No. 20-1495

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

LEADERS OF A BEAUTIFUL STRUGGLE, *et al.*,

Plaintiffs–Appellants,

v.

BALTIMORE POLICE DEPARTMENT, *et al.*,

Defendants–Appellees.

On Appeal from the United States District Court
for the District of Maryland at Baltimore

BRIEF FOR PLAINTIFFS–APPELLANTS

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Bates v. City of Little Rock,
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Berger v. New York,
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Boyd v. United States,
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Centro Tepeyac v. Montgomery Cty.,
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City of Indianapolis v. Edmond,
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Clark v. Library of Cong.,
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Commonwealth v. Almonor,
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Commonwealth v. Estabrook,
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Conner v. Donnelly,
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Dow Chem. Co. v. United States,
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Elrod v. Burns,
427 U.S. 347 (1976) 52

Ferguson v. City of Charleston,
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Florida v. Riley,
488 U.S. 445 (1989) 34

Giancola v. State of W. Va. Dep't of Pub. Safety,
830 F.2d 547 (4th Cir. 1987) 35

Gibson v. Fla. Legislative Investigation Comm.,
372 U.S. 539 (1963) 48

Giovani Carandola, Ltd. v. Bason,
303 F.3d 507 (4th Cir. 2002) 53, 54

In re Grand Jury Subpoena to First Nat'l Bank,
701 F.2d 115 (10th Cir. 1983) 50

In re Grand Jury Proceedings,
776 F.2d 1099 (2d Cir. 1985) 47

In re Search Warrant Issued June 13, 2019,
942 F.3d 159 (4th Cir. 2019) 18, 30

Katz v. United States,
389 U.S. 347 (1967) 37, 41

Kyllo v. United States,
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Local 1814, Int'l Longshoremen's Ass'n, AFL-CIO v. Waterfront Comm'n of N.Y. Harbor,
667 F.2d 267 (2d Cir. 1981) 49, 50

Lytle v. Doyle,
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Marron v. United States,
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Maryland v. Garrison,
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Master Printers of Am. v. Donovan,
751 F.2d 700 (4th Cir. 1984) 47

McDonald v. United States,
335 U.S. 451 (1948) 42

Mills v. District of Columbia,
571 F.3d 1304 (D.C. Cir. 2009) 52

Monell v. NY.C. Dep't of Soc. Servs.,
436 U.S. 658 (1978) 15

NAACP v. Alabama,
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Owens ex rel. Owens v. Lott,
372 F.3d 267 (4th Cir. 2004) 44

Owens v. Balt. City State's Attorneys Office,
767 F.3d 379 (4th Cir. 2014) 15

Riley v. California,
573 U.S. 373 (2014) ..... passim

Roe v. Dep't of Def.,
947 F.3d 207 (4th Cir. 2020) 18

Samson v. California,
547 U.S. 843 (2006) 41

Shelton v. Tucker,
364 U.S. 479 (1960) 49, 50, 51

Stanford v. Texas,
379 U.S. 476 (1965) 38

State v. Muhammad,
451 P.3d 1060 (Wash. 2019) 28

Steagald v. United States,
451 U.S. 204 (1981) 38

Tabbaa v. Chertoff,
509 F.3d 89 (2d Cir. 2007) 47

United States v. Bobo,
477 F.2d 974 (4th Cir. 1973) 41

United States v. Breza,
308 F.3d 430 (4th Cir. 2002) 35

United States v. Broadhurst,
805 F.2d 849 (9th Cir. 1986) 35

United States v. Carpenter,
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United States v. Cuevas-Sanchez,
821 F.2d 248 (5th Cir. 1987) 35

United States v. Jones,
565 U.S. 400 (2012) ..... passim

United States v. Karo,
468 U.S. 705 (1984) 39

United States v. Knotts,
460 U.S. 276 (1983) 22

United States v. Moore-Bush,
381 F. Supp. 3d 139 (D. Mass. 2019) 36

Winter v. Nat. Res. Def. Council,
555 U.S. 7 (2008) 18, 51

WV Ass'n of Club Owners & Fraternal Servs., Inc. v. Musgrave,
553 F.3d 292 (4th Cir. 2009) 52

Ybarra v. Illinois,
444 U.S. 85 (1979) 43

Zurcher v. Stanford Daily,
436 U.S. 547 (1978) 47

Statutes

42 U.S.C. § 1983 ..... 14, 15

Other Authorities

Alissa Scheller, *6 Maps That Show How Deeply Segregated Baltimore Is*, HuffPost, Dec. 6, 2017 9

Arthur Holland Michel, *Eyes in the Sky: The Secret Rise of Gorgon Stare and How It Will Watch All of Us* (2019) 11

Baltmore Police Department, Aerial Investigation Research Pilot Program (AIR), Facebook (Mar. 30, 2020) 8, 9, 31, 45

Baltimore Police Department, BPD Aerial Investigation Research (AIR) Pilot Program Launches Tomorrow, Facebook (Apr. 30, 2020) 14

Benjamin Powers, *Eyes Over Baltimore: How Police Use Military Technology to Secretly Track You*, Rolling Stone, Jan. 6, 2017 6

City of Baltimore, City of Baltimore Consent Decree 46

City of Baltimore, Open Baltimore: CCTV Cameras..... 9

David Collins, *Crime-Fighting Technology Outpaces Ability to Regulate It*, WBalTV, July 24, 2017 10

Editorial, *Aerial Surveillance is Not the Answer to Baltimore's Crime Problem*, Balt. Sun, Oct. 14, 2019 12

Editorial, *Aerial Surveillance Persists in Baltimore, Despite Concerns, Pandemic*, Balt. Sun, Mar. 31, 2020 55

Elizabeth Janney, *Maryland Tracks License Plates, Traffic With Surveillance*, Patch, Dec. 11, 2019 10

Emily Opilo, *Baltimore Spending Board Approves Surveillance Plane Pilot Program to Capture Images From City Streets*, Balt. Sun, Apr. 1, 2020 14

Homer, *The Iliad* (Robert Fagles tr., Penguin Classics 1990) (c. 1190 BCE)..... 12

Jay Stanley, ACLU, The Dawn of Robot Surveillance: AI, Video Analytics, and Privacy (June 2019)..... 27

Justin Fenton, *Baltimore Crime Update: Robberies, Assaults Plunge, Shootings Dip as Coronavirus Shutters City*, Balt. Sun, Apr. 23, 2020 ..... 54, 55

Kevin Rector & Ian Duncan, *State Lawmakers, ACLU Consider Legislation to Regulate Police Surveillance*, Balt. Sun, Sept. 3, 2016 6

Kevin Rector & Luke Bridgewater, *Report of Aerial Surveillance by Baltimore Prompts Questions, Outrage*, Balt. Sun, Aug. 24, 2016 6

Kevin Rector, *Baltimore Officers Pitched on Putting Three Surveillance Planes in the Sky at Once, Covering Most of City*, Balt. Sun, Sept. 19, 2019 12

McKenna Oxenden, *Baltimore Police Department Holds First Community Forum on Surveillance Plane That's Set to Launch in April*, Balt. Sun, Mar. 11, 2020 13

Michael Calhoun, *EXCLUSIVE: St. Louis Eyed as Test Market for Aerial Crime Surveillance Technology*, KMOX NewsRadio 1120, June 19, 2019 12

Monique Dixon, Opinion, *NAACP Legal Defense Fund: Spy Plane Planned for Baltimore is Unconstitutional*, Balt. Sun, Apr. 23, 2020 55

Monte Reel, *Secret Cameras Record Baltimore's Every Move From Above*, Bloomberg Businessweek, Aug. 23, 2016 ..... 6, 46

Morgan Cloud, *Searching Through History; Searching For History*, 63 U. Chi. L. Rev. 1707 (1996) 38

Nathan Freed Wessler & Naomi Dwork, *FBI Releases Secret Spy Plane Footage From Freddie Gray Protests*, ACLU Speak Freely (Aug. 4, 2016) 47

Office of Gov. Larry Hogan, COVID-19 Pandemic: Orders and Guidance 13, 54

Robert Sheckley, *Watchbird*, Galaxy Sci. Fiction (Feb. 1953) 20

Stephen R. Wilk, *Medusa: Solving the Mystery of the Gorgon* (2000)..... 12

U.S. Census Bureau, American Community Survey, 2018 American Community Survey 1-Year Estimates, Table B25033 (Baltimore City) 29

STATEMENT OF JURISDICTION

The district court had jurisdiction over this action pursuant to 28 U.S.C. § 1331 and 42 U.S.C. § 1983. The court entered an order denying Plaintiffs' motion for a preliminary injunction on April 24, 2020, PI Order at JA161, and Plaintiffs filed a notice of appeal the same day, NOA at JA162–64. This Court has jurisdiction pursuant to 28 U.S.C. § 1292(a)(1).

STATEMENT OF THE ISSUE

Whether the district court erred in denying Plaintiffs' motion for a preliminary injunction to halt the Baltimore Police Department's use of a wide-area aerial surveillance program for an estimated 12 hours a day, every day, for 180 days, to record a 45-day rolling log of Plaintiffs' and other Baltimoreans' movements about the city, in violation of their Fourth and First Amendment rights.

STATEMENT OF THE CASE

I. Introduction

Tomorrow, the Baltimore Police Department ("BPD") will begin to deploy aircraft to circle above Baltimore as part of a comprehensive system of long-term, persistent, wide-area aerial surveillance that will cover more than 90 percent of the city, recording second-by-second the movements of Baltimore's 600,000 residents. This warrantless mass surveillance system presents a radical and society-changing threat to individual privacy and to free association, and it violates the Constitution.

There is no factual dispute about what this system, which the BPD calls the "Aerial Investigation Research" or "AIR" program, will do. For 180 days, three aircraft equipped with high-definition cameras will fly above Baltimore for 12 hours each day, stopping only at night and in bad weather—an estimated 80 hours per week. Their purpose is to help the BPD identify specific individuals who are suspected of committing or witnessing serious crimes, as well as those who cross their paths before and after the crimes took place. While the cameras will not capture people's physical characteristics, they will record, second-by-second, the movements of virtually all of Baltimore's residents. The BPD will retain a rolling log of those movements for 45 days before aging off older data. To put this pervasive surveillance program into practice, the BPD has signed a contract with a private corporation, candidly called "Persistent Surveillance Systems" ("PSS"). The contract describes the work that PSS will do at the BPD's direction to record and track the movements of Baltimore's residents; to link that information to other BPD-operated surveillance systems (including ground-based video cameras and automatic license plate readers); and to deliver reports to the BPD that comprehensively detail the movements of individuals who have been in the vicinity of crime scenes—and the movements of everyone those individuals have met.

