 18 and 35. Respondents were most likely to identify as Black or African-American, followed by White, and around two-thirds were

[2] We are not permitted to report homicide and rape offenses separately.
[3] The eight Part I crimes are homicide, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson.
[4] Three Wave 1 surveys included in our original analysis were subsequently found to be invalid.

born in the United States. Just over half had children of any age. Reflecting the younger age groups represented, the majority of participants had a high school diploma or equivalent or had completed some college classes. In the earlier waves, fewer people were working full- or part-time, but the percentage working full-time increased in Wave 3. In each wave, most respondents said they lived at the hot spot; among those who did not, the most common reasons for being there included shopping or using public transit. There was variation in the length of time participants had been living in or visiting the hot spot. At Wave 1 there were significant differences between treatment and comparison hot spot respondents by age and race. Respondents in the treatment (Rainier Beach) hot spots were typically younger and more likely to be Black (African-American or African), another race ("Other" commonly included Hispanic and Middle Eastern), or more than one race, while comparison group respondents were slightly older and more likely to be White or Asian. These differences reflect the demographic differences between Rainier Beach and the other neighborhoods in South Seattle where our comparison hot spots were located.

Table 1: Number of surveys completed, by site and wave

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

Table 2: Sample characteristics by wave and by group at baseline (wave 1)

	Wave			Treatment at wave 1	Comparison at wave 1
	1	2	3		
Survey setting (%)					
Household	23.9	9.7	8.3	23.6	24.2
Street	70.0	83.3	85.5	70.8	69.1
Business	6.1	7.0	6.2	5.6	6.7
Gender (%)					
Female	43.5	49.7	43.2	43.2	43.8
Male	56.1	50.3	56.4	56.8	55.6
Other	.4	.0	.4	.0	.7
Age (%)*					
18-25	22.1	23.5	24.3	27.9	17.2
26-35	24.3	22.8	26.8	25.4	23.4
36-45	15.4	17.0	17.5	18.0	13.1
46-55	15.4	15.9	12.5	11.5	18.6
56-65	15.4	14.5	13.9	13.9	16.6
Over 65	7.5	6.2	5.0	3.3	11.0
Race (%)***					
Black/African-American	36.6	41.7	33.0	42.7	31.2
African immigrant/refugee	7.5	11.9	8.1	10.5	5.0
White	24.9	23.0	26.7	14.5	34.0
Asian	12.5	6.5	11.0	6.5	17.7
Other	14.7	11.5	12.5	19.4	10.6
More than one race	3.8	5.4	8.8	6.5	1.4
Born in United States (%)	63.1	70.8	68.3	60.5	65.3
Has children (%)	56.3	61.4	51.7	54.8	57.6
Education (%)					
Primary/Elementary school	3.0	1.7	.7	5.6	.7
Some middle/high school	7.5	5.5	6.0	8.0	7.1
High school diploma/GED	26.4	21.1	29.1	31.2	22.1
Some college	23.0	33.6	27.6	21.6	24.3
Associate's degree	15.5	12.8	9.0	13.6	17.1
Bachelor's degree	16.2	15.2	16.0	13.6	18.6
Masters/graduate/professional degree	8.3	10.0	11.6	6.4	10.0
Employment (%)					
Full-time	42.5	43.3	54.4	40.0	44.5
Part-time	18.7	23.9	21.0	20.0	17.5
Not working	29.0	19.0	14.0	31.3	27.0
Retired	9.9	10.0	7.0	8.7	10.9
Other	.0	3.8	3.7	.0	.0

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

	Wave			Treatment at wave 1	Comparison at wave 1
	1	2	3		
Currently in school (%)					
Full-time	8.1	11.3	12.8	9.1	13.7
Part-time	13.8	9.7	11.4	9.1	10.3
Main activity at hot spot (%)					
Live	47.8	35.7	36.3	49.7	46.1
Work	13.1	10.0	11.4	16.6	9.9
School	.3	.3	1.0	.7	.0
Own business	1.7	1.3	2.1	.7	2.6
Own property/land	.3	.7	.3	.0	.7
Shop	12.8	22.3	17.0	14.5	11.2
Use public transit	15.5	15.7	17.6	12.4	18.4
Use local resources	1.7	6.0	6.6	2.1	1.3
Walk/drive through	4.0	6.3	4.8	2.1	5.9
Other	2.7	1.7	2.8	1.4	3.9
Duration of main activity (%)					
Less than 1 year	20.6	22.0	21.5	20.1	21.1
1 year or more, but less than 5 years	36.8	37.3	39.2	38.2	35.4
5 years or more, but less than 10 years	18.6	13.9	16.0	14.6	22.4
10 years or more	24.1	26.8	23.3	27.1	21.1

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

3.3 Analytic strategy

We use a combination of statistical and descriptive methods to analyze the police and survey data in order to rigorously assess results while ensuring the results are accessible to readers. A key challenge in analyzing the effect of ABSPY on crime outcomes (calls for service and incidents) is that there is no clear distinction between "pre-ABSPY" and "post-ABPSY" due to the rolling start and breaks in interventions. This makes it impossible to identify a cut-off point after which any changes in crime rates could be attributed to ABSPY. To address this issue, we use a statistical modeling approach called difference-in-differences analysis, with Poisson regression and robust standard errors, to assess monthly crime rates in the treatment and control hot spots according to whether or not the interventions were active or inactive (e.g. Kondo, Keene, Hohl, MacDonald, & Branas, 2015). The robust standard errors account for overdispersion, clustering of outcomes in hot spot locations, and the dependency between treatment-active and treatment-inactive observations (Berk & MacDonald, 2008). This statistical model is described in more detail in Gill et al. (2016). The timeframe for the updated police data analysis is January 2011 to August 2017 (80 months). Each model also includes control variables for seasonality (monthly indicator variables) and crime trends over time.

In addition to the statistical analysis, we also present descriptive graphs showing the percentage change in each type of crime outcome in each individual hot spot relative to its comparison site, and in the hot spots relative to Rainier Beach as a whole and SPD's South Precinct. In these graphs we chose May 2014, when the first interventions were rolled out, as the cut-off point to show pre-post change, so it is important to note that unlike the statistical analysis, these graphs do not account for the varying implementation over time.[5] Table 3 shows the monthly average number of each crime outcome in the treatment and comparison hot spots, Rainier Beach, and the South Precinct before the interventions began (January 2011–April 2014).

We use a similar statistical method to assess the effects of ABSPY on community member perceptions as measured through our survey. However, in the survey data individual people are clustered or "nested" within each hot spot (and, in the case of households we surveyed in multiple waves, people are nested within households within hot spots). This clustering causes problems for statistical analysis so it has to be accounted for in the model. We use multilevel mixed effects regression models in which the hot spot and individual person/household are included as random effects (e.g. Kochel & Weisburd, 2017). In addition, because there are three waves in the survey, each model tells us two different outcomes for ABSPY: the short-term effects of the treatment (Wave 2 compared to Wave 1), and the longer-term effects (Wave 3 compared to Wave 1). The models also control for race and age, factors on which the treatment and comparison respondents significantly differed at baseline, and gender. While the groups did not significantly differ by gender, we included it as a control variable because gender may be relevant to respondents' perceptions of crime and safety.[6] We use mixed effects linear, logistic, and ordered logistic regression, depending on the outcome measure. The random effects were unstable in some models so we use regular one-level regression approaches in these cases.

Most of the questions in our survey measured agreement, frequency, or likelihood using 4- or 5-point scales. Higher numbers on these scales indicate higher levels of agreement or greater frequency/likelihood (so higher numbers are better on questions asking whether respondents agreed with positive statements, such as "this place is getting safer," whereas lower numbers are better for negative questions such as perceived likelihood of a crime happening at the street segment). In our analysis, we combine multiple questions into scales to assess underlying concepts such as social cohesion, collective efficacy, fear of crime, and satisfaction with/legitimacy of police. All scales have a Cronbach's alpha (α) greater than .75, which indicates that each question in the scale does a good job of capturing the same underlying concept. Table 4 shows each survey outcome included in our analysis, the α value and number of questions in the scale, where relevant, and the average (mean) value, standard deviation, and number of responses at each wave.

[5] We chose not to assess each individual hot spot using the difference-in-differences analysis because the small overall numbers of incidents at each small site can make the statistical analysis unreliable.

[6] We collapsed race and age into binary variables for the analysis, as the multilevel models will not run with too many parameters. Since Black was the most common race category, we include a control for Black/non-Black, and since the overall sample was relatively young and ABSPY focuses on youth outcomes, we recoded age as 18-25 (older youth) versus over 25. We also dropped the "other" category from the gender variable, as only two respondents across the three waves selected this category.

Table 3: Monthly average (mean) number of crime outcomes, pre-interventions (January 2011-April 2014)

	Calls for service	Incidents	Youth Incidents	Violent Crime	Part II
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Rose St					
Treatment	21.9 (7.5)	7.2 (3.4)	2.1 (1.7)	2.1 (1.2)	2.7 (1.7)
Comparison	41.6 (11.9)	10.5 (3.5)	2.5 (1.8)	2.5 (2.1)	4.0 (2.1)
Rainier & Henderson					
Treatment	47.0 (13.3)	13.1 (4.5)	5.5 (3.1)	3.5 (2.3)	3.8 (1.6)
Comparison	28.8 (11.6)	7.8 (3.4)	3.4 (2.0)	1.6 (1.5)	2.6 (2.0)
Light Rail					
Treatment	5.4 (3.0)	1.8 (1.1)	.7 (.7)	.8 (.9)	.5 (.7)
Comparison	9.6 (4.0)	4.0 (1.7)	.9 (.8)	.9 (1.0)	1.1 (1.1)
Lake Washington					
Treatment	30.9 (11.1)	11.3 (3.6)	4.5 (1.8)	1.7 (1.4)	3.6 (2.1)
Comparison	5.1 (2.4)	2.6 (2.0)	1.1 (1.0)	.6 (1.0)	1.0 (.9)
Safeway					
Treatment	19.4 (7.6)	7.8 (4.7)	2.0 (2.0)	1.0 (.9)	1.6 (1.1)
Comparison	24.1 (13.5)	7.5 (5.9)	2.4 (2.4)	1.1 (1.1)	1.4 (1.1)
All Treatment	124.7 (30.7)	41.1 (9.6)	14.8 (4.9)	9.0 (3.2)	12.1 (3.7)
All Comparison	109.3 (27.9)	32.4 (8.6)	10.3 (3.7)	6.7 (3.2)	10.1 (3.1)
Rainier Beach	318.3 (65.8)	107.1 (17.2)	33.7 (8.4)	20.6 (5.5)	33.7 (7.9)
South Precinct	2,624.9 (372.2)	948.7 (97.6)	231.5 (31.6)	125.7 (17.9)	271.5 (37.4)

Table 4: Descriptive statistics for survey outcomes

		Wave 1		Wave 2		Wave 3	
	Scale α (Items)	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Social cohesion/community resources[a]	.846 (11)	295	2.72 (.52)	288	2.73 (.43)	289	2.76 (.50)
Collective efficacy[b]	.780 (4)	280	2.45 (.71)	278	2.53 (.64)	280	2.54 (.72)
Noticed improvements to businesses[af]	-	-	-	138	2.88 (.70)	124	2.69 (.77)
Noticed Corner Greeters[af]	-	-	-	119	2.58 (.79)	125	2.38 (.74)
Noticed Safe Passage[af]	-	-	-	120	2.84 (.78)	125	2.84 (.76)
Satisfied with business improvements[ag]	-	-	-	97	2.94 (.67)	73	3.12 (.58)
Satisfied with Corner Greeters[ag]	-	-	-	64	2.89 (.69)	46	3.20 (.69)
Satisfied with Safe Passage[ag]	-	-	-	76	3.18 (.63)	74	3.32 (.60)
Feelings of safety[a]	.877 (9)	290	2.85 (.58)	284	2.93 (.48)	284	2.99 (.59)
Concerns about crime and disorder[a]	.890 (15)	282	2.71 (.58)	274	2.71 (.53)	279	2.75 (.44)
Frequency of disorder[a]	.933 (9)	266	2.52 (.98)	264	2.22 (.91)	274	2.03 (.88)
Likelihood of crime[c]	.938 (11)	265	3.00 (.64)	266	2.83 (.67)	272	2.73 (.66)
Ever been a victim of crime here[d]	-	271	.20 (.40)	272	.21 (.41)	270	.16 (.37)
Has crime here gotten better in past year[e]	-	241	3.22 (1.11)	239	3.70 (.99)	235	3.56 (1.05)
Frequency of police activity[c]	.808 (6)	269	2.34 (.75)	268	2.34 (.73)	267	2.27 (.78)
Satisfaction with police[a]	.811 (3)	255	2.59 (.80)	255	2.71 (.67)	253	2.64 (.73)
Police legitimacy[a]	.885 (3)	244	2.64 (.85)	247	2.72 (.70)	251	2.64 (.72)

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 4-point likelihood scale (1 = very unlikely, 4 = very likely)

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

[d] Outcomes based on a binary measure (1 = yes, 0 = no)

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

[f] These questions asked only to respondents in treatment sites in Waves 2 and 3

[g] These questions asked only to respondents in treatment sites in Waves 2 and 3 who said they had noticed these interventions

4 2017 Evaluation Update: Discussion of Findings

4.1 Police data analysis

In this section we discuss the statistical and descriptive analyses of the five crime outcomes described above (calls for service, incidents, youth incidents, violent crime, and Part II crime) for the combined hot spots relative to the comparison hot spots, followed by the descriptive analysis by hot spot and for the hot spots relative to Rainier Beach and the South Precinct. Tables showing the full statistical models are included in the Appendix.

4.1.1 Crime in overall treatment and comparison sites

Figure 4 shows that calls for service appear to be on a downward trend in both the treatment and the comparison sites. Importantly, calls appear to have declined substantially in the hot spots in 2015 after the Safe Passage, Corner Greeters, and business engagement interventions began, increased again during the break in interventions in early 2016, and declined again after they resumed (although the pattern is similar in the comparison sites). Statistically, calls were 34 percent higher in the treatment areas than the control areas while the intervention was active (Table A1). This does not necessarily mean that the interventions caused calls to increase in the treatment hot spots—crime may have declined in both areas but more rapidly in the comparison spots—however, in this case it appears the predicted number of calls was slightly higher in the treatment hot spots during the periods when the interventions were active, and slightly lower in the comparison hot spots (Figure A1). This may not be a bad outcome—it is possible that ABSPY increased collective efficacy and trust in the police, which could have led people to call the police more during the intervention periods overall. This is explored in our analysis of the survey data.

The trend in crime incidents has fluctuated over time, and it is difficult to see a clear pattern. However, incidents appeared to increase in both the treatment and comparison hot spots beginning in late 2016 (Figure 5). The active interventions are associated with a statistically significant 31 percent higher rate of incidents in the Rainier Beach hot spots relative to the comparison sites (Table A2), which is driven by a decrease in the predicted number of calls in the comparison site (Figure A2). The stable number of incidents in the treatment spots could be related to the higher number of calls—if residents are calling the police more often, the police will have more opportunities to take incident reports.

The pattern for youth incidents is similar to that of calls for service. Figure 6 suggests that youth incidents are also trending down. The rate of incidents was 33 percent higher in the treatment sites, which was statistically significant (Table A3); however, there was very little change in either group between the inactive and active intervention periods (the very small number of crimes overall makes the change in Figure A3 look larger than it is).

The number of violent incidents overall was also very small, so it is difficult to interpret Figure 7 because even small fluctuations are magnified on the graph. However, it appears that violent crime in the comparison hot spots is back around pre-October 2013 levels, when there was a large, sustained spike in violence for around six months. Violence was significantly higher in the treatment sites relative to the comparison sites, by 35 percent (Table A4), but Figure A4 shows that the predicted number of crimes barely changed in either group between the active and inactive intervention periods. The significantly

Figure 4: Calls for service in treatment and comparison sites, January 2011-August 2017

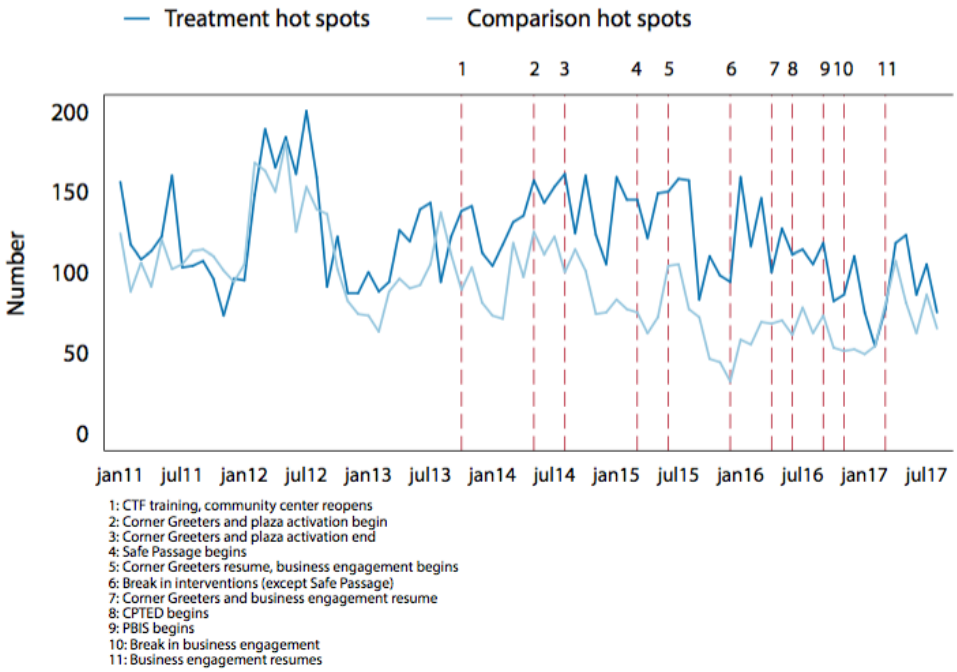


Figure 5: Crime incidents in treatment and comparison sites, January 2011-August 2017

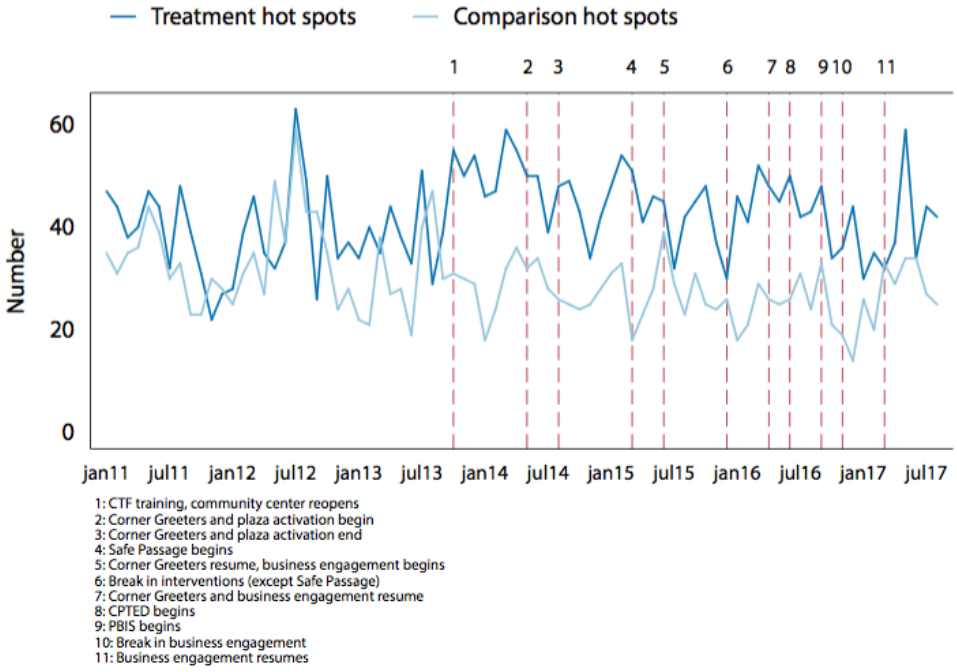
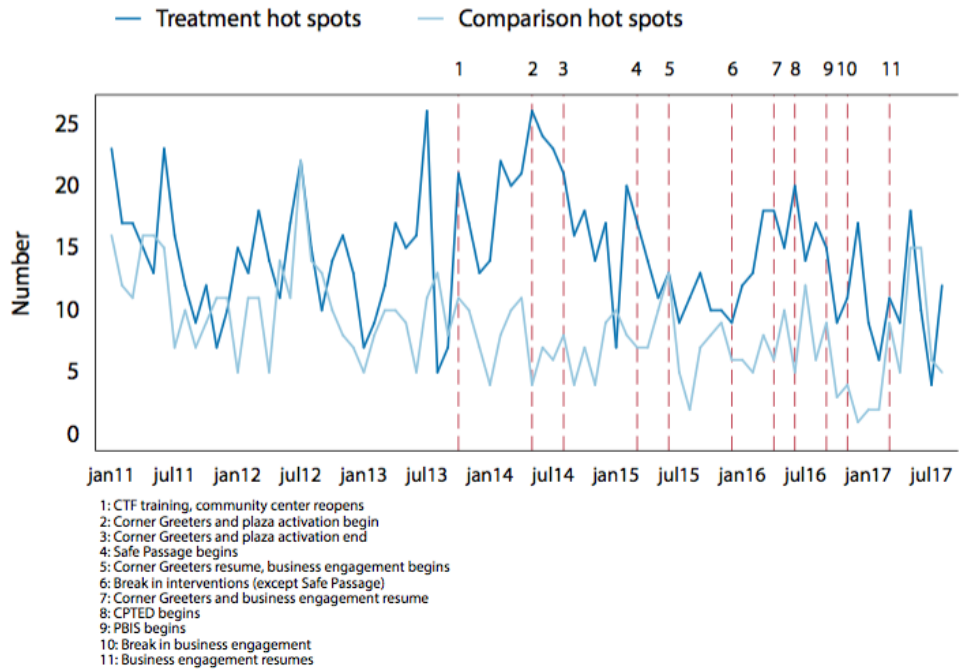


Figure 6: Youth incidents in treatment and comparison sites, January 2011-August 2017



higher levels of violent crime in the treatment hot spots simply reflect the fact that crime is higher at these locations overall (i.e. there is less violence in the hot spots). While we attempted to match the hot spots as closely as possible in terms of their characteristics and crime rates, it is clear from Table 3 that there were substantial pre-existing differences between the groups.

