Tracking Data, Fighting Crime

Multi-Agency, Data-Informed Violence Reduction in Baltimore, MD

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When Baltimore Mayor Catherine Pugh took office on December 6, 2016, one persistent problem confronting the city dwarfed all others: violent crime. For the second year in a row, the number of homicides in the city had exceeded 300. Although Baltimore had the steepest decline in violent crime in any American city between 1999 and 2009, its homicide rate had been among the top five in the US almost every year since 2000.[1] (See Appendix 1 for data on violent crime in Baltimore since 1995.)

The police force was dogged by scandal and corruption. Six of nine seats on the city's underfunded civilian review board were vacant when a twenty-five-year-old Black man, Freddie Gray, suffered a fatal spine injury in police custody, sparking protests, civil unrest, and rioting.[2] Police had responded to homicide charges against the officers involved by refusing to initiate any proactive enforcement activity, and over the summer, Baltimore had lost one to two residents a day to gun violence—a 62 percent increase over the previous year.[3]

One year after Gray's death, Pugh, a former city councilor and the majority leader in the state senate, won the Democratic mayoral primary, which all but guaranteed her election in the fall. She would be the third consecutive Black woman to serve as mayor in the majority Black city. "Our neighborhoods and our communities have been neglected for decades," she said in her victory speech. "Together, we're going to build great neighborhoods throughout the city."[4] She spoke of the need for inclusion, employment, help for individuals with substance abuse disorders, and community policing. She had a vision of a beautiful, vibrant, resilient, and safe Baltimore. How exactly she planned to realize it, however, remained uncertain.

CompStat and the Origins of CitiStat

As a member of Baltimore city council in 1996, Martin O'Malley had traveled to New York City to observe CompStat, the city's data-driven, crime-tracking system that helped police map crime hot spots and identify trends. It also helped the department hold its officers accountable through regular meetings, during which top brass compared performance targets to results and interrogated district commanders about their strategy for reducing crime.

O'Malley, a white, thirty-six-year-old former prosecutor and proponent of criminal justice reform, was elected mayor in 1999, having promised to reduce crime by more than 50 percent in his first term and shut down the city's open-air drug markets within his first six months.[5] He thought the BPD's efforts to launch CompStat in Baltimore had been a "dog-and-pony imitation" of the real thing, and he was determined to use the NYPD's model to get the dramatic results he was promising.[6] Having consulted

extensively with NYC Deputy Police Commissioner Jack Maple, the driving force behind CompStat, O'Malley built a state-of-the-art CompStat room in police headquarters and began mapping 911 calls. "The map told a story," O'Malley wrote in his book, *Smarter Government*. "And our story was that we had let open-air drug markets operate with impunity over whole swaths of our city. And the common denominator of the neighborhoods we had collectively written off was that they were all poor, and most of them were black."[7]

This was not the only circumstance O'Malley found unacceptable. Upon taking office, he was appalled to find that departmental managers could not answer elementary questions, such as how many vehicles were in the public works fleet, or how long it took to answer a 911 call. O'Malley came to believe that the CompStat model had potential far beyond the police. "It was clear that the city was used to managing by feel, not by fact," he later testified.[8] He launched a practice he called CitiStat with its own dedicated room in city hall, which would use real-time data to drive performance across city government. The room was large enough to hold thirty, but small enough that everyone could be heard without microphones, and it featured a control room behind glass where staff would run the technology. (See Appendix 2 for the CitiStat room layout.)

Key to this effort was adopting a comprehensive 311 system that would generate the data needed to manage service departments. At the start of CitiStat, relying on departments to provide and track their own performance data had led to frustration on all sides. A 311 call center integrated with a customer relationship management system not only allowed the city to map service calls and measure the timeliness of response, but also democratized the data, putting the power in the hands of residents rather than city workers. "Technology is just a small percentage of customer satisfaction," said 311 Director Lisa Allen, who set up the system for the O'Malley administration. "[311] is the customer service piece that has to partner with service delivery to make sure everything is . . . being done in a timely fashion."[9]

CitiStat's first director was Matthew Gallagher; he built an office of seven staff, most of them data analysts. Adding 311 data to agency data, he was able to establish a valuable baseline dataset on which to measure progress for a growing number of agencies. The data—presented in tables, graphs, and maps—helped identify efficiency gaps, service disparities, or wasted tax dollars and track their resolution. Human resource records at the Solid Waste Bureau, for example, revealed that the bureau suffered from chronic absenteeism and high overtime costs. After just a few months of one-hour CitiStat biweekly meetings, the bureau's personnel costs fell dramatically, and service improved.

The four tenets of CitiStat, put forth by Maple, were: accurate and timely information shared by all; rapid deployment of resources; effective tactics and strategies; and relentless follow-up and assessment.[10] Concretely, that meant getting everyone from a given department in the room; asking what problems they faced and what it would take to fix them; exploring how to make that happen; and then following up to learn whether and how fast it was done.

At its height, CitiStat meetings took place five or six times a week, and the program encompassed ten agencies. Departments were required to submit relevant data and slides by noon the day before a meeting. Each meeting produced an agenda, an executive briefing memo, and a one-page follow-up memo. The office tracked results and posted reports online for the public. One key to success was

O'Malley's own commitment to and participation in the process. He cited three rules: "You start and you don't stop, you lift up the leaders, and you lead. Part of the leadership is to create that collaborative space."[11] Predictability, regularity, and specific goals were also important: "The difference between a dream and a goal is a deadline . . . People work against deadlines. If output is measured annually, people will make incremental progress on an annualized basis at best. But if progress is measured every two weeks, then people will make incremental progress every two weeks. Two percent progress annually is mediocre. Two percent progress every two weeks can be nation-leading progress."[12] (See Appendix 3 for a sample conversation from a CitiStat meeting.)

O'Malley and his deputies could be persistent in their questioning, and some civil servants felt that "Stat meetings" were intimidating and carried the risk of blind deference to numbers. Moreover, by many accounts, the mayor's promise to shut down the city's open-air drug markets translated into police tactics targeting "quality-of-life" infractions such as loitering. Often referred to as "broken windows policing" or (less favorably) "stop-and-frisk" policing,[i] this approach to public safety came at a steep price in Baltimore and elsewhere—particularly for young Black men. Concerned about misconduct, O'Malley's administration encouraged residents to report incidents of excessive force and "discourtesy," and they did, lodging a record number of complaints during his first year in office, as arrests rose steeply. O'Malley also instituted "integrity stings" to weed out corruption, authorized the city's civilian review board to hire independent investigators, and instituted a Stat process for the police department's Internal Affairs Division that created an "early warning system" to identify officers who racked up high numbers of complaints. Internal Affairs officers reviewed the complaints and sometimes recommended retraining or other interventions.

According to O'Malley, arrests rose only slightly overall during his tenure, but in 2005 arrests spiked to 108,000, of which about one quarter were dismissed.[13] As the president of a neighborhood association pointed out to a reporter for *The Baltimore Sun*, "When you have to spend money to get a lawyer, that's money that might have been intended for a mortgage payment, or a vacation, or kids going to school."[14] The following year, the American Civil Liberties Union sued Baltimore over the BPD's high number of "quality-of-life" arrests (which it charged were often made with no probable cause), eventually winning an $870,000 settlement.[15]

In 2006, Mayor O'Malley ran for governor and won, at least in part on the strength of his results with CitiStat and CompStat. According to O'Malley, violent crime had dropped by 36 percent.[16] (See Appendix 1). Funding for drug treatment had increased, city services were more responsive than ever, and the city had saved an estimated $350 million and quadrupled its rainy-day fund.[17] Baltimore City

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[i] "Broken windows" policing refers to the idea, first articulated in *The Atlantic* by James Q. Wilson and George L. Kelling, that enforcing laws against vandalism and other visible signs of disorder would discourage more serious crimes. This theory was embraced by New York City Police Chief William Bratton, who established the CompStat system. Because the NYPD also viewed these "quality-of-life" law enforcement activities as a tactic for discovering and confiscating concealed weapons and other contraband, the practice became known as "stop-and-frisk." For more, see "Broken Windows: The Police and Neighborhood Safety" in the March 1982 issue of *The Atlantic* (https://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/) and Chapter 1 in Mark Moore's *Recognizing Public Value* (Cambridge: Harvard University Press, 2013).

