PUBLISHED

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

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_	No. 20-1495	
LEADERS OF A BEAUTIFUL ST JAMES,	RUGGLE; ERRICKA BRIDGEFORD	; KEVIN
Plaintiffs – Appellants	,	
v.		
BALTIMORE POLICE DEPARTM capacity as Baltimore Police Comm	IENT; MICHAEL S. HARRISON, in hissioner,	is official
Defendants - Appellee	S	
Appeal from the United States Dis Richard D. Bennett, District Judge.	trict Court for the District of Maryland (1:20-cv-00929-RDB)	d, at Baltimore.
Argued: September 10, 2020	Decided: No	vember 5, 2020
Before GREGORY, Chief Judge, an	nd WILKINSON and NIEMEYER, Cir	cuit Judges.
Affirmed by published opinion. J	udge Wilkinson wrote the opinion, in	n which Judge

ARGUED: Brett Max Kaufman, AMERICAN CIVIL LIBERTIES UNION FOUNDATION, New York, New York, for Appellants. Rachel Simmonsen, BALTIMORE CITY LAW DEPARTMENT, Baltimore, Maryland, for Appellees. **ON BRIEF:** David R. Rocah, AMERICAN CIVIL LIBERTIES UNION FOUNDATION OF MARYLAND, Baltimore, Maryland; Ashley Gorski, Alexia Ramirez, Nathan Freed Wessler, Ben Wizner, AMERICAN CIVIL LIBERTIES UNION FOUNDATION, New York, New York, for Appellants.

Niemeyer joined. Chief Judge Gregory wrote a dissenting opinion.

WILKINSON, Circuit Judge:

Plaintiffs appeal the district court's denial of their request for a preliminary injunction against Baltimore's aerial surveillance program. For the reasons set forth herein, we conclude that the district court did not abuse its discretion in denying the preliminary injunction.

I.

Baltimore sadly has experienced a serious recent rise in homicides. For each of the past five years, Baltimore has been victimized by at least three hundred murders. In 2017, Baltimore experienced a higher absolute number of murders than New York City, a city with fourteen times Baltimore's population. *See* Alec MacGillis, *The Tragedy of Baltimore*, N.Y. Times Magazine, Mar. 17, 2019, at 32. Moreover, the Baltimore Police Department (BPD) has struggled to respond effectively to this increase in murders. In 2019, it cleared just 32.1% of homicide investigations, its lowest rate in several decades. Jessica Anderson, *Baltimore Ending the Year with 32% Homicide Clearance Rate, One of the Lowest in Three Decades*, Balt. Sun, Dec. 30, 2019.

As Judge Bennett noted during the preliminary injunction hearing, "even a pandemic cannot slow the pace of killings" in Baltimore. Transcript of Preliminary Hearing at 74, *Leaders of a Beautiful Struggle v. Balt. Police Dep't*, No. RDB-20-0929, 2020 WL 1975380 (D. Md. Apr. 24, 2020). As of April 21, the date of the district court's hearing, Baltimore was on pace for a higher number of murders this year than in 2019. *Leaders of a Beautiful Struggle v. Balt. Police Dep't*, No. RDB-20-0929, 2020 WL 1975380, at * 15 (D. Md. Apr. 24, 2020).

One step taken by the BPD to strengthen its hand against violent crime is the Aerial Investigative Research program (AIR). It is a carefully limited program of aerial observations of public movements presented as dots, and it is important at the outset to say all the things the program does not do. It does not search a person's home, car, personal information or effects. It does not photograph a person's features. The program has been progressively circumscribed to meet the thoughtful objections of civil libertarians, though not sufficiently in plaintiffs' view.

To implement and test this program, the BPD has partnered with a private company, Persistent Surveillance Systems (PSS). The program operates by flying three small planes over Baltimore during daytime hours, weather permitting. The planes are equipped with cameras that cover about ninety percent of the city at any given time. The cameras employ a resolution that reduces each individual on the ground to a pixelated dot, thus making the cameras unable to capture identifying characteristics of people or automobiles.

The resulting photographs are transmitted to a control room, staffed by fifteen to twenty-five analysts employed by PSS along with BPD officers. The control room can access the photographs only when specific violent crimes—shootings, robberies, and carjackings—are reported in a particular location. Upon receiving a notification, analysts can "tag" the dots photographed around the crime scene and track those dots' public movements in the hours leading up to and following the crime. The process takes about eighteen hours and provides the BPD with a report that includes the location and timing of the crime, the observable actions at the crime scene, the tracks of people and vehicles to and from the crime scene, and the locations the individuals at the crime scene visited before

and after the crime. Using that data, the police can employ existing surveillance tools, such as on-the-ground surveillance cameras and license-plate readers, to identify witnesses and suspects. Within seventy-two hours, analysts can give the police a more detailed report about those present at the crime scene that potentially includes identifying information.

The partnership between PSS and the BPD began in 2016, when AIR was used to obtain about three hundred hours of surveillance. The BPD did not disclose the privately funded program's existence to the public, Baltimore's elected officials, or even the city solicitor. Then-Police Commissioner Kevin Davis later stated that he wanted to see if the program worked before bringing it to the City Council. After a news article exposed the program's existence, it was temporarily shut down.

Under a new police commissioner, defendant Michael Harrison, the BPD moved to reactivate AIR and introduced safeguards intended to guard against potential abuses. In the name of transparency, the BPD has made public its contract with PSS and hosted public fora via social media networks like Facebook to explain and answer questions about AIR. Further, the BPD rallied substantial political support for the project, including from Governor Larry Hogan, dozens of crime victims, community groups, business advocacy groups, and the United Baptist Ministry Convention. The BPD has also adopted several limitations on the collection, use, and retention of photographs obtained through AIR surveillance in its contract with PSS. *See* J.A. 69–73. Those limitations are as follows:

• AIR's planes fly only the daytime hours, weather permitting, and never at night.

- AIR uses limited resolution cameras that identify individuals only as pixelated dots in a photograph. Analysts examining these photographs are not able to identify an individual's race, gender, or clothing.
- If a dot is seen entering a building in a photograph, analysts cannot know if the same person is leaving the building when they see a dot leave the building without the use of other surveillance tools.
- The cameras do not utilize zoom, infrared, or telephoto technologies.
- Analysts cannot access photographs until they receive a notification related to the investigation of a specific murder, non-fatal shooting, armed robbery, or carjacking.
- There will be no live tracking of individuals. Analysts can only use AIR's photographs to look at past movements.
- If an arrest is made using the AIR technology, the photos related to the arrest will be given to the prosecutor and defense counsel. Otherwise, all photographs collected by AIR will be deleted after forty-five days.

After the district court denied the plaintiffs' request for a preliminary injunction, AIR became operational. It is currently near the completion of a six-month testing period, at the end of which its continued use will be assessed. As part of this assessment, the BPD has invited several independent research partners to study the program. The RAND Corporation will study how effective the program is at solving crimes. The Policing Project at the New York University School of Law will assess possible civil rights and civil liberties concerns. The University of Baltimore will study how residents of Baltimore perceive the program and whether, if at all, the program affects views of police legitimacy.

II.

On April 9, 2020, plaintiffs sued the BPD and Commissioner Harrison under 42 U.S.C. § 1983 challenging the constitutionality of the AIR program under the First and

Fourth Amendments. They alleged that the program would infringe their reasonable expectations of privacy because the police were likely to generate activity reports about them, that it would hinder their work in the community by making people afraid to talk to them on the streets for fear of being surveilled, and that it would chill their First Amendment rights by making them more hesitant to associate with people for fear of being observed. They sought a preliminary injunction.

After a hearing, the district court judge denied plaintiffs' request for a preliminary injunction. After finding that plaintiffs had standing, the court concluded that a preliminary injunction was inappropriate because plaintiffs were not likely to succeed on the merits of their complaint. *Leaders of a Beautiful Struggle*, 2020 WL 1975380 at *8–13. The court discussed the various technical limitations of the AIR program, including that the planes can only fly twelve hours and only during the day (weather permitting) and that individuals would only be represented as pixelated dots to the persons looking at the captured images. *Id.* at *4. The upshot of these limitations, Judge Bennett explained, was that individuals' movements could not be tracked over the course of multiple days. *Id.* at *12. He reasoned that the Supreme Court and the Fourth Circuit had upheld more intrusive forms of aerial surveillance, and that the Supreme Court's decision in *Carpenter v. United States*, 138 S. Ct. 2206 (2018), did not abrogate those precedents. *Leaders of a Beautiful Struggle*, 2020 WL 1975380 at *9–12.

III.

As a preliminary matter, we reject the defendants' argument that plaintiffs lack standing to bring this lawsuit. Article III of the Constitution limits the judicial power of the

United States to "Cases" and "Controversies." U.S. Const. art. III, § 2. To implement this limitation on judicial power, the Supreme Court has explained that a litigant must show an injury in fact, that the injury is caused by the defendant's unlawful conduct, and that the injury is redressable by a favorable judicial ruling. *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 103 (1998).

Defendants argue that plaintiffs' alleged injuries are too speculative to establish standing. They reason that the potential injury lies at the end of an attenuated chain of possibilities where the BPD successfully identifies who plaintiffs are. But the injury plaintiffs complain of is not being identified by the BPD, but merely that they are being photographed. And that is almost certain to occur, considering that AIR's cameras can capture around ninety percent of Baltimore in a given moment.

In Wikimedia Foundation v. National Security Agency, 857 F.3d 193 (4th Cir. 2017), this court found a concrete injury in a very similar case. There the plaintiffs alleged that the government was unlawfully intercepting and copying their Internet communications. *Id.* at 209–10. The government argued the plaintiffs lacked standing because they did not allege the NSA's collection involved human review, making it speculative the plaintiffs would be identified as their communications were collected. But this court found standing—the fact that the NSA collected and copied the communications was sufficient. *Id.* at 209–11. So too here. It is enough to confer standing that plaintiffs are likely to be photographed.