Finally, Figure 8 shows that levels of Part II crimes remained high at the treatment hot spots throughout the intervention periods, and were higher overall than the comparison sites. Overall, during the active intervention periods, Part II crimes were 40 percent higher in the treatment sites relative to the comparison sites (Table A5; Figure A5). Again, the overall number of crimes here is low. However, as we noted above, any increase in Part II crimes might be in part related to increased willingness to call the police, so this is not necessarily a negative outcome. In the following sections, we descriptively assess change at each individual hot spot and its comparison site to explore how patterns at specific sites may have driven these overall results.

Figure 7: Violent incidents in treatment and comparison sites, January 2011-August 2017

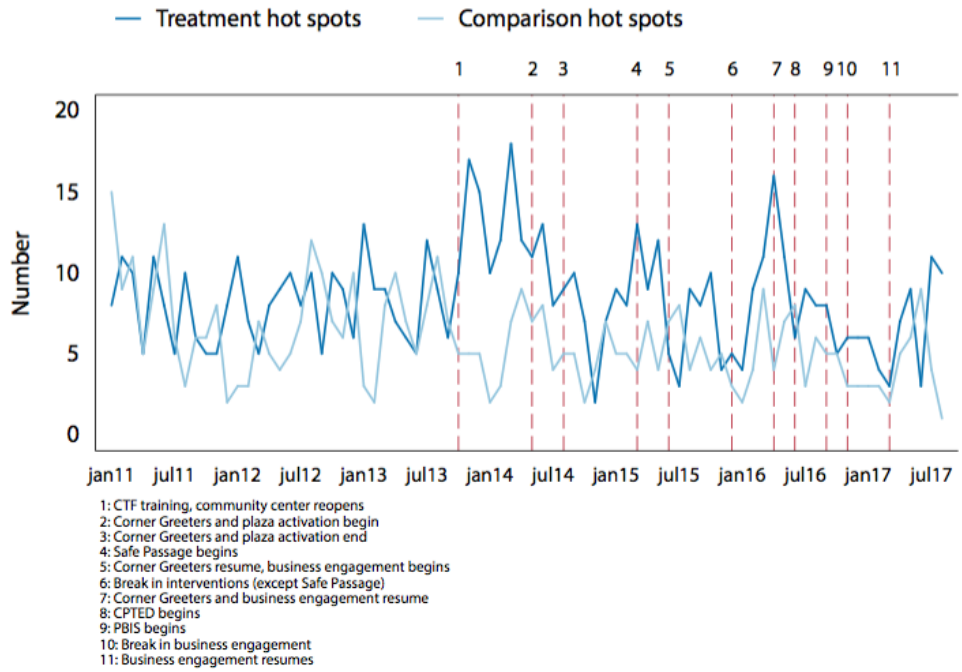
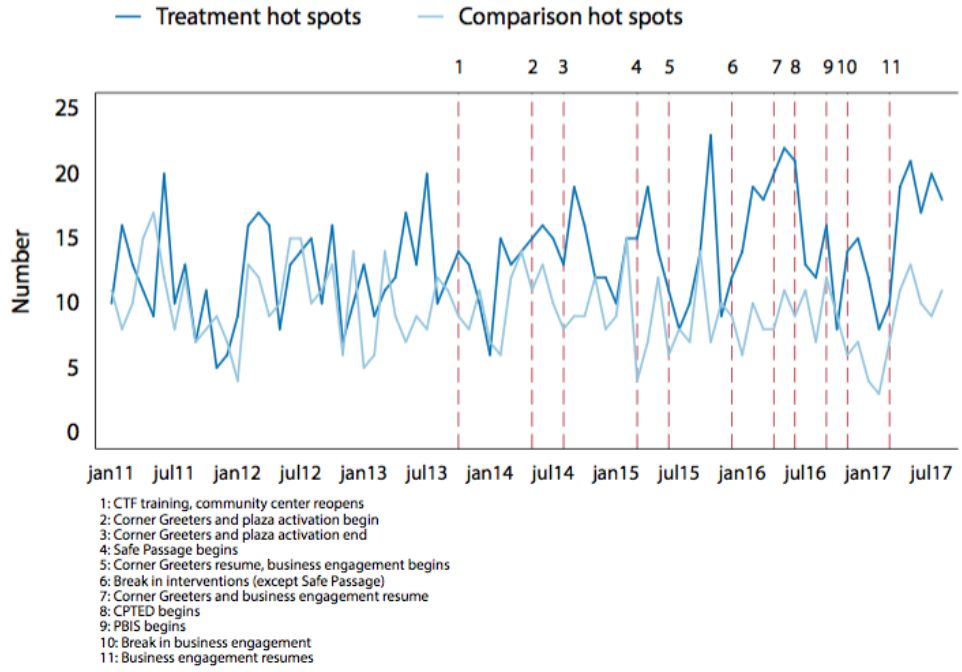


Figure 8: Part II incidents in treatment and comparison sites, January 2011-August 2017



4.1.2 Crime at Rose Street

Crime and calls for service at Rose Street have been lower overall since May 2014, when the intervention period officially kicked off, relative to the period from January 2011–April 2014 (Figures 9-13). Improvements range from a 6 percent decrease in Part II incidents to a 36 percent decrease in violent incidents. However, crime has also decreased more substantially at the Rose Street comparison hot spot during the same period. The exception is violence, where the 36 percent decrease at Rose Street was slightly larger than the 34 percent decrease at the comparison spot.

Figure 9: Percent change in calls for service at Rose Street and its comparison site, pre/post May 2014

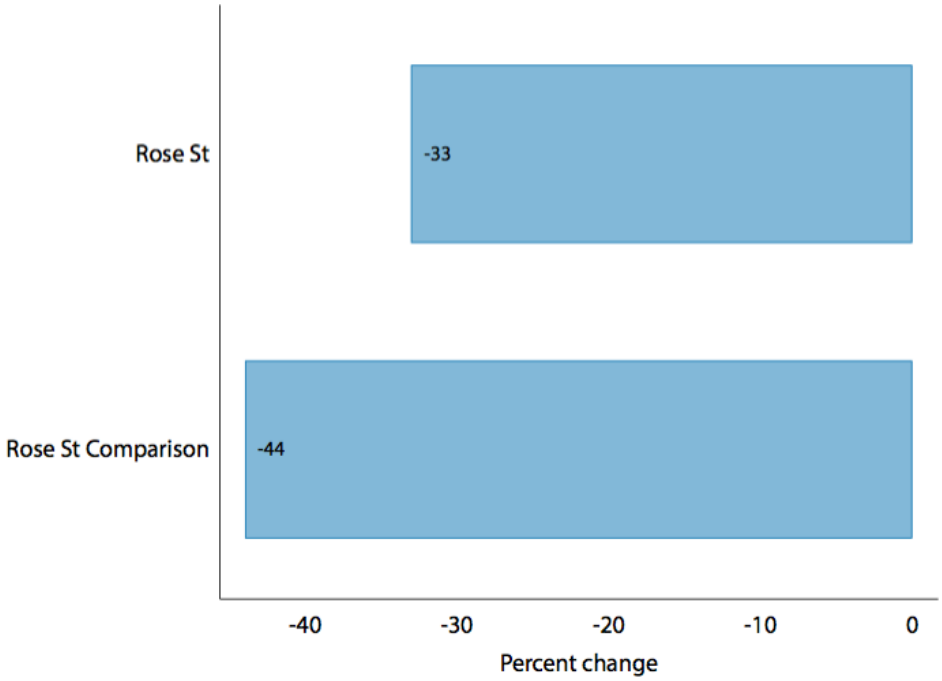


Figure 10: Percent change in incidents at Rose Street and its comparison site, pre/post May 2014

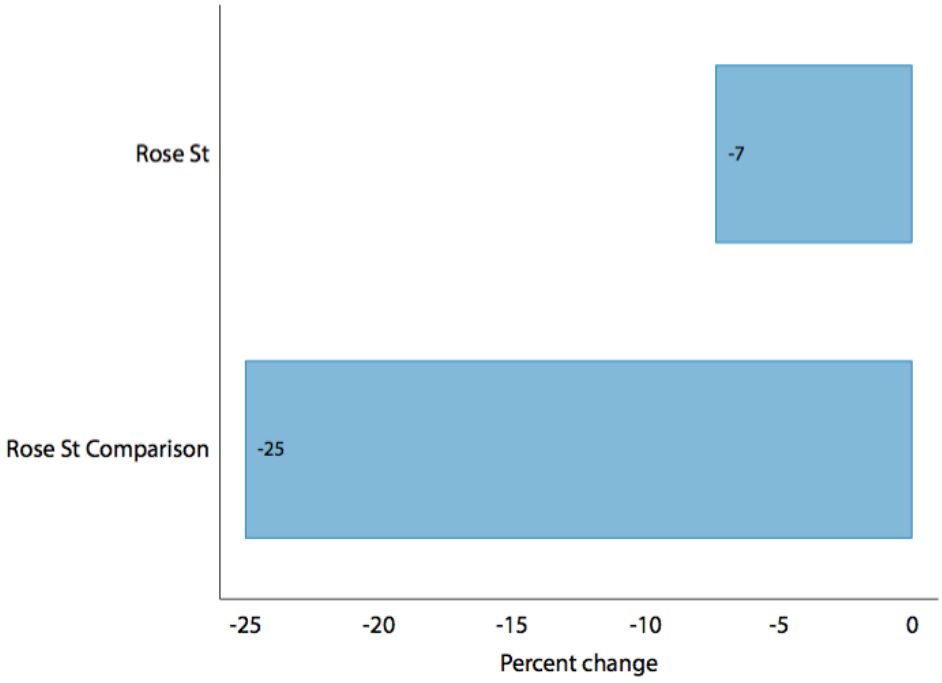


Figure 11: Percent change in youth incidents at Rose Street and its comparison site, pre/post May 2014

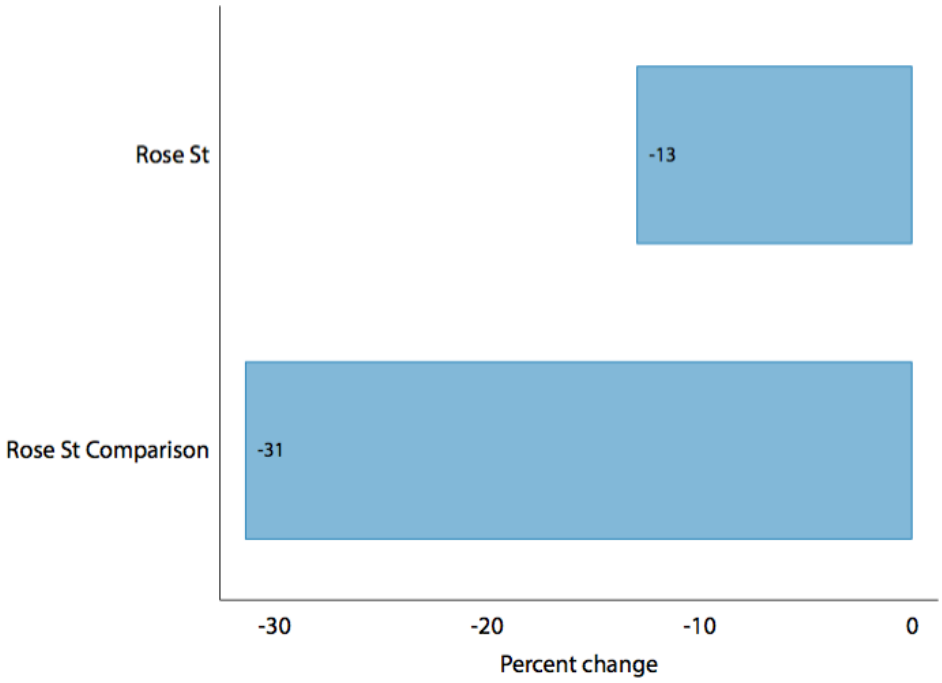


Figure 12: Percent change in violent incidents at Rose Street and its comparison site, pre/post May 2014

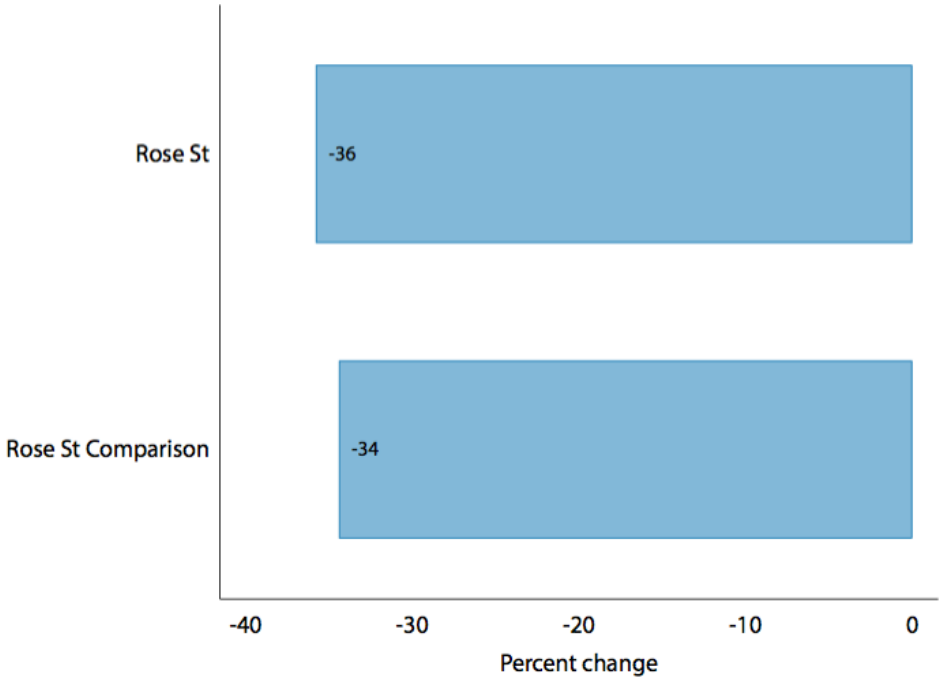
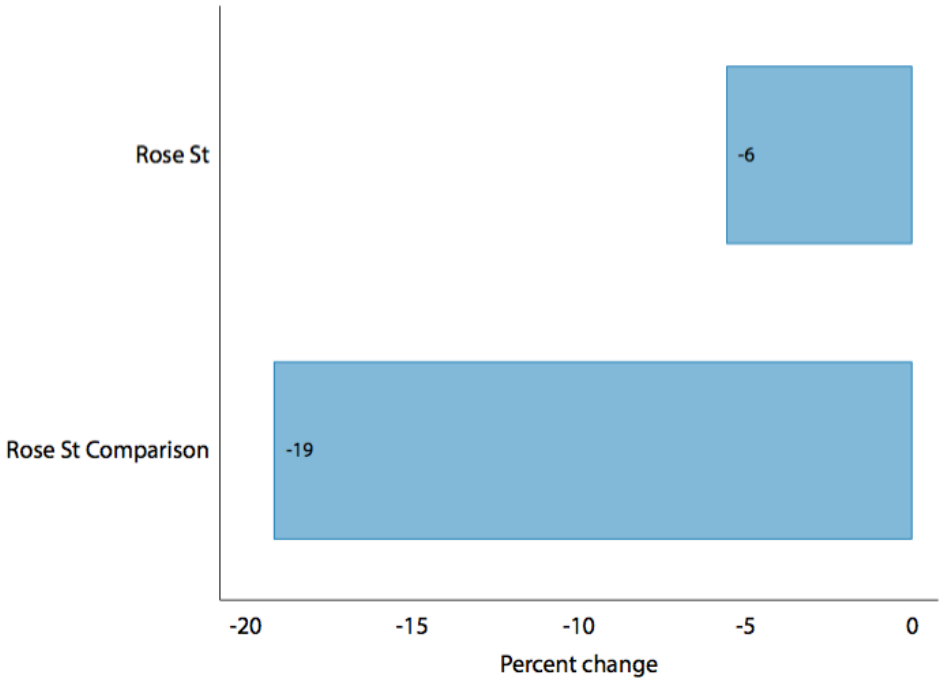


Figure 13: Percent change in Part II incidents at Rose Street and its comparison site, pre/post May 2014



4.1.3 Crime at Rainier and Henderson

Changes in crime and calls for service were more variable at Rainier and Henderson compared to the consistent decreases at Rose Street (Figures 14-18). Calls for service, youth incidents, and violent incidents decreased by 9, 13, and 13 percent respectively, but total incidents increased by 3 percent and Part II incidents increased by 11 percent. These results are positive overall—the increase in incidents appears to be driven by the lower-level, Part II issues, while youth incidents and violent incidents—the key focus of ABSPY, especially at this hot spot—have decreased. Additionally, the 3 percent increase in total incidents is relatively small. As in Rose Street, crime and calls in the Rainier and Henderson comparison site decreased more substantially over the same period, which partly drives the overall conclusion of the statistical analysis showing that crime was higher in the treatment sites.

Figure 14: Percent change in calls for service at Rainier & Henderson and its comparison site, pre/post May 2014

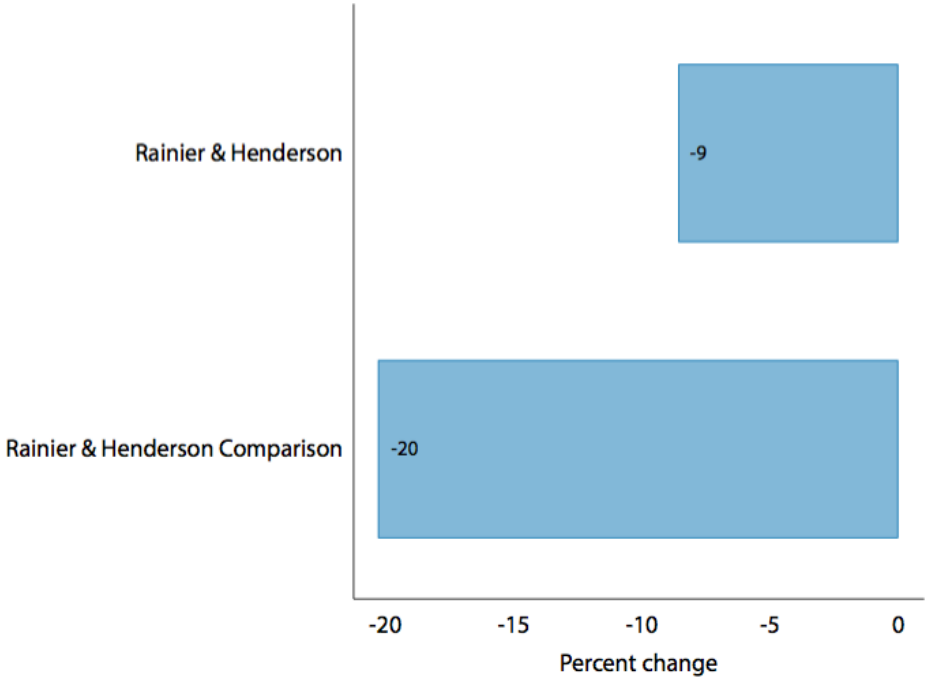


Figure 15: Percent change in incidents at Rainier & Henderson and its comparison site, pre/post May 2014

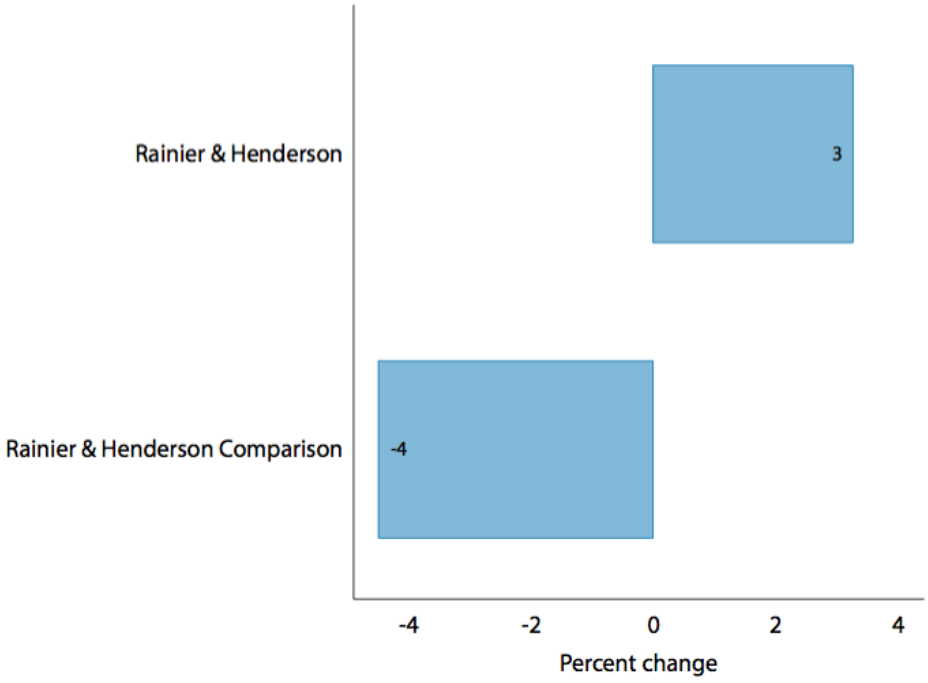


Figure 16: Percent change in youth incidents at Rainier & Henderson and its comparison site, pre/post May 2014