Council President Sheila Dixon took over as mayor on January 18, 2007, to serve out the final year of O'Malley's term, and O'Malley brought the CitiStat model to Annapolis as "StateStat."

CitiStat in Transition

Dixon had been council president since 1999, and she knew CitiStat well. "I thought CitiStat was a great data-driven system to assess our agencies—where we were strong, where we were weak, what we needed to focus and work on," she said.[18] When Gallagher left to head StateStat, Dixon appointed Christopher Thomaskutty, who had started as a CitiStat analyst, as the unit's second director.

Mayor Dixon wanted a few changes. While retaining the departmental Stats, she pushed for CitiStat to focus on cross-agency issues in a more collaborative atmosphere: "I wanted to see results, but I wanted to see it in a way where we were working cohesively as a team. Accountability was going to be put on everyone in order to end up with a good result."

She created CleanStat, which connected several agencies to make the city "cleaner, greener, healthier and safer."[19] She also used the Stat approach to address crime, creating a GunStat unit that brought police, prosecutors, probation officers, and city hall officials together every other Thursday to review data on gun cases "from start to finish—including the kinds of weapons seized, bail amounts, defendants' criminal histories, and court outcomes."[20] It was hard to persuade agencies to share data and other materials, recalled Thomaskutty, but eventually participants realized that "this is not about [having] the same boss. It is about the same goal."[21]

Under Dixon, the BPD recruited more police officers to reduce overtime costs and created new plainclothes units—the Violent Crime Impact Section—to enact a more targeted enforcement model focused on the most violent offenders, and arrests began to fall.[22] Homicides declined 11 percent, from 282 in 2007 to 238 for 2009.[23] In December 2009, Dixon was found guilty of a misdemeanor embezzlement charge for misusing gift cards intended for poor children. She was forced to resign, and on February 4, 2010, City Council President Stephanie Rawlings-Blake became mayor.

Like Dixon, Rawlings-Blake was a CitiStat believer. "CitiStat can be a very effective management tool and an accountability tool," she said. "The essential ingredient is data—being specific, intentional, and accurate about the type of data that you're collecting, and then creating measurements to look at that data in a way that helps you identify efficiencies.[24]

By the time Rawlings-Blake took office, the Great Recession had left the city saddled with a crippling deficit of $121 million. The new mayor believed outcome-based budgeting—which directed dollars only to projects that furthered her priorities—could improve conditions while saving money. The budget crunch and disruption of the new budgeting process cost her political capital within city government. How she intended to use CitiStat to support this process was not immediately obvious, and a series of false starts damaged the program's efficacy and reputation.

Thomaskutty had begun serving as deputy mayor of administration during Dixon's tenure while remaining CitiStat director. Under Rawlings-Blake, he continued as director with a new title, deputy mayor of operations and public safety. Building on Dixon's collaborative approach, Rawlings-Blake launched cross-departmental Stat processes to improve the way the city handled problems like vacant

properties and domestic violence, but she came to believe that combining Thomaskutty's deputy mayor duties with the oversight of CitiStat created an unruly portfolio at best and a conflict of interest at worst. When Thomaskutty resigned from CitiStat in March 2012, the program had gone nearly two years without publishing a single report online.[25] His successor, who pledged to improve transparency, lasted only eighteen months. Rawlings-Blake charged the next director to put CitiStat through a thorough review, saying "I thought it was stale, and that we had just been doing what had been done."

Meanwhile, the downward trend in homicides during Dixon's term had ended in 2011 with a low of 196 murders and climbed back upward through 2012 and 2013.[26] A Johns Hopkins study found that the BPD's focus on guns and hot spots had been effective in driving down crime, but police-involved shootings and brutality claims had spiked.[27]

Riots and Fallout

On April 12, 2015, twenty-five-year-old Freddie Gray saw three BPD officers on bicycles approaching him on the street, turned, and ran the other way. The officers caught up with him, detained him, and forced him into a police van. What happened next has been heavily disputed, with eyewitness accounts contradicting the sworn testimony of the officers involved, but Gray ultimately suffered an injury that nearly severed his spinal cord.[ii]

As reports of Gray's arrest and injuries spread, a few hundred Black Lives Matter protesters demonstrated peacefully outside the Western District police station. With news of Gray's death on Sunday, April 19, unrest grew. Over the following week and into the weekend, more protests took place around the city. Police made a limited number of arrests for injuries to police and vandalism of BPD vehicles.

On Monday, April 27, the day of Gray's funeral, the city braced for more disorder. Mayor Rawlings-Blake and Gray's twin sister called for peace, but rumors spread on social media that youth were planning to rampage through the city's downtown.[28] The Maryland Transit Authority shut down public transportation without consulting the mayor.[29] Businesses and schools closed early in the afternoon, and police in riot gear blocked access to certain streets. A few stranded high school students threw bricks and bottles at police and the situation deteriorated rapidly, with police cars vandalized and set ablaze and widespread violence and looting of shops and pharmacies.[30]

Having resisted requests over the weekend from Governor Larry Hogan that she call a state of emergency, the mayor finally relented, and the governor sent in 5,000 National Guard troops—the first National Guard deployment for civil unrest inside the US since 1968. The troops helped enforce a curfew for the remainder of the week.

On May 1, the medical examiner ruled Gray's death a homicide, and the driver of the van was charged with "depraved heart" murder in the second degree. Other officers involved faced charges of assault

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[ii] For comprehensive coverage of the Freddie Gray case, see "The Killing of Freddie Gray" podcast at https://undisclosed-podcast.com/episodes/miniseries-2/. A synopsis of revelations from the *Undisclosed* investigation can be found at https://www.rollingstone.com/culture/culture-features/death-of-freddie-gray-5-things-you-didnt-know-129327/.

and manslaughter. With these charges, community outrage dissipated and the curfew was lifted. The federal Department of Justice (DOJ) opened a civil rights inquiry into Baltimore police practices.

Over the next several months, the BPD answered service calls but were otherwise eerily absent on city streets. "It was up to the community to police the community," a West Baltimore resident told a *New York Times* reporter, "And quite frankly, we were outgunned."[31] The influx of looted drugs had disrupted the illicit drug market with predictably violent results. "There's enough narcotics on the streets of Baltimore to keep it intoxicated for a year," Police Commissioner Anthony Batts told a reporter from *The Sun*. "That amount of drugs has thrown off the balance on the streets of Baltimore."[32] (Seven of his own officers from the Gun Trace Task Force would eventually plead or be found guilty of racketeering charges for participating in the theft and sale of looted drugs, among other crimes.[33]) "We're having robberies at the playground in broad daylight," a resident told the *Sun.* "All these murders and shootings, we're having them in broad daylight."[34] Rawlings-Blake fired the chief of police in July.

The following month, the mayor, frustrated with the pace of change, also fired her CitiStat director. Since she had put him in charge of revamping the agency, administrative costs had continued to rise despite a dwindling number of analysts. Its budget was set to support 240 meetings in 2014, but just eighty-nine had taken place.[35] While the mayor defended the slowdown as necessary to allow time to retool processes and align CitiStat with the outcome-based budgeting process, she ultimately saw the director as uninterested in understanding the data and using the process "as an efficiency tool." The director had also been double dipping—collecting salaries from two taxpayer-funded jobs simultaneously.[36] In October, Rawlings-Blake hired Sameer Sidh to restore the office's accountability and announced the launch of OutcomeStat, "an integration of planning, budgeting and performance management that I know will help Baltimore turn the curve on its toughest challenges."[37]

By the end of 2015, there had been 344 homicides in Baltimore and over 900 shootings.[38] Rawlings-Blake decided not to run for reelection. In August 2016, the DOJ issued a scathing report that found Baltimore police guilty of a wide array of discriminatory practices including illegal detentions, searches, and excessive force.[39]

CitiStatSMART and Mayor Pugh's Violence-Prevention Initiative

When Catherine Pugh took office as mayor on December 6, 2016, the city was once again closing in on its 300th annual homicide, and CitiStat's future was uncertain. While the model had been adopted by over twenty other cities and counties across the US, Governor Hogan had discontinued StateStat when he succeeded O'Malley in 2015.[40] In Baltimore, CitiStat Director Sidh had resumed a more regular and frequent meeting schedule, started posting agency performance summaries online for the first time in three years, and created a CitiStat Twitter account. Pugh was determined to keep CitiStat and to use the system for cross-sectoral analysis of urgent issues like distressed properties and homelessness. But when CitiStat Director Sidh resigned in July 2017, Pugh decided to take advantage of the vacancy to rethink the enterprise. "I wanted more than data," Pugh said. "I wanted solutions. . . . How do you take the data and create sustainable solutions?" On August 9, she announced the appointment of Kendra Parlock as director of a newly created Mayor's Office of Sustainable Solutions (MOSS). CitiStat would be only one part of Parlock's portfolio.