The BPD's system is the largest mass surveillance program ever implemented in an American city. The system puts into place an expansive surveillance dragnet, giving the BPD access to a comprehensive record of the movements and activities of every Baltimore resident each time they leave their home. "[T]his newfound tracking capacity runs against everyone," "not just . . . persons who might happen to come under investigation." *Carpenter v. United States*, 138 S. Ct. 2206, 2218 (2018). By using advanced technology to aggregate location data over the long term, without a warrant, the AIR program offends the bedrock protections for a free society that the Constitution has long provided.

This Court should not allow Baltimore's novel mass surveillance system to become a chilling and all-seeing part of daily life in this country. The program's objectives to reduce crime and violence in Baltimore are laudable—indeed, that is one of the central aims of Plaintiffs' own work. But the Constitution dictates that the use of the BPD's indiscriminate and warrantless aerial dragnet is not an available solution to Baltimore's ills. For the reasons that follow, the Court should reverse the district court and remand with instructions that it enter a preliminary injunction to halt this program.

II. Statement of the Facts

A. Plaintiffs–Appellants

Plaintiff Leaders of a Beautiful Struggle ("LBS") is a grassroots think-tank founded in 2010 that advances the public policy interests of Black people in Baltimore through youth leadership development, political advocacy, and intellectual innovation. LBS Decl. at JA97–98 ¶ 4. A central focus of LBS's work is addressing historic and structural impediments to Black people's quality of life, including poverty, violence, and white supremacy in the American political and socio-economic order. *Id.* at JA98–99 ¶ 7. To this end, LBS has been heavily involved in advocacy surrounding policing reform, and it has spearheaded numerous legislative efforts aimed at policing accountability. *Id.* at JA98–99 ¶ 7. It has been a frequent critic of law enforcement's use of surveillance technologies against Black communities. *Id.* at JA99 ¶ 8.

Plaintiff Erricka Bridgeford is a Black activist in Baltimore, where she was born and raised. Bridgeford Decl. at JA104–05 ¶¶ 2, 4. She has been an involved community activist since the late 1990s and has focused on a range of social justice issues during that time, in particular abolishing the death penalty and supporting survivors of homicide victims. *Id.* at JA105 ¶ 4. She is the co-founder of Ceasefire Baltimore 365 ("Ceasefire"), a movement that serves as a hub for organizations and citizens to support one another, work together, and share resources with the

goal of seeing an end to murder in Baltimore City. *Id.* Ceasefire organizes quarterly 72-hour "ceasefire weekends" in the city, and one recent study has shown that these efforts have led to an estimated 52% reduction in gun violence in Baltimore during such weekends, with no evidence of "postponement effect" in the following three days or weekend. *Id.* at JA105–06 ¶¶ 5–6, JA108–09 ¶ 17. As part of her work for Ceasefire, Ms. Bridgeford conducts significant community outreach in neighborhoods throughout Baltimore, including by visiting every murder site in the city within two weeks of the crime occurring—and, on ceasefire weekends, visiting those sites within a day or even a matter of hours. *Id.* at JA106 ¶ 7.

Plaintiff Kevin James is an information technology professional, hip-hop musician, activist, and community organizer. Mr. James lives in Baltimore City and has lived in the area since 2001, when he moved to the city to join Teach for America. James Decl. at JA111–12 ¶¶ 2–4. He has been involved with many grassroots movements in Baltimore, working on issues that include school funding, housing rights, mental health, and immigration. *Id.* at JA111–12 ¶¶ 2–3. Through his activism and music, Mr. James expresses his values of community-building, justice, and equality. *Id.* at JA112 ¶¶ 3–4.

B. Defendants–Appellees and the AIR Program

Defendants are the BPD and Baltimore Police Commissioner Michael S.

Harrison. In December 2019, Commissioner Harrison announced that the City of Baltimore would enter into a contract with PSS to conduct a "180 day pilot program" of a wide-area aerial motion-imagery surveillance system, to be launched in April 2020. BPD Presentation at JA35; *see* Op. at JA129. But the system is not entirely new: the BPD deployed an earlier version of it for a period of months in 2016, Op. at JA129, keeping it secret not only from the public but from the Mayor of Baltimore and the city's top prosecutors.[1] The BPD halted its secret "trial" of PSS's surveillance technology only after news reports about the surveillance led to an overwhelming public outcry.[2] During its 2016 trial run, PSS recorded more than 300 hours' worth of the movements of ordinary Baltimoreans as they moved about their city.[3] And although PSS publicly represented that the information it collected

[1] *See* Kevin Rector & Ian Duncan, *State Lawmakers, ACLU Consider Legislation to Regulate Police Surveillance*, Balt. Sun, Sept. 3, 2016, https://www.baltimoresun.com/politics/bs-md-police-surveillance-legislation-20160903-story.html.

[2] *See id.*; Monte Reel, *Secret Cameras Record Baltimore's Every Move From Above*, Bloomberg Businessweek, Aug. 23, 2016, https://www.bloomberg.com/features/2016-baltimore-secret-surveillance.

[3] *See* Benjamin Powers, *Eyes Over Baltimore: How Police Use Military Technology to Secretly Track You*, Rolling Stone, Jan. 6, 2017, https://www.rollingstone.com/culture/culture-features/eyes-over-baltimore-how-police-use-military-technology-to-secretly-track-you-126885.

would be deleted after 45 days, it instead saved all of the recordings indefinitely.[4]

According to a "Professional Services Agreement" signed by the BPD and PSS in March 2020, the BPD will authorize PSS to use its "experimental aerial investigation research technology and analytics," whose use in "any US City" is unprecedented and whose "effect on crime has not been analyzed and is unknown," to assist in the investigation of certain crimes in Baltimore City during a six-month "pilot" period. Contract at JA69. While the contract represents that information collected by PSS through this "Aerial Investigation Research" program is ultimately intended to be used in investigations related to only four categories of crimes—murder, non-fatal shootings, armed robberies, and car-jackings—there is effectively no such limitation, as the Baltimore Police Commissioner retains the unreviewable authority to approve other uses in "extraordinary and exigent circumstances" on a case-by-case basis. *Id.*

PSS's aerial surveillance technology will bring the BPD an entirely novel capability, allowing it to amass a comprehensive record of the movements of every pedestrian and vehicle that moves about the city. Under the program, PSS pilots will fly over Baltimore in three manned aircraft, each equipped with the company's "Hawkeye Wide Area Imaging System." Contract at JA70; Op. at JA130. Though

[4] *See* Nat'l Police Found., Review of the Baltimore Police Department's Use of Persistent Surveillance 18 (2017), https://www.policefoundation.org/wp-content/uploads/2017/02/PF-Review-of-BCSP-Final.pdf.

the contract does not describe that system in detail, PSS's website describes a system called "Hawkeye II"—which is also listed in the contract's budget, Contract at JA77–78—as "consist[ing] of twelve, full color cameras" equipped with a "192 million pixel, full color, geo and ortho rectified airborne wide area surveillance sensor" with a "1/2 meter resolution throughout" its coverage area. PSS Web Page at JA84–85, JA87. The BPD has explained that these cameras will capture images of 32 square miles of the city every second—covering about 90 percent of the city. BPD Presentation at JA37; Op. at JA130. The planes will fly 12 hours a day, weather permitting. Op. at JA130. Although the system will not employ infrared or night vision technology, it is "sensitive enough to capture images at night with ambient City lighting." Contract at JA70; *see* Op. at JA130–31. The BPD and PSS have "agreed" that resolution of the surveillance cameras will be "one pixel per person," but the "technology has the ability to upgrade the [image] quality."[5] The cost of the program—fully funded by Texas philanthropists John and Laura Arnold through an entity called Arnold Ventures—is almost $4 million. Contract at JA52, JA77.[6]

[5] BPD, Aerial Investigation Research Pilot Program (AIR) at 24:02, Facebook (Mar. 30, 2020), https://www.facebook.com/58771761955/videos/212014970074066 ("BPD 3/30 Facebook Live Video"); *see* Op. at JA131.

[6] While PSS will naturally have "real-time" access to the data it is collecting, the BPD—ordinarily—will not. Contract at JA72 ("Contractor will not provide BPD

This surveillance power will be further supercharged by integration with existing BPD surveillance capabilities. Specifically, PSS will employ between 15 and 25 analysts in two seven-hour daily shifts, some of whom may work out of the "BPD's Watch Center to be teamed with a BPD sworn officer or BPD analyst." *Id.* at JA70. PSS analysts "will monitor BPD's [Computer Aided Dispatch] system from monitors in BPD facilities." *Id.* at JA71.

PSS will also be permitted to "integrate its imagery data analysis with BPD systems," including the BPD's centralized "CitiWatch" network of ground-based surveillance cameras. *Id.*; *see* Op. at JA132. The CitiWatch network includes more than 800 cameras in Baltimore City,[7] predominantly located in Black and Brown communities, as well as the downtown business district.[8] As part of the BPD's aerial surveillance program, PSS analysts "will track individuals and vehicles that pass the Baltimore CitiWatch CCTV cameras," and will "access or request CitiWatch camera information to provide more detailed descriptions." Contract at JA71; *see* BPD 3/30 Facebook Live Video at 28:19 (Commissioner Harrison: "It

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real time support except in exigent circumstances and only at the written request of the BPD Police Commissioner.").

[7] *See* BPD 3/30 Facebook Live Video at 28:28.

[8] *Compare* City of Baltimore, Open Baltimore: CCTV Cameras (showing locations), https://data.baltimorecity.gov/Public-Safety/CCTV-Cameras/y3f4-umna, *with* Alissa Scheller, *6 Maps That Show How Deeply Segregated Baltimore Is*, HuffPost, Dec. 6, 2017, https://www.huffpost.com/entry/baltimore-segregated-maps-riots_n_7163248 (showing racial makeup of the city).

absolutely will work with the city's camera system.").

PSS will also link the images it collects to the BPD's warrantless automated license plate reader ("ALPR") network, directly allowing any "vehicles that are tracked from [a] crime scene . . . to be identified." Contract at JA71; *see* Op. at JA132. In 2016, in Baltimore City, the BPD's ALPR system collected 6.5 million "reads"—which can include license plates, vehicle make and model, images of drivers and passengers, distinguishing features (such as bumper stickers and body damage), and registration information.[9] The contract explains that PSS will be permitted to "integrate its iView software to accept and utilize" these and other BPD surveillance systems "to help make all of the systems work together to enhance their ability to help solve and deter crimes." Contract at JA72; Op. at JA132.

