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*Leaders of a Beautiful Struggle v. Baltimore Police Department:*Balancing the Advances of Police Tracking Technology with the Constitutional Rights Afforded to the Public Citizenry

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Leaders of a Beautiful Struggle v. Baltimore Police Department: Balancing the Advances of Police Tracking Technology with the Constitutional Rights Afforded to the Public Citizenry

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In *Leaders of a Beautiful Struggle v. Baltimore Police Department*,[1] the Fourth Circuit, on rehearing en banc, addressed whether the Aerial Investigation Research ("AIR")[2] Program, a first-of-its-kind aerial surveillance program utilized by the Baltimore Police Department ("BPD"), and the accessing of its data constituted an "unreasonable search"[3] within the meaning of the Fourth Amendment as an invasion of individuals' reasonable expectation of privacy.[4] The court held that "[b]ecause the AIR program enable[d] police to deduce from the whole of individuals' movements," accessing the data gathered from the surveillance constituted a search and it's warrantless operation violated the Fourth Amendment.[5] Here, the court correctly ruled that BPD's use of this specific aerial surveillance technology constitutes an invasion of citizens' reasonable expectation

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1. Leaders of a Beautiful Struggle v. Balt. Police Dep't., 2 F.4th 330, 330 (4th Cir. 2021).

2. *Id.* at 334 ("The AIR program uses aerial technology to track movements related to serious crimes. Multiple planes fly distinct orbits above Baltimore, equipped with PSS's [Persistent Surveillance Systems] camera technology known as the 'Hawkeye Wide Area Imaging System.'").

3. U.S. CONST. amend. IV.

4. *Leaders of a Beautiful Struggle*, 2 F.4th at 330.

5. *Id.* at 346.

of privacy, as deduced from precedent such as *Carpenter*[6] and *Jones*.[7] This first-of-its-kind technology was implemented to assist law enforcement in combatting "Target Crimes" such as homicides and attempted murder, shootings with injury, armed robbery, and carjacking,[8] in a city that saw 335 murders is 2020.[9] However, based on Supreme Court precedent involving advancements in police technology,[10] society's expectations of privacy and public policy,[11] and BPD's lack of strategic planning in its use of the AIR Program,[12] police investigatory techniques that infringe on the rights of the country's citizens cannot go unchecked, and if deemed unconstitutional through judicial review, must be abolished.

I. THE CASE

Aerial surveillance initially began in Baltimore in August 2016 when it was announced that BPD would be using planes with high-tech cameras to survey the city.[13] In December 2019, BPD announced the AIR Program in partnership with Persistent Surveillance Systems ("PSS"),[14] and was funded by a private philanthropic organization, Arnold Ventures.[15] Any single AIR image obtained by BPD, captured once per second, includes around 32 square miles of Baltimore and can be magnified to a point where people and cars are individually visible, however, only as blurred dots or blobs.[16] This data is then transmitted to PSS "ground stations" where it is then used to "track individuals and vehicles from a crime scene and

6. Carpenter v. United States, 138 S. Ct. 2206, 2217 (2018) (holding that the ability to record a person's past movements through the record of their cell phone signals, known as cell-site location information ("CSLI"), contravenes a person's reasonable expectation of privacy).

7. United States v. Jones, 565 U.S. 400, 430 (2012) (holding that location-tracking technology through the use of long-term GPS monitoring impinges on expectations of privacy).

8. *Leaders of a Beautiful Struggle*, 2 F.4th at 334.

9. *Id.* at 352 (citing *Baltimore had 335 Homicides in 2020*, AP NEWS (Jan. 1, 2021), https://apnews.com/article/baltimore-48f0578d0c4e210c8601cd0e6f1ae91c).

10. *See infra* Section IV.A.

11. *See infra* Section IV.B.

12. *See infra* Section IV.C.

13. *Leaders of a Beautiful Struggle*, 2 F.4th at 333.