Parlock came to the job with nearly two decades of experience in private industry and a "black belt" in process management.[iii] Parlock said the MOSS job appealed to her because "using data to make decisions and all of the things you learn in the corporate world to improve processes apply here pretty naturally."[41] MOSS's stated mission was "to enable solutions which connect citizens with information, boost agency productivity, transform information access, and advance strategic priorities."[iv] She rebranded CitiStat as CitiStatSMART, invoking five criteria for performance metrics: specific, measurable, ambitious, realistic, and time-bound. She met with police, public works, and transportation department heads to establish memoranda of understanding before she began scheduling monthly Stat meetings. Mayor Pugh made it clear that she expected to see high-level agency officials at Stat meetings. On September 1, she hosted the first CitiStatSMART meeting—with the police.[v] But within weeks, it became clear that the mayor had a more ambitious objective than simply reviewing BPD activities.

One of Pugh's first moves as mayor was to designate areas of Baltimore hard-hit by crime and gun violence as "Transformation Zones" and make them eligible for extra services and resources. In early August, 2017, she appointed a new director of the Mayor's Office on Criminal Justice, and made public a violence reduction plan.[42] The plan's four pillars were: make Baltimore safe (by strengthening the BPD and increasing community engagement); keep citizens healthy (by expanding resources and opportunities); engage the city's youth (by investing in education and community programs); and move the city forward (by increasing jobs and providing business opportunities focused on neighborhoods).[43]

A federal consent decree approved in April 2017 had provided new funds for police training as well as desperately-needed equipment and technology upgrades.[vi] But Pugh recognized that the police, key to realizing her anti-crime goals, faced major challenges. Morale problems combined with natural attrition had led to the loss of 600 officers in just two years. Police chafed under the terms of the DOJ's consent decree.[vii] Moreover, the mayor acknowledged, "We've got a police department that has had some real challenges in terms of corruption."[44] Members of an elite police task force had been arrested on federal charges of racketeering, robbery, selling guns, buying drugs, and money laundering in March.[45] The police, it was clear, could not reduce violent crime alone. By October, homicides were again on track to crest well above 300 for the year.

The police commissioner understood that any number of factors contributed to troubled neighborhoods, requiring cross-departmental and cross-sector responses. BPD Chief of Staff James Gillis elaborated: "Crime happens because something else is wrong. Addressing it from a police agency standpoint requires close collaboration with other agencies and stakeholders—both internal and external—who are better equipped and empowered to fix, or better yet prevent, the issues." Potential

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[iii] This certification was awarded to Parlock by the Six Sigma program, which trains organizations and individuals in a process management methodology and offers relevant tools. For more information: https://asq.org/quality-resources/six-sigma.
[iv] For more on CitiStatSMART: https://citistat-dcdev.opendata.arcgis.com/.
[v] The police department had never stopped its internal Stat meeting, which convened Thursdays at 1 pm.
[vi] For more information on BPD technology, see the National Police Foundation's 2018 "Baltimore Police Department Technology Resource Study": https://www.documentcloud.org/documents/4555247-Bpd-Final-Technology-Inventory-Study-06-21-18.html.
[vii] The consent decree established a community oversight task force to review, advise, and report on all aspects of BPD policies, practices, and procedures, among other reforms and accountability mechanisms.

fixes and preventative measures could run the gamut, from repairing a malfunctioning streetlight to ensuring that children growing up in communities damaged by centuries of racist policies had a fair shot at a stable home and a good education. "We know that environmental factors, like abandoned homes, poor lighting, or dirty streets correlate with higher instances of crime. Or that early childhood development and improved educational outcomes equate to children who set foot on a better path to be successful later in life," said Gillis. "It is our partner agencies and stakeholders who, working collaboratively, can have an incredible impact on root causes and in addressing real-time issues that crop up and that lead to increases in crime."

On October 27, Mayor Pugh and Parlock suspended a scheduled police CitiStatSMART session to instead convene a meeting of all agencies that conceivably had an influence on crime. At the meeting, Pugh asked the police, "How do we help you do what you need to do?" and "Who else can help you do it?" Specifically, she wanted to know how they could work together to go all out for the remaining two months of the year to stem the 2016 murder rate. The police commissioner responded as specifically as he could: clear junked cars, replace broken streetlights, yank licenses from businesses offering cover for illicit activities.

By the end of the meeting, the group had sketched the outlines of what they dubbed a Violence Reduction Initiative (VRI) that would put existing anti-crime efforts on steroids. Its central premise: bring together the leaders of government agencies in a common effort to flood the worst crime-afflicted neighborhoods with police and government services, and the crime rate would decrease. As the mayor put it: "If you can drive crime down in the most violent areas, you can drive down crime all over the city."[46] Whether this hypothesis, which echoed CompStat's original emphasis on mapping crime, would prove true remained unknown.

To make VRI work, Mayor Pugh turned to the CitiStat model: put responsible individuals in the same room and oblige them to answer to one another. She asked the VRI team to commit to a daily 8 am meeting with a follow-up daily conference call at 4 pm. If agency heads could not attend, they needed to deputize a subordinate with authority to act. CitiStatSMART would track progress on a daily basis and report back. The group also created an email address list so participants could readily contact one another. The idea behind daily meetings was that the people in the room would become deeply familiar with one another and each agency's work.

The first VRI meeting was held on November 1, 2017, at the police department's Watch Center for emergency management. The group initially agreed to create five VRI zones: Central, Eastern (2), Northwestern, Tri-District, and Western; in February 2018, they added Eastern (1) and Northeastern. These neighborhoods represented 2.3 percent of the city's area, but accounted for 20 percent of violent crime, according to Gillis.[47] (See Appendix 4 for a map of the zones.)

Each meeting followed the same format. "The initial idea was it would be structured like an incident command," explained Parlock, "where you have an incident commander facilitate with a briefing and report outs . . . It's really a daily performance Stat meeting for violence reduction." Pugh was determined "to eliminate the availability of excuses, put everyone in the same room, and . . . be there to hold them all accountable," recalled Beth Blauer, director of the Johns Hopkins University Center for Government Excellence.[48]

Under VRI, the police assigned several dedicated neighborhood coordination officers to patrol each zone. The officers called in streetlights or traffic lights that were out, reported abandoned vehicles, and could suggest interventions from better lighting to compiling a list of at-risk youth. In addition, the mayor budgeted $1.6 million to pay for two DPW rapid-response crews, three extra housing inspectors to enforce code violations, and extended hours at neighborhood recreation centers.[49]

As the police identified tasks that might help reduce violent crime in the VRI zones, the list of agencies attending the VRI meetings grew longer, eventually reaching fourteen. For example, police had no authority to shut down all-night liquor and convenience stores that had become drug- trade hotspots. When the VRI group learned that the Finance Department was responsible for late-night operations licenses, a finance representative was brought in to work with police on license reviews. The State Attorney's Office, the Transportation Department, and others likewise joined. (See Appendix 5 for a list of agencies attending VRI meetings as of May 2018.)

Pugh also sought fresh leadership. On January 19, 2018, she fired Police Commissioner Kevin Davis because the city's murder rate had failed to come down for three years. In his place, she appointed Darryl de Souza—the third commissioner in five years. At the same time, she publicized early VRI results: a 58 percent drop in violence within the VRI zones in less than three months, along with decreased service request response times and increased public outreach activities. (See Appendix 6.) She also praised the initiative's success in building cross-agency relationships: "This ten, 11 weeks of experimentation I call it, I think what we found is that we created not only camaraderie but response that is needed."[50] To the surprise of some VRI participants, the mayor was firm that the group would continue to meet daily at 8 am; she saw no reason to discontinue a process that was working.