According to the contract, PSS will analyze the data it has collected "upon specific request by BPD or based on alerts" from the BPD's dispatch system. Contract at JA71. It will then create, within 18 hours, an "investigative briefing" that will include results of "imagery analysis, the location and timing of a crime,

[9] David Collins, *Crime-Fighting Technology Outpaces Ability to Regulate It*, WBalTV, July 24, 2017, https://www.wbaltv.com/article/crime-fighting-technology-outpaces-ability-to-regulate-it/10353655; Elizabeth Janney, *Maryland Tracks License Plates, Traffic With Surveillance*, Patch, Dec. 11, 2019, https://patch.com/maryland/towson/maryland-tracks-license-plates-traffic-surveillance.

the observable actions at the crime scene, the tracks of vehicles and people to and from the crime scene, the location the vehicles and people from the crime[] scene visited after and before the crime." *Id.*; *see* Op. at JA132. Within 72 hours, PSS will provide a more comprehensive report that includes "imagery of the crime scene"; "tracks" and locations of people whom PSS identifies as potential suspects or witnesses—as well as "people and vehicles that met with [those] people"—both prior to and after the crime; and CitiWatch-captured video. Contract at JA71–72. Data collected by PSS will be retained for 45 days and then, if unused and unanalyzed, allegedly deleted. *Id.* at JA73; BPD Presentation at JA47; Op. at JA131.

The contract makes clear that the BPD's wide-area aerial surveillance system is a vast, powerful, and unprecedented domestic spying apparatus. Notably, this technology was originally developed for use over battlefields abroad, beyond the ordinary reach of the Fourth Amendment's warrant requirement—and the President of PSS, Ross McNutt, worked on an early version of this technology as a military contractor.[10] The military's version of this aerial surveillance system is codenamed "Gorgon Stare," after a Greek mythological monster from the underworld whose defining characteristic is its "rigid, fixed, penetrating,

[10] *See* Arthur Holland Michel, *Eyes in the Sky: The Secret Rise of Gorgon Stare and How It Will Watch All of Us* 35–36 (2019).

unblinking stare."[11] In recent years, McNutt has been seeking to contract with local law enforcement agencies to deploy this wartime apparatus over American cities.[12]

The BPD's revival of its aerial surveillance system has been a matter of public controversy since McNutt pitched the department on a three-year, $6.6-million contract in September 2019.[13] While Police Commissioner Michael Harrison initially was "skeptical" of the program, he announced in December 2019 that despite its "controversial history," he intended to enter into a contract for PSS's services.[14] Commissioner Harrison's announcement took the public—as

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[11] *Id.* at 40 (quotation marks omitted); *see* Homer, *The Iliad*, XI:39–40 (Robert Fagles tr., Penguin Classics 1990) (c. 1190 BCE) (describing "the burning eyes, the stark, transfixing horror" of the "Gorgon's grim mask").

[12] Justin Fenton & Talia Richman, *Baltimore Police Back Pilot Program for Surveillance Planes, Reviving Controversial Program*, Balt. Sun, Dec. 20, 2019, https://www.baltimoresun.com/news/crime/bs-md-ci-cr-baltimore-police-support-surveillance-plane-20191220-zfhd5ndtlbdurlj5xfr6xhoe2i-story.html (describing McNutt's pitch to Baltimore); Michael Calhoun, *EXCLUSIVE: St. Louis Eyed as Test Market for Aerial Crime Surveillance Technology*, KMOX NewsRadio 1120, June 19, 2019, https://kmox.radio.com/articles/st-louis-being-considered-test-market-new-aerial-crime-surveillance-technology (explaining McNutt's outreach to St. Louis and Chicago).

[13] *See* Kevin Rector, *Baltimore Officers Pitched on Putting Three Surveillance Planes in the Sky at Once, Covering Most of City*, Balt. Sun, Sept. 19, 2019, https://www.baltimoresun.com/news/crime/bs-md-ci-cr-surveillance-pitch-20190919-dkurugpjdretrjzcevzlc7eabu-story.html; *see also* Editorial, *Aerial Surveillance is Not the Answer to Baltimore's Crime Problem*, Balt. Sun, Oct. 14, 2019, https://www.baltimoresun.com/opinion/editorial/bs-ed-1015-spy-plane-20191014-xlk36warirai7emy54nu3kpen4-story.html.

[14] Fenton & Richman, *supra* note 12.

well as Baltimore State's Attorney's Office and the Office of the Public Defender, neither of which were consulted—by surprise.[15]

In March 2020, as Baltimoreans were reeling from a State of Emergency declaration by Governor Larry Hogan in response to the fast-evolving coronavirus pandemic, and the shuttering of enormous portions of the local and national economies,[16] the BPD held three public meetings concerning its imminent aerial surveillance program. Op. at JA129–30. The first, on March 11, just after Governor Hogan's COVID-19 emergency declaration, was attended by 20 people.[17] Two other meetings, rescheduled to March 23 and March 30, were held as online Facebook events, Op. at JA129–30, while Baltimoreans were under emergency orders prohibiting gatherings of more than ten people.[18]

On April 1, the Baltimore Board of Estimates approved the BPD's contract

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[15] *Id.*

[16] *See* Office of Gov. Larry Hogan, COVID-19 Pandemic: Orders and Guidance, https://governor.maryland.gov/covid-19-pandemic-orders-and-guidance ("Maryland Pandemic Orders").

[17] McKenna Oxenden, *Baltimore Police Department Holds First Community Forum on Surveillance Plane That's Set to Launch in April*, Balt. Sun, Mar. 11, 2020, https://www.baltimoresun.com/news/crime/bs-md-ci-cr-community-forum-plane-20200312-xmcrmbzivfc2jp5xgalclqhmyi-story.html.

[18] *See* Maryland Pandemic Orders, *supra* note 16.

with PSS by a 3-to-2 vote. Op. at JA130.[19] The BPD's planes go up tomorrow.[20]

III. Procedural History

On April 9, 2020, Plaintiffs–Appellants filed a complaint challenging the constitutionality of the AIR program under the Fourth and First Amendments, pursuant to 42 U.S.C. § 1983. Compl. at JA7–27. The same day, Plaintiffs filed a motion for a temporary restraining order and preliminary injunction to halt the program. Mot. at JA28–29. The district court promptly held a telephonic conference with the parties and entered an order setting a briefing schedule and oral argument on Plaintiffs' motion. Sched. Order at JA116–17. Defendants agreed to delay implementation of their aerial surveillance program for 15 days pending the district court's ruling on Plaintiffs' motion, and the district court effectuated that agreement in its order. Op. at JA133–34; Sched. Order at JA117.

On April 24, 2020, the district court entered an order denying Plaintiffs' motion for a preliminary injunction and issued a memorandum opinion explaining its decision. PI Order at JA161; Op. at JA127–60. The court held that Plaintiffs had

[19] *See also* Emily Opilo, *Baltimore Spending Board Approves Surveillance Plane Pilot Program to Capture Images From City Streets*, Balt. Sun, Apr. 1, 2020, https://www.baltimoresun.com/news/crime/bs-md-ci-baltimore-surveillance-plane-approved-20200401-sskjob7dgrevpjfyygrlgitnqi-story.html.

[20] *See* BPD, BPD Aerial Investigation Research (AIR) Pilot Program Launches Tomorrow, Facebook (Apr. 30, 2020), https://www.facebook.com/58771761955/posts/10156868498611956.

standing to challenge the AIR program under both the Fourth and First Amendments. Op. at JA138–44. It also held that "the capture and analysis of imagery data by [PSS] is attributable to the [BPD] for purposes of the Plaintiffs' § 1983 claims." *Id.* at JA137.[21] It concluded, however, that Plaintiffs were not likely to succeed on the merits of their Fourth or First Amendment claims, *id.* at JA155, JA157. It further concluded, solely because of its legal conclusion as to the merits of Plaintiffs' claims, that Plaintiffs had not satisfied the other preliminary injunction factors. *Id.* at JA157–59.

Plaintiffs immediately filed a notice of appeal. NOA at JA162.

SUMMARY OF THE ARGUMENT

The district court legally erred in concluding that Plaintiffs–Appellants are not likely to succeed on the merits of their claims that the BPD's AIR program is unconstitutional, and the court abused its discretion in denying them a preliminary injunction to halt the program.

The AIR program is a Fourth Amendment "search" because the collection of

[21] As the district court held, the collection of location information by PSS through the AIR program constitutes "state action" under 42 U.S.C. § 1983, because it involves the explicit delegation and direction of policing functions to PSS through a contract signed by a final policymaker—the Baltimore Police Commissioner. Op. at JA137; Compl. at JA17–19 ¶¶ 39–46; *see, e.g.*, *Blum v. Yaretsky*, 457 U.S. 991, 1003–05 (1982). The BPD's contract with PSS also establishes a municipal "custom, policy, or practice" under *Monell v. New York City Department of Social Services*, 436 U.S. 658, 689–90 (1978). Op. at JA136–37; Compl. at JA17–19 ¶¶ 39–46, JA26.

Plaintiffs' (and all Baltimoreans') location information over 12 hours, each and every day, for 180 days, and the retention of that information for 45 days, violates their reasonable expectation of privacy. Because that collection is warrantless, it is *per se* unreasonable under the Fourth Amendment. And even if the initial mass collection of the location information were somehow permissible without a warrant, the procedures the BPD has put into place to govern its analysis and use of the information are constitutionally inadequate.

In denying Plaintiffs' Fourth Amendment argument, the district court made two fundamental legal errors.

First, the district court erred in concluding that the Supreme Court's ruling in *Carpenter v. United States*, 138 S. Ct. 2206, does not implicate the AIR program. The AIR program's ongoing 180-day collection and rolling 45-day retention of location information far exceeds the seven days at issue in *Carpenter*. And the collection of information under the AIR program is designed to, and will, reveal personally identifiable details of people's movements over time, even if people are not instantaneously identifiable in any single image captured from the sky. Were it otherwise, the program would serve little purpose in solving crimes.

Second, the district court erred in relying on decades-old Supreme Court decisions allowing brief, targeted aerial observation of particular locations to approve of the BPD's surveillance, which will last 180 days and will record and

make available to law enforcement a rolling 45 days' worth of video of an entire city's movements. The AIR program's surveillance is nothing like the limited observation at issue in those cases, and the Justices who decided them could not have imagined they were signing off on the kind of persistent mass surveillance that the AIR program implements over Baltimore.