By asking us to reverse the district court's denial of a preliminary injunction, plaintiffs face a doubly heavy burden on appeal. First, we review a district court's denial of a preliminary injunction for abuse of discretion. *See Gonzales v. O Centro Espirita Beneficente Uniao do Vegetal*, 546 U.S. 418, 428 (2006). This deference recognizes the traditional power district courts have had to craft remedies appropriate "to the necessities of the particular case," *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982), and it reflects a commitment by appellate courts not to second-guess a district court's remedial decision absent special circumstances.

Second, plaintiffs seek an extraordinary remedy that should "be granted only sparingly and in limited circumstances." *MicroStrategy Inc. v. Motorola, Inc.*, 245 F.3d 335, 339 (4th Cir. 2001) (internal quotation marks omitted). As the Supreme Court explained in *Winter v. Natural Resources Defense Council, Inc.*, 555 U.S. 7 (2008), "[a] preliminary injunction is an extraordinary remedy never awarded as of right." *Id.* at 24. This principle reflects the reality that courts are more likely to make accurate decisions after the development of a complete factual record during the litigation. DOUGLAS LAYCOCK & RICHARD L. HASEN, MODERN AMERICAN REMEDIES 453 (5th ed. 2019).

To satisfy this standard, plaintiffs must make a "clear showing" that they satisfy four independent requirements. *Winter*, 555 U.S. at 22; *see also Real Truth About Obama*, *Inc. v. Fed. Election Comm'n*, 575 F.3d 342, 346 (4th Cir. 2009) (clarifying that all four requirements must be independently satisfied by the party seeking a preliminary injunction). Plaintiffs must demonstrate that: (1) they are likely to succeed on the merits of

their legal claims; (2) they are likely to suffer irreparable harm in the absence of preliminary relief; (3) the balance of equities favors the grant of preliminary relief; and (4) that "an injunction is in the public interest." *Winter*, 555 U.S. at 20. These requirements make clear that preliminary injunctions should not be casually awarded.

We shall first address plaintiffs' likelihood of success on the merits.

Α.

The Fourth Amendment states that "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." U.S. Const. amend. IV. In evaluating whether a search is reasonable, the Supreme Court has established a variety of doctrinal tests to be used depending on the specific context of the search. The reasonable expectation of privacy test is the Court's most prominent standard, and we will evaluate the AIR program under it.

The Court has also tailored its standard to programs of searches designed to solve important public safety problems. Mindful that, "[a]s the text of the Fourth Amendment indicates, the ultimate measure of the constitutionality of a government search is 'reasonableness,'" *Maryland v. King*, 569 U.S. 435, 447 (2013) (quoting *Veronica School Dist. 47J v. Acton*, 515 U.S. 646, 652 (1995)), courts are sometimes required to balance the degree of invasion of Fourth Amendment rights against the public safety interests furthered when assessing the reasonableness of a surveillance program. The Supreme Court has held that this standard applies to assess drunk driving checkpoints, *see Michigan Dep't*

of State Police v. Sitz, 496 U.S. 444 (1990), suspicionless searches at the border, see United States v. Flores-Montano, 541 U.S. 149 (2004), and programmatic searches in prisons. See Florence v. Bd. of Chosen Freeholders, 566 U.S. 318 (2012). Therefore, we will also evaluate the AIR program under the balancing test used for programmatic searches.

We conclude initially that the AIR program does not violate a reasonable expectation of privacy. This test has both a subjective and an objective component. The court must first ask whether an individual actually expects that something will be kept private from surveillance and then whether society is prepared to recognize that expectation as reasonable. *Carpenter*, 138 S. Ct. at 2213. "Although no single rubric definitively resolves which expectations of privacy are entitled to protection, the analysis is informed by historical understandings 'of what was deemed an unreasonable search and seizure when [the Fourth Amendment] was adopted." *Id.* at 2213–14 (quoting *Carroll v. United States*, 267 U.S. 132, 149 (1925)). The Court recognized two "guideposts" to assist the inquiry. First, a court should ask whether the government action arbitrarily invades the privacies of life. *Id.* at 2214. Second, courts should be wary of "a too permeating police surveillance." *Id.* (quoting *United States v. Di Re*, 332 U.S. 581, 595 (1948)).

A cardinal rule that emerges from the Supreme Court's caselaw is that an individual has a limited expectation of privacy in his or her public movements. "What a person knowingly exposes to the public . . . is not a subject of Fourth Amendment protection." *Katz v. United States*, 389 U.S. 347, 351 (1967). Thus, "[a] person travelling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another." *United States v. Knotts*, 460 U.S. 276, 281 (1983).

In light of that rule, the Supreme Court has found no Fourth Amendment violation when the police used a tracking device placed inside a container to track an automobile on public streets. *Id.* at 285.

In *United States v. Jones*, 565 U.S. 400 (2012), five Justices qualified this rule through separate opinions by Justices Alito and Sotomayor. These two concurring opinions reasoned that long-term surveillance using GPS tracking violated a reasonable expectation of privacy. *Id.* at 414–15 (Sotomayor, J., concurring); *id.* at 430–31 (Alito, J., concurring in the judgment) (distinguishing between a long-term surveillance using GPS for twenty-eight days, which he thought was impermissible, and a shorter-term surveillance of public movements).

The lesson from these cases is that *short-term* surveillance of an individual's *public* movements is less likely to violate a reasonable expectation of privacy. And under that rule, the AIR program passes muster. As Judge Bennett explained, the built-in limitations of the AIR program mean that it *only* enables the short-term tracking of public movements. First, the AIR program's cameras are only able to track outdoor movements. They cannot track an individual who enters a building, and analysts cannot tell if the person leaving the building is the same person who entered it. Second, AIR's surveillance planes only fly during twelve daylight hours. Because they do not fly at night, AIR surveillance cannot be used to track individuals from day-to-day.

In response, plaintiffs object that the police may be able to use preexisting surveillance tools, like security cameras and license plate readers, in conjunction with AIR photographs to track individuals from day to day. But plaintiffs do not challenge these

existing tools—only the AIR program in particular. And for good reason. The Supreme Court specifically stated that traditional surveillance tools, specifically security cameras, remain lawful in light of *Carpenter*, 138 S. Ct. at 2220, and we are not at liberty to revisit that conclusion.

Further, the Supreme Court has already held that various types of aerial surveillance do not invade a reasonable expectation of privacy. In *California v. Ciraolo*, 476 U.S. 207 (1986), the government flying a plane a mere one thousand feet over an individual's home to photograph items within a fenced-in backyard did not violate a reasonable expectation of privacy. *Id.* at 209. The Court held that this intrusive surveillance was permissible as long as the surveillance plane remained "within public navigable airspace" and the surveillance was done "in a physically nonintrusive manner." *Id.* at 213. Both of those requirements are satisfied by AIR. Indeed, the AIR cameras cannot photograph an individual item within a backyard—the program is decidedly less intrusive than the surveillance in *Ciraolo*.

Similarly, in *Dow Chemical Co. v. United States*, 476 U.S. 227 (1986), the Supreme Court found no invasion of a reasonable expectation of privacy when the government repeatedly flew a plane over a factory and photographed items as small as one half inch in diameter. *Id.* at 239. In this case, AIR does not use cameras capable of photographing objects that small. Not even close. Individuals are just dots, and analysts cannot identify a person's race or sex from an AIR photograph. And like the surveillance in that case, AIR captures no "intimate details" of the sort that might implicate Fourth Amendment protections. *Id.* at 238.

Finally, in *Florida v. Riley*, 488 U.S. 445 (1989), the Court again upheld surveillance more intrusive than that in AIR. There, government agents circled four hundred feet above a home in a helicopter to look into a greenhouse partially within the home's curtilage. *Id.* at 450. AIR involves no surveillance of an individual's home or curtilage, and its aerial planes do not harass individual homeowners by hovering closely above their homes.

In light of these precedents, we cannot hold that AIR violates a reasonable expectation of privacy. AIR is merely a tool used to track short-term movements in public, where the expectation of privacy is lessened. Such an activity is lawful in light of *Knotts* and Jones. And the specific tool which the BPD will use for the surveillance, aerial photography, has been sanctioned by the Supreme Court in several cases. See also Brandon Nagy, Why They Can Watch You: Assessing the Constitutionality of Warrantless Unmanned Aerial Surveillance by Law Enforcement, 29 BERKELEY. TECH. L.J. 135, 155 (2014) ("[T]he Supreme Court's guidance, as derived from Riley, Dow, and Ciraolo, appears to be that aerial surveillance, whether by naked eye or assisted by some technology, conducted from lawful airspace that is traversed by aircraft with sufficient regularity, and that does not interfere with the victim's use of her property, is not a Fourth Amendment search and does not require a warrant."). Unlike the aerial surveillance previously upheld, AIR photographs cannot even be used to identify specific items within backyards or a person's identifying characteristics.

The Supreme Court's decision in *Carpenter* does not require a different result. In *Carpenter*, the Supreme Court considered whether targeting an individual and tracking his

specific movements over a six-day period invaded a reasonable expectation of privacy. 138 S. Ct. at 2217. The technology at issue in *Carpenter* was cell-site location information (CSLI), which was obtained because cell phones report their location to wireless towers several times every minute. *Id.* at 2211–12. In Carpenter's case, the government had, on average, 101 location data points for each of the seven days it obtained CSLI data. Because "a phone goes wherever its owner goes," CSLI provides a "comprehensive record of the person's movements." *Id.* at 2217. In summary, the Court held, CSLI "is detailed, encyclopedic, and effortlessly compiled." *Id.* at 2216. But the Court also emphasized the narrowness of its holding, insisting it did not "call into question conventional surveillance techniques and tools, such as security cameras." *Id.* at 2220.

The district court recognized the important technological differences between CSLI and the aerial surveillance at issue in this case. *Leaders of a Beautiful Struggle*, 2020 WL 1975380, at *12 ("*Carpenter* simply does not reach this case because CSLI offers a far more intrusive, efficient, and reliable method of tracking a person's whereabouts than the AIR pilot program."). Whereas CSLI could be used to reliably track an individual's movement from day to day, AIR can only be used to track someone's outdoor movements for twelve hours at most. *See Carpenter*, 138 S. Ct. at 2220 (stating CSLI gives law enforcement a "detailed chronicle of a person's physical presence compiled every day, every moment, over several years"). The technologies are also used quite differently. CSLI is used by law enforcement to learn detailed information about someone it is already monitoring. *Id.* at 2218 (explaining that CSLI tracking reveals an extensive amount of private information to law enforcement). In contrast, AIR is used to identify suspects and

witnesses to crimes; it takes no deep dive into an individual's life and in fact can tell the police very little about an identified person. Finally, *Carpenter* emphasized that CSLI surveillance was "remarkably easy" and "cheap," which meant that CSLI could easily be used to track large numbers of identifiable people. *Id.* at 2217–18. AIR, in contrast, is not. After flying a plane over the city, it takes an analyst hours to tag a person of interest and reconstruct a couple of hours of his public movements.