VRI in Practice

A VRI meeting routine was quickly established. Mayor Pugh—who attended the meetings at least three times a week—usually sat in the back, listening and making occasional comments. Parlock was there daily. At five long tables sat some forty people—police commanders from each zone plus representatives from other departments. (See Appendix 2 for the VRI meeting room layout.) Once a week a handout was shared with current data on violent crime, environmental improvements (cleaning streets etc.), public outreach activities, and contacts with businesses in each zone. Of ten electronic screens around the room, only one was activated—with a map of the zones. (See Appendix 7 for VRI meeting photos.)

A senior police officer ran the meetings.[viii] As the meeting opened, the convener read out handwritten numbers on a whiteboard next to the podium. Commanders from the VRI zones reported from the podium daily; on Tuesdays and Thursdays, officials from all nine of the city's police districts spoke. After the police, other department heads described their activities in the zones.

VRI report subjects ranged from the number of murders and shootings to restaurant and store investigations, clean-up efforts, community outreach, job training sessions, youth programs, and other community services. At one typical meeting, a police district commander reported, "We had a big win

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[viii] The first convener (incident commander) was Colonel Melissa Hyatt, followed by Lieutenant Colonel Richard Worley.

yesterday. The lady who was shot in the face? We found the guy who did it, arrested him." Another officer noted, "We disrupted this drug organization two to three times already. But this time, we did recover 330 grams of heroin from a trash barrel." Not all departments had news. At a request from the podium—"Finance, are you here?" and "Finance, anything to report?"—the answer came back, "Nothing to report." The Housing Department, however, reminded colleagues, "When you ask for a trash pick-up, a lot of that can be recycled. Here's the recycling number to call." The meeting adjourned after an hour.

By April 2018, VRI was showing progress. CitiStatSMART reported that homicides inside the seven VRI zones were down 30 percent compared to 2017 (citywide, the rate was down 16 percent).[51] The response time for service requests to clean up dumped trash had improved from an average three weeks to two days, and the time to remove abandoned cars and fix streetlights had been cut in half. The Bureau of Solid Waste alone said it closed 12,000 service requests from November to April.[52]

Critics pointed out that in some cases, criminal activity seemed to have simply moved. City Council Public Safety Committee Chair Brandon Scott noted, "We can see there's displacement. They can't just celebrate these zones while everything is going crazy everywhere else. Smart criminals are going to relocate."[53] Some neighborhood residents took offense at the mayor's profane suggestion that a block of abandoned buildings—homes to those who could not afford housing—should simply be torn down.[54] Others wondered if the goal was less violence reduction and more gentrification.[55] But Pugh countered that the city was aware of the potential spillover effect and was taking measures to combat it. Police Commissioner De Souza was also optimistic about the changes in the zones: "When there is a conversation about over-policing certain communities and under-serving them, I think we're flipping that."[56] Police Lieutenant Colonel Richard Worley added, "As far as the Police Department [is concerned], it's the first time that we've felt—at least speaking from my point of view—like the rest of the city was engaged."[57]

As of June 2018, MOSS was crafting strategic plans for each zone. "I don't think we think holistically about what people's needs are," noted Pugh. "It's not just the data, it's how you solve the problem . . . How we connect people to services, help, and a future is our responsibility." Parlock agreed: "We've got this great process going, everyone coming at 8 am and focused on outputs. BPD gets up and during the briefing for each area, the commander will talk about problems they are having in their area and we've got the agencies there to address concerns right on the spot. So, it's working in terms of focus on areas that need it most, but what is missing still is the focus on outcomes and a strategy for these seven areas and how we're really going to transform them."

In the spring, to relieve "meeting fatigue," Parlock had instituted weekly walking tours of the zones, which she said included "walking into priority problematic businesses and asking tough questions." The mayor found the daily meetings valuable and intended to continue holding them because she believed they were working. "When people get to know each other, they work better together toward the same goal. It's not just looking at the numbers, it's looking at the person who's responsible for the numbers," she said. "They hold each other accountable."

Small actions yielded satisfying results. For example, at one meeting, when Pugh learned that Transportation had run short of mobile streetlights, she approved more on the spot. After hearing how

few houses the city demolished and how many it boarded up, she encouraged a new policy of demolish and rebuild with the help of private sector partners. VRI participants seemed to take satisfaction in being part of a larger effort. Center for Government Excellence Director Blauer recalled one DPW manager saying, "[I] never felt more pride in the work that I'm doing, because I really do honestly believe that we're an integral part now of making Baltimore a safer place." Blauer added, "That is an employee incentive that cannot be replicated."

Still, the violence continued. Although homicide rates citywide were down an encouraging 23.3 percent through mid-June 2018, the number of non-fatal shootings remained high—and the summer lay ahead. Worse, in two VRI zones (Eastern 1, Northeastern) year-to-date murders were up over 2017, while in three (Central, Eastern 1, Northeastern) shootings were higher. (See Appendix 8.) Non-violent crime rates across the city were persistent, and the VRI zones represented only a fraction of criminal activity. In early May, Police Commissioner De Souza was forced to resign over failure to pay taxes.

New Mayor, New and Old Challenges

At the end of 2018, just over a year since the creation of the VRI, homicides had fallen somewhat—to 309 from 342 in 2017.[58] Violent crime overall had dropped 9.55 percent from the previous year but remained high by any standard.[59] In May, 2019, however, a year after De Souza's departure, it was Mayor Pugh's turn to resign under accusations of serious financial crimes.[ix]

Pugh's successor was longtime City Council President Bernard C. "Jack" Young. Within days of taking office, he faced a crippling cyberattack on Baltimore's computer infrastructure that shut down most of the city's servers. Aftershocks lasted weeks and ultimately cost the city an estimated $18 million.[60]

VRI had continued to function in the background during the turmoil of the mayoral transition with participants continuing to meet every morning and on the weekly walks; some were able to communicate via text message even during the ransomware attack. Departmental CitiStat meetings likewise continued into the early weeks of Mayor Young's tenure.

Young would be in office at least until the next election in November 2020 and had to choose where to focus his energies. A new police commissioner, Michael Harrison, had taken over in March and generally supported both CitiStat and VRI. But Parlock, director of the Mayor's Office of Sustainable Solutions and convener of the daily VRI meetings, announced her resignation in July. It fell to Young and his administration to determine how they would use data and Baltimore's ever-morphing "Stat" systems in the fight against violent crime.


[ix] Pugh was eventually found guilty of fraud and tax evasion, ordered to pay over $1,000,000 in restitution and penalties, and sentenced to three years in federal prison. See February 27, 2020, press release from the Department of Justice at https://www.justice.gov/usao-md/pr/former-baltimore-mayor-catherine-pugh-sentenced-three-years-federal-prison-fraud.