The district court also erred in rejecting Plaintiffs' First Amendment claim. The use of wide-area aerial surveillance to track and collect location information about Baltimore's residents as they move about violates their First Amendment rights to association. It exposes their private associations to government monitoring and scrutiny, and it fails exacting scrutiny because it is the very definition of indiscriminate.

Finally, the district court erred in concluding that Plaintiffs had not satisfied the non-merits elements of the preliminary injunction inquiry. Plaintiffs are already suffering irreparable harm as the result of the BPD's ongoing violations of their Fourth and First Amendment rights through the operation of the AIR program. The equities tip in Plaintiffs' favor, as their injuries are ongoing, and the BPD cannot be harmed by an injunction preventing it from exercising unconstitutional surveillance powers. And upholding Plaintiffs' and all Baltimoreans' constitutional rights is manifestly in the public interest.

STANDARD OF REVIEW

This Court reviews a district court's ultimate decision to deny a motion for a preliminary injunction for abuse of discretion, examining factual findings for clear error and legal conclusions de novo. *See In re Search Warrant Issued June 13, 2019*, 942 F.3d 159, 171 (4th Cir. 2019).

Plaintiffs seeking preliminary injunctive relief must establish that they are likely to succeed on the merits, that they are likely to suffer irreparable harm in the absence of preliminary relief, that the balance of the equities tips in their favor, and that an injunction is in the public interest. *See Winter v. Nat. Res. Def. Council*, 555 U.S. 7, 20 (2008); *see Roe v. Dep't of Def.*, 947 F.3d 207, 219 (4th Cir. 2020).

ARGUMENT

I. The district court erred in concluding that Plaintiffs are not likely to prevail on the merits of their claims that the BPD's AIR program is unconstitutional.

A. The AIR program violates the Fourth Amendment.

The surveillance machinery that is about to fly over Baltimore City puts into the BPD's hands a virtual, visual time machine whose digital eyes no person engaged in ordinary life can escape. This kind of panoptic surveillance infrastructure would have horrified the drafters of the Fourth Amendment, which was expressly designed to outlaw indiscriminate and wide-ranging searches conducted entirely at law enforcement's discretion. Warrantless, persistent, daily recording of even a single individual's movements is not a permissible exercise of executive power, and no warrant can authorize the constant recording of the daytime movements of hundreds of thousands of people. The BPD's implementation of such a system in Baltimore violates the Fourth Amendment.

1. The acquisition of location information through wide-area aerial surveillance is a Fourth Amendment "search."

No one, anywhere, reasonably expects that government cameras in the sky will record the whereabouts of an entire city's population second by second. That

kind of surveillance is the stuff of dystopian fiction, not American urban life.[22] As the Supreme Court has made clear, those details of location and movement, in their whole, are private. When the government persistently records people's movements from above, day after day, it transgresses upon the core of what the Fourth Amendment protects.

It is now beyond dispute that people's long-term physical movements, even in public places, enjoy constitutional protection. Almost a decade ago, a majority of the Supreme Court adopted that view, and the Court subsequently affirmed it as the law of the land. *See Carpenter*, 138 S. Ct. at 2217 (citing concurring opinions of five Justices in *United States v. Jones*, 565 U.S. 400 (2012)). That protection exists because the recording of individual movements over time reveals our "privacies of life," *id.* (quoting *Riley v. California*, 573 U.S. 373, 403 (2014) (quoting *Boyd v. United States*, 116 U.S. 616, 630 (1886))), laying bare "not only . . . particular movements, but through them . . . 'familial, political, professional, religious, and sexual associations,'" *id.* (quoting *Jones*, 565 U.S. at 415 (Sotomayor, J., concurring)). Long-term location tracking, made possible through advanced technology, intrudes upon the reasonable expectation that the government "would not—and indeed, in the main, simply could not—secretly

[22] *See, e.g.*, Robert Sheckley, *Watchbird*, Galaxy Sci. Fiction (Feb. 1953), *available at* https://www.law.upenn.edu/live/files/3400-sheckley-r-watchbird-1953 ("After all, murder was an old problem, and watchbird too new a solution.").

monitor and catalogue [a person's] every single movement . . . for a very long period." *Id.* (citing *Jones*, 565 U.S. at 430 (Alito, J., concurring in the judgment)). In *Carpenter*, the Court rejected the government's argument that by carrying a cell phone, people forfeit their expectations of privacy in their movements, such that the government may obtain reams of cell phone location information without a warrant. *See id.* at 2210. The Court reasoned that the use of a cell phone is so "indispensable to participation in modern society," and the sharing of location data with third parties so involuntary, that the Fourth Amendment's protections must apply. *Id.* That reasoning applies even more forcibly here, where the activity in question is ordinary people engaging in everyday life on public streets. Short of never leaving home, there is no way to avoid the BPD's surveillance.

The novel technology deployed by the AIR program has the power to constantly log the daytime movements of an entire city. The *Carpenter* Court sternly warned of such technologies, and of their potential to undermine the "degree of privacy against government that existed when the Fourth Amendment was adopted." *Id.* at 2214 (quoting *Kyllo v. United States*, 533 U.S. 27, 34 (2001)). As the Court explained, surveillance tools with the capacity to "effortlessly compile[]" highly "detailed" information, *id.* at 2216, to record indiscriminately and persistently in a way that "runs against everyone," *id.* at 2218, and to generate "retrospective" data that could be indefinitely mined by law enforcement, grant

"police access to a category of information [that is] otherwise unknowable," *id.*, and therefore trigger the Fourth Amendment's protections.

Modern location-tracking technologies simply change the game. The practical constraints of traditional surveillance once placed natural checks on government power, because detailed, long-term, and expansive monitoring were "difficult and costly and therefore rarely undertaken." *Jones*, 565 U.S. at 429 (Alito, J., concurring in the judgment). But advanced technology effectively removes those checks, allowing "a too permeating police surveillance." *Carpenter*, 138 S. Ct. at 2214 (quotation marks omitted); *see United States v. Knotts*, 460 U.S. 276, 284 (1983) (observing that compared to the use of a beeper, which requires resource-intensive tailing at close range by a human with an analog radio receiver, twenty-four hour "dragnet type law enforcement practices" would raise a distinct constitutional question); *Riley v. California*, 573 U.S. at 393 (rejecting the government's analogy of a search of a wallet to that of cell-phone data because it equates a "ride on horseback" to a "flight to the moon"). Never before could police have perfectly reconstructed even one person's past movements over days, weeks, and months; never could they have dreamed of reconstructing an entire city population's movements in this way.

2. The district court made two fundamental legal errors in rejecting the proposition that the AIR program's surveillance constitutes a Fourth Amendment "search."

The district court legally erred in two key respects in determining that the Fourth Amendment has nothing to say about the AIR program. First, the court wrongly held that the Supreme Court's decision in *Carpenter*, which also involved the long-term collection of location information, does not speak to this case—but more than just speak to this case, *Carpenter* controls it. Second, the court misconstrued decades-old cases approving of brief, targeted aerial observation of particular locations—but those cases did not contemplate, let alone approve of, the kind of technologically sophisticated mass surveillance at issue here.

a. The district court erred in concluding that *Carpenter* does not implicate the AIR program.

The district court refused to apply *Carpenter* to the BPD's mass surveillance system for several reasons, each of which reflects a fundamental misunderstanding of both the Supreme Court's case and this one.

i. The AIR program's long-term collection and retention of location information far exceeds the seven days at issue in *Carpenter*.

The district court held that the AIR program's recording of location information over 180 days, and retention of that information for 45 rolling days, does not amount to a Fourth Amendment "search" because the BPD's aerial cameras will operate only about 12 hours each day, stopping at night or during bad

weather. Op. at JA153. Under the court's analysis, the AIR program therefore did not implicate the "'whole of [Plaintiffs'] physical movements'" protected by the Fourth Amendment under *Carpenter*. *Id.* (quoting *Carpenter*, 138 S. Ct. at 2217). But the fact that the AIR program will not record people's movements for every second of the day does not distinguish it from *Carpenter* at all.

In *Carpenter*, the Supreme Court held that a government demand for seven days' worth of location information amounted to a Fourth Amendment "search." 138 S. Ct. at 2217. Here, the BPD's planes will be aloft for 12 hours each day, seven days a week for the next 180 days, and the AIR program will retain a consistent 45-day log of Plaintiffs' and other Baltimoreans' second-by-second movements—clearly beyond any *Carpenter* threshold. The district court refused to consider this 45-day time period in its Fourth Amendment analysis, insisting that "gaps in the data" collected through the AIR program make it constitutionally distinct from the collection of location information in *Carpenter*. Op. at JA153. In other words, the court concluded that after the end of each day's 12 hours of AIR program surveillance, the constitutional clock begins anew. This was error.

There are, of course, plenty of gaps in the kind of cell-site location data addressed in *Carpenter*, too. People can turn off their cell phones, leave them at home, or travel out of their service provider's coverage area. In fact, these inherent gaps are precisely why, despite *requesting* seven days of data, the government only

received (and viewed) two days of the defendant's location information. *See Carpenter*, 138 S. Ct. at 2266–67 (Gorsuch, J., dissenting). Moreover, the location information in *Carpenter* was not continuous, but rather was logged only when there happened to be an outgoing or incoming call. *See id.* at 2212 (majority op.); *United States v. Carpenter*, 819 F.3d 880, 885 (6th Cir. 2016). The district court was thus wrong to suggest that, compared to the cell-site location information in *Carpenter*, the AIR program's "location-tracking abilities" are "limited," in part because cell phones "relay[] location data several time a minute so long as its signal can reach a cell tower." Op. at JA153 (quotation marks omitted). The AIR program records movement each and every second, creating an even richer font of location information than episodic call-based cell-site location information.

Likewise, in *Jones*, which involved a GPS tracker attached to a vehicle, five concurring Justices considered the collection of 28 days of location information a Fourth Amendment "search," *see* 565 U.S. at 403, even though tracking a car to a parking lot would not reveal whether the suspect went to the nearby jewelry store for a robbery, doctor's office for a checkup, or cafe for a meeting with a friend—let alone capture any of the suspect's trips on foot, bicycle, public transit, or taxi. The bottom line is that today, regardless of how often people actually carry around their cell phones, or where they park their cars overnight, the Supreme Court's rulings still protect their location information with a warrant requirement.