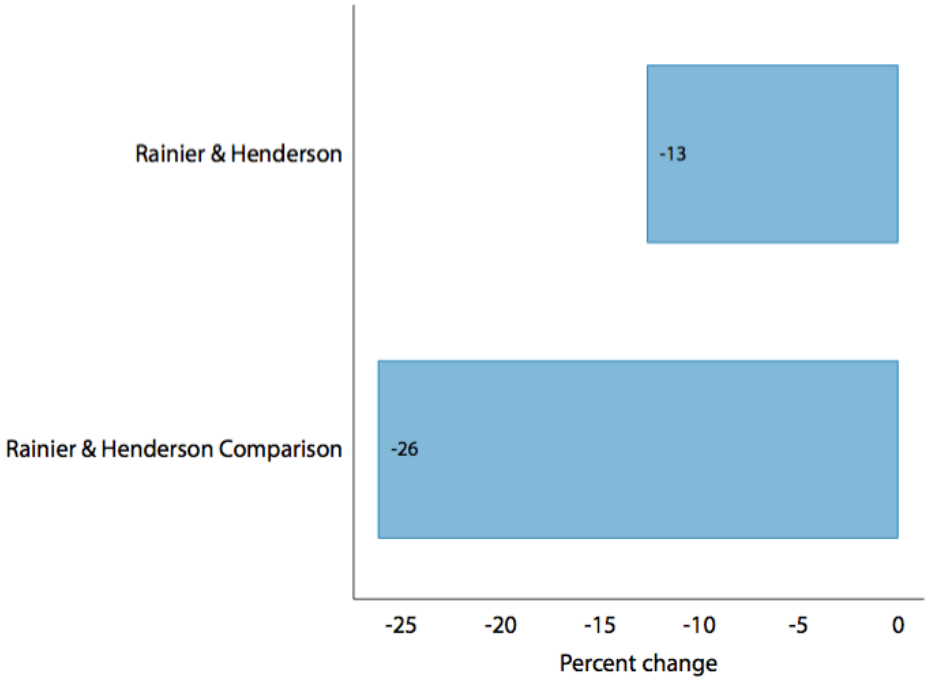


Figure 17: Percent change in violent incidents at Rainier & Henderson and its comparison site, pre/post May 2014

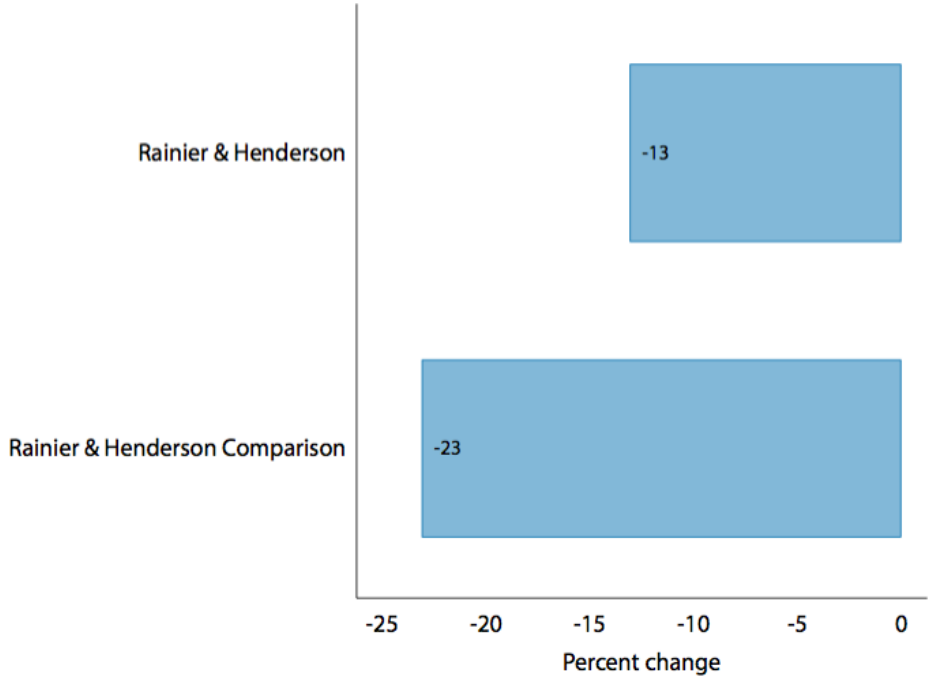
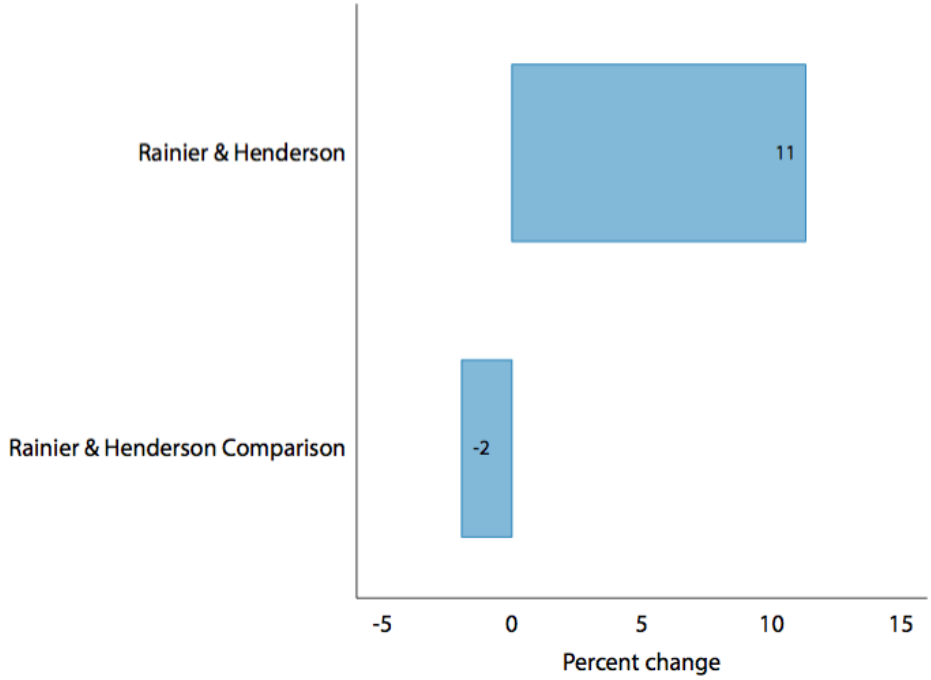


Figure 18: Percent change in Part II incidents at Rainier & Henderson and its comparison site, pre/post May 2014



4.1.4 Crime at the Light Rail

The ABSPY interventions did not result in any change in incidents, youth incidents, or Part II crimes at the Light Rail (Figures 19-23). However, it is important to note that the overall number of crimes at the Light Rail is very small, so crime rates are likely more stable over time. However, there was some good news—calls for service decreased by 27 percent, compared to an 11 percent decrease a the Light Rail comparison site, and there was a 55 percent decrease in violent crimes compared to a 31 percent decrease at the comparison spot. Again, these changes may be magnified by small numbers, but the decrease in violent crime is particularly promising given ABSPY's focus on reducing violence.

Figure 19: Percent change in calls for service at the Light Rail and its comparison site, pre/post May 2014

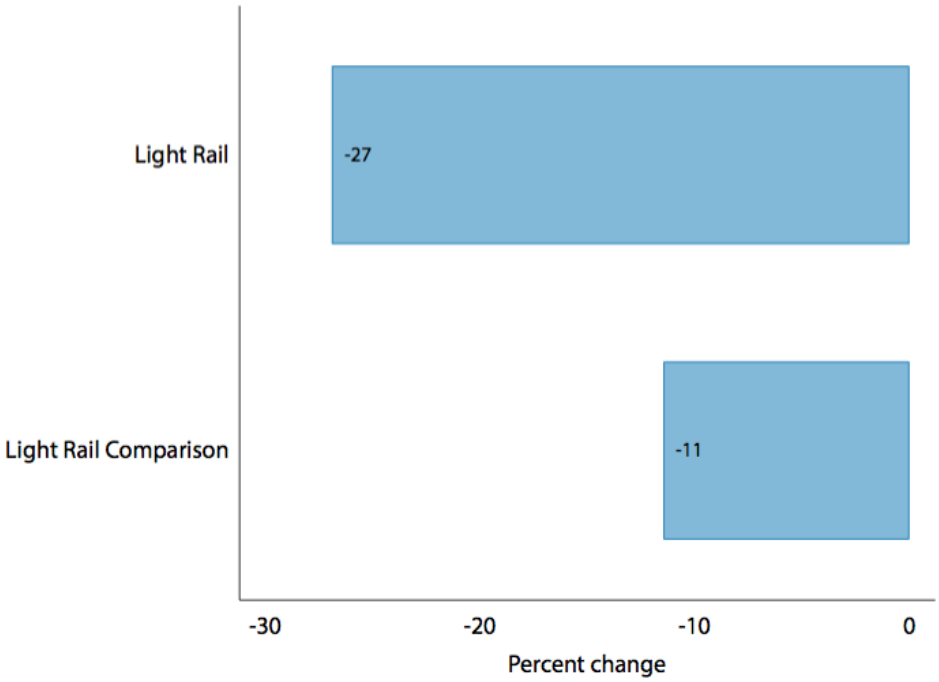


Figure 20: Percent change in incidents at the Light Rail and its comparison site, pre/post May 2014

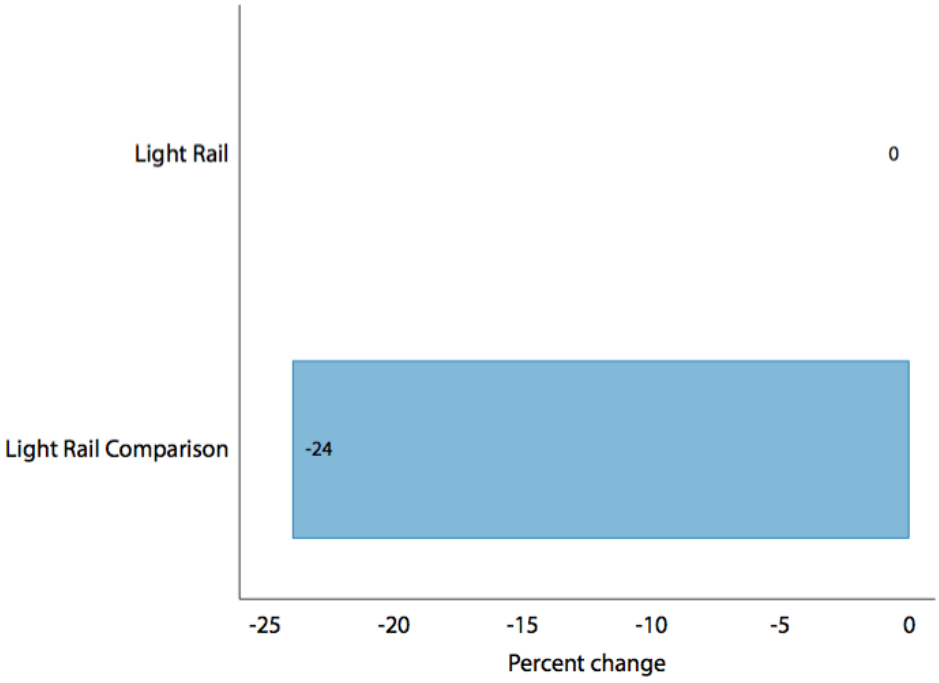


Figure 21: Percent change in youth incidents at the Light Rail and its comparison site, pre/post May 2014

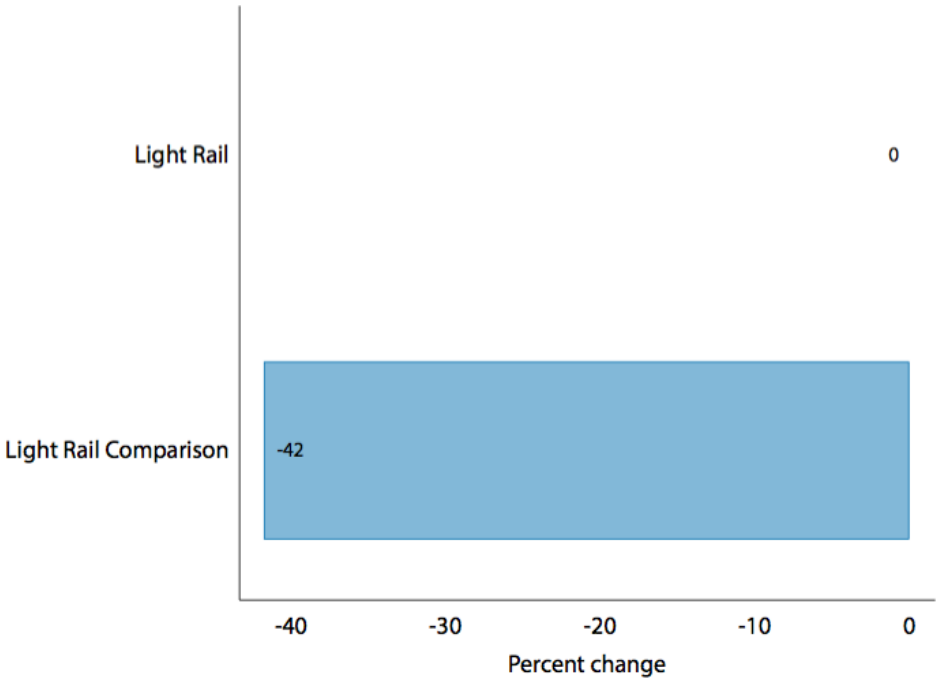


Figure 22: Percent change in violent incidents at the Light Rail and its comparison site, pre/post May 2014

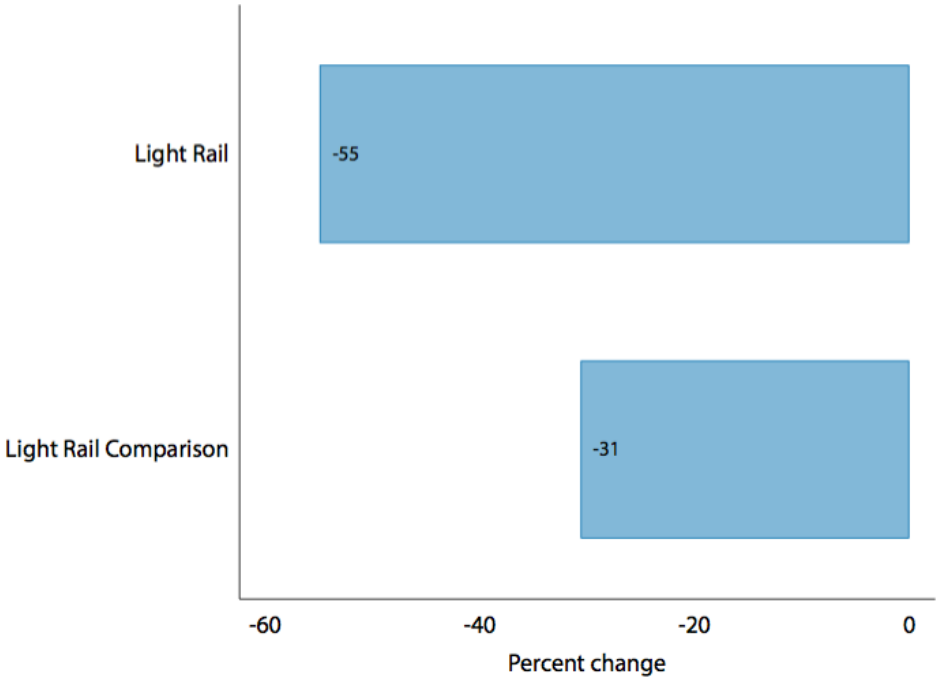
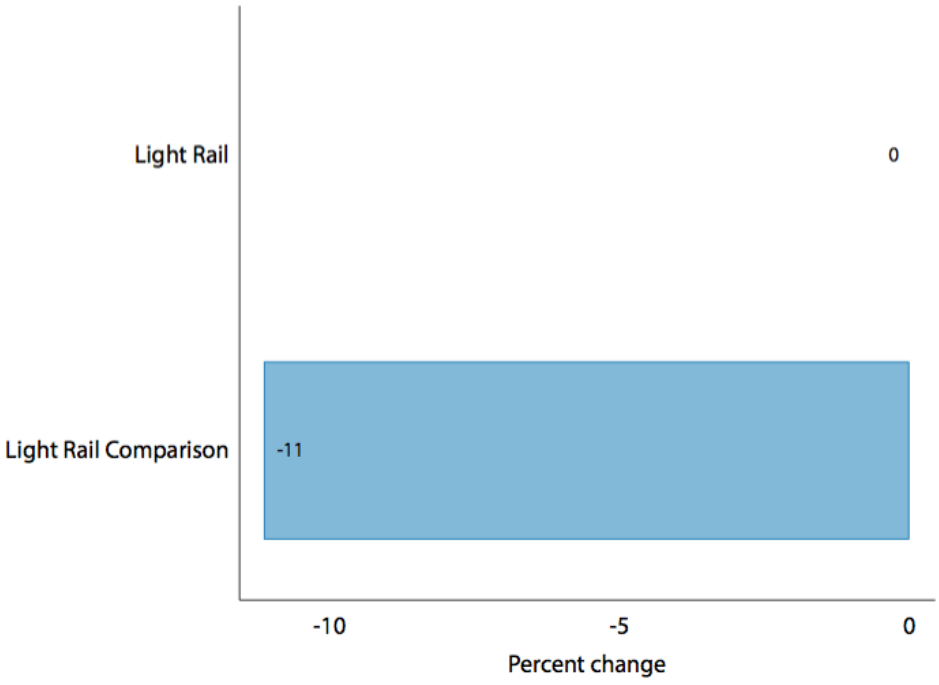


Figure 23: Percent change in Part II incidents at the Light Rail and its comparison site, pre/post May 2014



4.1.5 Crime at Lake Washington

Consistent with our original evaluation findings, the change in crime and calls for service at Lake Washington was less promising than the change we observed at other sites (Figures 24-28). Calls for service decreased by 13 percent, but in the comparison site they decreased by 54 percent. For all the crime incident outcomes, we see increases at Lake Washington after ABSPY compared to decreases at the comparison site. For example, overall incidents increased by 3 percent, youth incidents by 1 percent, violent incidents by 24 percent, and Part II incidents by 27 percent. These are all compared to decreases between 40 and 65 percent in the comparison site. As we observed in our previous report, Lake Washington apartments were renovated during this time period and went from 50 percent to full occupancy, which may explain the increases in crime (there are simply more opportunities for crime in larger populations, even if a place is not actually becoming more dangerous). Lake Washington has also had the lowest dosage of ABSPY interventions, so these patterns also indicate that the ABSPY interventions may well be making a difference at the locations where they are implemented more intensively.

Figure 24: Percent change in calls for service at Lake Washington and its comparison site, pre/post May 2014

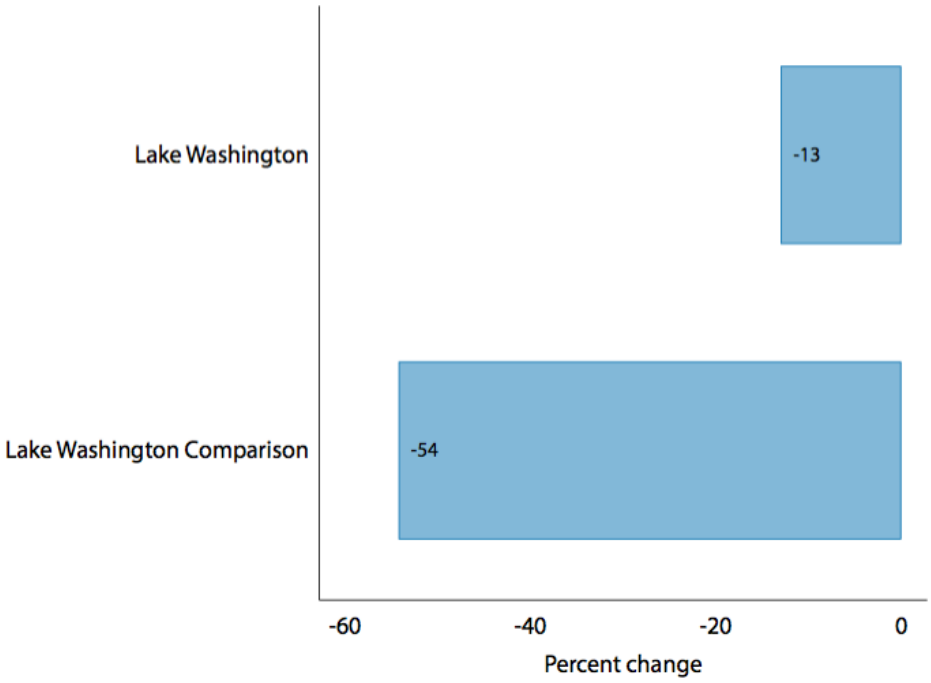


Figure 25: Percent change in incidents at Lake Washington and its comparison site, pre/post May 2014

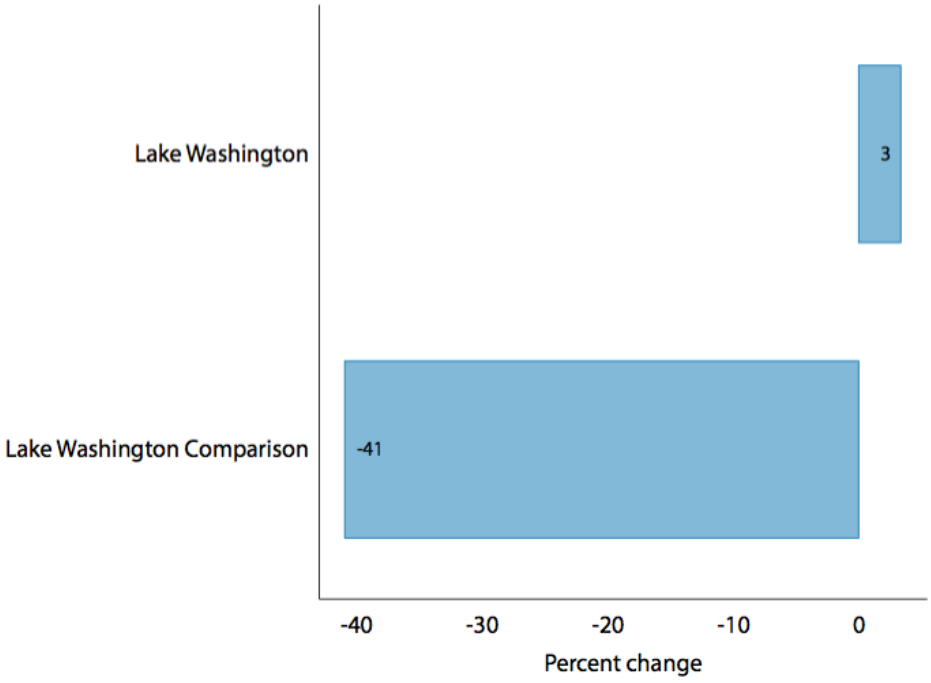


Figure 26: Percent change in youth incidents at Lake Washington and its comparison site, pre/post May 2014