Our opinion should not be overread. Although we conclude that AIR does not invade a reasonable expectation of privacy, our decision should not be interpreted as endorsing all forms of aerial surveillance. We only address the AIR program, which has built-in limitations designed to minimize invasions of individual privacy. We do not address a surveillance program that includes, for example, twenty-four hour surveillance of indoor and outdoor spaces using photographs that allow analysts to immediately identify the specific people being photographed. Although plaintiffs insist that AIR could spawn something more intrusive than the program here, we must adjudicate each case based on the facts before us. By proceeding cautiously, we heed Justice Frankfurter's warning to tread carefully in cases involving new technology, lest we "embarrass the future." *Nw. Airlines, Inc. v. Minnesota*, 322 U.S. 292, 300 (1944).

B.

In addition to not infringing a reasonable expectation of privacy, the AIR program seeks to meet a serious law enforcement need without unduly burdening constitutional rights. In such programmatic contexts, the Court assesses searches and seizures by balancing the burden on constitutional rights against other law enforcement and public

safety needs. *See, e.g.*, *Grady v. North Carolina*, 575 U.S. 306, 310 (2015) (per curiam); *Samson v. California*, 547 U.S. 843, 848 (2006) ("Whether a search is reasonable 'is determined by assessing, on the one hand, the degree to which it intrudes upon an individual's privacy and, on the other hand, the degree to which it is needed for the promotion of legitimate governmental interests." (quoting *United States v. Knights*, 534 U.S. 112, 118–19 (2001)).

The Supreme Court has not given comprehensive guidance on when this balancing test applies. It has, however, applied it in a wide variety of cases upholding programs and policies addressing imperatives of public safety so long as—and this is crucial—the program does not unreasonably burden personal privacy rights. See, e.g., King, 569 U.S. at 447 (upholding policy of swabbing the DNA of all arrestees for violent offenses); Bd. of Educ. of Indep. Sch. Dist. No. 92 of Pottawatomie Cty. v. Earls, 536 U.S. 822 (2002) (upholding program of drug testing of students who wished to participate in competitive extracurricular activities); Nat'l Treasury Emps. Union v. Von Raab, 489 U.S. 656 (1989) (holding that policy requiring employees seeking promotions to positions involving drug enforcement to submit to urine tests was reasonable under balancing test). And in *Michigan* Department of State Police v. Sitz, 496 U.S. 444 (1990), for example, the Supreme Court upheld a program of drunk-driving checkpoints at which police officers randomly stopped motorists without individualized suspicion. Id. at 447. The Court justified its decision, in large part, by emphasizing the "magnitude" of the threat posed by drunk drivers to public safety. Id. at 451 ("No one can seriously dispute the magnitude of the drunken driving problem or the States' interest in eradicating it.").

We emphasize that the Court has not just issued sweeping approvals of suspicionless search programs. The key word is balancing. For example, the Court has repeatedly reaffirmed that "searches made at the border, pursuant to the longstanding right of the sovereign to protect itself by stopping and examining persons and property crossing into this country, are reasonable simply by virtue of the fact that they occur at the border . . . "United States v. Ramsey, 431 U.S. 606, 616 (1977). But although the government's interest in conducting searches and seizures is high at the border, the Court still balanced that law enforcement need against the privacy interests invaded. See, e.g., United States v. Flores-Montano, 541 U.S. 149, 154–56 (2004) (considering the privacy interests of an individual whose car was partially disassembled during a border search). And it recognized that a search could be intrusive enough or so destructive of property so as to make it constitutionally unreasonable. Id. at 155–56.

Two factors support the validity of Baltimore's AIR program under the Supreme Court's reasonableness balancing test for such programs. First, this program is not being used to target particular individuals. Instead, it is used to track non-identified individuals only under certain circumstances—namely, once a shooting, armed robbery, or carjacking has been reported in a specific location. An individual will not have his public movements tracked unless he happens to be at the scene of one of these violent crimes. Ignoring this dynamic, plaintiffs complain they are particularly likely to be targeted because of their community activism. But the AIR program cannot be used to target them *as individuals*; they do not appear in the photographs as individuals, but as featureless pixelated dots.

Second, the AIR program is designed to serve critical government purposes. *Von Raab*, 489 U.S. at 665–66. Baltimore is plagued by violent crime, and the BPD has struggled to capture the perpetrators. Although the BPD can take advantage of existing networks of cameras and license plate readers, holes in their coverage may leave the police dependent on eyewitnesses, who may not exist or be feasible to find. The AIR program is designed to assist in that effort.

Baltimore's AIR program thus passes the Supreme Court's balancing test. On the one hand, the BPD has a clearly demonstrated need for this surveillance. The violent crime rates in Baltimore are astonishing, being indisputably among the worst in the country. And despite law enforcement's best efforts, its low clearance rate—just 32.1% in 2019 for murders—shows the challenge is formidable and this additional tool important.

On the other hand, the program has been carefully designed to impose a minimal burden on constitutional rights. We stress yet again that the BPD's contract with PSS establishes important limitations on how the AIR program can be used. Individuals photographed by AIR are, as noted, represented as mere dots without race, gender, or other identifiable characteristics. AIR only captures outdoor movements, and individuals cannot be tracked once they enter a building. Analysts only access photographs when a violent crime has occurred in a particular area. Unless photographs are being used in a prosecution, they are discarded after forty-five days.

Moreover, this program burdens privacy substantially less than a well-established staple of existing surveillance: security cameras. "Cameras mounted in public and semi-public places . . . are increasingly unremarkable, their presence taken for granted." David

Alan Sklansky, *Too Much Information: How Not to Think About Privacy and the Fourth Amendment*, 102 CALIF. L. REV. 1069, 1085 (2014). Especially in large cities, these cameras are ubiquitous, allowing "law enforcement to search for any individual, anywhere in a city, going back for weeks or months" Rebecca Lipman, *Protecting Privacy with Fourth Amendment Use Restrictions*, 25 GEO. MASON L. REV. 408, 436–37 (2018). Baltimore itself has around eight hundred ground-based surveillance cameras. Our point is not to endorse this or that use of such cameras, but to note that the AIR program is less intrusive by comparison.

Precedent suggests law enforcement can use security cameras without violating the Fourth Amendment. In *Carpenter*, the Supreme Court explicitly said it was not calling these cameras into constitutional question. *Carpenter*, 138 S. Ct. at 2220. The lower courts have generally upheld the use of security cameras against Fourth Amendment challenges. *See United States v. Vankesteren*, 553 F.3d 286 (4th Cir. 2009); *United States v. Houston*, 813 F.3d 282 (6th Cir. 2016); *United States v. Bucci*, 582 F.3d 108 (1st Cir. 2009).

Assuming that these cameras are constitutional, as the Supreme Court has instructed, it follows that the aerial surveillance in this case is too. The aerial cameras serve a similar purpose as ground-based cameras: capturing public movements. Admittedly, they are more effective at doing this than ground-based cameras because there are gaps in the coverage of ground-based cameras. But as Judge Bennett recognized, AIR is less invasive in most ways. *Leaders of a Beautiful Struggle*, 2020 WL 1975380 at *11 ("The AIR pilot program does not approach the surveillance capabilities of a pole camera."). Often employing facial recognition software, ground-based cameras capture the individual

characteristics of those surveilled, allowing the police to immediately conclude who someone is and what they look like. *See* Rachel Levinson-Waldman, *Hiding in Plain Sight: A Fourth Amendment Framework for Analyzing Government Surveillance in Public*, 66 EMORY L.J. 527, 539–41 (2017). AIR's surveillance cannot do that. Indeed, it is telling that the BPD cannot identify someone photographed by AIR without relying on ground-based cameras.

Rapid advancements in technology hold real promise in preventing and resolving crimes. But they also pose unprecedented threats to personal privacy. Sometimes legitimate concerns manage to meet at a sensible mean. So it is here. We agree with plaintiffs that there are aerial surveillance programs that would transgress basic Fourth Amendment protections. We further agree that investigative tools, whether aerial or electronic, should not operate without restrictions. *See, e.g.*, Omnibus Crime Control and Safe Streets Act of 1968, 18 U.S.C. §§ 2510-22 (establishing safeguards to regulate wiretapping). But we also agree with the district court that this particular limited investigative tool does not violate the Constitution. Finally, any search or seizure of a car, home, or person that follows from an AIR investigation must of course satisfy the applicable probable cause and warrant requirements expressly embedded in the Fourth Amendment.

V.

Plaintiffs also allege that AIR will violate their First Amendment rights to freely associate with others. Although they did not extensively develop this argument below, their basic theory is that the fear of being surveilled will deter them from associating with others on the streets of Baltimore.

We conclude plaintiffs are unlikely to succeed on the merits of this claim. The Supreme Court has explained that the First Amendment protects two types of free association: intimate association and expressive association. *Roberts v. U.S. Jaycees*, 468 U.S. 609, 619 (1984). Plaintiffs do not plead that either type of association is infringed here. The AIR program does not in any way affect the personal affiliations that "attend the creation and sustenance of a family," such as marriage, childbirth, "the raising and education of children," or "cohabitation with one's relatives." *Id.* Nor can plaintiffs assert that the AIR program interferes with their right "to speak, to worship, [or] to petition the government for the redress of grievances." *Id.* at 622.

The basic problem with plaintiffs' argument is that people do not have a right to avoid being seen in public places. And even if that were not so, it is a stretch to suggest people are deterred from associating with each other because they may show up as a dot under the AIR program. We thus conclude plaintiffs have failed to prove they will likely succeed on the merits of their First Amendment claim.