The district court's impression that the gaps in the AIR program's collection "*prevent* the monitoring of a person's movements over the course of multiple days," Op. at JA131 (emphasis added), was incorrect for two reasons. First, what matters is what the acquired information is capable of revealing, and it is irrelevant under the Fourth Amendment that some degree of additional legwork may be required to fill in the blanks. In *Carpenter*, the Supreme Court "rejected the proposition that 'inference insulates a search.'" 138 S. Ct. at 2218 (majority op.) (quoting *Kyllo*, 533 U.S. at 36). There, the government argued that the Constitution permitted the warrantless collection of cell-phone location information because that data was not especially precise—indeed, so inexact that it alone could not definitively place the defendant at the crime scene. *See id.* But the Court brushed that argument aside, observing that the government "could, in combination with other information, deduce a detailed log of Carpenter's movements." *Id.*[23]

And second, while it may be true that, under the AIR program, an individual's movements will not be *automatically* correlated to one another day after day, the court was wrong in concluding that ongoing tracking of individuals

[23] The location information collected through the BPD's system is also far more precise than the data at issue in *Carpenter* and *Jones*. In *Carpenter*, the government asserted that the cell-site location records at issue could place a person only within a "wedge-shaped sector ranging from one-eighth to four square miles," 138 S. Ct. at 2218, and *Jones* involved GPS technology accurate only to within 50 to 100 feet, 565 U.S. at 403. Here, of course, the AIR program footage pinpoints people's locations to the yard.

would be impossible, or even difficult. Notably, while the court's opinion categorically rejected this capability, Op. at JA131, the source it cited—the purveyor of this surveillance system—did not: in a sworn declaration, PSS's McNutt would represent only that the aerial cameras cannot monitor an "individual *reliably* over a period of multiple days." McNutt Decl. at JA122 ¶ 14 (emphasis added) (pointing to the fact that the cameras will not operate at night). But repeated, daily tracking of individuals with the data collected would be easy to accomplish. For most Baltimoreans, who return home at night and leave in the morning from the same place, any of the AIR program's "gaps" will hardly provide meaningful protection against day-after-day tracking. *See infra* Part I.A.2.a.ii.

Again, tracking people (and vehicles) is the entire point of the BPD's system. That it may be "labor-intensive," Op. at JA131, to derive meaning from the masses of data the AIR program collects is precisely why the contract calls for the use of 15 to 25 PSS analysts working in two seven-hour daily shifts. Contract at JA70. And even if this process is—for now, at least, given the rapid spread of video analytics software[24]—somewhat more resource-intensive than what was at

[24] *See* Jay Stanley, ACLU, The Dawn of Robot Surveillance: AI, Video Analytics, and Privacy (June 2019), https://www.aclu.org/sites/default/files/field_document/061119-robot_surveillance.pdf (describing how video analytics can be used to, among other things, automatically alert authorities based on often-unexplainable algorithmic decision making).

issue in *Carpenter*, that process was not automated, either. There, law enforcement could not simply pull up a Google Map of the suspects' whereabouts using cell-site location information alone. *See United States v. Carpenter*, 819 F.3d at 885 (describing investigator's labor-intensive steps to render location records meaningful).

At bottom, the AIR program involves the daily collection of Plaintiffs' movements, down to the yard, for 180 days, retained for 45 days at a time. This long-term collection far exceeds the seven days at issue in *Carpenter*.[25]

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[25] Even if the relevant period of collection is 12 hours (180 or 45 times over), the AIR program implicates *Carpenter*. In holding that collecting seven days of location data was a search, the *Carpenter* Court did not hold, or even suggest, that collection of location data over a shorter period would evade Fourth Amendment protection. Indeed, before and after *Carpenter*, courts have held that much shorter collections of location information deserve protection. *See, e.g.*, *State v. Muhammad*, 451 P.3d 1060, 1072–73 (Wash. 2019) (holding that a single ping of cell-phone location information is a search requiring a warrant); *Commonwealth v. Almonor*, 120 N.E.3d 1183, 1197 (Mass. 2019) (same); *see also, e.g.*, *Commonwealth v. Estabrook*, 38 N.E.3d 231, 237 & n.11 (Mass. 2015) (holding, pre-*Carpenter*, that police could acquire up to only six hours of historical cell-site location information without triggering a search under the state analogue to the Fourth Amendment).

Those rulings make sense. As Justice Sotomayor pointed out in *Jones*, "even short-term monitoring" of location using advanced technologies implicates society's reasonable expectations of privacy by threatening to reveal "a wealth of detail about . . . familial, political, professional, religious, and sexual associations" and thereby "alter[ing] the relationship between citizen and government in a way that is inimical to democratic society." 565 U.S. at 415–16 (Sotomayor, J., concurring). When the government engages in that kind of "short-term monitoring" en masse, through systematic and inescapable advanced technology, it surely effects a Fourth Amendment "search."

ii. The AIR program's collection of location data is meant to, and will, identify people.

The district court concluded that the Fourth Amendment does not apply to the AIR program because the BPD's cameras will themselves only record individual people as "a series of anonymous dots traversing a map of Baltimore." Op. at JA149.[26] But that conclusion was wrong for several reasons.

First, contrary to the district court's insistence that the AIR program merely collects the movements of "anonymous dots," it would be simple for the BPD to roll back the tape to trace pedestrians' or vehicles' paths to the homes they left in the morning, and roll it forward to the homes they returned to at night, thereby deducing identity.[27] Moreover, cell-site location information is ordinarily correlated with a phone number, not a name. Yet the court did not address these basic propositions at all.

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[26] In summarizing the parties' positions, the district court appeared to suggest that the resolution of the AIR program's cameras was a "factual dispute." Op. at JA128. But there is no factual dispute—everyone agrees "that individual physical characteristics will not be observable." *Id.* Plaintiffs do, of course, "contend that the technology in the AIR program is sufficiently precise as to invade the individual liberties of Baltimore citizens," *id.*—but that is a legal claim, not a factual one.

[27] *See* U.S. Census Bureau, American Community Survey, 2018 American Community Survey 1-Year Estimates, Table B25033 (Baltimore City), https://perma.cc/CM9C-VC95 (estimating that more than 75% of Baltimore City's residents live in single-family homes) (sum of persons in single-family–occupied homes divided by the total population).

Second, Plaintiffs submitted as evidence a scientific study showing that people's collective movements are so individually unique that 95 percent of people could be reliably identified using just four points of location information. *See* Study at JA89–93. The court ignored this uncontroverted study's relevance because, it wrote, Plaintiffs had "not proffered 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." Op. at JA154. But while the study happened to use cell-phone location data as a "mobility dataset," its conclusion was not cabined to that particular type of location data—which is, again, *less* precise than the location data at issue here. Instead, the study's conclusion applied to the "re-identification" of individuals through their movements more generally. Study at JA92. And it concluded that the "uniqueness of human mobility traces . . . means that little outside information is needed to re-identify the trace of a targeted individual even in a sparse, large-scale, and coarse mobility dataset." *Id.* (What the study called "traces" are what the AIR program calls "tracks." Contract at JA72.) By ignoring Plaintiffs' unrebutted evidence, the district court abused its discretion. *See In re Search Warrant Issued June 13, 2019*, 942 F.3d at 171.[28]

[28] Moreover, even if the resolution of the BPD's cameras today is "one pixel per person," in assessing whether the government's use or exploitation of a certain technology threatens to "shrink the realm of guaranteed privacy," a court must also

The district court also misconstrued the scope and capabilities of the program—as well as its explicit, sole purpose—by ignoring that the integration of the location data captured from above with other BPD surveillance systems will make identification of individuals trivially easy. The court stated that it would not "lump together discrete surveillance activities as one Fourth Amendment 'search,'" Op. at JA154, but that misapprehends both the AIR program and Plaintiffs' challenge to it, Compl. at JA13–15 ¶¶ 24–32. The use of wide-area surveillance is not simply "one more investigative tool" added to the BPD's current capabilities, Op. at JA154; rather, these systems are explicitly part and parcel of the AIR program itself. The contract is clear that the AIR program's analysts "will track individuals and vehicles that pass the Baltimore CitiWatch CCTV cameras," and will "access or request CitiWatch camera information to provide more detailed descriptions." Contract at JA71. And it is explicit that the BPD's warrantless ALPR network will directly allow any "vehicles that are tracked from [a] crime

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consider related, existing technologies that could further enhance the government's surveillance capabilities. *Kyllo*, 533 U.S. at 34, 36. Thus, any rule a court adopts in a case involving even "relatively crude" surveillance technology, *id.* at 36, "'must take account of more sophisticated systems that are already in use or in development,'" *Carpenter*, 138 S. Ct. at 2218 (quoting *Kyllo*, 533 U.S. at 36), rather than "leave the [public] at the mercy of advancing technology," *Kyllo*, 533 U.S. at 35. Cameras with far more precision and detail than those the BPD plans to use during its 180-day trial, as well as cameras with night vision and infrared capabilities, are just an upgrade away. *See* PSS Web Page at JA95; *see* BPD 3/30 Facebook Live Video at 23:40.

scene . . . to be identified." *Id.* This will be accomplished by "integrat[ing] [PSS's] iView software to accept and utilize" these and other BPD surveillance systems "to help make all of the systems work together to enhance their ability to help solve and deter crimes." *Id.*; *see* Op. at JA132.

Again, deriving identity from the population-wide data the AIR program will collect is precisely its point.

b. The AIR program's surveillance is nothing like the aerial surveillance approved of in past cases.

The district court drew the wrong lessons from decades-old cases in which the Supreme Court and this Court "generally upheld" a very different kind of aerial surveillance. Op. at JA148. Those cases considered brief, targeted aerial observation of static locations—a materially different proposition than the BPD's surveillance, which will record video of an entire city's movements constantly over the next six months, and retain it in a rolling 45-day log. And the factors the district court found relevant from those cases do not bear at all on the elements of the AIR program—inescapable persistence, advanced technology, recording, and the observation of movement—that make it so constitutionally problematic under *Carpenter*.

From the older cases, the district court derived several principles, determining that warrantless aerial surveillance is permissible as long as it: (1) "occurs within navigable or regularly traveled airspace"; (2) "does not permit the

visual observation of 'intimate details' associated with a person's home"; and (3) does not "disturb the use of a person's property." *Id.* The court concluded that because all three factors applied here, the AIR program is lawful. *Id.* But the court entirely failed to engage with the differences between those older cases and the AIR program in terms of sheer scale, persistence, and technology—differences that, as explained above, make the AIR program much like the warrantless collection in *Carpenter*, albeit 600,000 times over. That the district court called the AIR program "far less intrusive" than traditional aerial surveillance, *id.* at JA149, simply underscores its error.