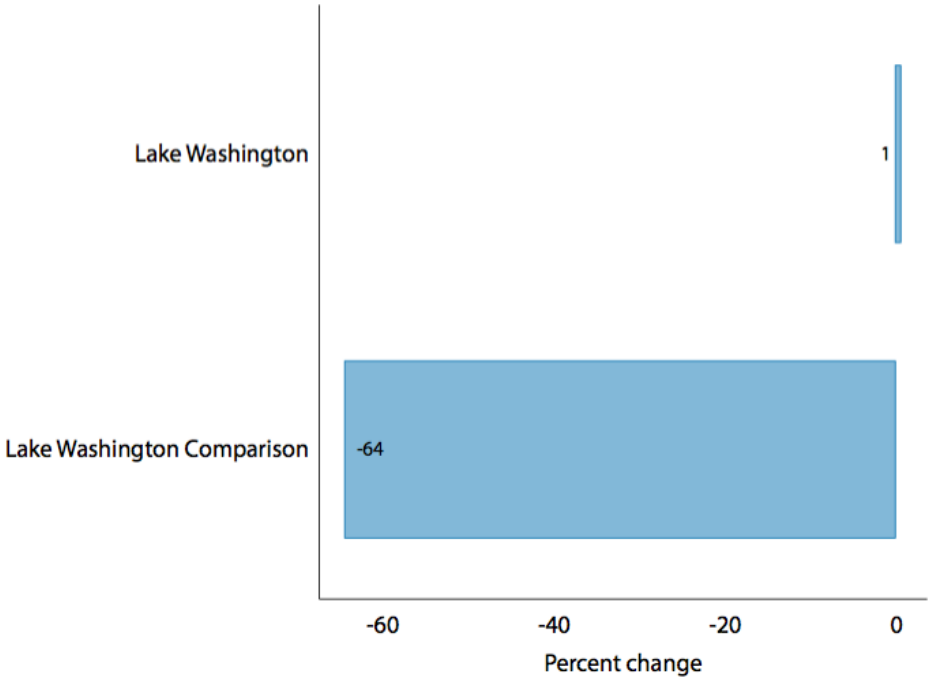


Figure 27: Percent change in violent incidents at Lake Washington and its comparison site, pre/post May 2014

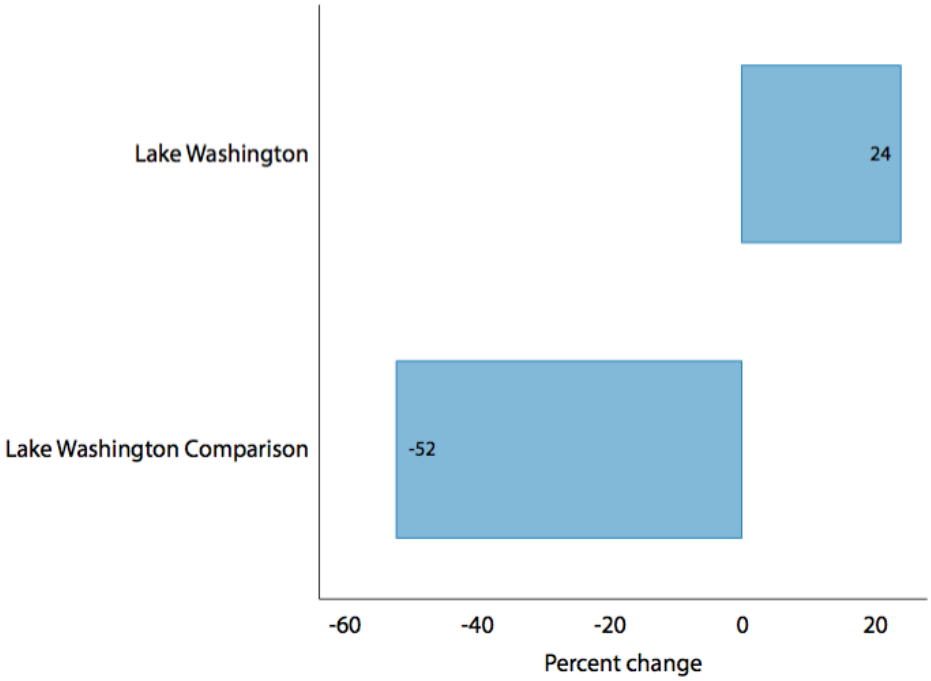
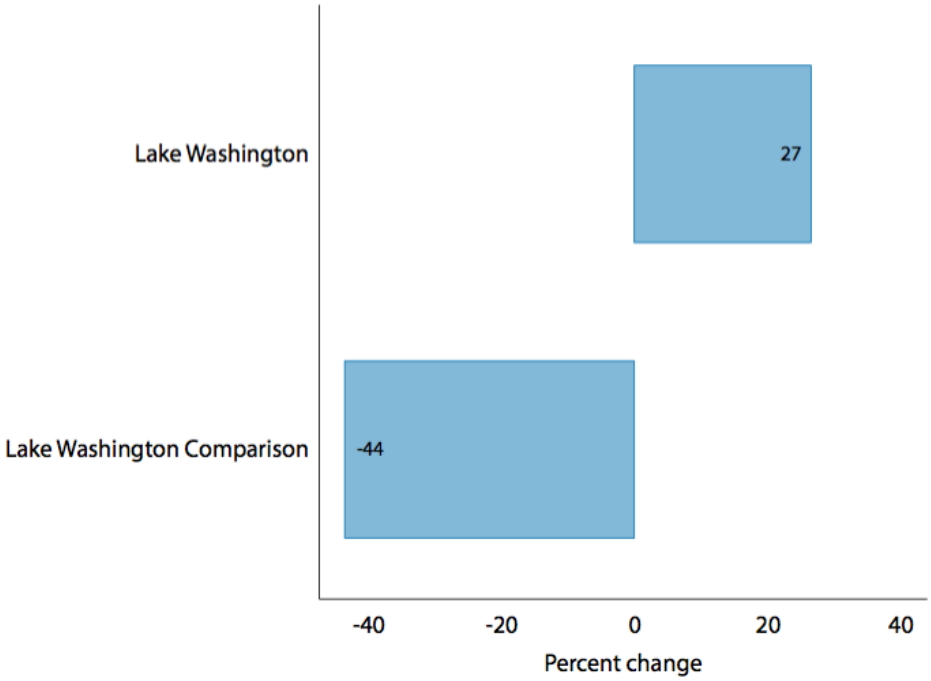


Figure 28: Percent change in Part II incidents at Lake Washington and its comparison site, pre/post May 2014



4.1.6 Crime at Safeway

Finally, Safeway was the only hot spot in which all crime outcomes increased post-ABSPY implementation (Figures 14-18). The biggest increases were for Part II crimes (97 percent increase) and calls for service (65 percent increase). Incidents, youth incidents, and violent incidents also increased by 19, 6, and 8 percent respectively. In Safeway's comparison site, all outcomes except for Part II crimes decreased during the same time period. This is a change from our previous report, in which calls for service and Part II crimes were higher at Safeway but other crime types decreased. As we noted in that report, the Safeway manager has been highly proactive about identifying and reporting crimes since ABSPY began, which may account for some of the changes at this site. However, there have also been some challenges recently involving students from Rainier Beach High School being involved in shoplifting at the Safeway store.

Figure 29: Percent change in calls for service at Safeway and its comparison site, pre/post May 2014

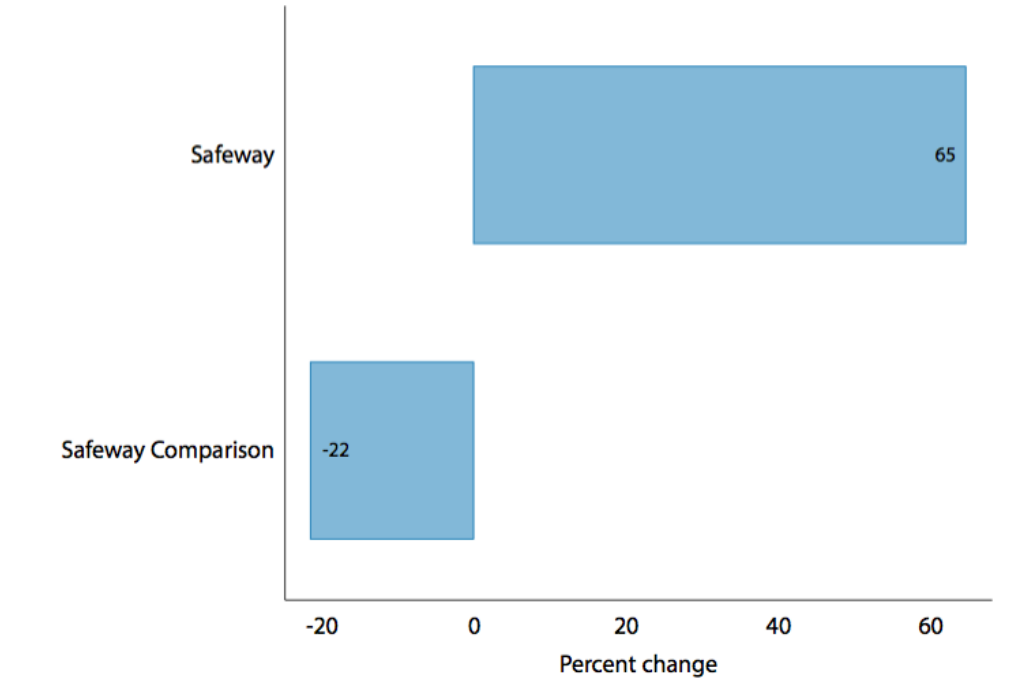


Figure 30: Percent change in incidents at Safeway and its comparison site, pre/post May 2014

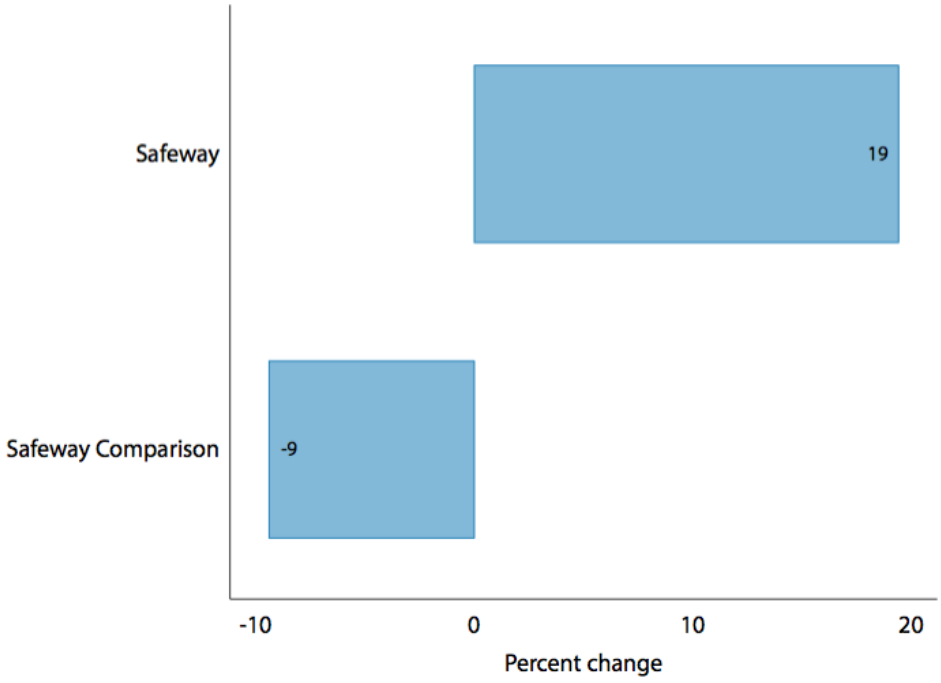


Figure 31: Percent change in youth incidents at Safeway and its comparison site, pre/post May 2014

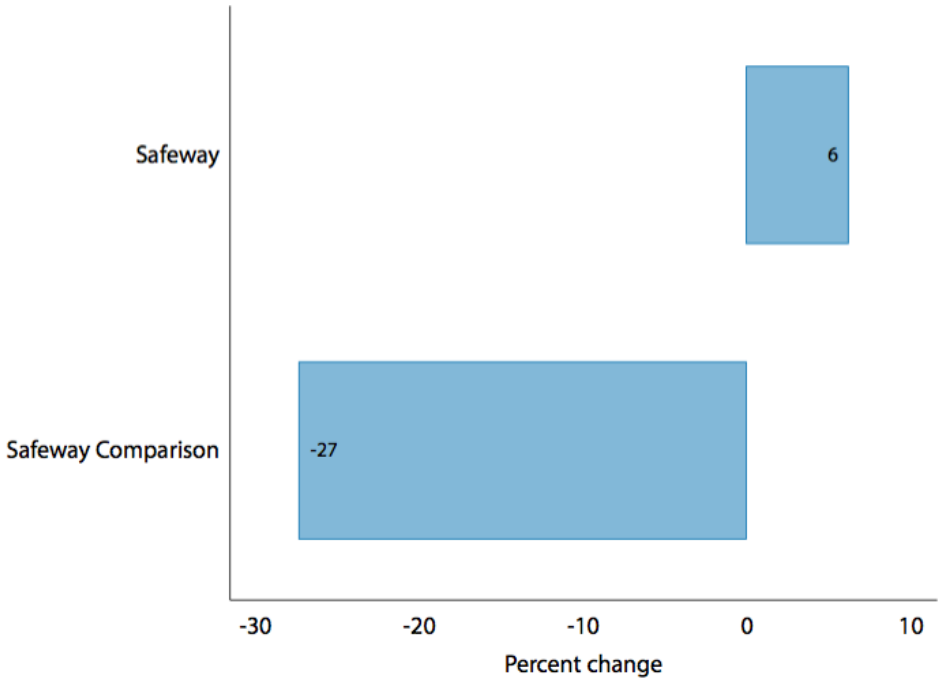


Figure 32: Percent change in violent incidents at Safeway and its comparison site, pre/post May 2014

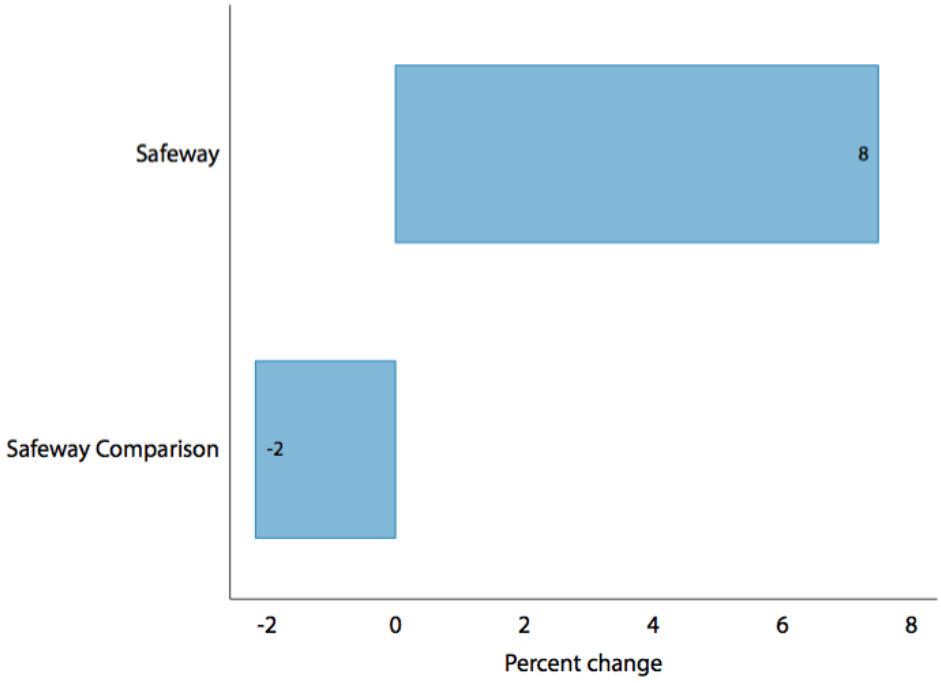
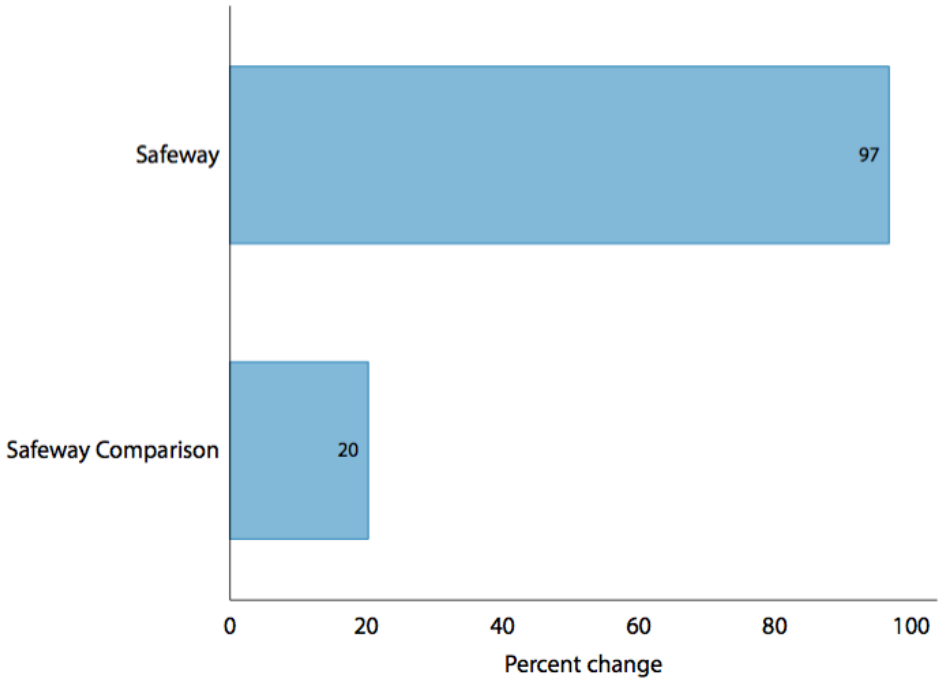


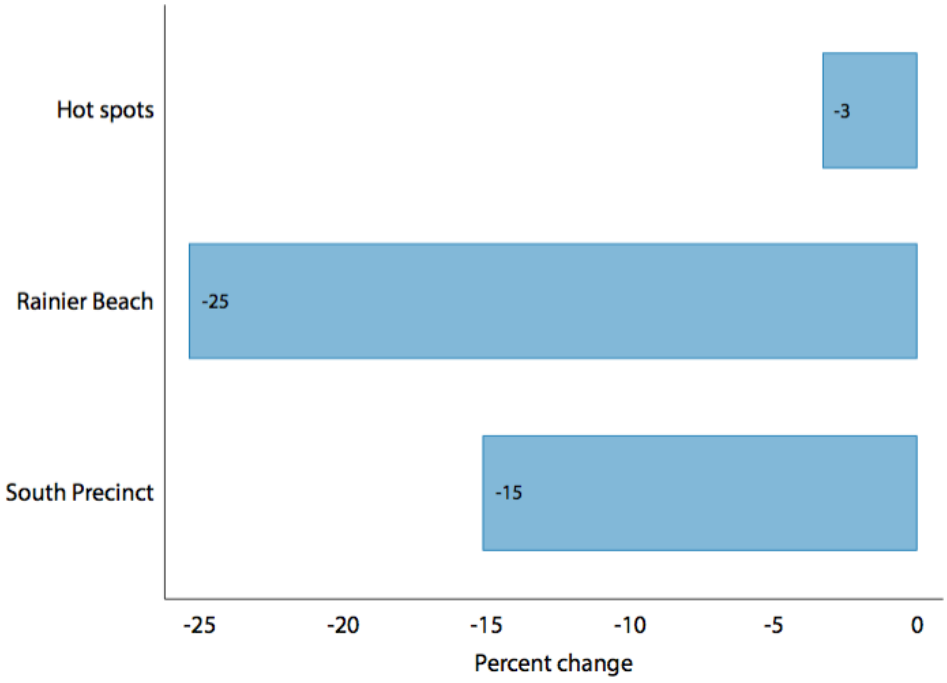
Figure 33: Percent change in Part II incidents at Safeway and its comparison site, pre/post May 2014



4.1.7 Neighborhood effects

We also examined how crime trends in the hot spots compared with those in the Rainier Beach neighborhood[7] and the South Precinct overall (Figures 34-38). Due to the large number of unmeasured factors external to ABSPY that could affect crime rates in the broader geographic areas we do not statistically assess causal effects in this analysis. Nonetheless, there are some promising findings here. Most importantly, violent crime in the hot spots has continued to decrease by a larger percentage than Rainier Beach as a whole and the South Precinct (Figure 37). While the size of the change is smaller than we reported last year, this is still a promising direction given ABSPY's goals. Calls for service in Rainier Beach overall have decreased by a larger proportion than the South Precinct (25 percent compared to 15 percent). While this does not appear to be driven exclusively by the hot spots, this is also a promising finding. Youth incidents have also declined, although the decrease is larger in the South Precinct overall than Rainier Beach or the hot spots. Overall incidents have not changed substantially, while Part II crimes have increased by 23 percent in the hot spots relative to 5 percent in Rainier Beach and 2 percent in the South Precinct.