VI.

In sum, the district court exercised sound equitable discretion in denying a preliminary injunction. Allowing Baltimore's AIR program to continue is the equitable course of action and serves the public interest.

In deciding whether to grant a preliminary injunction, district courts "should pay particular regard for the public consequences in employing the extraordinary remedy of injunction." *Winter*, 555 U.S. at 24 (quoting *Romero-Barcelo*, 456 U.S. at 312). In *Winter*, the Supreme Court explained that a preliminary injunction under the environmental laws

against Navy training exercises was inappropriate because of the public interest in national security and safety. *Id.* at 24–25.

The equitable balance here favors Baltimore. After a controversial initial roll-out of the AIR program, the BPD pulled it back and consulted with the people of Baltimore. In building political support for the program, the BPD agreed to the important limitations on AIR's capabilities that we have repeatedly underscored. Baltimore's multiple partners in the AIR program depict a community initiative in the process of ongoing evaluation. To respond to such an initiative with an immediate "No" risks leaving a fine city with lessened hope and not knowing where to turn.

In *United States v. Jones*, four justices of the Supreme Court recognized that elected officials should play a leading role in crafting policies that balance the need for public safety and the need for privacy. *Jones*, 565 U.S. at 429–30 (Alito, J., joined by Ginsburg, Breyer, & Kagan, JJ., concurring in the judgment) ("A legislative body is well situated to gauge changing public attitudes, to draw detailed lines, and to balance privacy and public safety in a comprehensive way."). That is exactly what Baltimore's government officials have done in this case. After the program's secret rollout raised legitimate privacy concerns, the program was halted. Constituents were heard and the BPD's contract with PSS was approved by elected officials with modified and substantially less intrusive conditions.

Baltimore and its citizens have a strong interest in the AIR program not being strangled in its infancy. The AIR program is carefully designed to slow the recurrent increases in violent crime in Baltimore. As noted above, Baltimore is one of the more

dangerous cities in America, with hundreds of people being murdered every year. Alec MacGillis, *The Tragedy of Baltimore*, N.Y. Times Magazine, Mar. 17, 2019, at 32. But lest we be swept up in harrowing statistics, remember that 348—the number of Baltimore homicide victims in 2019—is not merely a number. These were 348 individual people, with family and friends, hopes and dreams. Such a tragedy cannot be subsumed under some new normal of indifference, and the public interest, *see Winter*, 555 U.S. at 24, is surely not served by terminating at its very inception a program with the potential to help.

Plaintiffs have failed to persuade us that this program violates their constitutional rights. As cherished as constitutional rights are, the Founders understood that the Bill of Rights was not the only source of rights worthy of protection. They understood that all people are endowed with "certain unalienable rights, that among these are Life, Liberty, and the pursuit of Happiness." The Declaration of Independence para. 2 (U.S. 1776). And because these rights are "exposed to the invasion of others," not just the government, the Founders believed that government must exist for the "mutual preservation of [the people's] lives, liberties, and estates." JOHN LOCKE, SECOND TREATISE ON GOVERNMENT 178 (Mark Goldie ed., 1993) (1689). Thus our Constitution was ratified, in no small part, to "establish justice," "insure domestic tranquility," and "secure the blessings of liberty to ourselves and our posterity." U.S. Const. pmbl.

When hundreds of Baltimore residents are killed on their streets each year, their rights to life are not protected. When murders remain unsolved, their rights to liberty are not protected. When criminals can rob Baltimoreans at gunpoint with apparent impunity, their rights to property are not protected. All these rights are denied without due process,

nothing remotely resembling the protections an accused will receive, rightly and deservedly, from the Bill of Rights. It is all so sad. Now and then the gunshots pause, leaving only the silence of loved ones lost long before their time.

The AIR program just might help reduce this most aching of silences—giving it a chance to succeed is in the public interest.

VII.

For the foregoing reasons, we hold that the district court did not abuse its discretion in declining to issue the requested injunction.

AFFIRMED

GREGORY, Chief Judge, dissenting:

This case presents a long-anticipated Fourth Amendment question: Does the Constitution permit warrantless dragnet surveillance by a police plane in the sky above an American city? Until now, this question was merely a provocative hypothetical for law professors¹ or a slippery-slope concern for litigants.² But with the Aerial Investigative Research ("AIR") program, Persistent Surveillance Systems ("PSS") and the Baltimore Police Department ("BPD") bring the thought-exercise to life. Because the majority concludes the warrantless surveillance program is constitutional, I respectfully dissent.

I.

I agree with the majority's standing analysis. Maj. Op. at 6–7. I also broadly agree with the majority's presentation of the Fourth Amendment framework that applies here.

¹ See, e.g., Rachel Levinson-Waldman, Hiding in Plain Sight: A Fourth Amendment Framework for Analyzing Government Surveillance in Public, 66 Emory L.J. 527, 528 (2017) ("The 2002 movie Minority Report, which seemed wildly futuristic at the time, effectively predicted many of the technologies now available to police at the click of a button . . . [D]oes an eye in the sky . . . constitute a search under the Fourth Amendment . . . when it is used for public surveillance?"); Marc Jonathan Blitz, The Fourth Amendment Future of Public Surveillance: Remote Recording and Other Searches in Public Space, 63 Am. Univ. L. Rev. 21, 24 (2013) ("Do police need to obtain a warrant . . . before they use a drone to track a person's movements or reconstruct those movements using video footage from public cameras?").

² For example, in 1983, the Supreme Court considered a respondent's fear that "the result of the holding sought by the government would be that twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision." *United States v. Knotts*, 460 U.S. 276, 283 (1983) (internal quotations omitted). The Court was skeptical, but noted that "if such dragnet type law enforcement practices as respondent envisions should eventually occur, there will be time enough then to determine whether different constitutional principles may be applicable." *Id.* at 283–84.

Maj. Op. at 9–10. We apply the reasonable expectation of privacy test, which has a subjective and objective component. *United States v. Castellanos*, 716 F.3d 828, 832 (4th Cir. 2013). First, we look to whether an individual's subjective expectation of privacy is implicated; then, we ask whether that expectation is objectively reasonable. *Id*.

Our minds diverge, however, when applying this test to the AIR program. *See* Maj. Op. 10–20. The majority finds—as the district court found below—that no reasonable expectation of privacy is presented here because the AIR program is capable of only short-term surveillance. Maj. Op. at 10–15. Therefore, they reason, this case is more like those cases that have approved of public surveillance tactics—like ground-based security cameras or aerial "flyover" surveillance—than those that have struck down more revealing tracking. On this basis, the majority distinguishes the Supreme Court's recent teachings in *Carpenter v. United States*, 138 S. Ct. 2206 (2018). Alternatively, the majority also finds that the AIR program is justified as a "programmatic search." Maj. Op. at 15–20.

These conclusions rest on a fundamentally warped understanding of the facts, accepting the Government's promises about the AIR program and ignoring the plaintiffs' contrary evidence. The AIR program does, indeed, amount to long-term surveillance that compiles "a detailed and comprehensive record" of a person's past movements. *See Carpenter*, 138 S. Ct. at 2215–19. Thus, *Carpenter* is not only relevant to this case. It controls the outcome.

A.

Carpenter clarified the rules governing law enforcement surveillance of people's public movements. *Id.* at 2215–16 (internal quotations omitted). The starting point was

United States v. Knotts, 460 U.S. 276 (1983), where the Court held that the use of a location-tracking "beeper" on a suspect's car was constitutional because a person "traveling on public thoroughfares has no reasonable expectation of privacy in [their] movements from one place to another," given that they "voluntarily conveyed [their movements] to anyone who wanted to look." *Id.* at 281–82. The *Knotts* court qualified, though, that if "dragnet type law enforcement practices . . . should eventually occur," then "different constitutional principles may be applicable." *Id.* at 284.

"Three decades later, the Court considered more sophisticated surveillance of the sort envisioned in *Knotts* and found that different principles did indeed apply." *Carpenter*, 138 S. Ct. at 2215. In *United States v. Jones*, 565 U.S. 400 (2012), police used a GPS tracking device to "remotely monitor[] [a] vehicle's movements for 28 days." *Carpenter*, 138 S. Ct. at 2215. Though *Jones* ultimately rested on trespass principles, it also had privacy implications, as *Carpenter* explained: "Since GPS monitoring of a vehicle tracks 'every movement' a person makes in that vehicle, the [five] concurring Justices concluded that 'longer term GPS monitoring . . . impinges on expectations of privacy'—regardless whether those movements were disclosed to the public at large." *Id.* (quoting *Jones*, 565 U.S. at 430 (Alito, J., concurring); *Jones*, 565 U.S. at 415 (Sotomayor, J., concurring)).

Thus, "[a] person does not surrender all Fourth Amendment protection by venturing into the public sphere." *Id.* at 2217. *Carpenter* solidified the line between permissible short-term tracking of a person in public—just as law enforcement was capable of accomplishing "[p]rior to the digital age"—and an individual's "expectation of privacy in the whole of their physical movements." *Id.* For example, while most people understand

that a security camera may record them as they walk down a city block, they also reasonably expect that police will not "secretly monitor and catalogue every single movement of an individual's car for a very long period." *See id.* (quoting *Jones*, 565 U.S. at 430 (Alito, J., concurring)).

Based on this rule, the Court held that the Fourth Amendment protects cell-site location information ("CSLI") because, "[m]uch like GPS tracking of a vehicle, cell phone location information is detailed, encyclopedic, and effortlessly compiled." *Id.* at 2216–19. CSLI reveals "an all-encompassing record of the holder's whereabouts," and "[a]s with GPS information, the time-stamped data provides an intimate window into a person's life, revealing not only [their] particular movements, but through them [their] 'familial, political, professional, religious, and sexual associations." Id. at 2217 (quoting Jones, 565 U.S. at 415 (Sotomayor, J., concurring)). Such a record "hold[s] for many Americans the privacies of life." Id. (quoting Riley v. California, 573 U.S. 373, 403 (2014)). Even more than a GPS device on a car, cell data "tracks nearly exactly the movements of its owner," such that "when the Government tracks the location of a cell phone, it achieves near perfect surveillance, as if it had attached an ankle monitor to the phone's user." *Id.* at 2218. And, the "retrospective quality" of cell data further distinguishes it from past surveillance techniques, because "the Government can now travel back in time to retrace a person's whereabouts"; "[u]nlike with the GPS device in *Jones*, police need not even know in advance whether they want to follow a particular individual, or when." *Id.* ("Whoever the suspect turns out to be, [they] ha[ve] effectively been tailed every moment of every day . . .

and the police may—in the Government's view—call upon the results of that surveillance without regard to the constraints of the Fourth Amendment.").