While the Supreme Court has indeed permitted limited and transitory information-gathering from aircraft, the Justices who decided those older cases could hardly have imagined the BPD's long-term, omnipresent aerial surveillance system, and they certainly did not approve of it. And in recent years, "[w]hen confronting new concerns wrought by" new, digital-age surveillance technologies, the "Court has been careful not to uncritically extend existing precedents." *Carpenter*, 138 S. Ct. at 2222 (citing *Riley v. California*, 573 U.S. at 386). The Court's three aerial surveillance cases date back more than thirty years, and each involved targeted, short-term aerial observations with—by today's standards—crudely unsophisticated equipment or no equipment at all. They involved nothing

remotely as invasive, all-seeing, and comprehensive as the spying tool now in the hands of the BPD.[29]

The first, *California v. Ciraolo*, 476 U.S. 207 (1986), involved a one-time, "simple visual observation[]" of curtilage from 1000 feet with "the naked eye." *Id.* at 214–15. The next, *Dow Chemical Co. v. United States*, 476 U.S. 227 (1986)—decided the same day as *Ciraolo*—concluded that the Fourth Amendment was not triggered by the aerial observation of an industrial area akin to an "open field" through a flyover technique the Court called "conventional" and "commonly used," without employing any "highly sophisticated surveillance equipment not generally available to the public." *Id.* at 233, 238. And the last, *Florida v. Riley*, 488 U.S. 445 (1989), permitted a helicopter flyover for naked-eye observations in a routinely used, publicly accessible airway. *Id.* at 449. As the district court noted, this Court has twice approved of similar types of short-term, targeted aerial observation. Op. at JA148; *see United States v. Breza*, 308 F.3d 430, 434 (4th Cir.

[29] The district court suggested that it is relevant that the BPD's surveillance system is not authorized to engage in real-time surveillance, or even capable of doing so. Op. at JA130, JA150. Because PSS is a state actor in this context, that is obviously not the case; in fact, the AIR program involves the real-time collection of location information for 180 days. And in any event, the BPD can request such access from PSS at its discretion. Contract at JA72.

Regardless, the *Carpenter* Court emphasized that the use of location tracking to amass reams of historical data is especially problematic, because its function is to generate "retrospective" data that can be indefinitely mined by law enforcement—granting it access to a virtual time machine. 138 S. Ct. at 2218.

2002) (permitting single helicopter flight over 92-acre farm); *Giancola v. State of W. Va. Dep't of Pub. Safety*, 830 F.2d 547, 550–51 (4th Cir. 1987) (permitting helicopter flights over marijuana field and observing that relevant factors for the legal analysis include the "frequency" and "number of instances of surveillance").

The BPD's new aerial surveillance system is light-years beyond the single flights at issue in those cases. It is not fleeting, but long-term—at least 180 days, and perhaps indefinite. It is not targeted, but covers a wide area—indeed, 90 percent of Baltimore City. It does not monitor a single stationary location, but is designed to track movement over time. It does not record a series of static snapshots, but a reviewable log of video that will be retained for 45 days at a time—and that will be stored, analyzed, and linked to other surveillance technologies already in the BPD's hands. Contract at JA70–71.[30] And its multiple 192 million pixel wide-angle cameras are "highly sophisticated surveillance equipment not generally available to the public" today, *Ciraolo*, 476 U.S. at 238, and inconceivable three decades ago.[31] The result is a system of "tireless and

[30] *See United States v. Cuevas-Sanchez*, 821 F.2d 248, 251 (5th Cir. 1987) ("It does not follow that *Ciraolo* authorizes any type of surveillance whatever just because one type of minimally-intrusive aerial observation is possible."); *United States v. Broadhurst*, 805 F.2d 849, 854, 856 (9th Cir. 1986) (explaining that *Ciraolo* was limited to "unenhanced visual observations" and that its result "can hardly be said to approve of intrusive technological surveillance where the police could see no more than a casual observer").

[31] Today's high-end commercially available digital cameras have approximately 20 million pixels. *See, e.g.*, Canon, EOS 6D EF, https://shop.usa.canon.com/shop/en/

absolute surveillance," *Carpenter*, 138 S. Ct. at 2218, that is incompatible with the Constitution.[32]

At most, the Supreme Court cases relied upon by the district court establish that people reasonably expect aircraft to fly over them briefly in navigable airspace, perhaps even with a standard camera. But no one expects a plane—or, more to the point, a connected network of planes recording second-by-second data that will be integrated with another network of ground surveillance cameras and yet another network of automatic license plate readers—to be circling above them, recording each of their movements, 12 hours a day, seven days a week.

In the end, it is not reasonable to read *Carpenter* and the Supreme Court's old aerial surveillance cases to authorize, rather than prohibit, the kind of surveillance implemented through the AIR program. This norm-shattering use of

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catalog/eos-6d-ef-24-105mm-f35-56-is-stm-lens-kit ($2,099 camera with 20.2 million pixels).

[32] The district court also found relevance in a series of circuit court cases (though none from this Court) holding that the warrantless use of "pole cameras" to engage in extended surveillance of static locations does not constitute a Fourth Amendment "search." Op. at JA149–50. None of those cases post-date *Carpenter*, and (as the court acknowledged) one came out the other way. And notably, the only pole-camera case cited by either of the parties below was *United States v. Moore-Bush*, 381 F. Supp. 3d 139, 149 (D. Mass. 2019), which held that, under *Carpenter*, a "home occupant would not reasonably expect" eight months of surveillance with a pole camera.

wide-area surveillance to engage in a daily dragnet of a major American city is, among other things, a Fourth Amendment "search."

3. The warrantless, long-term use of wide-area aerial surveillance to collect and retain the locations of all Baltimoreans is unreasonable under the Fourth Amendment.

Because the district court held that the AIR program does not trigger a Fourth Amendment "search," it did not reach the overall reasonableness of the program. But the BPD's adoption of an advanced wide-area aerial surveillance system allows them to engage in a staggering number of warrantless searches, which are "per se unreasonable under the Fourth Amendment." *Arizona v. Gant*, 556 U.S. 332, 338 (2009) (quoting *Katz v. United States*, 389 U.S. 347, 357 (1967)).

In fact, the BPD's surveillance system will subject all Baltimoreans, including Plaintiffs, to the particular form of search that the authors of the Fourth Amendment found most offensive—those pursuant to the constitutionally repugnant "general warrant." Stretching back to the origins of Anglo-Saxon law, such searches "have long been deemed to violate fundamental rights. It is plain that the amendment forbids them." *Marron v. United States*, 275 U.S. 192, 195 (1927); *accord Maryland v. Garrison*, 480 U.S. 79, 84 (1987). The "general warrants" that the Framers deplored "specified only an offense," leaving "to the discretion of the

executing officials the decision as to which persons should be arrested and which places should be searched." *Steagald v. United States*, 451 U.S. 204, 220 (1981).

Like a search conducted pursuant to a general warrant, the BPD's aerial surveillance system specifies four offences, and then searches the movements of everyone in Baltimore in case they might turn out to be a suspect, witness, or someone those persons meet with. It permits searches not predicated upon "an oath or information supplying cause." Morgan Cloud, *Searching Through History; Searching For History*, 63 U. Chi. L. Rev. 1707, 1738 (1996). It authorizes surveillance that "survive[s] indefinitely." *Id.* And it is "not restricted to searches of specific places or to seizures of specific goods." *Id.*; *see Berger v. New York*, 388 U.S. 41, 59 (1967) (striking down electronic-surveillance statute that, like "general warrants," left "too much to the discretion of the officer executing the order" and gave the government "a roving commission to seize any and all conversations" (quotation marks omitted)). Opposition to general warrants "helped spark the revolution itself," *Carpenter*, 138 S. Ct. at 2213, as the Founders considered them to be "'the worst instrument of arbitrary power . . . that ever was found in an English law book,'" *Stanford v. Texas*, 379 U.S. 476, 481 (1965) (quoting American Revolutionary James Otis). Wide-area aerial surveillance, like the general warrants the Founders feared, places unprecedented discretion in law

enforcement and does away with the requirement that law enforcement develop some measure of individualized suspicion prior to engaging in a search.

In fact, the BPD's aerial surveillance system is far more offensive to the Fourth Amendment than even the general warrants of yore. Rather than conducting a general search of a single individual, the BPD is instead conducting indefinite warrantless surveillance of an entire city of 600,000 people. Moreover, even a general warrant was—in name, at least—a warrant signed by a judge. But the BPD's system—which aims to follow every Baltimore resident around their city—imagines no role for the courts at all.

Government officials may conduct a warrantless search only if one of the "few specifically established and well-delineated exceptions" to the warrant requirement applies. *Gant*, 556 U.S. at 338 (quotation marks omitted); *see United States v. Karo*, 468 U.S. 705, 717 (1984). Because the AIR program's primary purpose is a "'general interest in crime control,'" *City of L.A. v. Patel*, 135 S. Ct. 2443, 2452 (2015) (alteration in original) (quoting *City of Indianapolis v. Edmond*, 531 U.S. 32, 44 (2000)), the BPD has not—and could not—argue that any exception to the warrant requirement applies. *See, e.g.*, *Edmond*, 531 U.S. at 42 (explaining that without this rule, the Fourth Amendment "would do little to prevent [warrantless] intrusions from becoming a routine part of American life"); *Ferguson v. City of Charleston*, 532 U.S. 67, 84 (2001) (explaining that "law

enforcement involvement always serves some broader social purpose or objective," and if that were enough, "special needs" would immunize "virtually any nonconsensual suspicionless search").

The upshot is this: the BPD does not have a warrant to engage in wide-area aerial surveillance through the AIR program; the BPD could not lawfully obtain a warrant to engage in that surveillance; and the BPD has no justification to engage in that surveillance without one. For those reasons, the AIR program is unreasonable under the Fourth Amendment.

4. The rules regulating the AIR program are constitutionally inadequate.

Even if the BPD were permitted to amass data about every Baltimorean's location without a warrant, their overall scheme—including the procedures they have implemented to collect, store, and analyze that information—must still adhere to the Fourth Amendment's reasonableness requirement.[33] *See Brigham City v. Stuart*, 547 U.S. 398, 403 (2006) ("[T]he ultimate touchstone of the Fourth Amendment is reasonableness." (quotation marks omitted)); *United States v. Bobo*,

[33] In uncontroverted declarations, Plaintiffs Erricka Bridgeford and Kevin James have explained why their location information in particular is likely to be analyzed by the BPD. Bridgeford Decl. at JA107–08 ¶¶ 10–12; James Decl. at JA113 ¶¶ 5–6. As Plaintiffs argued before the district court and discuss below, the BPD's overall scheme for the use of that information is unreasonable under the Fourth Amendment. Compl. at JA14–17 ¶¶ 28–38, JA25–26 ¶¶ 68–70. The district court did not address this alternative argument.