Figure 34: Percent change in calls for service in hot spots, Rainier Beach, and South Precinct, pre/post May 2014



[7] Note that we use the RBNPU definition of the Rainier Beach boundaries, which differ from the area SPD defines as Rainier Beach. Thus, our findings may differ from official SPD data reports.

Figure 35: Percent change in incidents in hot spots, Rainier Beach, and South Precinct, pre/post May 2014

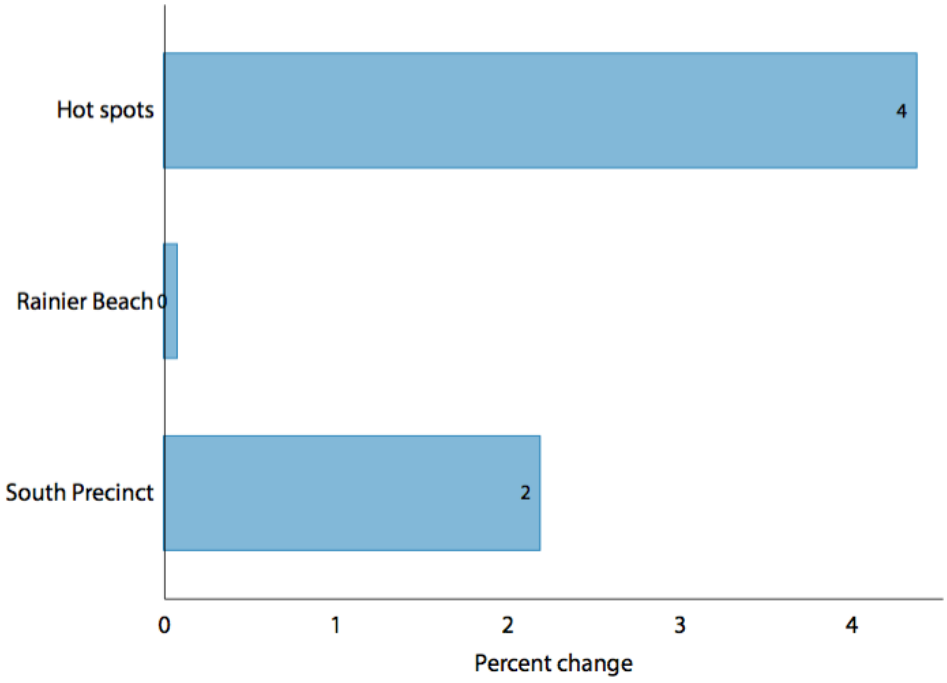


Figure 36: Percent change in youth incidents in hot spots, Rainier Beach, and South Precinct, pre/post May 2014

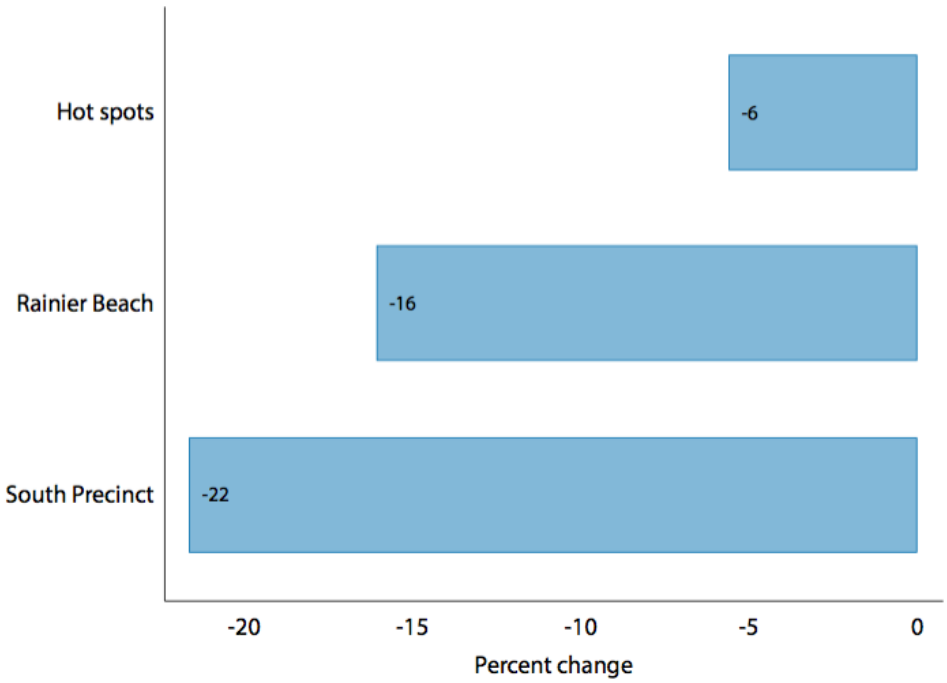


Figure 37: Percent change in violent incidents in hot spots, Rainier Beach, and South Precinct, pre/post May 2014

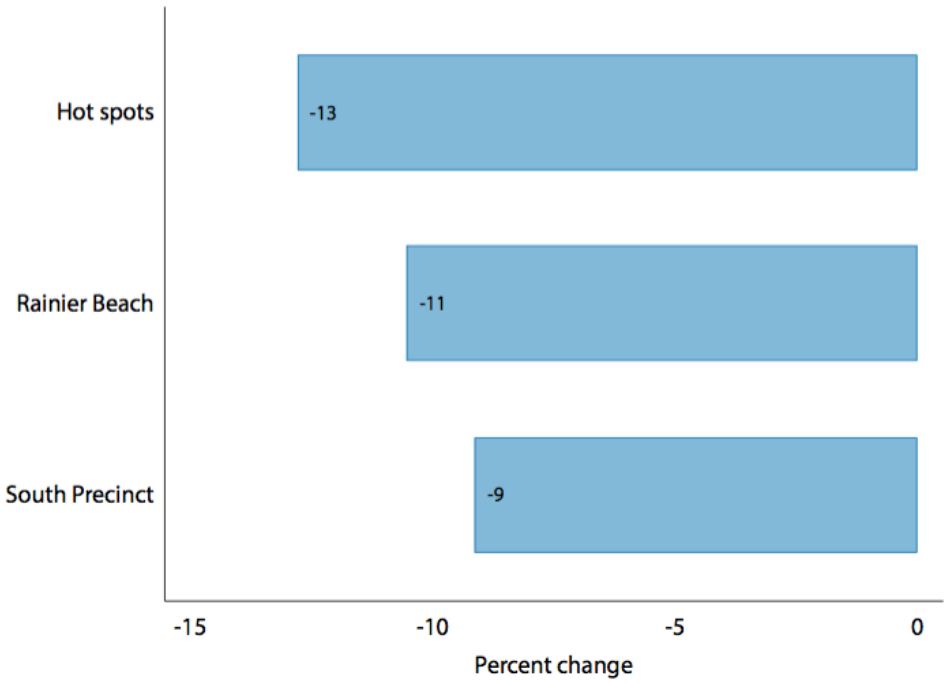
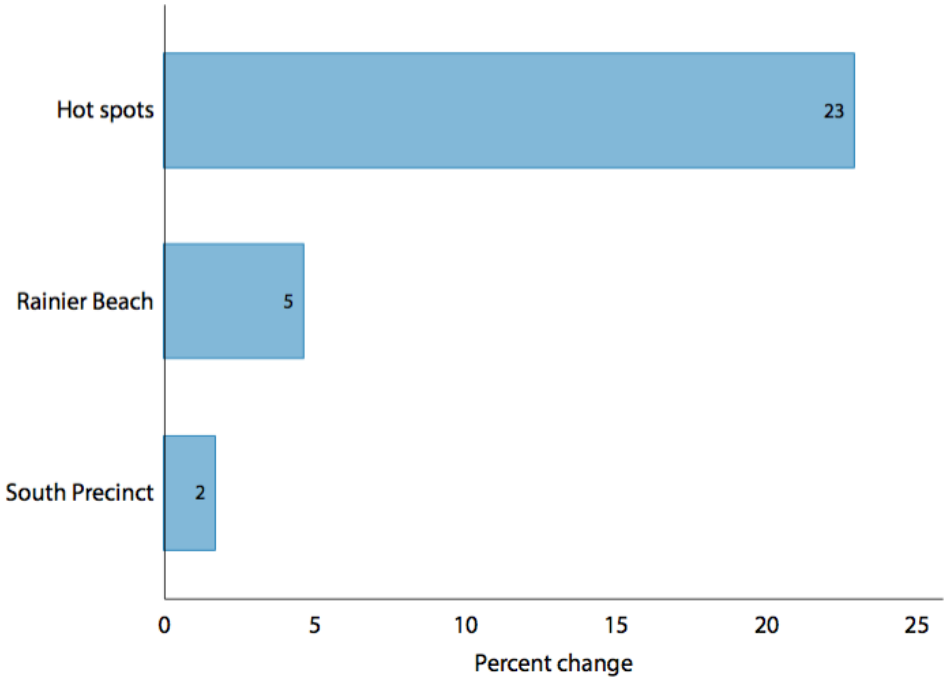


Figure 38: Percent change in Part II incidents at in hot spots, Rainier Beach, and South Precinct, pre/post May 2014



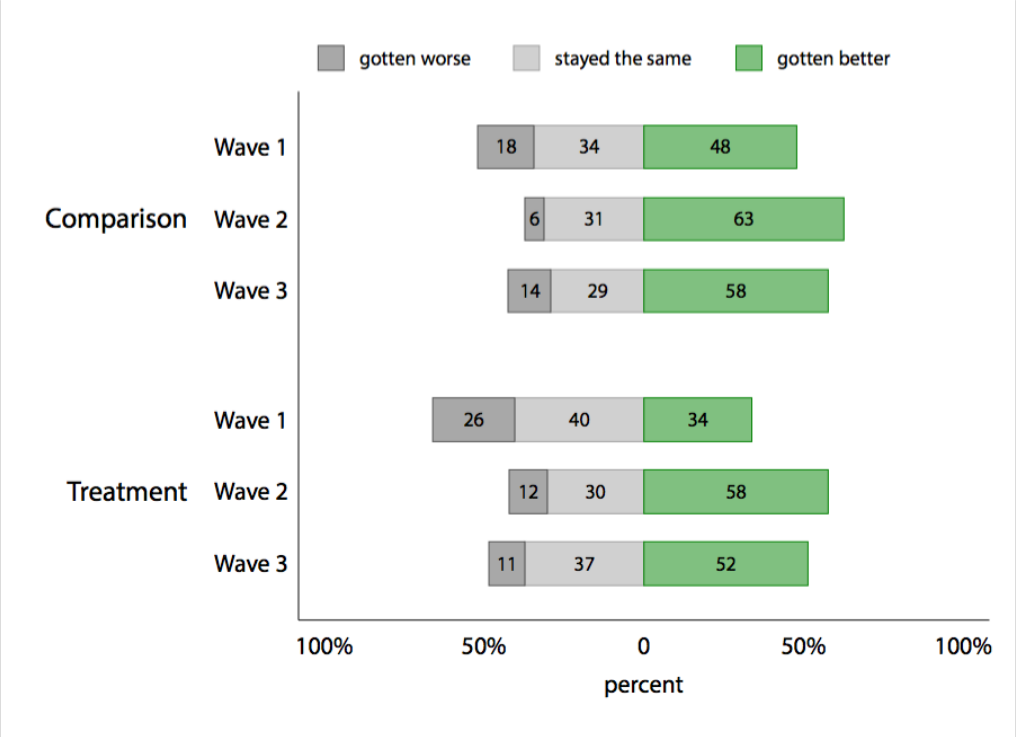
4.2 Community survey analysis

The survey analysis reveals a number of promising findings. While few of the findings are statistically significant, the overall pattern of results suggests that ABSPY is having a positive impact on the ground in terms of changing community members' perceptions of crime and safety in Rainier Beach.

4.2.1 Overall perceptions of crime and ABSPY interventions

We asked respondents in each wave whether they thought crime had gotten worse, stayed the same, or gotten better in the past year.[8] In Waves 2 and 3, the proportion of people saying crime had gotten better was higher than in Wave 1; however, in both the treatment and comparison sites fewer people thought crime had improved in Wave 3 compared to Wave 2. Nonetheless, in the treatment sites people were more likely to say crime had stayed the same in Wave 3, whereas in the comparison sites people were more likely to say it got worse. Statistically, the improvement in the treatment group was greater at Wave 3 than at Wave 2, although this was not statistically significant (Table A6). Nonetheless, this shows an improvement over time in people's views of crime in the Rainier Beach hot spots.

Figure 39: In the past year, has crime gotten worse, stayed the same, or gotten better?



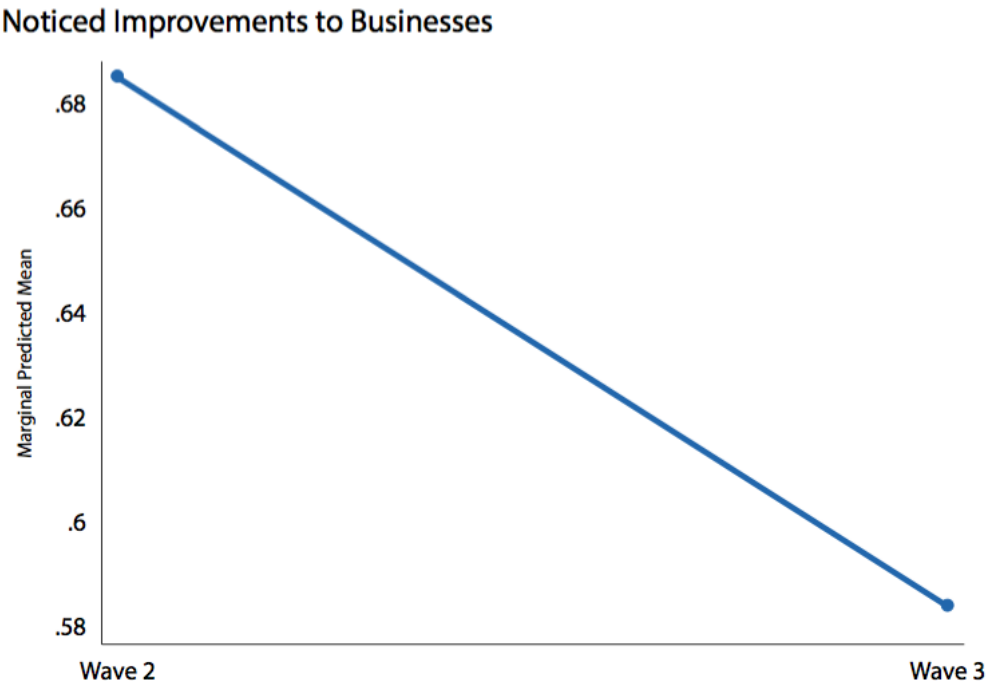
Interestingly, the proportion of people in the treatment hot spots who had noticed the signature ABSPY interventions (business improvements, Corner Greeters, and Safe Passage) decreased in Wave 3 relative to Wave 2 (Figures 40-42).[9] The decreases were not statistically significant (Table A7). However, respondents

[8]This was originally measured on a 5-point scale. We combined "much worse/somewhat worse" and "much better/somewhat better" to make the graph easier to read.

[9]These questions were originally measured on a 4-point scale (strongly disagree-strongly agree). We combined these responses

who said they had noticed these interventions were much more satisfied with them in Wave 3 compared to Wave 2 (satisfaction was already very high in Wave 2). The proportion of respondents saying they were satisfied or very satisfied with the business improvements increased by over 10 percentage points; there was an almost 15 percentage point increase for Corner Greeters, and around a 5 percentage point increase for Safe Passage (Figures 43-45). Note that while the increase was smallest for Safe Passage, satisfaction was already over 90 percent in Wave 2 and this improved to around 96 percent in Wave 3. These increases were not statistically significant (Table A8), but the improvements are very promising.

Figure 40: Noticed improvements to businesses, 2016 vs. 2017 (%)



into a two-category "yes/no" measure for analysis. These questions were not asked in Wave 1 as the interventions had not yet started.

Figure 41: Noticed Corner Greeters, 2016 vs. 2017 (%)

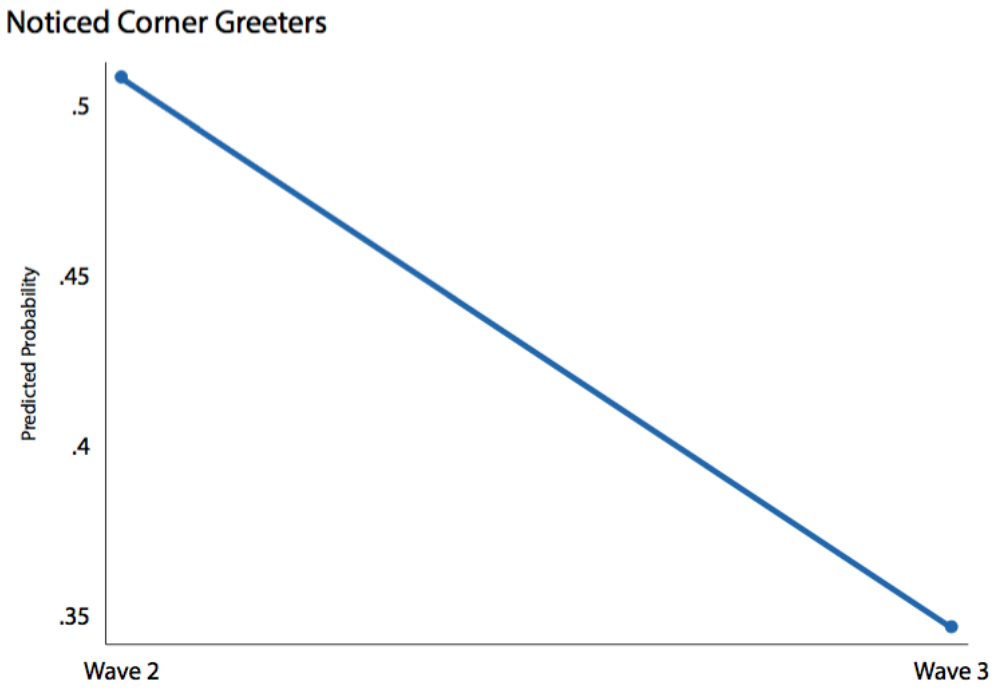


Figure 42: Noticed Safe Passage, 2016 vs. 2017 (%)

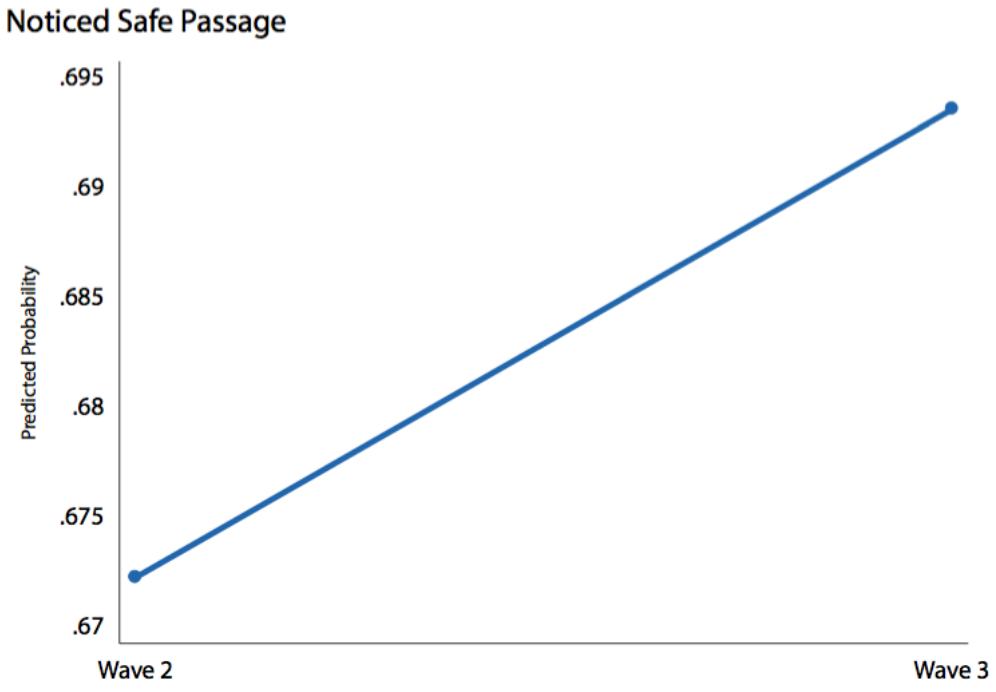


Figure 43: Satisfied with improvements to businesses, 2016 vs. 2017 (%)

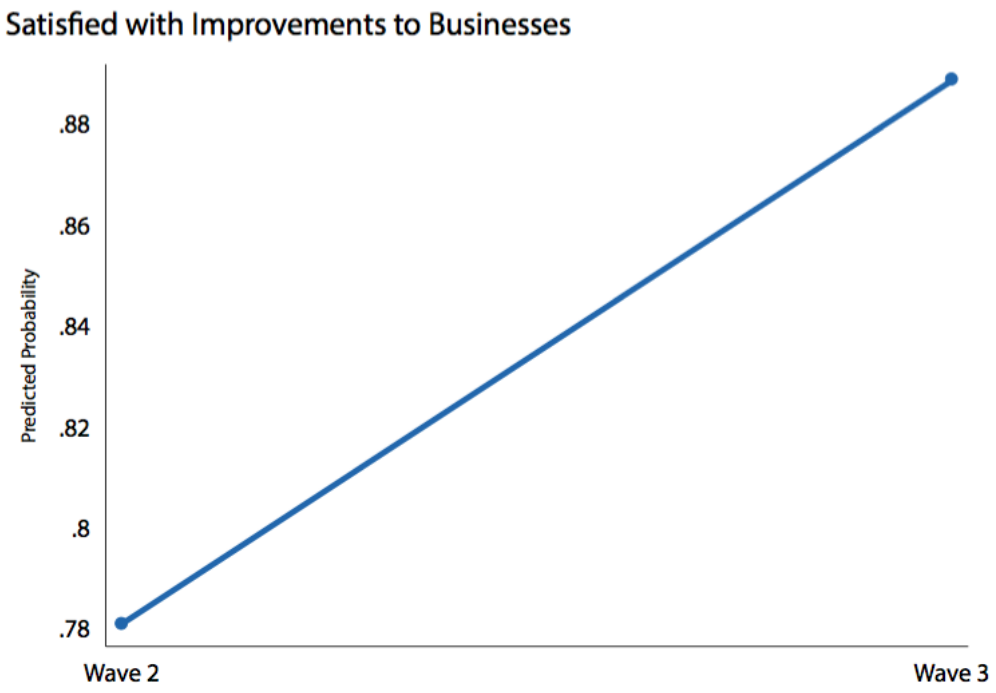


Figure 44: Satisfied with Corner Greeters, 2016 vs. 2017 (%)