Appendices

Appendix 1   Violent Crime and Homicide in Baltimore

Figure 1: Violent crime in Baltimore per 100,000 residents, 1995-2019*
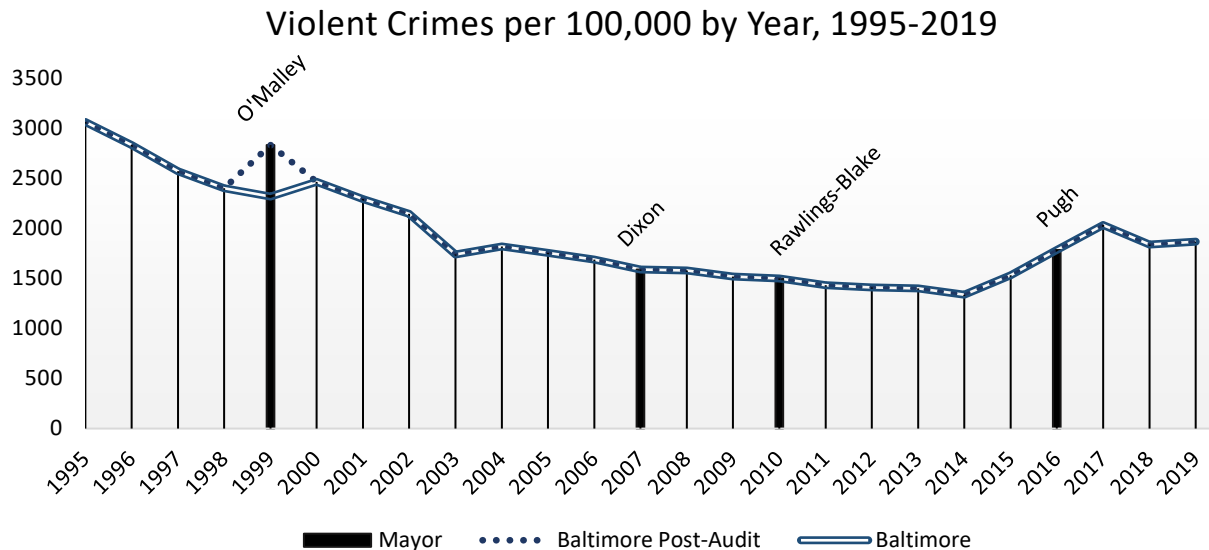
*Crime rates come from the [FBI Uniform Crime Reporting (UCR) Program](#), with the exception of 1999. Upon taking office, Mayor O'Malley ordered an audit of crime statistics, which resulted in a significantly higher number of incidents than were initially reported. The FBI did not publish violent crime data for Baltimore for 1999 due to the conflicting numbers. The audit became a point of contention in the 2006 governor's race, with some questioning the methods used. The numbers for 1999 above come from news reports. For details, see "Doubts Arise About Mayor's Crime Statistics" by Doug Donovan in the *Baltimore Sun* (https://www.baltimoresun.com/2006/02/11/doubts-arise-about-mayors-crime-statistics/) and "O'Malley Downplays Questions on Crime Statistics" by John Wagner and Ann E. Marimow in the *Washington Post* (https://www.washingtonpost.com/archive/local/2006/02/12/omalley-downplays-questions-on-crime-statistics/e8788469-4daf-45ac-8038-b5e80945b57a/).

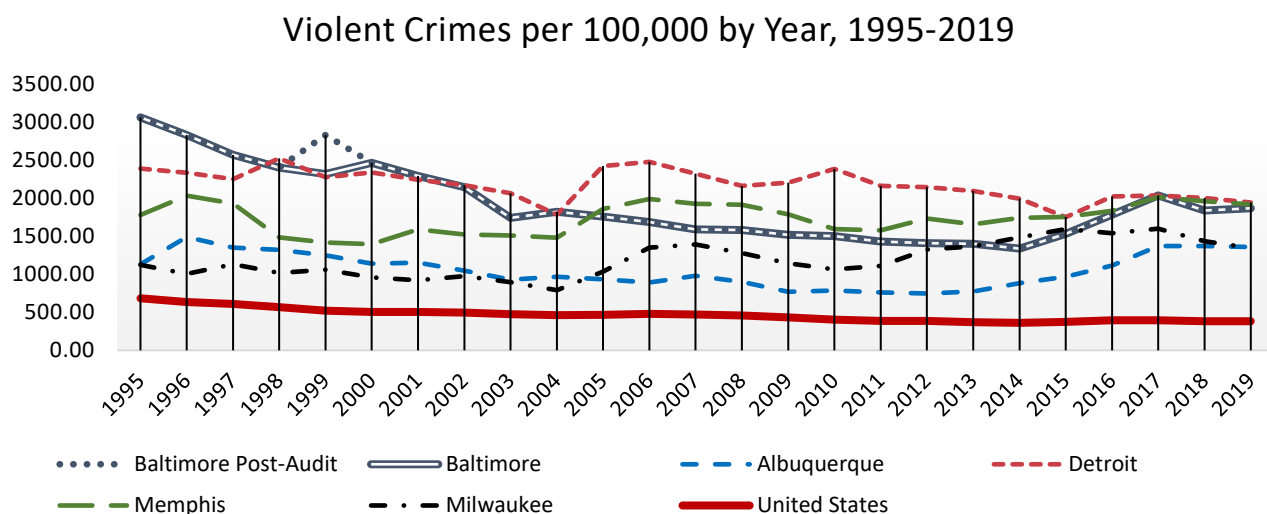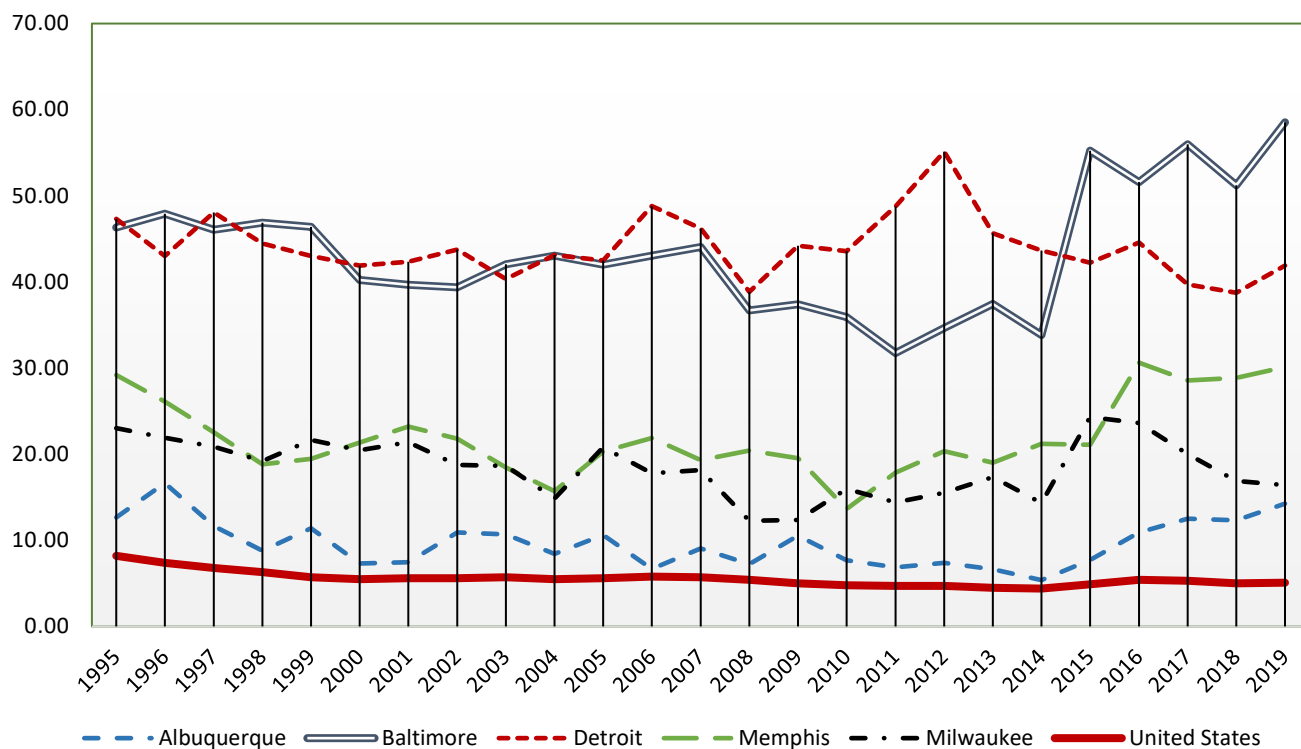Figure 2: Violent Crime in Baltimore vs. Cities with Comparable Populations and Crime Rates[†]

Figure 3: Homicides in Baltimore vs. Cities with Comparable Populations and Crime Rates, 1995-2019

Homicides per 100,000 by Year, 1995-2019

†Baltimore and the four peer cities represented in Figures 2 and 3 all fell within the top 10 US cities with the highest rates of violent crime per 100,000 residents in 2019. Peer cities selected for comparison also had population sizes similar to Baltimore (593,490 residents), from 560,786 (Albuquerque) and 670,442 (Detroit) residents as of 2019. Data are from the U.S. Census Bureau and the FBI Uniform Crime Reporting (UCR) Program.

Data source (excluding Baltimore 1999, see note on previous page, Figure 1): FBI Unified Crime Reports, modified for accessibility.