14. *Id.*; *see also Mission, Vision, & Values*, PSS, https://www.pss-1.com/mission-vision-values (last visited Mar. 31, 2022) ("[Our mission is to] provide unparalleled capabilities and support systems to our customers that inform data-driven decisions based on factual data.").

15. *Leaders of a Beautiful Struggle*, 2 F.4th at 334; *see also Mission*, ARNOLD VENTURES, https://www.arnoldventures.org/about (last visited Mar. 31, 2022) ("Arnold Ventures core mission is to invest in evidence-based solutions that maximize opportunity and minimize injustice.").

16. *Leaders of a Beautiful Struggle*, 2 F.4th at 334. The opinion notes that the flying of the planes is only limited to daylight hours and obtains an estimated twelve hours of coverage of around 90% of the city each day, weather permitting. *Id.*

extract information to assist BPD in the investigation of Target Crimes."[17] The AIR program is not designed, however, to provide real-time analysis of when a crime takes place.[18] Reports and briefings are then created and sent to BPD per the department's request, and may include from before and after the crime: "observations of driving patterns and driving behaviors; the tracks of vehicles and people present at the scene; the locations those vehicles and people visited; and the tracks of the people whom those people met with and the locations they came from and went to."[19] Independent institutions, such as the RAND Corporation,[20] University of Baltimore, and New York University School of Law, were enlisted to evaluate the AIR program during its six-month pilot period between April and October 2020.[21]

Plaintiffs, a grassroots community advocacy group in Baltimore,[22] filed suit against BPD on April 9, 2020, just before the pilot program was to commence.[23] Plaintiffs requested that the district court enjoin BPD from operating the AIR Program on Fourth Amendment grounds and moved for a preliminary injunction, but the district court denied Plaintiff's motion on April 24 and the program began a week later.[24] Plaintiffs appealed that same day, moved to accelerate the proceedings, and oral arguments were eventually calendared for September 10.[25] In a split decision, the Fourth Circuit affirmed the decision of district court, noting that Plaintiffs' Fourth Amendment claim would not likely succeed on the merits; however, plaintiffs filed a petition for a rehearing en banc, which was granted at the end of December.[26] While these proceedings went on, the AIR Program completed its pilot run, but based on the run's mixed results the City ultimately

17. *Id.* at 334 (quoting Joint Appendix at 70, 130, Leaders of a Beautiful Struggle v. Balt. Police Dep't, 2 F.4th 330 (4th Cir. 2021) (No. 20-1495).

18. *Id.*

19. *Id.* (quoting Joint Appendix at 72, 132, Leaders of a Beautiful Struggle v. Balt. Police Dep't, 2 F.4th 330, (4th Cir. 2021) (No. 20-1495).

20. *About the RAND Corporation*, RAND CORP., https://www.rand.org/about.html (last visited Mar. 31, 2022) ("The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous.").

21. *Leaders of a Beautiful Struggle*, 2 F.4th at 334-35. The court indicated that the RAND Corporation was awarded a grant to evaluate effectiveness in improving policing outcomes; the University of Baltimore was assigned to study community perceptions and reactions; and the Policing Project at New York University School of Law conducted a "civil rights and liberties audit." *Id.*

22. LEADERS OF A BEAUTIFUL STRUGGLE, https://www.lbsbaltimore.com/ (last visited Mar. 31, 2022) ("LBS is a grassroots think-tank which advances the public policy interest of Black people, in Baltimore, through: youth leadership development, political advocacy, and autonomous intellectual innovation.").

23. *Leaders of a Beautiful Struggle*, 2 F.4th at 335.