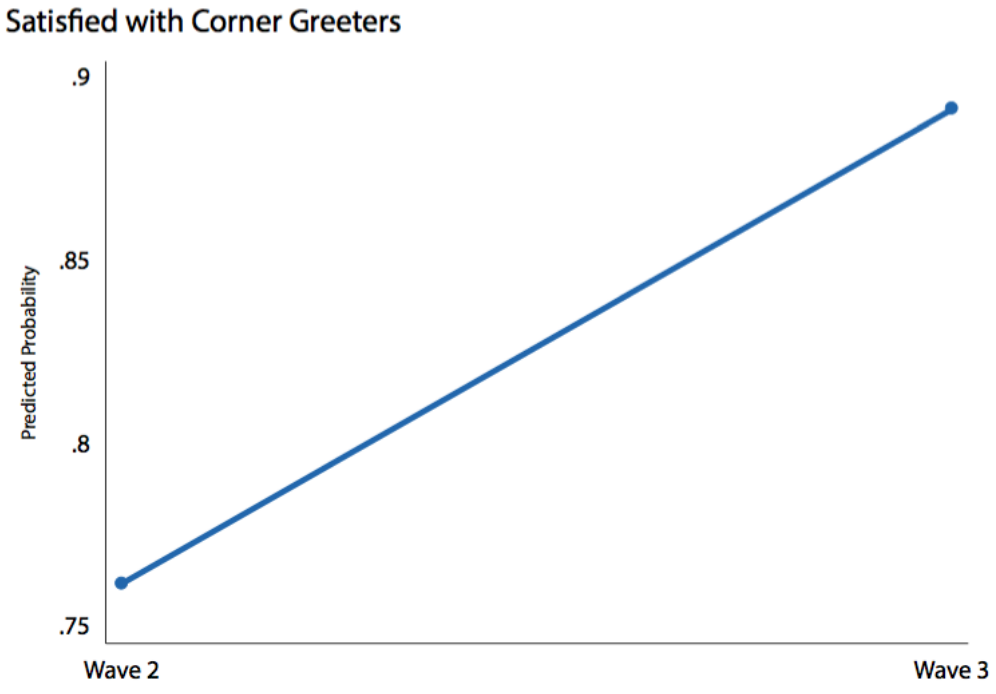
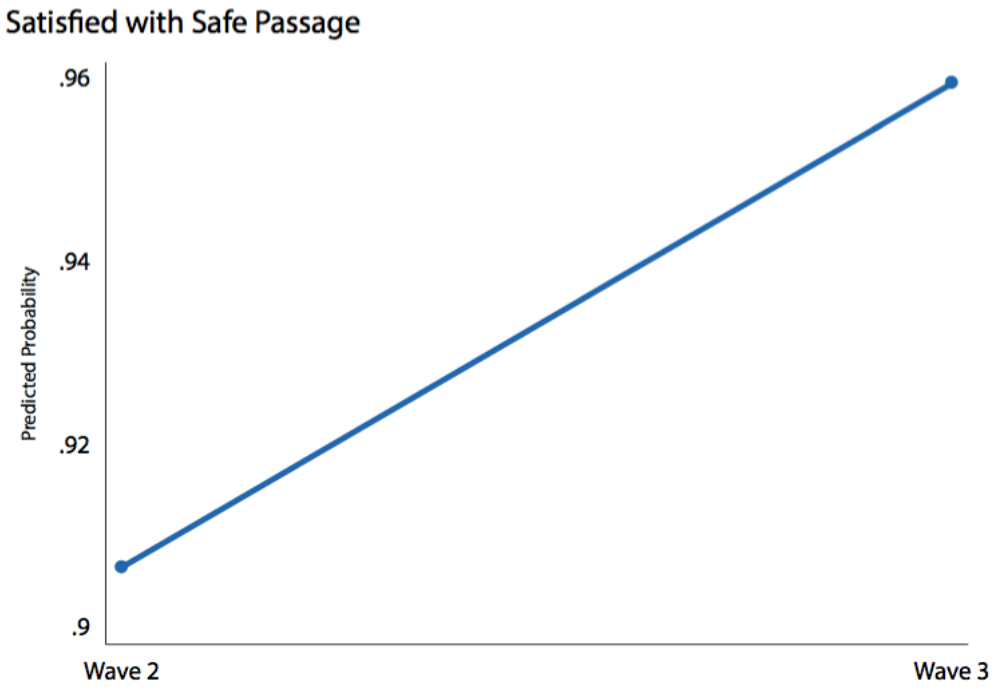


Figure 45: Satisfied with Safe Passage, 2016 vs. 2017 (%)



4.2.2 Feelings of safety, concerns about crime, and victimization

Overall, treatment hot spot respondents continue to feel less safe than respondents in the comparison spots, consistent with our original report. Figure 46 shows the predicted response for the average treatment group respondent and the average comparison spot respondent in each wave, based on a 4-point scale (strongly disagree-strongly agree).[10] However, there has been a steady increase in feelings of safety across the waves among treatment group respondents, whereas the increase in the comparison spots slowed slightly between Waves 2 and 3. While this improvement was not statistically significant (Table A9), it is a promising finding for ABSPY.

Interestingly, there was a slight increase in concerns about crime and disorder in both groups between Waves 2 and 3 (Figure 47; note that the scale on this graph is very small). This is understandable in the comparison group, given that respondents were more likely to say crime had gotten worse in the past year between Waves 2 and 3. However, it is less consistent with the larger proportion of treatment group respondents who did not think crime had gotten worse. As we noted in our previous report, it is possible that ABSPY activities focused attention on crime and disorder in Rainier Beach and helped residents become more aware of these issues, which could be positive if those residents then felt empowered to join the efforts to reduce them. These changes were not statistically significant (Table A10).

We also asked respondents how frequently they believed various signs of disorder—people arguing or fighting, groups of youth hanging out and causing problems, people drinking in public or acting drunk/high, people making too much noise at night, people selling or using drugs, prostitution, and

[10] Subsequent graphs can be interpreted in the same way; scales vary between agreement, likelihood, and perceived frequency.

Figure 46: Change in feelings of safety in the hot spots and comparison spots, 2014-2017

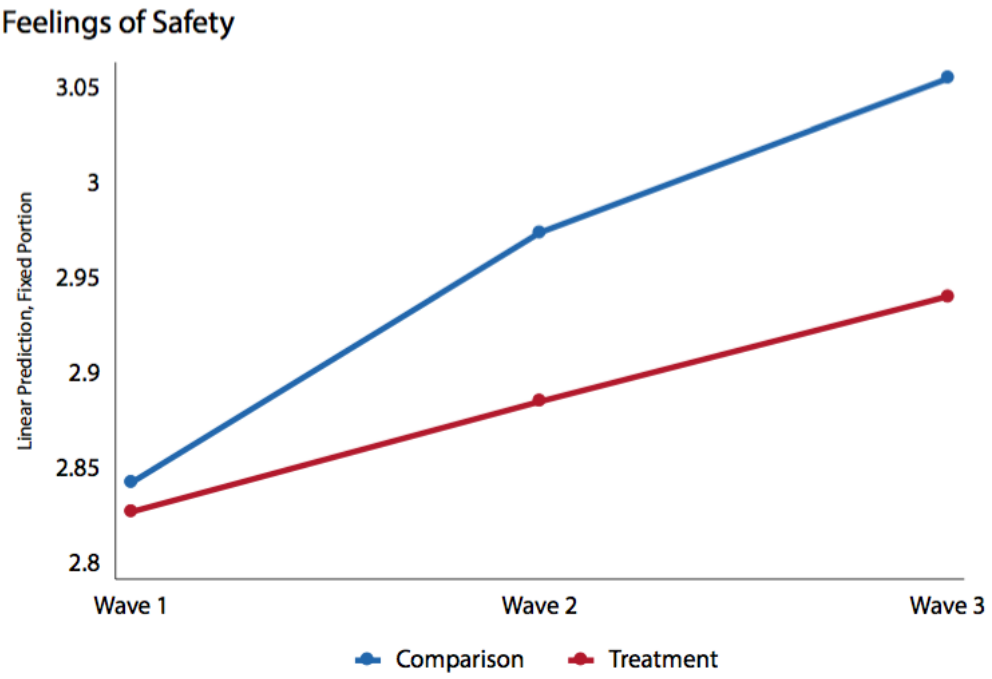
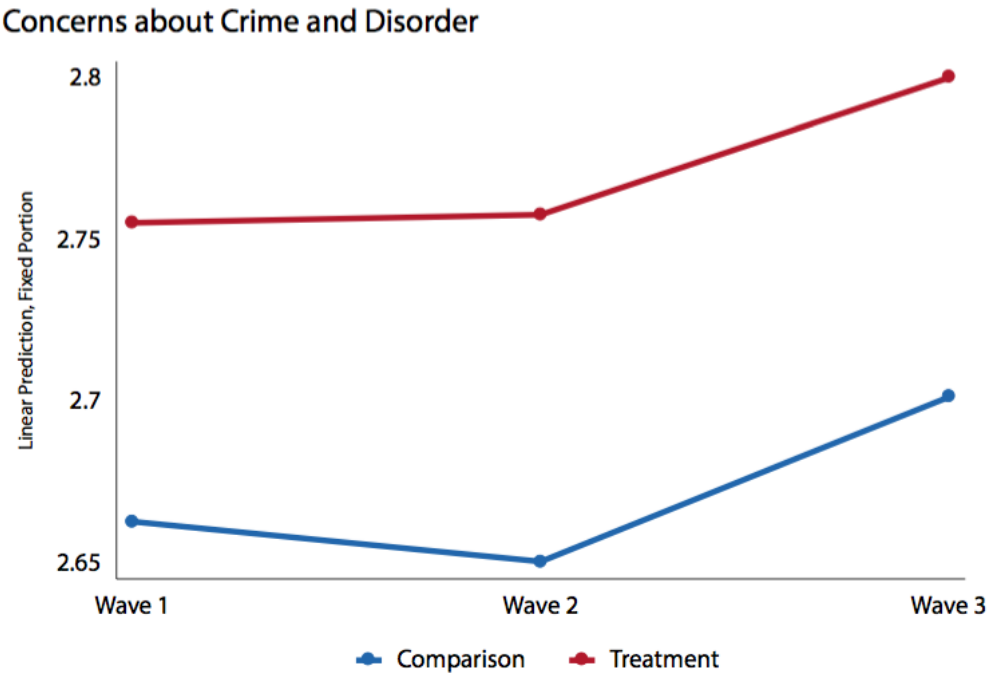
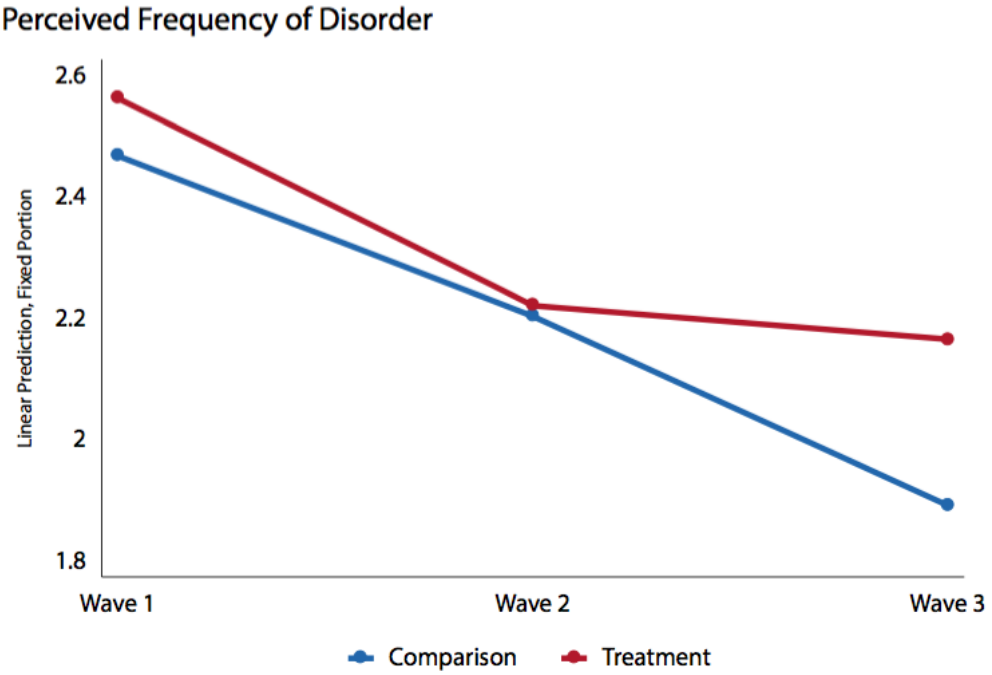


Figure 47: Change in concerns about crime and disorder in the hot spots and comparison spots, 2014-2017



vandalism—had occurred at the hot spots over the past year. Overall, in both groups respondents did not believe these issues happened very frequently, and the reported frequency reduced across the waves (Figure 48). However, this reduction was more consistent in the comparison group, while there was a slight decrease between Waves 1 and 2 in the treatment group and then a slight increase between Waves 2 and 3 (which was not statistically significant; Table A11). Again, this could be explained by treatment group respondents paying more attention to disorder issues as a result of ABSPY. We see a similar pattern in respondents' perceptions of the likelihood that different types of more serious crime, such as sexual assault, robbery, and property crimes, would happen at the location (Figure 49). Again, this was not statistically significant (Table A12).

Figure 48: Change in perceived frequency of disorder in the hot spots and comparison spots, 2014-2017



These mixed findings may be explained in part by the proportion of people who reported that they had ever been victimized at the hot spot. In Wave 2, the proportion of treatment group respondents who had been victimized at their hot spot was significantly lower than it was at Wave 1 (Figure 50; Table A13). The proportion was lower again at Wave 3, although this change was not statistically significant relative to Wave 1. Comparison group participants were much more likely to report having been victimized at Wave 2 relative to Wave 1, although the proportion decreased again between Waves 2 and 3.

Figure 49: Change in perceived likelihood of crime in the hot spots and comparison spots, 2014-2017

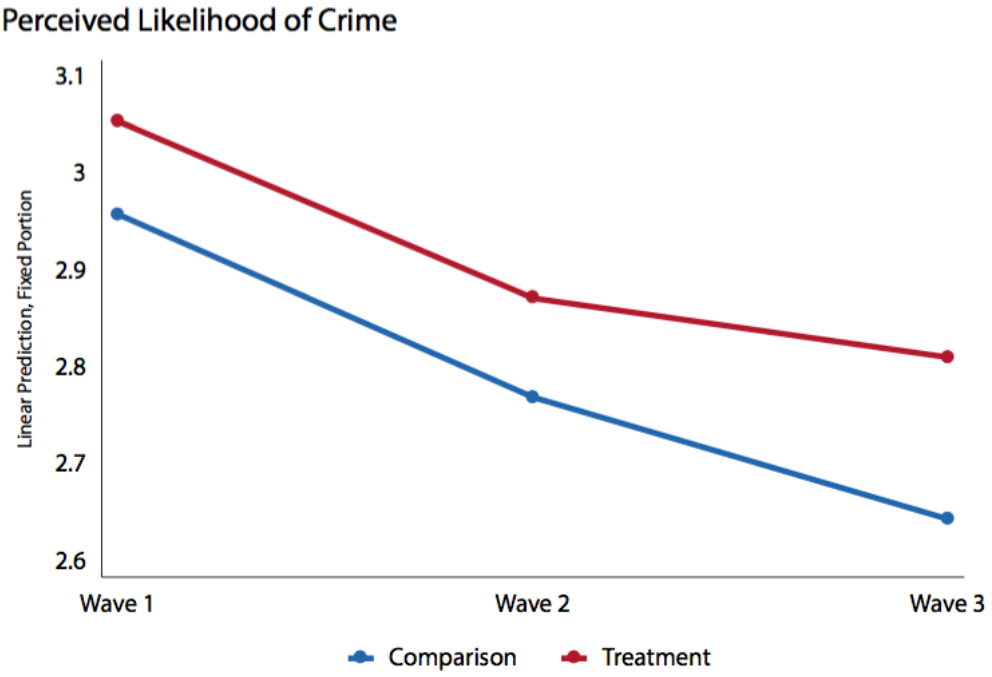
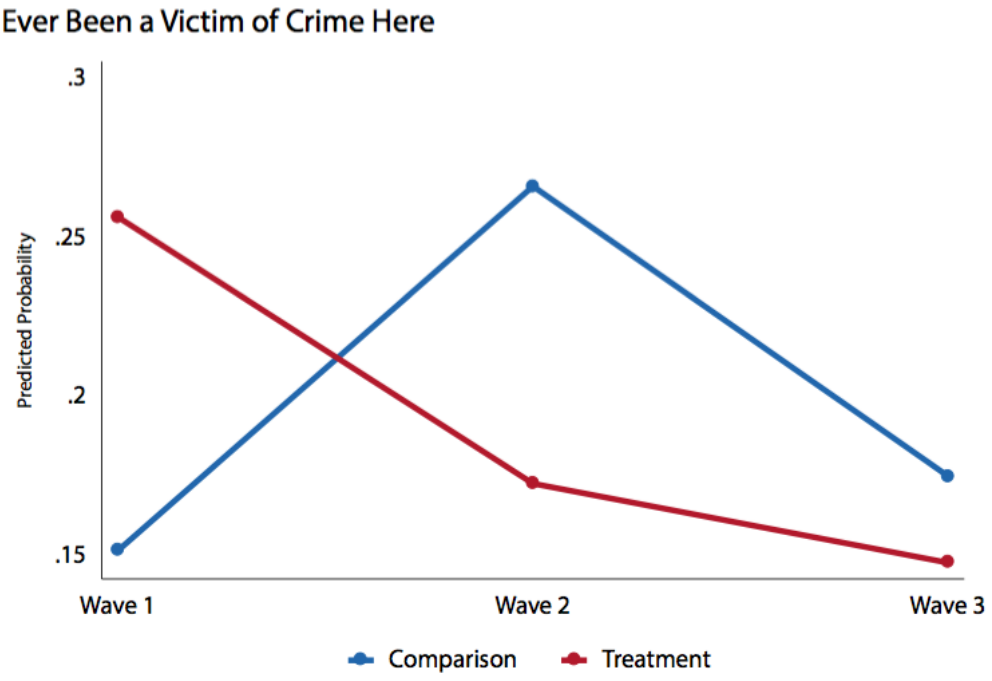


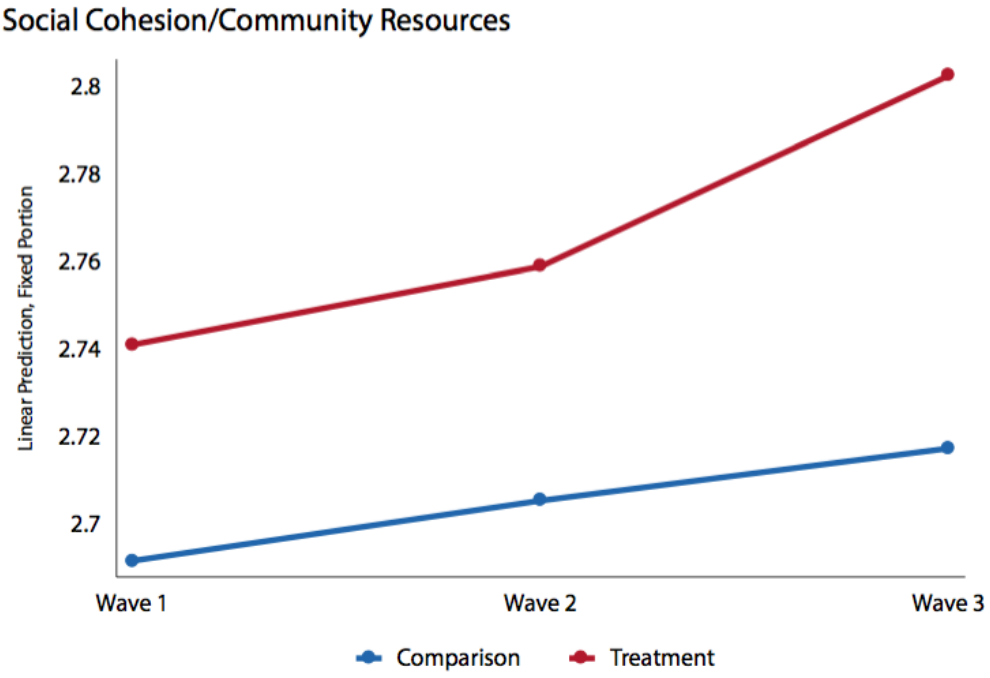
Figure 50: Change in proportion reporting victimization in the hot spots and comparison spots, 2014-2017



4.2.3 Social cohesion and community resources

Social cohesion is an important precursor to collective efficacy—community members need to form trusting relationships with each other in order to be willing to work together to prevent crime and improve safety. Our social cohesion measure also includes people's perceptions of community resources available at their hot spot, which provide opportunities to build relationships and trust. Overall, while the change was not statistically significant, the pattern of improvement in social cohesion is promising for the ABSPY sites. While the overall improvement between Waves 2 and 3 was small, there was barely any change between Waves 1 and 2. Social cohesion did not change in the comparison group (Figure 51; Table A14).