Carpenter's application here could not be clearer. The AIR program compiles a "detailed, encyclopedic" record of "the whole of" every resident of Baltimore's movements in public. See id. at 2216–19; see also id. at 2217 ("Whether the Government employs its own surveillance technology as in Jones or leverages the technology of a wireless carrier, we hold that an individual maintains a legitimate expectation of privacy in the record of [their] physical movements . . .") (emphasis added).

Carpenter identified Jones as applying new constitutional principles based on the possibility of dragnet surveillance anticipated in Knotts. Id. at 2215. Here, more like the cell phone data in Carpenter and GPS-tracking in Jones than the beeper-tracking in Knotts, the AIR program "tracks every movement" of every person outside in Baltimore. See id. And, like the cell data in Carpenter, the AIR program's privacy implications are amplified because of the "retrospective quality" of its data; within a 45-day window, 3 the Baltimore police can "travel back in time to retrace a person's whereabouts." See id. at 2218.

³ Notably, though, the 45-day retention period is self-imposed by BPD and PSS. The data could theoretically be retained for longer periods or indefinitely. For example, when BPD initially, and secretly, piloted the AIR program in 2016, its data was retained indefinitely—even though there was, then too, a purported 45-day retention period. *See* Nat'l Police Found., Review of the Baltimore Police Department's Use of Persistent Surveillance 18 (2017), https://perma.cc/Q277-QP8U (finding, after initial pilot of the AIR program, that "[t]he PSS Privacy Protection Policy states that after 45 days, the data will be destroyed unless an inquiry is received. However, PSS is retaining all the data from the . . . pilot program") (saved as ECF opinion attachment).

This capability transcends the expectation that was at issue in *Knotts*—that police officers could follow a person in public—and instead "gives police access to a category of information otherwise unknowable." *See id.* Just like in *Carpenter*, the AIR program means that for every single resident of Baltimore, "[w]hoever the suspect turns out to be, [they] ha[ve] effectively been tailed every moment of every day" for 45 days. *See id.* Residents of Baltimore have a subjective expectation of privacy in the *whole* of these day-to-day movements, even though they take place outdoors. *See id.* at 2215–19; *Jones*, 565 U.S. at 415 (Sotomayor, J., concurring); *Jones*, 565 U.S. at 430 (Alito, J., concurring).

Long-term, recorded surveillance of public movements uncovers more than temporary trailing by a suspecting officer; it reveals a person's most intimate associations and activities. *Carpenter*, 138 S. Ct. at 2217–18. Therefore, that subjective expectation of privacy is objectively reasonable because it concerns the "privacies of life"—the epitome of information expected to be beyond the warrantless reach of the government. *See id.* at 2214, 2218; *Boyd v. United States*, 116 U.S. 616, 630 (1886) (explaining that the fundamental principles of the Fourth Amendment protect "the sanctity of a [person]'s home and the privacies of life"). Accordingly, when police call upon AIR program data, the "information obtained . . . [is] the product of a search," and the program's warrantless operation violates the Fourth Amendment. *Carpenter*, 138 S. Ct. at 2217; *see also Jones*, 565 U.S. at 415 (Sotomayor, J., concurring) (questioning "the appropriateness of entrusting to the Executive, in the absence of any oversight from a coordinate branch, a tool so amenable to misuse, especially in light of the Fourth Amendment's goal to curb arbitrary

exercises of police power and prevent 'a too permeating police surveillance'") (quoting *United States v. Di Re*, 332 U.S. 581, 595 (1948)).

B.

The majority distinguishes *Carpenter* by finding that the AIR program is incapable of long-term and individually-targeted surveillance. On that basis, the majority concludes that plaintiffs have no reasonable expectation of privacy in the information the AIR program obtains. The majority also finds, alternatively, that the AIR program is constitutional as a "programmatic search."

1.

The majority, the district court, and the Government each emphasize certain aspects of the AIR program to distinguish *Carpenter* and *Jones*. In particular, the majority relies on the fact that the surveillance planes fly for "only" twelve hours per day, and that individuals, when photographed, appear "only" as "pixelated dots." *See* Maj. Op. at 4–5. Indeed, the majority emphasizes this latter fact repeatedly throughout its opinion. *See*, *e.g.*, Maj. Op. at 3–6, 12, 17, 18, 21.

The majority derives far-reaching conclusions from these two facts. First, "[b]ecause [the planes] do not fly at night, AIR surveillance cannot be used to track individuals from day-to-day." Maj. Op. at 11. Second, because people appear as "pixelated dots," "individuals cannot be tracked once they enter a building," and "the AIR program cannot be used to target them *as individuals*." Maj. Op. at 17–18. Thus, the AIR program is "less intrusive" than ground-based security cameras, which also "captur[e] public movements"—with significantly more detail, though "[a]dmittedly" with "gaps in the

coverage"—and remain constitutional after *Carpenter*. Maj. Op. 18–20. By conceiving of the AIR program as incapable of identifying individuals or tracking them over time, the majority finds *Carpenter* inapplicable. *See* Maj. Op. at 11–20.

However, these conclusions only hold up when limiting the Fourth Amendment analysis of the AIR program to solely the photographic data its planes collect, as opposed to what information that data can reveal. *Carpenter* precludes such a narrow focus. The *Carpenter* court did not consider only what was revealed by raw CSLI, but also what information law enforcement could *deduce* "from the . . . location data it received . . . *in combination with other information*." 138 S. Ct. at 2218 (emphasis added). The Court rejected the Government's argument that using the CSLI was not a search because "the location records did not on their own suffice to place Carpenter at the crime scene." *Id.* (internal quotations and alterations omitted). Rather, because the CSLI *enabled* the police to "deduce a detailed log of Carpenter's movements," a warrant was required. *See id.* at 2217–18. Thus, the rule from *Carpenter* is that if locational data enables police to deduce a cumulative, retrospective "record of [a person's] physical movements," then "[t]he location information obtained . . . was the product of a search." *See id.*

⁴ In *Carpenter*, the records themselves were only a time-stamped log of cell tower locations pinged by the suspect's cell phone number. *See Carpenter*, 138 S. Ct. at 2212–13. Police then used that data to "produce[] maps" that "placed Carpenter's phone near four of the charged robberies." *Id.* Here, as in *Carpenter*, the police get raw locational data without a warrant and then apply policework to track and identify suspects using that data, just like producing maps of the *Carpenter* suspect's likely movements. *See, e.g., Kyllo v. United States*, 533 U.S. 27, 36–37 (2001) (explaining that, where police used technology to warrantlessly infer information that violated reasonable expectations of privacy, it was "[t]he *police activity*" that "was held to be a search, and the search was held unlawful") (emphasis added).

This Court must apply the same scope of analysis here. While aerial photographs and ground-based security camera footage both capture people's public movements, the plaintiffs challenge the AIR program specifically for capturing images of everyone, every day, and everywhere. It makes no Fourth Amendment difference that the AIR photographs may require further analysis to yield their investigatory value. See id. at 2218 (rejecting "the proposition that 'inference insulates a search") (quoting Kyllo v. United States, 533 U.S. 27, 37 (2001)). So while the majority posits that AIR photographs "take[] no deep dive into an individual's life and in fact can tell the police very little about an identified person," Maj. Op. at 15, the question under *Carpenter* is whether the AIR program will nevertheless enable police to deduce a comprehensive record of people's past movements. It is that capability that distinguishes CCTV cameras, or the temporary surveillance at issue in *Knotts*, and tells the police more than a little about an identified person. See Jones, 565 U.S. at 415 (Sotomayor, J., concurring) (explaining how retrospective records of public movements can reveal "a wealth of detail" about a person's "familial, political, professional, religious, and sexual associations" and private activities like trips to a psychiatrist, plastic surgeon, abortion clinic, AIDS treatment center, and more).

Applying that broader perspective to this case, the limitations of the AIR program that the majority emphasizes do little to distinguish *Carpenter* and *Jones*. Indeed, it is hard to reconcile the majority's portrayal of the AIR program's capabilities with its insistence that the program is justified because it helps BPD police crime. That the AIR program's surveillance planes will fly only during the daylight hours and capture individuals as

solitary pixels⁵ does not mean that AIR program data cannot be used to track specific individuals over time. Presumably, the vast majority of Baltimore's residents start and end most days in the same place: their homes.⁶ Who resides at a given address is often public information. Likewise, many people begin each day at home, then travel during the daytime based on a daily routine, and then return home again. In just one possible application, law enforcement could use AIR data to track a person's movements from a crime scene to, eventually, a residential location where the person remains. Police could then look through time and track the movements of people from that residence. Police could use any number of context clues to distinguish individuals and deduce identity. After all, that is the very purpose of the program.

The plaintiffs submitted evidence to the district court to support this intuitive reasoning. In a study based on cell phone locational data, researchers found that a person's movements—looked at as a whole—tend to be so unique that 95% of people can be

⁵ Both of these limitations are self-imposed by BPD and PSS, not technological necessities. The plane-cameras are capable of taking decipherable photographs of city streets lit by ambient light during the nighttime. Likewise, BPD and PSS "agreed" to set the resolution of the cameras at "one pixel per person," but "the technology has the ability to upgrade the quality." See BPD, Aerial Investigations Research Pilot Program Presentation (AIR) at 23:46, Facebook (Mar. 30. 2020), https://www.facebook.com/58771761955/videos/212014970074066 ("BPD Facebook Live Townhall") (saved as ECF opinion attachment).