Appendix 2 Room Layouts

Figure 1: CitiStat room
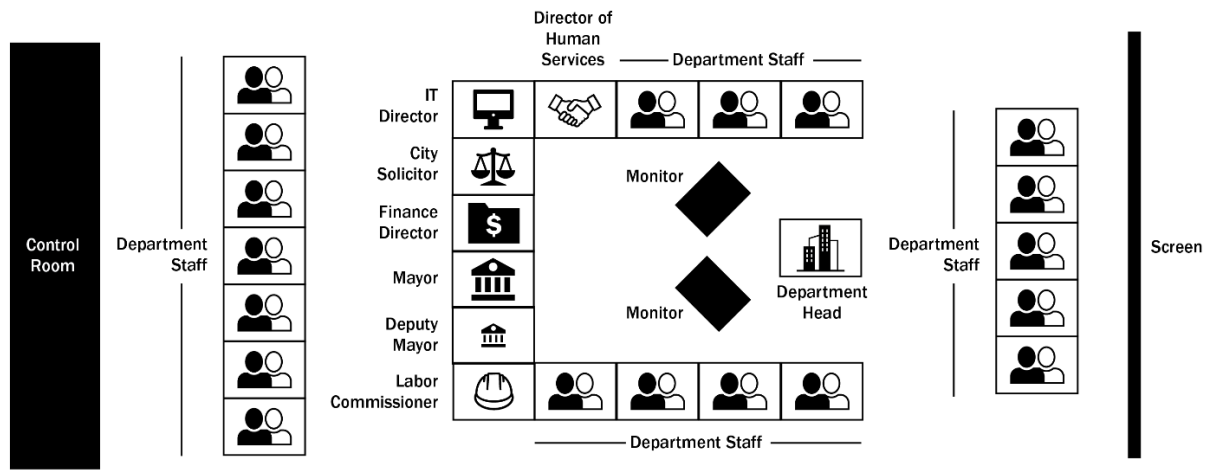
Data source: O'Malley, *Smarter Government* (image created by authors)
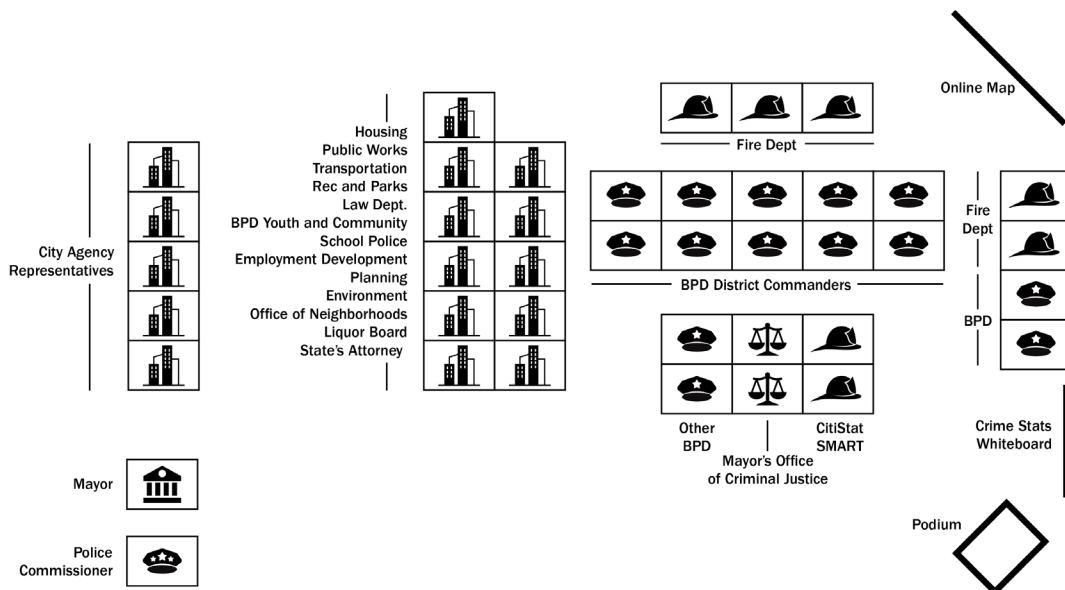
Figure 2: VRI Morning Briefing Room

Source: City of Baltimore (image created by authors)

Appendix 3 An Example of Conversation at an O'Malley CitiStat Meeting

Excerpted from Smarter Government: How to Govern for Results in the Information Age by Martin O'Malley.[61] In Chapter 1, "A New Way of Governing," O'Malley describes an early CitiStat meeting. Joe Kolodjieski, director of the Bureau of Solid Waste, is at the podium:

Top of the agenda for that CitiStat meeting was the problem of unexcused absences. This meant, quite literally, people not showing up for work. Over the years, it had grown into a major problem. And when people don't show up for their shift, others must be paid overtime to complete a collection route or fulfill a given task. It drives costs up, and it also makes us less effective and less efficient.

There were many reasons offered as to why we had such a chronic problem, including high levels of drug addiction and alcoholism among our workforce. Another reason was the gaming of our quick managerial reflex to spend more money to pay overtime rather than fire the chronically absent. Workers get paid time and a half for overtime, so a regular rotation of unexcused absences might just be a way for a cohesive crew to boost pay by slowing productivity.

Together, we needed to ask more questions. Not a never-ending range of questions on a host of irrelevant details; not the sort of questions that are designed to make the questioner look smart at a meeting ("Can this scale? Can we take a step back?"). Rather, we needed to ask more questions in order to get to the root of the problem instead of focusing on the many flowers of its symptoms.

The line of questions and answers on this day unfolded as follows:

Latest premise: "Joe, you told us last week that unexcused absenteeism is one of the biggest operational challenges you face, and you talked about the various reasons why people don't show up for work..."

Question: "When was the last time you wrote someone up (a required precursor to firing) for being repeatedly absent without excuse?"
Answer: "Can't really say, because we don't generally do that."
Question: "Why?"
Answer: "Partly because the union contract has a lot of requirements." (Note: The word "partly" is a clue to ask more questions.)

Next, a short conversation takes place openly around the table because the labor commissioner, the director of human resources, and the city solicitor are all sitting at the table and focused on the same problem. Quickly, we conclude that the union contract requires only some evidence of two or more unexcused absences and one written warning before a dismissal. We agree that we should start tracking the number of times a supervisor writes up an employee for being repeatedly absent without an excuse. A note is made for the follow-up memo that will go out to everyone after the meeting to memorialize Joe's commitment to track these leading actions of documented evidence and written warning before a disciplinary firing.

That's for the next two weeks. But this is today. And Joe is still at the podium, halfway into our one-hour CitiStat meeting that is focused on the Bureau of Solid Waste. We come back to Joe and the problem at hand.

Question: "Mr. K., you said you don't proceed with firing people who don't show up 'partly because of the union contract.' The union contract doesn't seem to be such a tough requirement, after all, so what was the other reason why we don't fire people for being chronically absent?"
Answer: "Because ultimately we don't want to lose the permanent PIN number."
Question: "What's a permanent PIN number?"
Answer: "That's essentially the budget authorization that allows you to hire and keep a full-time employee. And if we fire a full-time employee, we can only replace them with a temporary employee."
Question: "Why?"
Answer: "Because that's just the way it is."
Question: "Why is that the way it is?"

Answer: "Because the finance department captures all vacant full-time PINs for salary savings and will only give us a temporary PIN. So, we'd rather have a bad employee in a full-time PIN (with health and retirement benefits) than risk having a worse employee in a temporary PIN."

Okay, now we are getting somewhere. Supervisors don't supervise because they believe their staffing levels will be reduced if they do.

All eyes turn to the finance director—who also has a seat the CitiStat table—and the question is asked:

Question: "Madame Finance Director, do we really discourage managers from holding their employees accountable by taking vacant full-time positions and insisting they can only be replaced with temps? Or, is this a misunderstanding?"

The Finance Director believes it is most likely a misunderstanding.

Question: "Are you sure, or is that your best guess right now?"

The finance director pledges to get to the bottom of the question by the next meeting in two weeks—if not before. A note is made by the notetaker, which will also be included in the follow-up memo that goes out to all participants of that day's meeting.

As it turned out, the finance director was able to track down the answer within just a day or two. In fact, on this matter, Joe was right, and the finance director was mostly wrong. At the next meeting, the finance director reports to all in attendance, "This was a rule that was put into effect a few years back—as best as anyone can remember—to close out an operating deficit in the final months of one particular fiscal year. It was not intended to be permanent. We apparently never rescinded the policy."