477 F.2d 974, 979 (4th Cir. 1973) ("[W]e know that the Fourth Amendment means what it says—unreasonable searches are prohibited."). The measures Defendants have contractually implemented to cabin the use of their bulk-collected location data fail that test.

Under the Fourth Amendment, reasonableness is determined by examining the "totality of the circumstances" to "assess[], on the one hand, the degree to which [government conduct] intrudes upon an individual's privacy and, on the other, the degree to which it is needed for the promotion of legitimate governmental interests." *Samson v. California*, 547 U.S. 843, 848 (2006) (quotation marks omitted). If "'the protections that are in place for individual privacy interests are . . . insufficient to alleviate the risks of government error and abuse, the scales will tip toward a finding of unconstitutionality.'" *[Redacted]*, 402 F. Supp. 3d 45, 86–87 (F.I.S.C. 2018) (quoting *In re Directives [Redacted] Pursuant to Section 105B of the Foreign Intelligence Surveillance Act*, 551 F.3d 1004, 1012 (F.I.S.C. Rev. 2008)).

First, the BPD's overall scheme fails a test of reasonableness because it fails to interpose "the deliberate, impartial judgment of a judicial officer . . . between the citizen and the police." *Katz*, 389 U.S. at 357 (quotation marks omitted). The Fourth Amendment reflects a judgment that the right to privacy is "too precious to entrust to the discretion of those whose job is the detection of crime and the arrest

of criminals." *McDonald v. United States*, 335 U.S. 451, 455–56 (1948). The Supreme Court recognized this principle in *Berger*, where it struck down New York's wiretapping statute as unreasonable even though the state's scheme involved a limited form of court approval. *See* 388 U.S. at 54–55, 56 (explaining that the use of "indiscriminate" surveillance tools imposes "a heavier responsibility" on the courts in supervising the surveillance). Yet the BPD's contract contemplates no role of any kind for a court—not before it puts mass surveillance into practice in Baltimore, and not before it accesses the data it collects to build detailed dossiers about Baltimoreans, including those who aren't suspected of any crime. Simply put, Defendants have written and approved the rules for themselves, and even if those rules provided stronger privacy protections, they would not be enough. *See Riley v. California*, 573 U.S. at 398 ("[T]he Founders did not fight a revolution to gain the right to government agency protocols.").

Second, the rules Defendants have put into place purportedly to protect individual privacy are as weak as they are vague and incomplete. The initial collection of information under the BPD's system is maximally permissive, widespread, and indiscriminate. The BPD's spy planes will intentionally record, on a daily basis, information about every single Baltimorean who steps outside while the planes are in flight. In those circumstances, the Fourth Amendment demands

stringent regulation of how that collected information is stored, processed, and utilized by law enforcement on the back end. *See, e.g.*, *In re Directives*, 551 F.3d at 1015.

Yet the central protection in the BPD's contract—which lays out a "Privacy Protection Program" over less than a single page—appears to be a promise to delete data that is not packaged by analysts after 45 days. Contract at JA74. As a result, the BPD will have a 45-day rolling log of the movements of virtually every person in Baltimore, linked to information obtained (also warrantlessly) from BPD's other surveillance networks, including its CitiWatch ground surveillance cameras and ALPRs. Critically, even beyond these comprehensive logs of the movements of countless people, *id.* at JA71–72, the BPD's data packages encompass the tracks and locations of vehicles and people who merely happen to be in the vicinity of a crime scene—as well as "people and vehicles *that met with* people who were tracked from the crime scene," both backward and forward in time, *id.* at JA71–72 (emphasis added). That means that Baltimoreans—and, given the nature of their work, especially Plaintiffs, LBS Decl. at JA100–02 ¶¶ 12–15; Bridgeford Decl. at JA107–08 ¶¶ 10–12; James Decl. at JA113 ¶¶ 5–6 —are likely to be caught up in those data packages without justification. *See Ybarra v. Illinois*, 444 U.S. 85, 91 (1979) (holding that "a person's mere propinquity to others independently suspected of criminal activity does not, without more, give rise to

probable cause to search that person"); *see Owens ex rel. Owens v. Lott*, 372 F.3d 267, 276–77 (4th Cir. 2004) (holding that a warrant authorizing the search of "all persons" at a single residence violated the Fourth Amendment because it was "based on nothing more than their proximity to a place where criminal activity may or may not have occurred" (emphasis removed)). The BPD's procedures even fail to specify a time limit for these supposedly relevant interactions. If a resident of Baltimore gets lunch with a friend who, two days later, is present near the commission of a serious crime, would that be enough to be drawn into a permanently retained "evidence" file, and under the BPD's microscope? The procedures do not say.

The BPD's AIR program procedures are weak and incomplete for still other reasons. At present, it appears that the lone mechanism for auditing "unauthorized use of the system" is "self-report[ing]" by PSS. Contract at JA74. Although the contract contemplates the retention of an "Independent Verification & Validation" firm to assess the BPD's use of mass aerial surveillance, *id.* at JA82, there is no indication that such a firm has been retained, or that its oversight will even be based on effective and scientifically tested means. Not even the physical security of the data pool, which will include information about every single Baltimorean, is accounted for; it is, instead, left to PSS alone to "institute physical, technical and policy systems to ensure the integrity of the data it records in its surveillance and

analysis." *Id.* at JA73. This raises the question whether those integrity-ensuring systems are already in place, or not. Finally, the contract says nothing about what happens to the data once the contract comes to an end. *Id.* at JA72.

If the consequences of the BPD's experimental surveillance system were not so serious, the protocols they have chosen to put in place to manage massive volumes of private information about ordinary Baltimoreans would be laughable. While the government's law enforcement interests are of course entitled to some weight in the reasonableness analysis, the contract "acknowledge[s]" that wide-area aerial surveillance's "effect on crime has not been analyzed and is unknown at this time." *Id.* at JA69; *see* BPD 3/30 Facebook Live Video at 28:50 (Commissioner Harrison stating that "[t]here is no expectation that this will work"). On the other hand, the privacy intrusions here are both known and substantial—and they operate on an unprecedented scale. The AIR program's procedures fail to ameliorate those harms at either the individual or the collective level—indeed, they are designed to *encourage* the warrantless exploitation of constitutionally protected information. It is not a close question: the BPD's extraordinary intrusions into Baltimoreans' privacy are unreasonable under the Fourth Amendment.

B. The AIR program violates the First Amendment.

The district court also held that Plaintiffs had not shown a likelihood of success on the merits of their First Amendment claim, despite the fact that Defendants did not contest the merits of Plaintiffs' argument, only their standing. Op. at JA156. The district court's holding was incorrect: The use of wide-area aerial surveillance to track and collect location information about Baltimore's residents as they move about—from home to a friend's, to a health clinic, to a protest site, to a church, to a gay bar, and beyond—violates their First Amendment rights to association. For Plaintiffs, this violation is particularly acute, given the political nature of their work, much of which addresses systemic racism and violence in Baltimore and, indeed, in its police force. LBS Decl. at JA98–99 ¶¶ 7–8, JA100–01 ¶¶ 10–14; Bridgeford Decl. at JA107–09 ¶¶ 11–13, 16; James Decl. at JA113–14 ¶¶ 5, 8; *see also* City of Baltimore, City of Baltimore Consent Decree, https://consentdecree.baltimorecity.gov ("court enforceable agreement to resolve [the Department of Justice's] findings that it believed the [BPD] had engaged in a pattern and practice of conduct that violates the First, Fourth, and Fourteenth Amendments to the United States Constitution, and certain provisions of federal statutory law"); Reel, *supra* note 2 (discussing PSS's use of aerial surveillance in

2016, at the BPD's direction, to "monitor[] the city's reaction" to the acquittal of a BPD police officer tried for the murder of Freddie Gray).

Over the last decade, the Supreme Court has made clear that that sustained surveillance of individuals threatens freedom of association even when the surveillance is conducted in public places. *See Carpenter*, 138 S. Ct. at 2217–18 (citing concurring opinions of five Justices in *Jones*, 565 U.S. 400, and the majority opinion in *Riley v. California*, 573 U.S. at 401–03). Government surveillance that substantially burdens First Amendment rights, as the BPD's wide-area aerial surveillance program does, must survive "exacting scrutiny." *See, e.g.*, *Buckley v. Valeo*, 424 U.S. 1, 64 (1976); *In re Grand Jury Proceedings*, 776 F.2d 1099, 1102–03 (2d Cir. 1985) (grand jury subpoena); *Clark v. Library of Cong.*, 750 F.2d 89, 94 (D.C. Cir. 1984) (FBI field investigation). It is constitutional only if it serves a compelling state interest and only if it is the "least restrictive means" of achieving that interest. *See, e.g.*, *Clark*, 750 F.2d at 94–95, 98. The BPD's system fails this standard.[34]

[34] Where government searches implicate First Amendment rights, the Fourth Amendment must be applied with "scrupulous exactitude." *Zurcher v. Stanford Daily*, 436 U.S. 547, 564 (1978). But even where searches comply with the Fourth Amendment, they may violate the First. *See, e.g.*, *Tabbaa v. Chertoff*, 509 F.3d 89, 102 n.4 (2d Cir. 2007) ("Our conclusion that the searches constituted a significant or substantial burden on plaintiffs' First Amendment associational rights is unaltered by our holding that the searches were routine under the Fourth Amendment. . . . [D]istinguishing between incidental and substantial burdens under the First Amendment requires a different analysis, applying different legal

First, the BPD's aerial surveillance system substantially impairs Plaintiffs' First Amendment rights because it exposes their associations to government monitoring and scrutiny. Every time Plaintiffs leave their homes during the day, the BPD will have a record of where they went, when, how long they stayed, who they were there with, and where they went next. The creation of this record for all Baltimoreans is, in fact, the very purpose of the surveillance. Contract at JA71–72. The system impairs Plaintiffs' right of associational privacy by placing a record of all of their sensitive movements in the hands of the police.