⁶ *C.f.* U.S. Census Bureau, American Community Survey, 2018 American Community Survey 1-Year Estimates, Table B25033 (Baltimore City), https://perma.cc/CM9C-VC95 (estimating, among population living in occupied housing units, that over 75% of Baltimore City residents reside in single-unit housing structures) (sum of persons in owner-occupied and renter-occupied single unit structures, mobile homes, and "boats, RVs, van, etc." divided by total population) (saved as ECF opinion attachment).

individually identified based only on "[f]our randomly chosen points" of location data from their collective movements. In other words, when reviewing data showing a group of people's collective movements, an individual's movements tend to be so unique that it is not difficult to distinguish among people in the group. This is why the majority's conclusion that individuals cannot be tracked is unsubstantiated. The police would have access to 45 daytimes' worth of retroactive locational data to follow any given "pixel" as it moved through time and space. By analyzing patterns, it is possible—and often relatively easy—to identify the person behind the pixel based on the routines it follows.

And that is without even considering BPD's ability to rely on other police information systems. BPD's contract with PSS expressly provides for integrating BPD's "CitiWatch CCTV cameras" and "License Plate Readers" into the AIR program, stating that "analysts will track individuals and vehicles" using both systems, "to provide more detailed descriptions" and "allowing the vehicles to be identified." BPD's "CitiWatch" surveillance camera network consists of more than 800 cameras in Baltimore City. Along with downtown Baltimore, those cameras are most prevalent in predominantly Black

⁷ The district court ignored the study by finding that the plaintiffs did not "proffer[] any evidence suggesting that the same analysis applicable to cell-phone location data may be grafted on to the imagery data produced by the AIR pilot program." But no such evidence is necessary; the source of the location data is irrelevant to the findings. The study establishes the relative ease of "re-identifying" unique individuals from a pool of data showing their collective movements. It would make no difference whether that pool was sourced from cell phones, GPS trackers, surveillance airplanes, or some other source.

⁸ BPD Facebook Live Townhall at 28:07.

neighborhoods.⁹ Thus, considering all of the above, the fact that AIR data does not include nighttime and indoor movements does not inherently inhibit "track[ing] individuals from day-to-day."

According to the majority, "that the police may be able to use . . . security cameras and license plate readers[] in conjunction with AIR photographs" is beyond this Court's review because "plaintiffs do not challenge these existing tools—only the AIR program in particular." Maj. Op. at 11–12. But as discussed above, there is no basis for this insistence that the Court put on blinders when considering how the AIR program is being implemented. ¹⁰ That plaintiffs do not independently challenge the legality of surveillance cameras and license plate readers does not mean that this Court must ignore their

⁹ *Compare* City of Baltimore, Open Baltimore: CCTV Cameras, https://data.baltimorecity.gov/Public-Safety/CCTV-Cameras/y3f4-umna (showing map of locations of CitiWatch CCTV cameras) (saved as ECF opinion attachment), *with* U.S. Dep't of Justice, Civil Rights Div., Investigation of the Baltimore City Police Department 13 (2016), https://perma.cc/EPN2-7G38 (showing map of Black population in Baltimore City) (saved as ECF opinion attachment).

systems; their integration is expressly provided for in BPD's contract with PSS and is fundamental to the operation of the AIR program. PSS provided that it will "hire between 15 and 25 analysts for this Project," working "in two shifts per day, seven days per week in support of this effort." And, the contract provides that PSS will integrate BPD's existing surveillance systems—Computer Aided Dispatch, CitiWatch Ground Based Cameras Integration, Shot Spotter Gun Shot Detection System, and License Plate Readers—into its own. Within 18 hours of a "Target Crime," PSS provides that it will analyze the scene of the crime, identify people and vehicles present, and then analyze "locations the vehicles and people visited prior to and after the crime," as well as the "tracks of people and vehicles that met with people who were tracked from the crime scene and the locations they came from and went to," by using, in addition to PSS' own photographic data, "ground-based camera video made available to [PSS] by BPD."

availability to the police and integration in the AIR program when applying *Carpenter*. *See* 138 S. Ct. at 2217–18.

Likewise, the twelve-hours-per-day, single-pixel nature of the AIR program's data hardly distinguishes Carpenter and Jones. The CSLI at issue in Carpenter was not a comprehensive location log without any informational gaps. As the lower court explained, each datapoint covered an area "typically anywhere from a half-mile to two miles." *United* States v. Carpenter, 819 F.3d 880, 885 (6th Cir. 2016). And datapoints were generated only "at call origination and at call termination for incoming and outgoing calls." See id. at 884. Similarly, in *Jones*, police collected 28 days of data showing the movements of the suspect's car "within 50 to 100 feet." 565 U.S. at 403. This kind of GPS-data would only reflect a suspect's movements in their own car and could only place a suspect in the vicinity of a given site where their car was parked, without indicating, for example, which building the suspect may have entered. See Carpenter, 138 S. Ct. at 2218. That the AIR data has gaps overnight or when a suspect is indoors is no different from the gaps in Carpenter between phone calls or in *Jones* between car rides. 11 And the AIR photographs provide a more precise depiction of individuals' locations than the data in either Carpenter or Jones.

¹¹ It is worth mentioning, though, that even if we were to consider "only" the AIR program's single twelve-hour daily recordings, there is still likely a Fourth Amendment violation. The most problematic aspect of the AIR program is its dragnet nature, surveilling *every individual's* public movements across Baltimore. *Carpenter* emphasized this concern regarding CSLI. 138 S. Ct. at 2218 ("Critically, because location information is continually logged for all of the 400 million devices in the United States—not just those belonging to persons who might happen to come under investigation—this newfound tracking capacity runs against everyone."); *see also Jones*, 565 U.S. at 415–16 (noting that developing technology means that "even short-term monitoring" that obtains "a precise, comprehensive record of a person's public movements" can reveal private associations).

Ultimately, the majority's portrayal of the AIR program aligns with BPD's public assurances about how the program is intended to be used, but requires putting one's head in the sand about the program's capabilities. That latter capability, however, is what controls the Fourth Amendment analysis. *See id.* at 2219 (noting that the CSLI at issue "reflect[ed] the state of technology at the start of the decade," but considering "new technology" for CSLI data that is even more precise); *Kyllo*, 533 U.S. at 35–36 (rejecting "a mechanical interpretation of the Fourth Amendment" that would leave protections "at the mercy of advancing technology," and instead instructing that "the rule we adopt must take account of more sophisticated systems that are already in use or in development").

2.

Once the assumption that the AIR program cannot identify and track individuals over time is dispelled, the majority's corresponding application of the law breaks down. First, conceiving of the program as short-term surveillance, the majority, like the district court, concludes that this case is governed by *Knotts* and its progeny, analogizing to the line of cases approving of "various types of aerial surveillance . . . more intrusive than that in AIR." Maj. Op. at 11–13. The Supreme Court has approved of "flying a plane a mere one thousand feet over an individual's home to photograph items within a fenced-in backyard"; using a plane flying over a factory to "photograph[] items as small as one half inch in diameter"; and circling a helicopter "four hundred feet above a home . . . to look into a greenhouse partially within the home's curtilage." Maj. Op. at 12–13. By contrast, "the AIR cameras cannot photograph an individual item within a backyard" and "AIR involves no surveillance of an individual's home or curtilage," so the program is "decidedly

less intrusive." Maj. Op. at 13. "Individuals are just dots, and analysts cannot identify a person's race or sex from an AIR photograph," such that "AIR captures no 'intimate details' of the sort that might implicate Fourth Amendment protections." Maj. Op. at 12.

This reasoning is nonresponsive to the Fourth Amendment objections in this case. Plaintiffs do not challenge the AIR program on the basis of what any single photograph may reveal. Rather, they object to the planes photographing the city for twelve hours per day, seven days per week, and creating a retrospective database of everyone's movements across the city. All of the cases the majority cites, and that the district court relied on, involved single instances of targeted surveillance of an individual suspect or location for a temporary period of time.¹² Because that kind of surveillance can only reveal what is already being held out in the open and could be observed by traditional surveillance tactics—albeit, sometimes with the aid of "augmented" sensory perception—it is permissible under the Fourth Amendment. *See Carpenter*, 138 S. Ct. at 2215 (citing

¹² See California v. Ciraolo, 476 U.S. 207, 209, 213–14 (1986) (describing single occasion of "fl[ying] over respondent's house at . . . 1,000 feet, within navigable airspace" to "observe plants" with "the naked eye"); Dow Chem. Co. v. United States, 476 U.S. 227, 229, 238 (1986) (approving of "commercial aerial photographer" flying over a suspected industrial building without using "highly sophisticated surveillance equipment not generally available to the public"); Florida v. Riley, 488 U.S. 445, 449 (1989) (finding no violation where officer "circled twice over respondent's property in a helicopter" at 400 feet to observe greenhouse "[w]ith his naked eye"); United States v. Breza, 308 F.3d 430, 433–34 (4th Cir. 2002) (finding no violation when, "[w]hile conducting a routine drug interdiction operation," officers "flew over [the suspect's] property in a helicopter" to observe marijuana plants); Giancola v. W.Va. Dep't of Pub. Safety, 830 F.2d 547, 548, 550–51 (4th Cir. 1987) (looking to factors such as "the total number of instances of surveillance, the frequency of surveillance, [and] the length of each surveillance," and finding no violation when "two helicopters . . . flew over [the suspect's] property for ten to twenty minutes" to observe fields in plain view).

Knotts, 460 U.S. at 281–82). But the ability to call upon a log of photographs revealing an individual's movements in the past is not just augmented sensory perception; it "gives police access to a category of information otherwise unknowable." *See id.* at 2218. Therefore, that information is the product of a search. *See id.* at 2217.

The AIR program reveals intimate details about the plaintiffs' lives because it records where they go, not because any single photograph in isolation is especially revealing. The fact that the database of past movements comes from aerial surveillance planes instead of, say, a cell-service provider's CSLI records is, ultimately, inconsequential. Thus, despite their discussion of flying police technology, the cases the district court relied on and the majority points to bear little relevance to this case.

3.

Finally, the majority also considers the AIR program's constitutionality as a "programmatic search," applying the balancing test that applies to drunk driving checkpoints, searches at border crossings, and searches in carceral settings. Maj. Op. 15–20. These cases are simply inapplicable. Indeed, the parties did not brief the issue because the Government did not argue that the AIR program is governed by the doctrine. Nevertheless, the majority reasons that it provides an alternative basis for affirming.