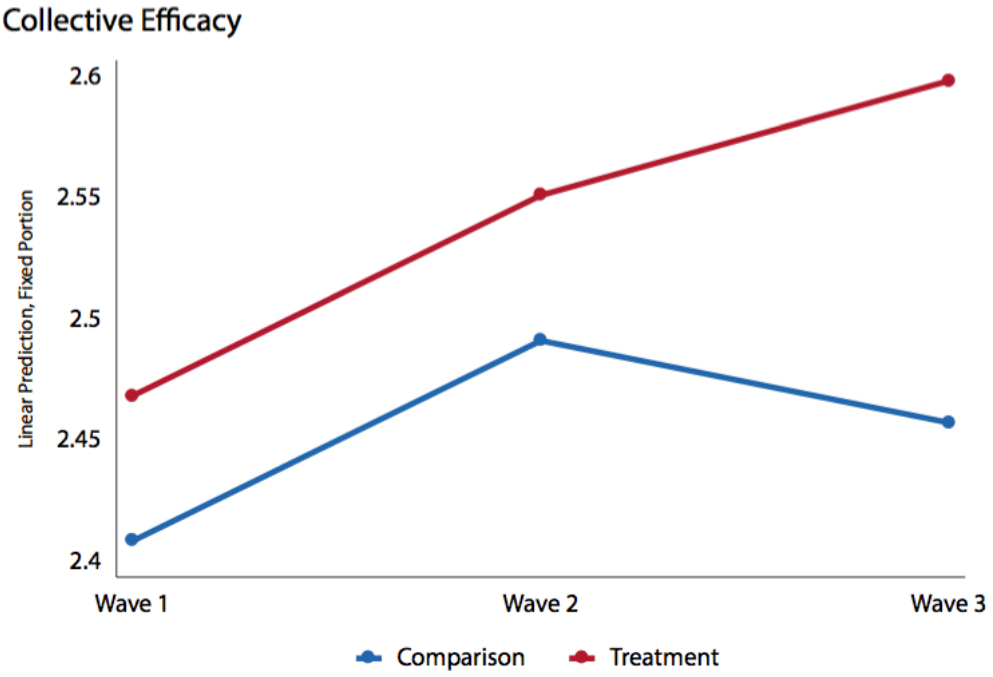
Figure 51: Change in social cohesion in the hot spots and comparison spots, 2014-2017



4.2.4 Collective efficacy

Our collective efficacy outcome measures whether respondents think it is likely someone at the hot spot would intervene if various problems happened, such as a fight or young people disrespecting an adult. Our findings are similar to those for social cohesion—in the treatment hot spots there was a small but steady increase in agreement that people would intervene across the waves. There was a slight increase between Waves 1 and 2 in the comparison group, but this decreased again between Waves 2 and 3. This finding was not statistically significant (Figure 52; Table A15).

Figure 52: Change in collective efficacy in the hot spots and comparison spots, 2014-2017



4.2.5 Perceptions of the police

Finally, we asked respondents a number of questions about their perceptions of the police, which we combined into three scales: perceived frequency of police activity, satisfaction with police, and police legitimacy. There was barely any change in respondents' perceptions of the frequency of police activity across the waves in the treatment or comparison groups, but overall respondents in the Rainier Beach hot spots said they saw the police more frequently in every wave (Figure 53; Table A16). The findings for satisfaction and legitimacy are interesting: there was a statistically significant improvement in satisfaction and a non-significant but noticeable improvement in legitimacy associated with ABSPY in the short-term (between Waves 1 and 2; Figures 54-55; Tables A17-A18). However, in the longer-term these effects disappeared (although in both cases there was still a very slight improvement in Wave 3 compared to Wave 1).

Figure 53: Change in perceived frequency of police activity in the hot spots and comparison spots, 2014-2017

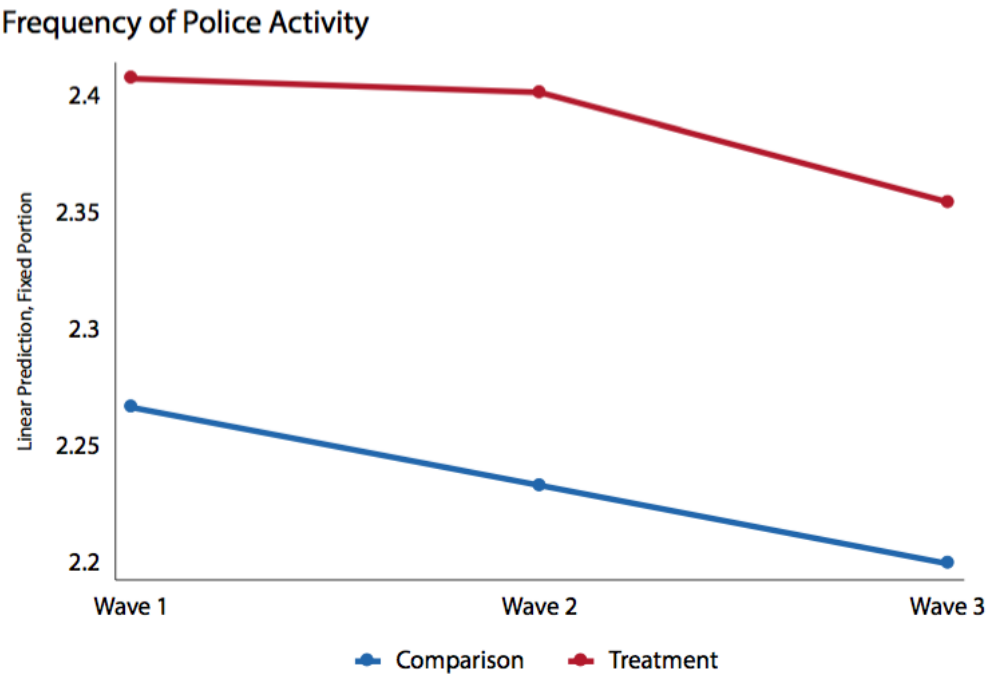


Figure 54: Change in satisfaction with police in the hot spots and comparison spots, 2014-2017

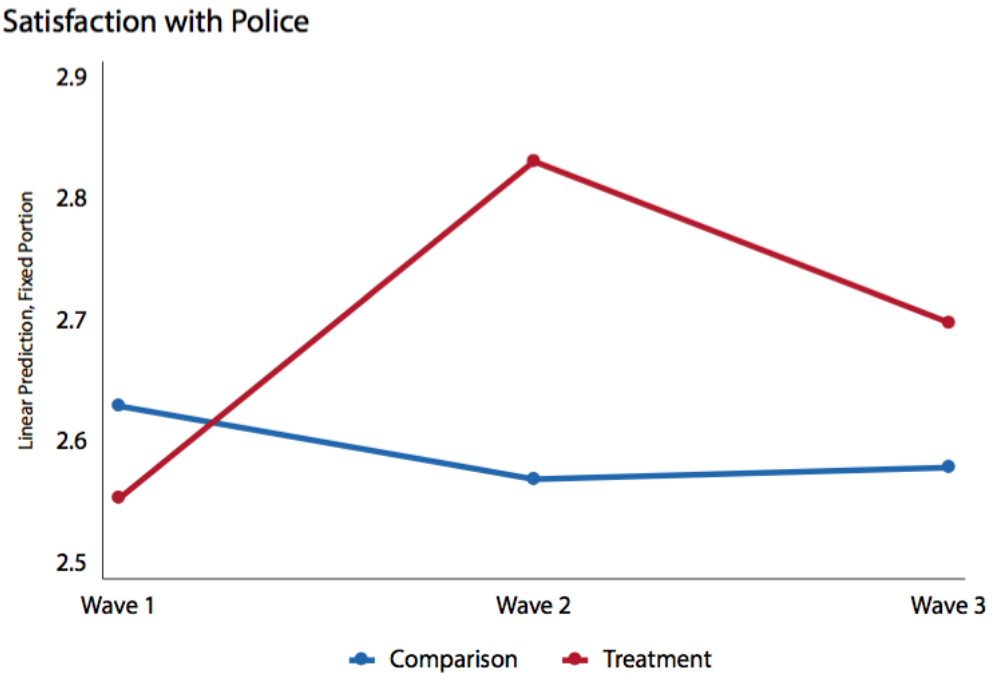
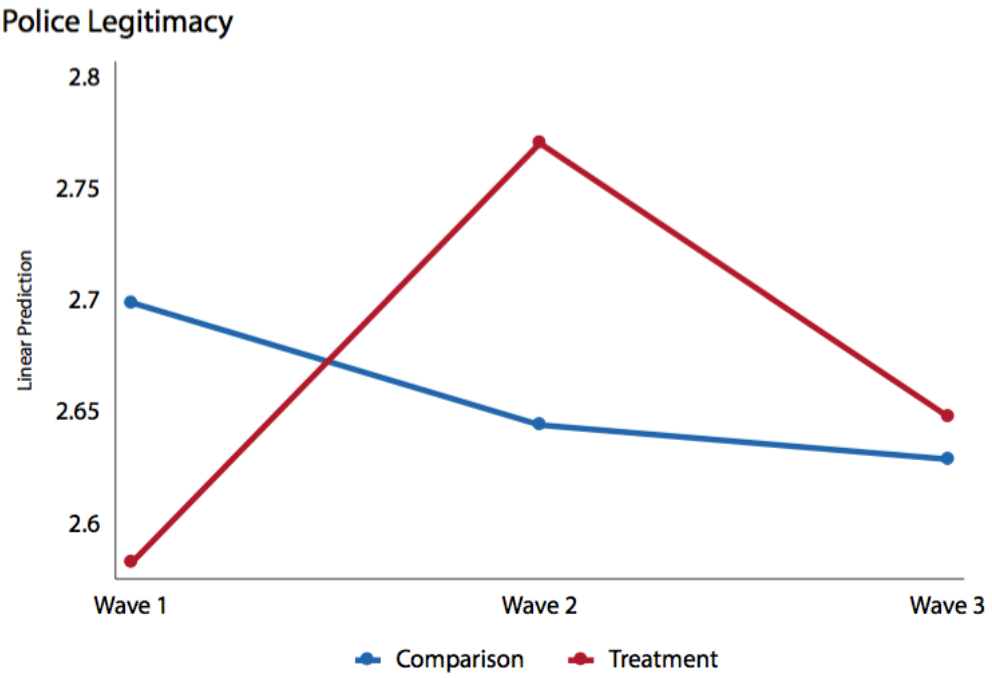


Figure 55: Change in perceived police legitimacy in the hot spots and comparison spots, 2014-2017



5 Conclusions

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 in the five years since the program was first awarded federal funding by the Bureau of Justice Assistance, ABSPY has continued to build 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. The promising trends we identified in our previous report have been sustained during 2017.

- **The hot spots have continued to become less "hot" over time.** As we have reported, it is difficult to statistically assess changes in crime and calls for service because rates of these outcomes are consistently higher in the hot spots than the comparison sites. As we discussed in our original evaluation, the ABSPY hot spots are unique in the city. They were selected precisely because they experienced a greater concentration of crime than most other segments in the South Precinct over many years. Even though the comparison sites we selected were also "hot spots" in the sense that crime was more concentrated in these places than other areas, they have on the whole never been as "hot" as the street segments in Rainier Beach. There has also been a significant amount of gentrification and revitalization in the areas surrounding our comparison hot spots, which have changed the character and composition of these places and may have had an effect on crime and social dynamics. Our findings provide an interesting view of these changes—crime is lower overall in the comparison sites, but social cohesion, collective efficacy, and other indicators of strong community ties (as measured in our survey and discussed further below) also appear to be falling. Nonetheless, on many measures, crime in the Rainier Beach hot spots has been lower since ABSPY started than it was before.

- **Violent crime decreased more in the hot spots than in Rainier Beach or the South Precinct overall.** We also found this in our original evaluation report, and the trend has persisted through 2017. While violent crime has ticked up slightly in 2017 (as evidenced by the fact that the pre/post-ABSPY decline in violence in the hot spots is less than it was when we measured it last year), this is still a very promising result given ABSPY's original focus on violent crime.

- **Calls for service and crime incidents were higher in the hot spots while the interventions were active, but this is not necessarily a negative outcome.** Calls for service and incidents (particularly less serious "Part II" crimes) were higher in the ABSPY hot spots during the periods when the interventions were active than they were while the interventions were not active. This provides more nuance to the results above as it takes into account the rolling start and breaks in interventions, whereas the basic pre/post change just looks at crime before and after the initial ABSPY kick-off in May 2014. However, this does not necessarily indicate that ABSPY increased crime. While we cannot prove it directly through statistical analysis, it is possible that the increases could be attributed to greater community engagement and attention to crime issues; for example, people being more alert to addressing crime and more willing to call the police because of ABSPY. We find some indirect support for this in our survey results—people generally feel safer overall and trust in the police has increased.

- **ABSPY has had a promising impact at specific hot spots.** At Rose Street, all measures of crime have reduced since ABSPY first began, and violent crime has decreased more than in the Rose Street

comparison site. At Rainier and Henderson, youth and violent incidents are lower than they were during the pre-ABSPY period. While there has been little change at the Light Rail due to low base rates of crime, the reduction in calls for service and violent incidents is promising.

- **Survey respondents in the ABSPY hot spots continue to believe that crime is going down.** While the percentage of respondents in the treatment hot spots who agreed that "crime has gotten better in the past year" decreased slightly between the 2016 and 2017 surveys, most of the change can be attributed to people saying it had "stayed the same." In the comparison hot spots more people said crime had gotten worse compared to last year.

- **Collective efficacy, social cohesion, and feelings of safety are improving in Rainier Beach.** While we did not find any statistically significant effects of ABSPY on these issues, the trends are positive—respondents' opinions have consistently improved over the three waves of the survey. There have been improvements in the comparison group too, but not always to the same degree as the treatment group.

- **ABSPY improved community members' perceptions of the police—at least in the short term.** ABSPY was associated with statistically significant improvements in respondents' satisfaction with the police and perception of the police as legitimate in the short term (between the baseline survey in 2014 and the Wave 2 survey in 2016). However, these effects dropped off in 2017.

- **Community members in the ABSPY hot spots are satisfied with ABSPY interventions.** Recognition of the signature ABSPY interventions—Corner Greeters, Safe Passage, and business improvements—dropped slightly between 2016 and 2017. However, among respondents in the treatment hot spots who were familiar with the interventions, satisfaction with them was very high and had increased substantially since last year.

5.1 Recommendations for 2018

Overall, our conclusions in 2017 reflect those of 2016—Rainier Beach is moving in the right direction with ABSPY, but it will likely take many more years to show strong effects. In our original report we suggested that we may see stronger positive findings after three or four more years of implementation; after one more year of implementation the positive trends have continued, so we remain confident in that assessment. Other studies in which the authors of this report have been involved are drawing similar conclusions—it simply takes a very long time to measure real and sustained change in a neighborhood or place (e.g. Weisburd, Gill, & Wooditch, 2017). In most cases our results do not yet meet the scientific standard of "statistical significance" relative to the comparison locations, which means we cannot rule out the possibility that our findings are simply due to chance rather than the effects of the ABSPY strategies. However, we also caution that statistical significance is extremely difficult to establish when the number of crimes at each hot spot is small. Nonetheless, we continue to see increased capacity building and community engagement around crime prevention as a result of ABSPY. Based on our findings, our recommendations for continued implementation in 2018 (beyond sustaining the existing efforts) are as follows:

1. **Place specific emphasis on boosting intervention efforts at Lake Washington and Safeway.** Given that crime has not reduced at these two locations at the same pace as the other hot spots, additional attention to these two hot spots is warranted. This is already under way, at least at

Lake Washington, through the ABSPY Core Team's workgroup dedicated to Lake Washington apartments. The Core Team may wish to address these sites by increasing the dosage and intensity of existing ABSPY interventions and/or reconvening the Community Task Forces at these sites and assessing more recent data to identify whether any new strategies can be developed under ABSPY's broad parameters (increasing supervision and structure for youth; environmental change; policy change; building collective efficacy).

2. **Maintain and strengthen collaboration with SPD's South Precinct Community Policing Team.** After several years of personnel change and instability within SPD—both locally and at the city level—the ABSPY Core Team has more recently enjoyed consistent positive representation from the Community Policing Team. However, short-term improvements in citizen satisfaction and perceptions of legitimacy as a result of ABSPY have not been sustained. Nonetheless, the fact that a community-led crime prevention effort could have such a positive effect on perceptions of police is remarkable. The change in perceptions more recently could be unrelated to ABSPY or the South Precinct officers (for example, national conversations about policing have continued to focus on the challenges of police relationships with communities of color, and survey respondents in Rainier Beach were much more ethnically diverse than those in our comparison sites). However, SPD should continue and even increase its outreach efforts to businesses and residents in Rainier Beach through its relationships with the merchants' association, public schools, apartment complexes, and community center.

3. **Continue to raise awareness of ABSPY interventions in the neighborhood.** Our survey findings showed that while Rainier Beach community members are highly satisfied with ABSPY's signature interventions, fewer people were familiar with them this year compared to 2016. The ABSPY Core Team should focus on raising awareness through increased branding of both the overall ABSPY initiative and its interventions through the use of logos, flyers, etc. and opportunities to promote the efforts, such as the December 2017 celebration held at the Rainier Beach community center. Similar events could be held more frequently throughout the year, at which representatives from the different interventions could present updates and progress and connect with community members. The Core Team may also consider increasing promotion through both traditional (such as local news websites and print media) and social media, and engaging local young people in this process (particularly the social media aspect). Finally, increased community member representation on the Core Team may increase the connection between team and community members and improve awareness of the interventions.

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Appendix: Additional Tables and Figures

Table A1: Difference-in-differences Poisson regression on calls for service

	Calls for service
	IRR (robust SE)
Active	.865 (.073)
Treatment	1.185*** (.060)
Active × Treatment	1.343*** (.105)
Month	.990 (.006)
Trend	.994*** (.001)
Constant	129.073*** (7.819)
Log pseudolikelihood	-1008.164
Pseudo R^2	.256
Wald χ^2	118.030***
N	160

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Figure A1: Predicted number of calls by treatment assignment and intervention status

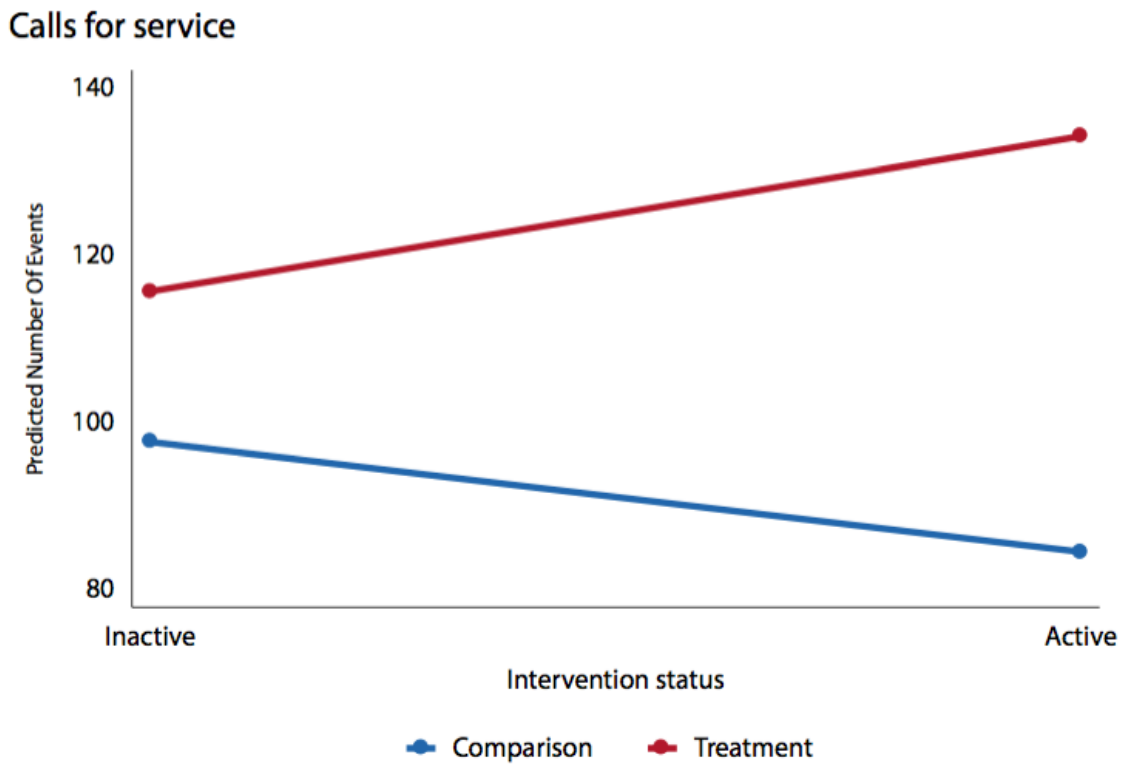

Table A2: Difference-in-differences Poisson regression on all incidents

	All incidents
	IRR (robust SE)
Active	.839** (.057)
Treatment	1.310*** (.066)
Active × Treatment	1.225** (.082)
Month	.995 (.005)
Trend	1.000 (.001)
Constant	32.944*** (1.776)
Log pseudolikelihood	-562.311
Pseudo R^2	.148
Wald χ^2	146.890***
N	160

Exponentiated coefficients (incidence rate ratio, IRR)

* $p < .05$, ** $p < .01$, *** $p < .001$

Figure A2: Predicted number of incidents by treatment assignment and intervention status