Appendix 4   Map of Baltimore's Violence Reduction Zones
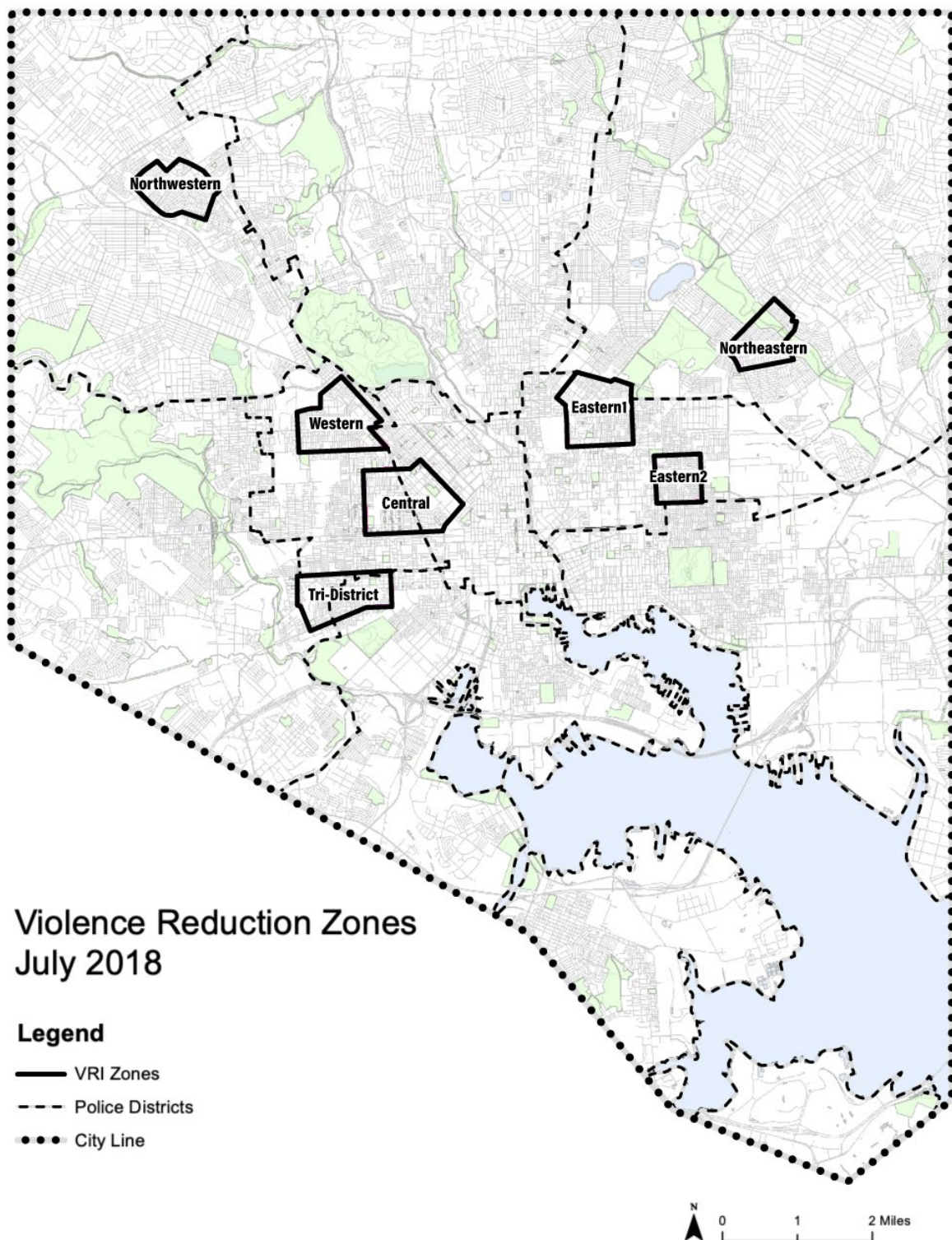
Source: Mayor's Office of Sustainable Solutions, Baltimore, modified for accessibility

Appendix 5   Departmental Attendees at VRI Meetings, May 2018

Agency	Contact #1	Contact #2
BPD Youth & Community Division	Sgt Kevin Bailey	
Baltimore City School Police	Lt Alphonso Small	Lt Thomas Schuch
MOSS/ CitiStatSMART	Kendra Parlock	
Fire Marshall	Karl Zimmerman	Del Holmes
Housing Special Investigations Unit	Kathleen Byrne	Seth Greer
Health Department	Jeff Amoros	D'Paul Nibber
Liquor Board	Joann Martin	Tom Akras, Mark Fosler
Finance Department	Dawn Cherry	Dorothy Reed
Department of Housing	Eric Booker	Jason Hessler
Department of Transportation	Marshall Goodwin	Frank Murphy
Department of Public Works	John Chalmers	Robert Murrow
Mayor's Office of Neighborhoods	Tony White	
Mayor's Office of Criminal Justice	Rexanah Wise	Daisy Heartberg
Environmental Control Board	Rebecca Woods	
Baltimore City State's Attorney Office	Derrick Greene	
Department of Planning	Stephanie Smith	
Fire Department, Operations	Chief Mark Wagner	
Mayor's Office of Employment Development	Kerry Owings	Deidre Webb
Department of Recreation and Parks	Asia Scott	Scott Stanfill
Mayor's Office of Human Services	Terry Hickey	Chris Rafferty
Law Department		

Source: Mayor's Office of Sustainable Solutions

Appendix 6   Early VRI data: Outreach and changes in service request response times

Figure 1: Outreach efforts within VRI zones during its first 11 weeks (week 44 of 2017 through week 3 of 2018)

Overdose Outreach	Needle Exchange	Safety Home Inspection	Smoke Detector Checks	Fire Public Education	Recreation Center Attendees	BPD Citizen Outreach	Employment Development (door-to-door)	TOTAL
169	1288	5397	2251	1955	18869	1740	2725	34394

Figure 2: Changes in service-request response times for the first 12 weeks of VRI vs the eight weeks pre-VRI

311 Service Requests	Streetlight(s) Out	TRS-Abandoned Vehicle	HCD-Vacant Building	SW-Dirty Street	SW-Dirty Street - Proactive	SW-HGW	SW-Boarding	SW-Dirty Alley	SW-Cleaning	HCD-Sanitation Property
Avg Time to Close (Days) Pre-VRI, Weeks 34-43 2017	2.6	3.4	7.3	2.6	0.7	24.5	3.8	2.7	19.1	6.4
Avg Time to Close (Days) VRI Weeks 44, 2017 - 3, 2018	**1.3**	**1.5**	**1.9**	**2.2**	**0.1**	**1.5**	**1.5**	**1.9**	**2.1**	**2.2**

Source: Mayor's Office of Sustainable Solutions

Appendix 7   VRI Meeting, June 14, 2018

White board compares citywide data from the first two weeks of June 2018 and 2017: 11 homicides and 26 nonfatal shootings in 2018, with 13 homicides and 39 nonfatal shootings in June 2017. A separate entry notes that June 2017 saw a total of 24 homicides and 72 nonfatal shootings. Finally, the board lists the times and addresses of two nonfatal incidents from June 14, 2017.
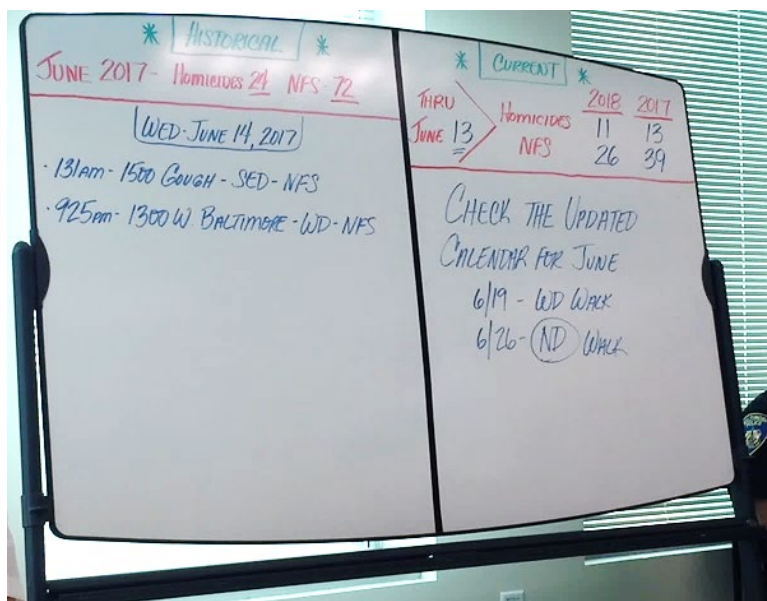
Photos by Kirsten Lundberg, used with permission