What the majority refers to as programmatic searches are one type of search that "fit[s] within the closely guarded category of constitutionally permissible suspicionless searches." *See Chandler v. Miller*, 520 U.S. 305, 309 (1997); *see generally United States v. Curry*, 965 F.3d 313, 339–43 (4th Cir. 2020) (Diaz, J., concurring). "The suspicionless search is the very evil the Fourth Amendment was intended to stamp out," but

individualized suspicion can be "dispensed with" as a component of Fourth Amendment reasonableness when certain kinds of searches are necessary to meet a "special need" of the Government. *Samson v. California*, 547 U.S. 843, 858 (2006) (Stevens, J., dissenting). Thus, "[i]n limited circumstances, where the privacy interests implicated by the search are minimal, and where an important governmental interest furthered by the intrusion would be placed in jeopardy by a requirement of individualized suspicion, a search may be reasonable despite the absence of such suspicion." *Skinner v. Ry. Labor Execs. Ass'n*, 489 U.S. 602, 624 (1989).

In addition to this balancing requirement, the suspicionless search also must take an especially "systematic" and "discretionless" form. *See Curry*, 965 F.3d at 339–43 (Diaz, J., concurring). For example, this doctrine provides the authority for routinized searches at a fixed Border Patrol checkpoint designed to intercept undocumented persons. *Mich. Dep't of State Police v. Sitz*, 496 U.S. 444, 448–55 (1990). Yet, the doctrine does *not* authorize "roving-patrol stops," even for the same governmental purpose, because of their "sporadic and random" nature and the "unbridled discretion" they grant to officers. *Almeida-Sanchez v. United States*, 413 U.S. 266, 270–75 (1973).

Here, the majority concludes that the AIR program is an acceptable suspicionless programmatic search program for two reasons. The first is that "this program is not being used to target particular individuals. Instead, it is used to track non-identified individuals only under certain circumstances;" namely, when those individuals "happen[] to be at the scene of . . . violent crimes." Maj. Op. at 17. This proposition defies reason. In one breath, the majority states that the AIR program is "not being used to target particular individuals,"

while in the next, it specifies that the program "track[s] non-identified individuals" who are present at crime scenes. The fact that police may not know the name of the individual they are surveilling—at the time the surveillance initially takes place—does not change the reality of what is occurring. When police use the AIR program to track as-yet-unidentified individuals, they are "target[ing] particular individuals." And the purpose of using the AIR program to track those non-identified individuals from crime scenes is to identify them, be it as witnesses or as suspects. What other reason could there be for investing millions of dollars in a city-wide aerial surveillance program?

Indeed, that is the very governmental purpose that the majority then provides as its second reason for finding a constitutional suspicionless search here:

Second, the AIR program is designed to serve critical government purposes. Baltimore is plagued by violent crime, and the BPD has struggled to capture the perpetrators. Although the BPD can take advantage of existing networks of cameras and license plate readers, holes in their coverage may leave the police dependent on eyewitnesses, who may not exist or be feasible to find. The AIR program is designed to assist in that effort.

Maj. Op. at 18 (internal citation omitted). If the AIR program is justified because it assists in the effort of capturing the perpetrators of violent crime—by filling holes in police surveillance coverage and providing eyewitness leads—then the AIR program is targeting and identifying individual people. Such a program is clearly incompatible with the "discretionless" and "systematic" suspicionless search rubric that the majority attempts to force onto it.

The majority's position is more comprehensible if one conceives of the "programmatic search" as being solely the act of *taking* photographs of the city, as distinct

from the act of *reviewing* those photographs to deduce an individual's movements. But, as discussed above, *Carpenter* precludes such a framing. *Carpenter* identified the "search" as occurring "when the Government *accessed* CSLI from the wireless carriers," because "[f]rom the . . . location data it received, the Government could, in combination with other information, deduce a detailed log of Carpenter's movements." 138 S. Ct. at 2218 (emphasis added). In other words, because the interest at stake is one's expected privacy "in the whole of [their] physical movements," the conduct amounting to a "search" includes the police activity that "deduce[s]" the "detailed log." *See id.*; *see also Kyllo*, 533 U.S. at 36 (finding "the dissent's extraordinary assertion that anything learned through 'an inference' cannot be a search" is "blatantly contrary to *United States v. Karo*, where the police 'inferred' from the activation of a beeper that a certain can of ether was in the home. The *police activity* was held to be a search, and the search was held unlawful") (emphasis added).

Regardless, even if accepting the majority's framing, the "programmatic search" doctrine cannot render the AIR program constitutional. A foundational rule of the doctrine is that the "special need" justifying the suspicionless search must be "beyond the normal need for law enforcement." *Curry*, 965 F.3d at 340 (Diaz, J., concurring); *see*, *e.g.*, *Ferguson v. Charleston*, 532 U.S. 67, 79 (2001) (referring to whether the "special need" is "divorced from the State's general interest in law enforcement"); *City of Indianapolis v. Edmond*, 531 U.S. 32, 37 (2000) (holding that "narcotics-detection" checkpoint lacked sufficient "special need" because its "primary purpose was to detect evidence of ordinary criminal wrongdoing"); *Griffin v. Wisconsin*, 483 U.S. 868, 873 (1987) (looking to whether

"special needs, beyond the normal need for law enforcement, make the warrant and probable-cause requirement impracticable").

Here, the "critical government purpose" identified by the majority as the "special need" is that "Baltimore is plagued by violent crime, and the BPD has struggled to capture the perpetrators." Stopping violent crime by capturing perpetrators is a paradigmatic example of "the normal need for law enforcement." *See Edmond*, 531 U.S. at 37–40. Because the majority does not identify a special need other than "the general interest in crime control" to justify the AIR program as a suspicionless search system—and the program serves no other special purpose—the doctrine does not apply. *See id.* at 40.

II.

I therefore find that the plaintiffs established a strong likelihood of success on the merits of their Fourth Amendment claim. The remaining preliminary injunction factors counsel in favor of plaintiffs as well.

Because the plaintiffs identify a Fourth Amendment violation, they are irreparably harmed. *See, e.g., Ross v. Meese*, 818 F.2d 1132, 1134–35 (4th Cir. 1987) (finding, in Fourth Amendment context, that "the denial of a constitutional right, if denial is established, constitutes irreparable harm for purposes of equitable jurisdiction"); *see also Elrod v. Burns*, 427 U.S. 347, 373 (1976) (finding, where plaintiff established a likelihood of success on First Amendment claim, that the violation "unquestionably constitutes irreparable injury"); *Preston v. Thompson*, 589 F.2d 300, 303 n.4 (7th Cir. 1978) ("[A] continuing constitutional violation constitutes proof of an irreparable harm.").

Likewise, the balance of the equities favors plaintiffs because they have established an ongoing constitutional violation. By contrast, "precedent counsels that 'a state is in no way harmed by issuance of a preliminary injunction which prevents the state from enforcing restrictions likely to be found unconstitutional." *See Centro Tepeyac v. Montgomery County*, 722 F.3d 184, 191 (4th Cir. 2013) (quoting *Giovani Carandola Ltd. v. Bason*, 303 F.3d 507, 521 (4th Cir. 2002)) ("If anything, the system is improved by such an injunction."). Moreover, BPD has emphasized in its public-facing materials that the present AIR program is only "a 180 day pilot program" designed to "collect enough data that can be analyzed and reviewed" to determine the program's effectiveness. BPD has also represented that "if research determines little to no impact on the measures for success, then BPD will ground the plane and discontinue operations." That limited purpose would be unimpeded if it takes place after this case is resolved, whereas plaintiffs' injuries are accruing every passing day.

Finally, for these same reasons, the public interest favors the plaintiffs. "Surely, upholding constitutional rights serves the public interest." *Newsom ex rel. Newsom v. Albemarle Cty. Sch. Bd.*, 354 F.3d 249, 261 (4th Cir. 2003); *see also League of Women Voters of N.C. v. North Carolina*, 769 F.3d 224, 248 (4th Cir. 2014) (same); *Giovani Carandola*, 303 F.3d at 521 (same). The Government's desire to find innovative solutions to respond to crime is also generally in the public interest, but not when that purpose comes at the expense of the public's constitutional rights.

Therefore, the district court abused its discretion in denying plaintiff's request for a preliminary injunction. The district court portrayed the AIR program's capabilities as unrealistically limited while ignoring countervailing evidence. And the district court relied on precedents that bear little relevance to plaintiff's Fourth Amendment objections to the AIR program. Instead, *Carpenter* controls this case.

Throughout its opinion, the majority emphasizes that "Baltimore is one of the more dangerous cities in America, with hundreds of people being murdered every year." Maj. Op. at 22–23. And BPD "has struggled to respond effectively." Maj. Op. at 2. The majority concludes that, because "[t]he AIR program just might help reduce" these levels of violence, we should "giv[e] it a chance to succeed." Maj. Op. at 24.

But dragnet law enforcement tactics are nothing new for many neighborhoods in Baltimore. See generally Lucius T. Outlaw III, Unsecured (Black) Bodies: How Baltimore Foreshadows the Dangers of Racially Targeted Dragnet Policing Let Loose by Utah v. Strieff, 50 N.M. L. Rev. 25, 36–45 (2020). A Department of Justice report, following a 14-month investigation into BPD's unconstitutional practices, provides several examples. See U.S. Dep't of Justice, Civil Rights Div., Investigation of the Baltimore City Police Department (2016), https://perma.cc/EPN2-7G38 ("DOJ Report") (saved as ECF opinion attachment).