24. *Id.*

25. *Id.*

26. *Id.*

decided not to continue the program.[27] The data retained by BPD was the "minimum amount" necessary "to support the prosecution and the defense teams" in the 200 cases aided by the program, "including 150 open investigations."[28]

Finally, on rehearing en banc, the court ruled in favor of the Plaintiffs, remarking that because the AIR Program enabled police to deduce from the whole of individuals' movements, accessing its data constituted a search, and its warrantless operation violated the Fourth Amendment.[29] In a staunch dissenting opinion, it was noted that although Baltimore is one of America's most dangerous cities,[30] for some reason the majority sees "oversurveillance" as Baltimore's big problem,[31] and "irreparable damage is being done to our federal system with [the majority's] precipitous strike against the Baltimore AIR program."[32] Lastly, the dissent discussed the hardships on businesses to thrive in Baltimore due to the impact of the high crime rate in connection to job opportunity potential, and how the AIR Program could have been a useful tool in combatting violent crime in the city.[33]

II. LEGAL BACKGROUND

In relevant part, the Fourth Amendment maintains "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause. . ."[34] The basic right preserved by this Amendment "is to safeguard the privacy and security of individuals against arbitrary invasions by government officials."[35] As technology has advanced, however, "the Government's capacity to encroach upon areas normally guarded from inquisitive eyes" has become enhanced,[36] and thus the courts have been tasked with preserving a certain degree of privacy against the government that existed when the Fourth Amendment was adopted.[37] Hence, the courts have been called on to draw a line between short-

27. *Id.* By this time, BPD had obtained 1,916.6 hours of coverage. *Id.* However, by February 2021, the police department had decided to delete a majority of the data obtained by the program, keeping only 14.2%, or about 264.82 hours, of the imagery data. *Id.* at 336.

28. *Id.* at 336.

29. *Id.* at 346.

30. *Baltimore had 335 Homicides in 2020*, AP NEWS (Jan. 1, 2021), https://apnews.com/article/baltimore-48f0578d0c4e210c8601cd0e6f1ae91c.

31. *Leaders of a Beautiful Struggle*, 2 F.4th at 352 (Wilkinson, J., dissenting).

32. *Id.* at 362 (Wilkinson, J., dissenting).

33. *Id.* at 368 (Wilkinson, J., dissenting).

34. U.S. CONST. amend. IV.

35. Carpenter v. United States, 138 S.Ct 2206, 2213 (2018) (quoting Camara v. Mun. Ct. of City & Cnty. of S.F., 387 U.S. 523, 528 (1967)).

36. *Id.* at 2214.

37. *Id.* (quoting Kyllo v. United States, 553 U.S. 27, 34 (2001)).

term tracking of public movements – akin to what law enforcement could do "prior to the digital age" – and prolonged tracking that can reveal intimate details through habits and patterns.[38] This is because the latter form of surveillance invades the reasonable expectation of privacy that individuals have in the whole of their movements and thus, at a minimum, requires a warrant.[39]

A. 20th Century Precedent and Technological Advances

The judiciary has been tackling cases that deal with warrantless police surveillance and the technological advances that have come alongside such surveillance for decades.[40] In *Katz v. United States*,[41] FBI agents had attached an electronic listening and recording device to the outside of a public telephone booth where the defendant had been making phone calls, which they introduced at trial.[42] The Supreme Court held that the Government's eavesdropping activities violated the privacy upon which petitioner justifiably relied upon while using a telephone booth, which constituted a "search and seizure" within the meaning of the Fourth Amendment.[43] Additionally, the Court noted that only under "sufficiently 'precise and discriminate'" circumstances can a federal court empower government agents to employ a concealed electronic device for determining the truth of a "detailed factual affidavit alleging the commission of a specific criminal offense."[44] Lastly, the Court importantly noted that "the government agents here ignored the procedure of antecedent justification . . . that is central to the Fourth Amendment," which is a "constitutional precondition of the kind of electronic surveillance involved in this case."[45] Congress would then codify the standards crafted by the Court in *Katz*.[46]

In 1983, the Supreme Court would address authorities' use of beeper device tracking technology.[47] In *United States v. Knotts*, officers placed a beeper device[48] inside a five-gallon drum containing chloroform, a so-called "precursor" chemical used to manufacture illicit drugs, after a narcotics investigator informed the police

38. *Leaders of a Beautiful Struggle*, 2 F.4th at 341.