Appendix 8   Crime Data: First Five Months of VRI

Figure 1: Homicides/shootings in the VRI zones vs citywide, January through June 13 in 2017 and 2018

VRI Zones*	Jan 1, 2017 – June 13, 2017	Jan 1, 2018 – June 13, 2018	% Change
Homicides	41	28	-31.7%
Non-fatal shootings	72	59	-18.1%
Total	113	87	-23.0%
Citywide			
Homicides	159	122	-23.3%
Non-fatal shootings	276	257	-6.9%
Total	435	379	-12.9%

*These figures exclude the Southern (Brooklyn) zone, which did not exist as of June 13, 2018.
Source: Baltimore Police Department

Figure 2: Homicides/shootings in the VRI zones mid-February through June 13 for 3 years, 2016-2018

VRI Zone Crime	2016 Feb	Mar	Apr	May	Jun	2016 Total	2017 Feb	Mar	Apr	May	Jun	2017 Total	2018 Feb	Mar	Apr	May	Jun	2018 Total	Grand Total
Central	1	3	2	6		12	2	3	2	3	2	12	2	2		4	1	9	42
HOMICIDE	1		2	1		4	1	1		2	1	5	1					1	13
SHOOTING		3		5		8	1	2	2	1	1	7	1	2		4	1	8	29
Eastern 1	3	5	1	4		13	4		7	2	2	15	1	3	12	1	2	19	69
HOMICIDE	1	1	1	2		5			2	1	1	4		2	4		1	7	18
SHOOTING	2	4		2		8	4		5	1	1	11	1	1	8	1	1	12	51
Eastern 2	4	5	6	3		18	3	4	6	1	1	15			4			4	47
HOMICIDE	2	3	1			6		1	3	1		5			1			1	14
SHOOTING	2	2	5	3		12	3	3	3		1	10			3			3	33
Northeastern			1	2		3		1				1	1	1	5			7	12
HOMICIDE			1	1		2							1					1	4
SHOOTING				1		1		1				1		1	5			6	8
Northwestern				2		2	2	1	2	5		10	3		1	1		5	27
HOMICIDE				1		1	1	1		2		4	2					2	9
SHOOTING				1		1	1		2	3		6	1		1	1		3	18
Tri-District	2	1	2	6	1	12	3	4	10	3		20		5	2	4	1	12	58
HOMICIDE	1	1	1	1		4	1	1	4	1		7		2	1	2		5	19
SHOOTING	1		1	5	1	8	2	3	6	2		13		3	1	2	1	7	39
Western	4	3	2	3		12	2	6	3	8	2	21		5	6	1	1	13	61
HOMICIDE	2	1		1		4		2	1	3	1	7		2	2		1	5	19
SHOOTING	2	2	2	2		8	2	4	2	5	1	14		3	4	1		8	42
Grand Total	14	17	14	26	1	72	16	19	30	22	7	94	7	16	30	11	5	69	316

Figure 3: Four years of homicides and nonfatal shootings in VRI zones, mid-February through mid-June
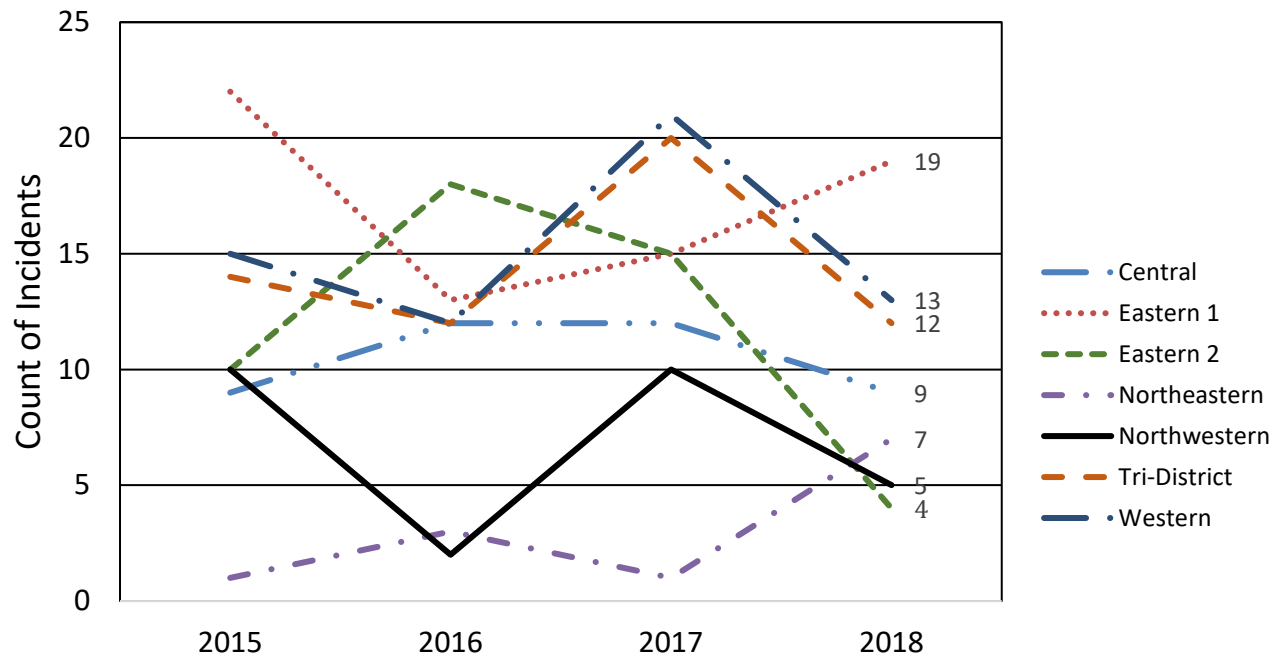(weeks 6-23)

Figure 4: All Crimes, VRI Zones vs Citywide, January-June 2018

VRI 2018	Jan	Feb	Mar	Apr	May	Jun	Total
HOMICIDE	6	4	6	8	2	4	30
SHOOTING	10	3	10	22	9	11	65
RAPE	3	4	6	5	4	3	25
ROBBERY - CARJACKING	2	3	8	4	2	3	22
ROBBERY - COMMERCIAL	8	7	2	5	5	8	35
ROBBERY - RESIDENCE	6	3	7	3	3	6	28
ROBBERY-STREET	24	11	28	25	25	23	136
AGG. ASSAULT	55	45	53	85	89	82	409
ARSON	3		3	2	2		10
AUTO THEFT	44	36	43	39	30	30	222
BURGLARY	68	63	41	40	49	56	317
LARCENY	73	61	74	91	96	82	477
LARCENY AUTO	22	28	26	21	25	36	158
Grand Total	324	268	307	350	341	344	1934

CITYWIDE 2018	Jan	Feb	Mar	Apr	May	Jun	Total
HOMICIDE	26	15	17	33	20	23	134
SHOOTING	37	23	53	60	59	57	289
RAPE	29	34	31	32	28	41	195
ROBBERY - CARJACKING	54	37	37	23	28	35	214
ROBBERY - COMMERCIAL	96	48	64	54	65	88	415
ROBBERY - RESIDENCE	41	29	59	45	42	35	251
ROBBERY-STREET	298	225	233	266	282	222	1526
AGG. ASSAULT	369	312	413	483	540	477	2594
ARSON	12	11	12	14	11	9	69
AUTO THEFT	465	308	305	323	303	310	2014
BURGLARY	537	428	426	444	466	479	2780
LARCENY	669	611	642	751	921	886	4480
LARCENY AUTO	346	385	384	367	471	481	2434
Grand Total	2979	2466	2676	2895	3236	3143	17395

Source for figures 2, 3, and 4: Mayor's Office of Sustainable Solutions

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