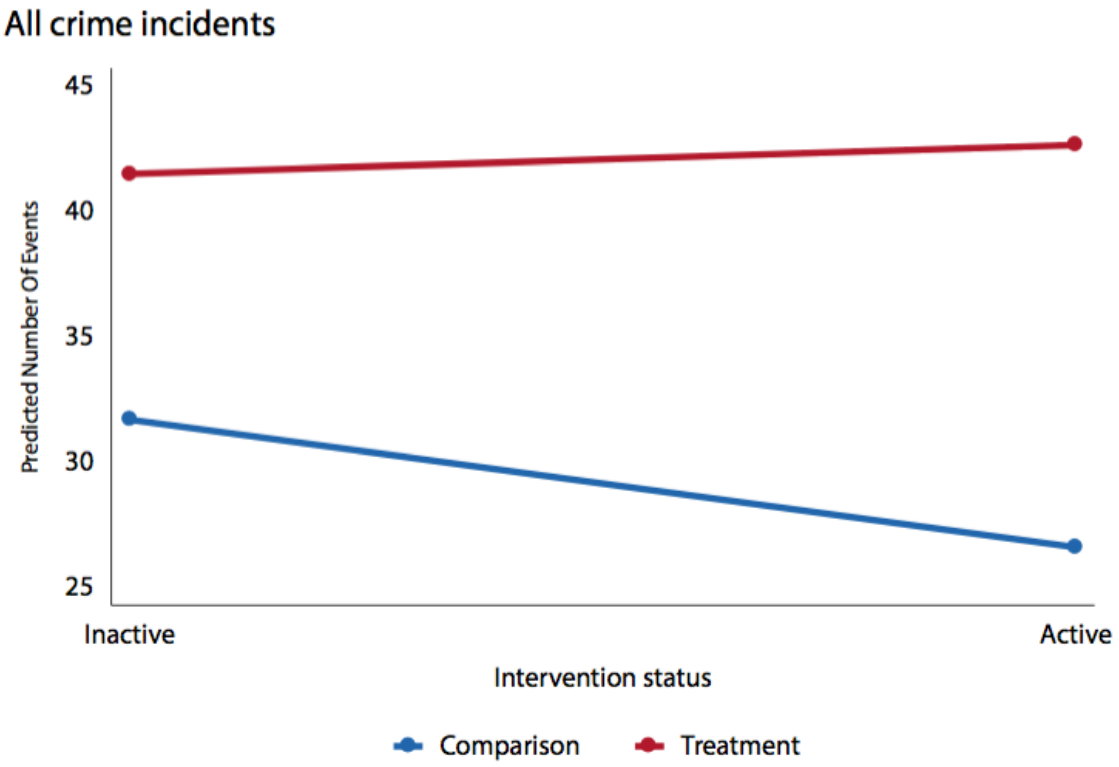

Table A3: Difference-in-differences Poisson regression on youth incidents

	Youth incidents
	IRR (robust SE)
Active	.874 (.107)
Treatment	1.511*** (.107)
Active × Treatment	1.332* (.167)
Month	.992 (.008)
Trend	.994* (.002)
Constant	11.874*** (1.003)
Log pseudolikelihood	-455.729
Pseudo R^2	.146
Wald χ^2	92.152***
N	160

Exponentiated coefficients (incidence rate ratio, IRR)

$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Figure A3: Predicted number of youth incidents by treatment assignment and intervention status

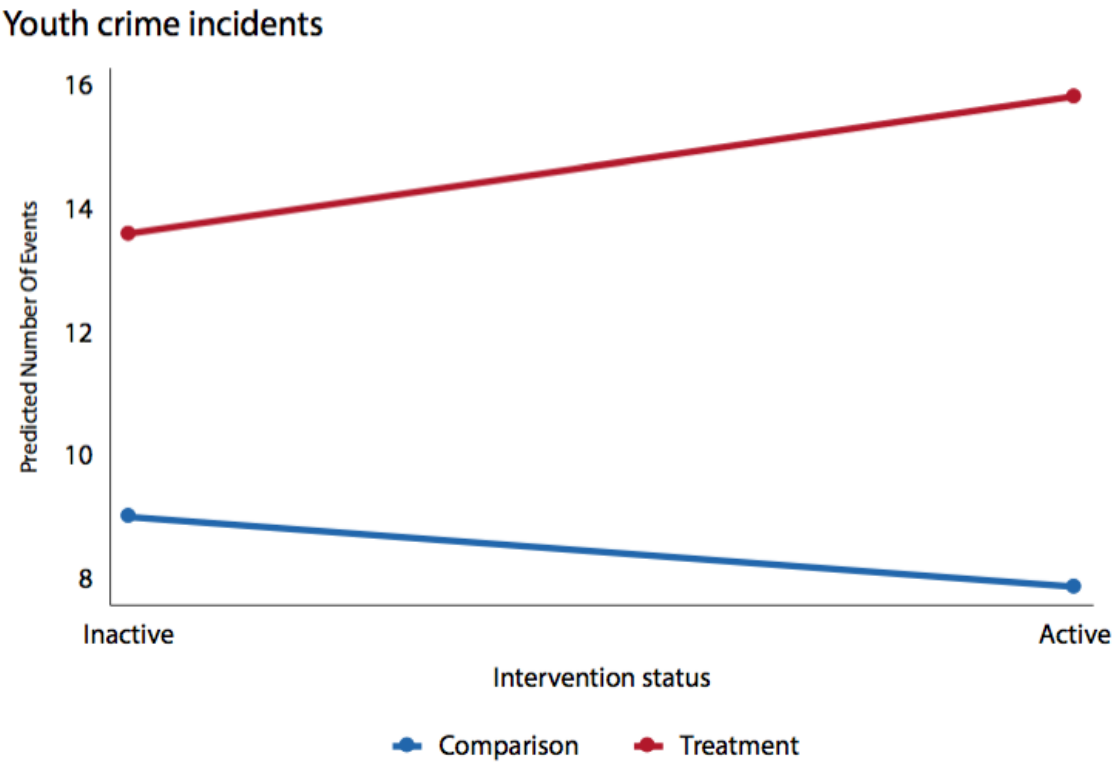

Table A4: Difference-in-differences Poisson regression on violent crime

	Violent crime
	IRR (robust SE)
Active	.896 (.112)
Treatment	1.357*** (.119)
Active × Treatment	1.189 (.155)
Month	.990 (.010)
Trend	.996 (.002)
Constant	7.572*** (.912)
Log pseudolikelihood	-390.772
Pseudo R^2	.063
Wald χ^2	58.725***
N	160

Exponentiated coefficients (incidence rate ratio, IRR)
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Figure A4: Predicted number of violent incidents by treatment assignment and intervention status

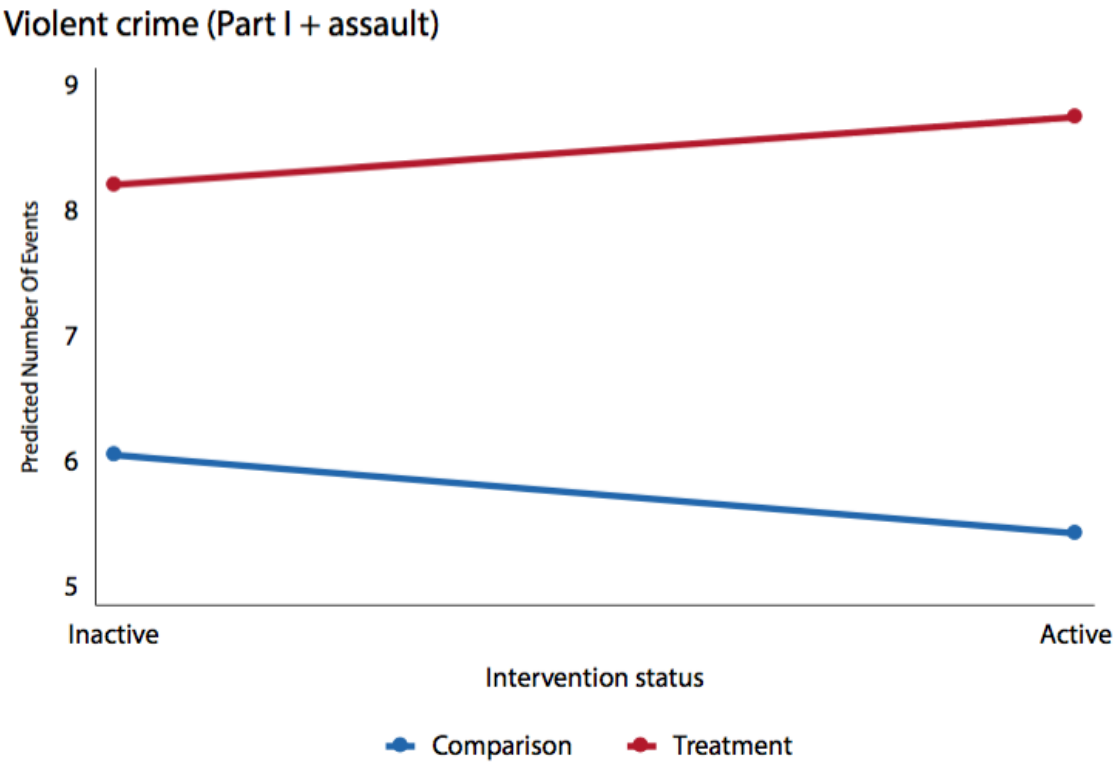

Table A5: Difference-in-differences Poisson regression on Part II crime

	Part II crime
	IRR (robust SE)
Active	.821* (.076)
Treatment	1.219** (.075)
Active × Treatment	1.407*** (.132)
Month	.996 (.007)
Trend	1.001 (.002)
Constant	10.042*** (.753)
Log pseudolikelihood	-418.571
Pseudo R^2	.076
Wald χ^2	73.046***
N	160

Exponentiated coefficients (incidence rate ratio, IRR)

* $p < .05$, ** $p < .01$, *** $p < .001$

Figure A5: Predicted number of Part II incidents by treatment assignment and intervention status

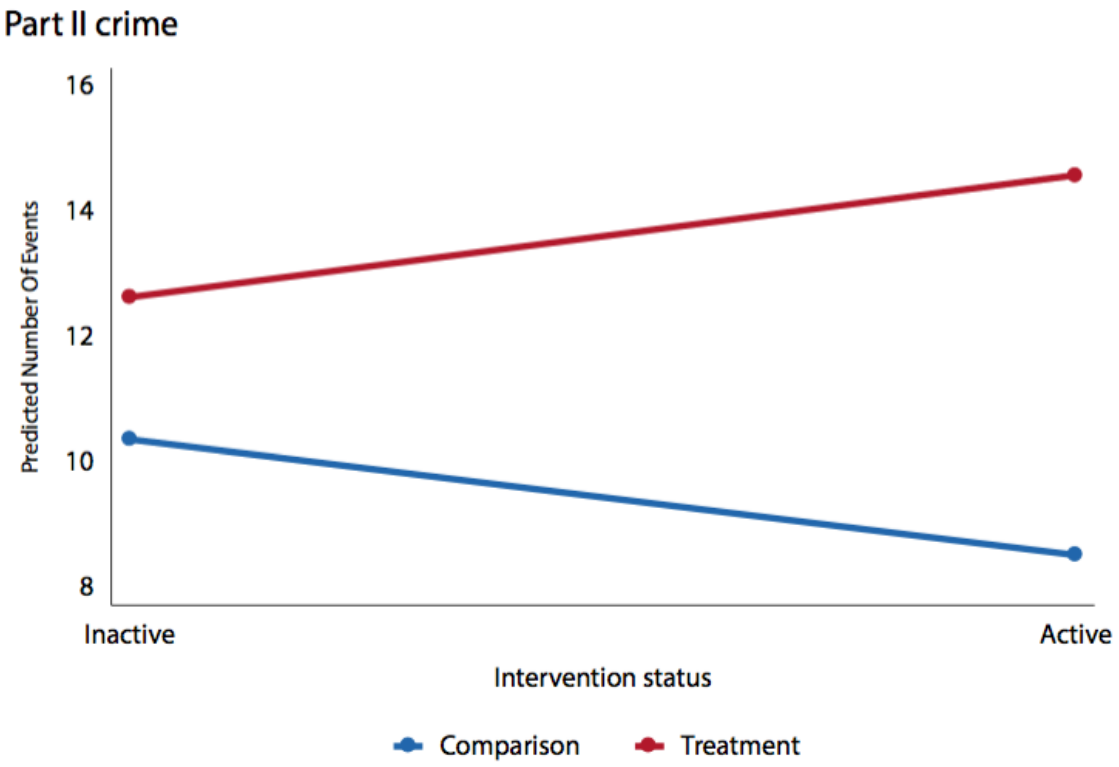

Table A6: Change in Crime in Past Year

	Has crime gotten better in past year
Fixed effects	b (robust SE)
Wave 2	.632*** (.133)
Wave 3	.313*** (.081)
Treatment	-.678* (.292)
Wave 2 $\times$ Treatment	.445 (.306)
Wave 3 $\times$ Treatment	.574 (.330)
Gender (Male)	.347 (.184)
Race (Black)	.038 (.110)
Youth (18-25)	.410* (.190)
Cut 1	*-1.394*** (.097)*
Cut 2	*.372** (.125)*
Random effects	σ (robust SE)
Hot spot	.032 (.032)
Log pseudolikelihood	-672.850
Wald χ^2	843.831***
N	701.000

Note: Outcome was recoded to a three-level variable for analysis (got worse, stayed the same, got better).
Multilevel mixed effects ordered logistic regression
$^{*}\ p < .05$, $^{**}\ p < .01$, $^{***}\ p < .001$

Table A7: Noticed Interventions

	Noticed business improvements[a]	Noticed Corner Greeters[b]	Noticed Safe Passage[b]
Fixed effects	b (robust SE)	b (robust SE)	b (robust SE)
Wave	-.421* (.200)	-.706** (.274)	.225 (.295)
Gender (Male)	-.097 (.253)	.036 (.276)	-.525 (.298)
Race (Black)	-.041 (.229)	-.042 (.287)	.291 (.305)
Youth (18-25)	.346 (.204)	.489 (.331)	.676 (.394)
Hot spot (Ref: Rose St)			
Rainier & Henderson	-	.596 (.440)	-.025 (.487)
Light Rail	-	-.098 (.429)	-.670 (.461)
Lake Washington	-	.039 (.434)	-.260 (.492)
Safeway	-	-.442 (.427)	-.615 (.443)
Constant	1.209** (.440)	.656 (.515)	.848 (.574)
Random effects	σ (robust SE)	σ (robust SE)	σ (robust SE)
Hot spot	.146 (.129)	-	-
Log pseudolikelihood	-166.057	-156.964	-145.553
Pseudo R^2	-	.049	.041
Wald χ^2	599.16***	14.425	11.393
N	259	242	243

[a] Multilevel mixed effects logistic regression
[b] Logistic regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A8: 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	.864 (.487)	1.221 (.697)	1.127 (.775)
Gender (Male)	.017 (.420)	-1.299* (.591)	-.679 (.569)
Race (Black)	-.613 (.453)	-1.034 (.591)	-.680 (.668)
Youth (18-25)	.402 (.570)	.822 (.758)	1.426 (1.043)
Hot spot (Ref: Rose St)			
Rainier & Henderson	-.709 (.618)	.711 (.777)	1.085 (.913)
Light Rail	.276 (.829)	.698 (.739)	1.446 (1.093)
Lake Washington	-.734 (.651)	.588 (.924)	1.041 (1.108)
Safeway	-.634 (.626)	.582 (.781)	1.943 (1.224)
Constant	.983 (.850)	.364 (.937)	.472 (1.224)
Log pseudolikelihood	-72.777	-45.352	-31.940
Pseudo R^2	.058	.127	.129
Wald χ^2	10.782	9.311	10.210
N	168	109	149

Logistic regression
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A9: Feelings of Safety

	Feelings of safety
Fixed effects	b (robust SE)
Wave 2	.132* (.061)
Wave 3	.213* (.098)
Treatment	-.015 (.107)
Wave 2 × Treatment	-.074 (.061)
Wave 3 × Treatment	-.099 (.121)
Gender (Male)	.154*** (.034)
Race (Black)	.119*** (.019)
Youth (18-25)	-.036 (.053)
Constant	2.724*** (.112)
Random effects	σ (robust SE)
Hot spot	.009 (.004)
Individual/Household	.064 (.078)
Residual	.225 (.077)
Log pseudolikelihood	-660.526
Wald χ^2	297.440***
N	820

Multilevel mixed effects linear regression
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A10: Concerns about Crime and Disorder

	Concerns about crime and disorder
Fixed effects	b (robust SE)
Wave 2	-.012 (.064)
Wave 3	.039 (.059)
Treatment	.093 (.071)
Wave 2 $\times$ Treatment	.015 (.095)
Wave 3 $\times$ Treatment	.006 (.089)
Gender (Male)	-.157*** (.037)
Race (Black)	-.096* (.039)
Youth (18-25)	.042 (.043)
Constant	2.772*** (.052)
Random effects	σ (robust SE)
Individual/Household	.155 (.042)
Residual	.107 (.040)
Log pseudolikelihood	-604.630
Wald χ^2	32.684***
N	807

Multilevel mixed effects linear regression
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A11: Perceived Frequency of Disorder

	Frequency of disorder
Fixed effects	b (robust SE)
Wave 2	-.265 (.139)
Wave 3	-.577* (.235)
Treatment	.095 (.262)
Wave 2 $\times$ Treatment	-.077 (.255)
Wave 3 $\times$ Treatment	.180 (.254)
Gender (Male)	-.107 (.067)
Race (Black)	.022 (.110)
Youth (18-25)	.169* (.078)
Constant	2.478*** (.212)
Random effects	σ (robust SE)
Hot spot	.029 (.013)
Residual	.809 (.039)
Log pseudolikelihood	-1038.498
Wald χ^2	124.994***
N	786

Multilevel mixed effects linear regression
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A12: Perceived Likelihood of Crime

	Likelihood of crime
Fixed effects	b (robust SE)
Wave 2	-.189* (.083)
Wave 3	-.315*** (.071)
Treatment	.096 (.102)
Wave 2 × Treatment	.006 (.141)
Wave 3 × Treatment	.071 (.100)
Gender (Male)	-.167*** (.038)
Race (Black)	-.020 (.047)
Youth (18-25)	.002 (.069)
Constant	3.055*** (.076)
Random effects	σ (robust SE)
Hot spot	.004 (.003)
Residual	.412 (.018)
Log pseudolikelihood	-771.028
Wald χ^2	671.556***
N	787

Multilevel mixed effects linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A13: Ever Been a Victim of Crime Here

	Ever been a victim of crime here
	b (robust SE)
Wave 2	.711* (.312)
Wave 3	.172 (.334)
Treatment	.660* (.313)
Wave 2 × Treatment	-1.215** (.434)
Wave 3 × Treatment	-.863 (.466)
Gender (Male)	-.271 (.183)
Race (Black)	-.001 (.189)
Youth (18-25)	-.052 (.221)
Constant	-1.572*** (.276)
Log pseudolikelihood	-382.840
Pseudo R^2	.017
Wald χ^2	13.980
N	796

Note: Categorical fixed effect for hot spot was omitted due to collinearity. Robust standard errors account for clustering.
Logistic regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A14: Social Cohesion/Community Resources

	Social cohesion/ community resources
Fixed effects	b (robust SE)
Wave 2	.014 (.071)
Wave 3	.026 (.073)
Treatment	.049 (.105)
Wave 2 $\times$ Treatment	.004 (.100)
Wave 3 $\times$ Treatment	.036 (.080)
Gender (Male)	.032 (.023)
Race (Black)	.012 (.027)
Youth (18-25)	.031 (.029)
Constant	2.663*** (.083)
Random effects	σ (robust SE)
Hot spot	.006 (.003)
Residual	.221 (.011)
Log pseudolikelihood	-555.354
Wald χ^2	76.722***
N	826

Multilevel mixed effects linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A15: Collective Efficacy

	Collective efficacy
Fixed effects	b (robust SE)
Wave 2	.083 (.082)
Wave 3	.049 (.084)
Treatment	.060 (.107)
Wave 2 $\times$ Treatment	.000 (.106)
Wave 3 $\times$ Treatment	.081 (.123)
Gender (Male)	.071 (.063)
Race (Black)	.026 (.034)
Youth (18-25)	.025 (.045)
Constant	2.354*** (.075)
Random effects	σ (robust SE)
Hot spot	.003 (.004)
Individual/Household	.378 (.075)
Residual	.090 (.083)
Log pseudolikelihood	-834.162
Wald χ^2	43.540***
N	803

Multilevel mixed effects linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A16: Frequency of Police Activity

	Frequency of police activity
Fixed effects	b (robust SE)
Wave 2	-.033 (.088)
Wave 3	-.067 (.086)
Treatment	.141 (.092)
Wave 2 $\times$ Treatment	.028 (.128)
Wave 3 $\times$ Treatment	.014 (.131)
Gender (Male)	.025 (.053)
Race (Black)	.155** (.056)
Youth (18-25)	.194** (.066)
Constant	2.152*** (.069)
Random effects	σ (robust SE)
Individual/Household	.118 (.151)
Residual	.425 (.152)
Log pseudolikelihood	-875.207
Wald χ^2	30.989***
N	786

Multilevel mixed effects linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A17: Satisfaction with Police

	Satisfaction with police
Fixed effects	b (robust SE)
Wave 2	-.060 (.086)
Wave 3	-.051 (.059)
Treatment	-.076 (.124)
Wave 2 $\times$ Treatment	.339* (.141)
Wave 3 $\times$ Treatment	.196 (.116)
Gender (Male)	.116** (.039)
Race (Black)	.040 (.065)
Youth (18-25)	-.066 (.082)
Constant	2.565*** (.092)
Random effects	σ (robust SE)
Hot spot	.007 (.004)
Residual	.516 (.024)
Log pseudolikelihood	-818.483
Wald χ^2	296.495***
N	749

Multilevel mixed effects linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$

Table A18: Police Legitimacy

	Police legitimacy
	b (robust SE)
Wave 2	-.055 (.103)
Wave 3	-.070 (.099)
Treatment	-.117 (.111)
Wave 2 $\times$ Treatment	.243 (.144)
Wave 3 $\times$ Treatment	.136 (.146)
Gender (Male)	.021 (.057)
Race (Black)	-.035 (.060)
Youth (18-25)	-.123 (.065)
Constant	2.730*** (.083)
F	1.33
R^2	.012
RMSE	.758
N	728

Note: Categorical fixed effect for hot spot was omitted due to collinearity. Robust standard errors account for clustering.
Linear regression
$^{*}\ p < .05, ^{**}\ p < .01, ^{***}\ p < .001$