39. *Id.*

40. *See infra* notes 42-53 and accompanying text.

41. 389 U.S. 347, 347 (1967).

42. *Id.* at 348.

43. *Id.* at 350-53. *Katz*, as well as prior precedent, lays out that the application of the Fourth Amendment depends on whether the person invoking its protection can claim a justifiable, reasonable, or legitimate expectation of privacy that has been invaded by government action. United States v. Knotts, 460 U.S. 276, 280 (1983).

44. *Katz*, 389 U.S. at 355 (quoting Osborn v. United States, 385 U.S. 323, 329-330 (1966)).

45. *Id.* at 359.

46. People v. Darling, 95 N.Y.2d 530, 535 (N.Y. 2000).

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

48. *Id.* at 277-78. A beeper is defined by the Court as "a radio transmitter, usually battery operated, which emits periodic signals that can be picked up by a radio receiver." *Id.*

of suspicious activity surrounding the three defendants.[49] The authorities then used the beeper to track and, in effect, "tail" one of the defendants to an out-of-state cabin located near Shell Lake, Wisconsin, where after multiple days of intermittent visual surveillance, police obtained a warrant and searched the premises.[50] Ultimately, the Court held that the governmental surveillance conducted by means of beeper here paralleled to the following of an automobile on public streets and highways, thus upholding the trial court's conviction.[51] Further, the Court noted that an individual has a lesser expectation of privacy in a motor vehicle because its inherit function is transportation, and that a "person travelling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another."[52] Lastly, the Court made mention of advances in police technology along this front, stating that "nothing in the Fourth Amendment prohibited the police from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them in this case."[53] Since the 1900's, technological innovation has grown significantly on all fronts, and the courts have been tasked with keeping up to the best of their ability.

B. 1st Century Precedent and Technological Advances

At the turn of the century, the Court continued to face constitutional challenges regarding Fourth Amendment searches and seizures.[54] Sense-enhancing technology has seemingly become more popular among law enforcement and was used in the form of thermal imaging in *Kyllo v. United States*.[55] On the suspicion that marijuana was being grown in the private residence of the defendant, absent a warrant, law enforcement used an Agema Thermovision 210 thermal imager to scan the residence from a public street.[56] The Court ruled that the use of this technology without a warrant violates the Fourth Amendment, stating that "obtaining by sense-enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical 'intrusion into a constitutionally protected area,'[57] constitutes a search – at least where (as here)

49. *Id.* at 277-78. 3M Co., a chemical manufacturer, had suspicions that a former employee had been stealing chemicals. *Id.* Defendant also decided to purchase these chemicals from Hawkins Chemical Co., who consented to allowing police to place the beeper in the drum of chloroform at issue. *Id.*

50. *Id.* at 278-79.

51. *Id.* at 281.

52. *Id.* at 281.

53. *Id.* at 282.

54. *See infra* notes 55-74 and accompanying text.

55. 533 U.S. 27, 29 (2001).

56. *Id.* at 29-30. Thermal imagers are used to detect infrared radiation, which virtually all objects emit but which is not visible to the naked eye. *Id.* at 29.

57. *Id.* at 34 (quoting Silverman v. United States, 365 U.S. 505, 512 (1961)).

the technology in question is not in general public use."[58] In the case of searching the interior of homes, because "there is a ready criterion, with roots deep in the common law, of the minimal expectation of privacy that *exists*, and that is acknowledged to be *reasonable*," withdrawing protection of this "minimum expectation would be to permit police technology to erode the privacy guaranteed by the Fourth Amendment."[59] The dissent disagreed, noting they would not establish a "constitutional impediment to the use of sense-enhancing technology unless it provides the user with the functional equivalent of actual presence in the area being searched."[60] Thus, it was becoming increasingly prevalent that the Court would continue to be faced with issues regarding advances in police technology.