The DOJ found "a widespread pattern of BPD officers stopping and detaining people on Baltimore streets without reasonable suspicion that they are involved in criminal activity." *Id.* at 27. BPD officers "routinely violate" the Fourth Amendment-based rules

governing *Terry*-stops by detaining and questioning people who are simply "sitting, standing, or walking in public areas, even where officers have no basis to suspect them of wrongdoing." *Id.* at 28. And "overwhelming" statistical evidence established that these strategies targeted predominantly Black neighborhoods and "produce severe and unjustified disparities in the rates of stops . . . of African Americans." *Id.* at 3, 5–6, 48–74. Yet these discriminatory practices "uncover[ed] evidence of criminal activity" at an "extremely low rate." *Id.* at 28; *see, e.g., id.* at 50 ("One African-American man in his mid-fifties was stopped 30 times in less than four years" based only on a suspicion of "loitering" or 'trespassing" and "none of the 30 stops resulted in a citation or criminal charge"). Although DOJ's investigation resulted in a federal consent decree with the BPD, discriminatory policing continues to affect city residents.¹³

¹³ See, e.g., Morgan State Univ. Inst. for Urban Research, The Community's Experiences and Perceptions of the Baltimore City Police Department Survey Report 8–21 (2020), https://perma.cc/WX8D-GXX8 (finding, in survey conducted as part of federal consent decree monitoring, that a majority of respondents had personally witnessed BPD officers engaged in racial profiling, among other findings of community dissatisfaction) (saved as ECF opinion attachment); Justin Fenton, Corrupt Squad Scoured Baltimore Streets in Pursuit of Black Men to Search, Arrest—and Steal From, Baltimore Sun (June 12, 2019), https://perma.cc/2W8Q-44VN (reporting on the now-infamous "Gun Trace Task Force" scandal involving a unit of BPD officers who routinely planted false evidence and stole from vulnerable community members, continuing even through DOJ's investigation and the imposition of the federal consent decree) (saved as ECF opinion attachment); see also Brief of Amici Curiae Victims of the Baltimore Police Department in Support of Appellee at 6-26, Baltimore City Police Department v. Potts, Misc. No. 6 (Md. Dec. 16, 2019), available at https://perma.cc/ZLA2-H6ZY (collecting evidence to show that the conduct underlying the Gun Trace Task Force scandal more broadly pervades BPD's policing and continues through the present-day) (saved as ECF opinion attachment).

This recent history provides important context to the majority's conclusions that BPD has "consulted with the people of Baltimore," such that the AIR program is ultimately "a community initiative." *See* Maj. Op. at 22. It counsels that the consequences of the AIR program's unconstitutional nature are likely to be felt in the same overpoliced neighborhoods where BPD's discriminatory practices have already left generational legacies. ¹⁴

For example, the West Baltimore neighborhood of Sandtown-Winchester—now marked in history as the home of Freddie Gray—has been at least 90% Black "for the past five census periods," and is currently more than 95% Black. *Id.* at 13, 16–18 (citing No Boundaries Coalition, *Over-Policed, Yet Underserved* ("Over-Policed Report"), March 2016, https://perma.cc/KD7V-PZRG) (saved as ECF opinion attachment). The neighborhood has "a rich history of arts, culture, and civil rights activism"; "[p]erformers such as Billie Holliday and Diana Ross performed at venues along the historic Pennsylvania Avenue, often called 'Harlem of the South," and "'The Avenue' was known as the heart of Baltimore's Entertainment scene during the time of prohibition through the civil rights movement." Over-Policed Report 6.

But through the mid-twentieth century, as Baltimore's industrial sector declined and middle-class "flight" to the suburbs proliferated, Sandtown suffered from "economic depression, housing abandonment, [and] increased crime." *Id.* Today, one-in-three of the neighborhood's houses are vacant or abandoned, more than one-fifth of residents are unemployed, and more residents are imprisoned than those of any other Baltimore neighborhood. Outlaw, *supra*, at 38. Life expectancy in Sandtown is 69.7 years, compared to 84.4 years in the majority-white neighborhood Roland Park. *Id.* The Sandtown infant mortality rate is 9.7 per 1,000 births, compared to Roland Park's 3.4, and Sandtown has been the neighborhood most heavily impacted by Baltimore's long-standing lead poisoning epidemic. *Id.*; DOJ Report at 14.

(Continued)

¹⁴ In particular, several of the historically Black neighborhoods in West Baltimore have been shaped by decades of segregationist and exclusionary policy and policing. *See* DOJ Report at 12–15, 70–73. Baltimore was the first city in America to "establish[] block-by-block segregation," enforced over the decades by tactics including "restrictive covenants, aggressive redlining, a contract system for housing loans, and racially targeted subprime loans." *Id.* at 12. As a result, "Baltimore remains among the most segregated cities in the country." *Id.*

Yet the majority reasons that—"[a]s cherished as constitutional rights are"—"the Bill of Rights was not the only source of rights worthy of protection." Maj. Op. at 23. "When hundreds of Baltimore residents are killed on their streets each year," or "[w]hen criminals can rob Baltimoreans at gunpoint with apparent impunity," their "rights to life," "rights to liberty," and "rights to property" are not protected. Maj. Op. at 23. Therefore, "Baltimore and its citizens have a strong interest in the AIR program not being strangled in its infancy." Maj. Op. at 22.

Under this line of reasoning, which rights—and whose rights—are regarded as expendable in the name of protecting life, liberty, and property? Why must the people of Baltimore, that the majority regards as so thoroughly victimized by crime and violence, "decide between their constitutional rights against unwarranted searches and seizures or forgo governmental protection that is readily afforded to other communities[?]" *Curry*, 965 F.3d at 333 (Gregory, J., concurring).

Yet while Sandtown remained under-resourced, it became over-policed. Over-Policed Report 10-19; see also DOJ Report at 51 (showing, on a map, how the frequency of police stops correlates with the Blackness of a given Baltimore neighborhood, with Sandtown among the highest density of stops). Under BPD's "zero tolerance" approach to policing, implemented during its "War on Drugs," the police prioritized "broken windows" strategies, "stop and frisk" searches, and brutal physical confrontations. Over-Policed Report 11–12. When Sandtown residents have requested a more supportive police presence in the neighborhood they have been rebuffed, while predominantly-White neighborhoods received those same services. See id.; DOJ Report 4–5, 65–66, 156. Thus, residents report "that the legacy of racism in Baltimore is a defining feature of community life and is experienced through concentrated poverty, disinvestment, discrimination, and police profiling and abuse in Sandtown." Over-Policed Report 19. In neighborhoods like Sandtown, trauma caused by policing has made a "transgenerational impact" with "long-term consequences . . . [that] cannot be understated or ignored." See Over-Policed Report 19. This is the living and breathing history that should inform our understanding of the consequences of police practices that trample the Fourth Amendment's protections.

No crime rate can justify warrantless aerial surveillance of an entire city, wholly unchecked by the judiciary. This case presents another circumstance in which "we must remind law enforcement that the Fourth Amendment protects against unreasonable searches and seizures" to prevent "the slow systematic erosion of Fourth Amendment protections for a certain demographic." *United States v. Black*, 707 F.3d 531, 534, 542 (4th Cir. 2013). Any innovation by the police must occur within the confines of the Constitution. *C.f. Curry*, 965 F.3d at 345 (Thacker, J., concurring) ("Technology cannot override human flaws.").

I cast no aspersions on the majority's sincere concerns regarding the problem of crime in the city of Baltimore. "Certainly, the law-abiding residents of Baltimore want and welcome policing. They want safe streets for their families, to feel secure in their homes, and to go about their lives without being robbed, assaulted, or killed." *Outlaw, supra*, at 40. "However, the *manner* in which policing occurs is just as important as the level of policing." *Id.* Here, the manner selected by BPD violates the Constitution.

However, the majority posits that halting the AIR program—in the face of "hundreds of people being murdered every year"—would acquiesce to "some new normal of indifference." Maj. Op. at 23. Granting plaintiffs an injunction would leave the City "with lessened hope and not knowing where to turn." Maj. Op. at 22.

But Baltimore is not a hopeless place. One need only look to the plaintiffs themselves to find proof of that. For example, Plaintiff Erricka Bridgeford is a longtime activist in Baltimore, most prominently as an organizer behind Ceasefire Baltimore 365, an organization devoted to ending gun violence in the City. Ms. Bridgeford has organized

high-profile "ceasefire weekends" and personally visits every murder site within the city shortly after violence takes place. 15

When hearing about Baltimore's crime statistics, Ms. Bridgeford has responded: "But the thing about Baltimore is that it has never been the one to just be defeated. So the story about the Baltimore ceasefire is that Baltimore looked the murder rate in the eye and said, 'What you're not going to do is snatch our greatness.'" Erricka Bridgeford, How Baltimore Called a Ceasefire, TED (Oct. 2017), https://perma.cc/Q97D-D89G (saved as ECF opinion attachment). In fact, Ms. Bridgeford was moved to begin organizing ceasefire weekends specifically in response to hearing that common refrain about the city's high murder rate. "[B]ecause my city looks broken and is always yearning to show up in its wholeness," she knew that "people around this city wanted to do something great together." *Id.* And through her work, Ms. Bridgeford "ha[s] seen the power of collective consciousness. ...[P]eople around this world mischaracterized [Baltimore] and misunderstood it. What you failed to realize is Baltimore has the power to rise up, and that is what we continue to do." *Id.* Ms. Bridgeford's leadership shows that—regardless of this Court's dicta—the people of Baltimore do, in fact, know where to turn. They turn to each other.

This Court should not invoke the tragedies imparted by gun violence in Baltimore to justify its grant of sweeping surveillance powers to the BPD. This Court should not

¹⁵ One study—cited in Ms. Bridgeford's declaration to the district court—found a 52% reduction in gun violence in Baltimore City during the ceasefire weekends, with no evidence of a "postponement effect" in the days immediately following. Peter Phaylen et al., *Baltimore Ceasefire 365: Estimated Impact of a Recurring Community-Led Ceasefire on Gun Violence*, 110 Am. J. Pub. Health 554, 554 (2020), https://perma.cc/MZ79-82EC (saved as ECF opinion attachment).

"[p]ermit[] unconstitutional governmental intrusions into these communities in the name of protecting them." *Curry*, 965 F.3d at 332 (Gregory, J., concurring). "If merely preventing crime was enough to pass constitutional muster, the authority of the Fourth Amendment would become moot." *Id.* at 334.

The dragnet aerial surveillance program implemented by the BPD violates the Fourth Amendment, and the plaintiffs are entitled to a preliminary injunction to halt its operation. Meanwhile, in the face of strife and struggle, the people of Baltimore will continue to turn to their resiliency, their beauty, and their hope.