Critically, the scope of the BPD's surveillance system far exceeds that of the government surveillance that led to the Supreme Court's seminal associational-privacy cases, *NAACP v. Alabama*, 357 U.S. 449, 462 (1958); *Bates v. City of Little Rock*, 361 U.S. 516 (1960); and *Gibson v. Florida Legislative Investigation Committee*, 372 U.S. 539 (1963). While those cases involved demands for specific organizations' membership rolls, the information that the BPD is now gathering yields a much richer web of private associational information about Plaintiffs and other Baltimoreans. It supplies a comprehensive map of the sensitive associational ties embedded in Plaintiffs' everyday lives and community-based work. LBS Decl.

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standards, than distinguishing what is and is not routine in the Fourth Amendment border context.").

at JA100–03 ¶¶ 10–18; Bridgeford Decl. at JA107–09 ¶¶ 10–16; James Decl. at JA113–14 ¶¶ 5–8.

The Supreme Court's decision in *Shelton v. Tucker*, 364 U.S. 479 (1960), is instructive. In that case, the Court found that First Amendment rights were substantially burdened by an Arkansas statute requiring teachers to "disclose every single organization with which [they had] been associated over a five-year period." *Id.* at 487–88. In *Shelton*, the Second Circuit later observed, the Supreme Court "adopted a commonsense approach and recognized that a chilling effect was inevitable if teachers . . . had to disclose to the government all organizations to which they belonged." *Local 1814, Int'l Longshoremen's Ass'n, AFL-CIO v. Waterfront Comm'n of N.Y. Harbor*, 667 F.2d 267, 272 (2d Cir. 1981). The chilling effect is equally inevitable here.

The district court concluded that *Shelton*, as well as Plaintiffs' other cases, "have no applicability to the issue of surveillance techniques which in no way compel or imperil speech." Op. at JA157. But that is incorrect. The AIR Program involves the acquisition of Plaintiffs' sensitive associational information. *Id.* at JA141–42. The result is the same as it would be if Plaintiffs were compelled to provide the government, at the end of each day, a detailed record of their movements and associations. This surveillance unquestionably imperils Plaintiffs' right to associate freely.

Second, the BPD's aerial surveillance program fails exacting scrutiny because it is the very definition of indiscriminate—the BPD is collecting all Baltimoreans' location information because some tiny fraction of them may become useful to an investigation at some point in the future. Courts have rejected investigative efforts that were far more targeted than the one at issue here. In *Local 1814*, the Second Circuit narrowed a subpoena for payroll records after concluding that the subpoena would otherwise have an "inevitable chilling effect" on constitutionally protected activity. 667 F.2d at 273–74. The modification, the Court held, would "appropriately limit the impairment of . . . First Amendment rights without compromising the [government's] legitimate investigative needs." *Id.* at 274.

The Supreme Court's analysis in *Shelton* is again illuminating. There, the Court characterized the statute at issue as "completely unlimited" because it required teachers to "list, without number, every conceivable kind of associational tie—social, professional, political, avocational, or religious." 364 U.S. at 488. An inquiry into those associations could not be justified, the Court held, particularly when so many of them "could have no possible bearing" on the interests the government was seeking to protect. *Id.*; *see also, e.g.*, *In re Grand Jury Subpoena to First Nat'l Bank*, 701 F.2d 115, 119 (10th Cir. 1983) (remanding for evidentiary hearing to determine whether subpoena would chill associational rights and, if so,

whether breadth of subpoena could be limited). Indeed, in this case the First Amendment analysis is more straightforward than it was in *Shelton*. It is plain that the BPD, whose surveillance system imposes a quintessentially "unlimited and indiscriminate sweep," *Shelton*, 364 U.S. at 490, could advance its law enforcement objectives through less intrusive means.

Mass surveillance is designed to, and inevitably does, uncover private association, and the BPD's aerial surveillance program is no different. Because the BPD's AIR program will substantially burden Plaintiffs' First Amendment rights without justification, it is unconstitutional.

II. Because the district court erred in rejecting Plaintiffs' likelihood of success on the merits, it also erred in applying the remaining preliminary injunction factors.

The district court explicitly tied its evaluation of the last three prongs of the preliminary injunction inquiry to its legal conclusion that Plaintiffs were not likely to succeed on the merits of their constitutional claims. Op. at JA157–59; *see Winter*, 555 U.S. at 20 (discussing likelihood of irreparable harm absent an injunction, the balance of equities, and the public interest). As a result, it held that none of these preliminary injunction factors favored Plaintiffs. Should this Court

reject the district court's constitutional analysis, it must reject its application of the other preliminary injunction factors as well.

First, unless enjoined, the BPD's wide-area aerial surveillance system will cause irreparable harm to Plaintiffs. As Plaintiffs have established, the BPD's system violates their constitutional rights, which alone constitutes manifest, irreparable harm. *See, e.g.*, *WV Ass'n of Club Owners & Fraternal Servs., Inc. v. Musgrave*, 553 F.3d 292, 298 (4th Cir. 2009) ("[I]n the context of an alleged violation of First Amendment rights, a plaintiff's claimed irreparable harm is 'inseparably linked' to the likelihood of success on the merits of plaintiff's First Amendment claim."); *Mills v. District of Columbia*, 571 F.3d 1304, 1312 (D.C. Cir. 2009) ("It has long been established that the loss of constitutional freedoms, 'for even minimal periods of time, unquestionably constitutes irreparable injury.'" (*quoting Elrod v. Burns*, 427 U.S. 347, 373 (1976))). And even if further demonstration of irreparable harm were required, such a requirement is surely met by evidence that the BPD's surveillance will burden Plaintiffs' and others' associational and expressive activity, particularly that of marginalized groups. LBS Decl. at JA100–03 ¶¶ 10–18; Bridgeford Decl. at JA107–09 ¶¶ 10–16; James Decl. at JA113–14 ¶¶ 5–8.

Second, the balance of equities also weighs heavily in favor of an injunction. While Plaintiffs will suffer significant harm in the absence of an injunction as the

BPD compiles video of their daily movements, the BPD faces little, if any, injury from its issuance. As this Court has recognized, government officials are not harmed by the issuance of a preliminary injunction that prevents the state from implementing a likely unconstitutional practice. *See Centro Tepeyac v. Montgomery Cty.*, 722 F.3d 184, 191 (4th Cir. 2013) (quoting *Giovani Carandola, Ltd. v. Bason*, 303 F.3d 507, 521 (4th Cir. 2002)).

Notably, the injunction sought will impose no affirmative obligation, administrative burden, or cost upon the BPD. It will only pause implementation of their pilot program and maintain the status quo that existed prior to the commencement of this lawsuit while the Court assesses the constitutionality of the BPD's surveillance system.[35]

Furthermore, one of Defendants' explicit goals in implementing this experimental pilot surveillance system is to enable BPD to collect and "to test out and rigorously evaluate" data to determine whether to permanently implement

[35] Indeed, the BPD agreed to delay the program by at least 15 days in order to allow the district court to rule on Plaintiffs' motion, undermining any claim that time is of the absolute essence in commencing its surveillance. Sched. Order at JA116.

And while the district court concluded that it was "within the realm of the possible" that the philanthropic support for the AIR program would be withdrawn if legal challenges lead to substantial delays, Op. at JA158, the BPD floated that possibility without introducing or pointing to any evidence in the record whatsoever.

wide-area aerial surveillance over Baltimore. Contract at JA52–53. But the data collected over the coming months will be of questionable value due to the present circumstances of the COVID-19 pandemic. *See* Maryland Pandemic Orders, *supra* note 16. Because of Maryland's stay-at-home order, movement and activity are greatly reduced throughout Baltimore. Under these circumstances, the value of data regarding the impact of the AIR program on the city's crime rates is considerably diminished if meant to inform analyses of its causal impact on crime rates and effectiveness in identifying suspects during times of ordinary city life. *See* BPD Presentation at JA41–42 (discussing "measures of success" upon which the BPD will evaluate the trial period).[36]

Finally, preliminarily enjoining the BPD's wide-area aerial surveillance program is manifestly in the public interest. It is a well-established principle that "upholding constitutional rights surely serves the public interest." *Giovani Carandola*, 303 F.3d at 521. Plaintiffs' constitutional rights, and those of every other Baltimorean, will be violated by Defendants' aerial surveillance system, and an injunction is the only way to protect them.

Because it ruled against Plaintiffs on the merits, the district court did not

[36] *See also, e.g.*, Justin Fenton, *Baltimore Crime Update: Robberies, Assaults Plunge, Shootings Dip as Coronavirus Shutters City*, Balt. Sun, Apr. 23, 2020, https://www.baltimoresun.com/news/crime/bs-md-ci-cr-baltimore-crime-stats-update-20200423-4a5jnrqlhbbwrkgoaqhaso67qe-story.html.

credit this side of the public-interest balance. The court instead relied on scattered evidence of pockets of support for the AIR program—one letter introduced into evidence by the BPD, and some sources the court apparently found on its own. Op. at JA158–59. But that evidence is neither the full picture[37] nor determinative of this question. *Id.* at JA158–59 ("Defendants readily confess that the 'public interest' factor is not a popularity contest."). Finally, the district court deemed statistics about the 2020 murder rate in Baltimore to be "relevant," *id.* at JA159, but overall, crime is in sharp decline there over the past months.[38]

CONCLUSION

For the foregoing reasons, this Court should reverse the district court and remand with instructions to enter a preliminary injunction to halt the AIR program, specifically prohibiting the BPD from collecting or accessing any images of Baltimoreans through wide-area aerial surveillance.

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[37] *See, e.g.*, Monique Dixon, Opinion, *NAACP Legal Defense Fund: Spy Plane Planned for Baltimore is Unconstitutional*, Balt. Sun, Apr. 23, 2020, https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-0424-baltimore-surveillance-plane-naacp-legal-20200423-ix4bvm2r2jctbjpj7udk5ufhz4-story.html; Editorial, *Aerial Surveillance Persists in Baltimore, Despite Concerns, Pandemic*, Balt. Sun, Mar. 31, 2020, https://www.baltimoresun.com/opinion/editorial/bs-ed-0401-baltimore-spy-plane-20200331-botkmcfy3bbyrnhxkiidywokum-story.html ("[I]n the end, [Baltimoreans] would still be guinea pigs in an experiment between a for a profit-driven company without much of a track record and a police department with a history of constitutional violations. To say we're uncomfortable with that is an understatement.").

[38] Fenton, *supra* note 36.

April 30, 2020

Respectfully submitted,

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REQUEST FOR ORAL ARGUMENT

Due to the novel and significant legal issues in this case, Plaintiffs–Appellants respectfully request oral argument pursuant to Local Rule 34(a).

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because it contains 12,998 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word in 14-point Times New Roman.

Date: April 30, 2020

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