Somewhat similar to *Knotts*, in *United States v. Jones*[61] law enforcement placed a GPS-tracking device on a vehicle registered to the defendant's wife after obtaining a warrant from the United States District Court for the District of Columbia.[62] Police installed the tracking device while the vehicle was parked in a public parking lot in Maryland, and over the course of the next twenty-eight days used the device to track the vehicles movements.[63] Ultimately, the Court held that the Government's installation of a GPS device on a target's vehicle, and its use of that device to monitor the vehicle, constituted a "search."[64] The Court noted that by attaching the GPS device to the vehicle, officers encroached on a protected area[65] by "physically occup[ying] private property for the purpose of obtaining information."[66] In passing reference to *Katz*, the concurrence remarked that "the same technological advances that have made possible non-trespassory surveillance techniques will also affect the *Katz* test by shaping the evolution of societal privacy expectations."[67]

Lastly, and used as direct precedent in *Leaders of a Beautiful Struggle*, is *Carpenter v. United States*.[68] Here, the Supreme Court addressed whether the government's acquisition of the defendant's historical cell-site location information

58. *Id.*

59. *Id.*

60. *Id.* at 47 (Stevens, J., dissenting).

61. *Jones*, 565 U.S. 400 (2012).

62. *Id.* at 402-403.

63. *Id.* at 403. The Court noted that "[B]y means of signals from multiple satellites, the device established the vehicle's location within fifty to one-hundred feet and communicated that location by cellular phone to a [g]overnment computer," which ultimately relayed more than 2,000 pages of data. *Id.*

64. *Id.* at 404-405.

65. *Id.* at 410.

66. *Id.* at 404.

67. *Id.* at 415 (Sotomayor, J., concurring). It is becoming increasingly evident that the issues continuing to arise in this sphere of the law will require the judiciary to consistently grapple with what society *perceives* as an expectation of privacy.

68. 138 S.Ct 2206 (2018).

(CSLI) from wireless carriers constituted a search under the Fourth Amendment.[69] Defendants had been suspected of robbing numerous stores in Michigan and Ohio, and in order to obtain the cellphone records of the petitioner and several other suspects, prosecutors applied for court orders under the Stored Communications Act[70] to obtain cellphone records.[71] Carpenter's wireless carriers complied, which allowed the Government to obtain 12,898 location points cataloging Carpenter's movements.[72] The Supreme Court drew on *Jones*, stating that "[w]hether the Government employs its own surveillance technology as in *Jones* or leverages the technology of a wireless carrier, we hold that an individual maintains a legitimate expectation of privacy in the record of his physical movements as captured through CSLI."[73] Thus, the Court held that it would not grant the state unrestricted access to a wireless carrier's database of physical location, because "the Court is obligated – as '[s]ubtler and more far-reaching means of invading privacy have become available to the Government' – to ensure that the 'progress of science' does not erode Fourth Amendment protection."[74] Presented with the case at hand,[75] it is clear the difficulties the judiciary has been presented with in balancing individuals' reasonable expectations of privacy, all the while trying to judicially regulate law enforcement's ability to use the enhanced technology that has become so prevalent in the digital age.

III. THE COURT'S REASONING

In *Leaders of a Beautiful Struggle*, the Fourth Circuit was tasked with determining whether to uphold a first-of-its-kind aerial surveillance program commissioned by the BPD.[76] On rehearing en banc, writing for the majority, Chief Judge Robert Gregory reversed the Fourth Circuit's initial holding by ruling that "[b]ecause the AIR program enables police to deduce from the whole of individuals' movements, we hold that accessing its data is a search, and its warrantless

69. *Id.* at 2211-2212. Cell phones continuously scan their environment in order to obtain the best signal, usually coming from the nearest cell site. *Id.* at 2211. When a phone connects to a cell site, it will generate a time-stamped record known as CSLI. *Id.*

70. *Carpenter*, 138 S.Ct at 221; 18 U.S.C. § 2703(d). The statute permits the Government to compel disclosure of certain telecommunications records when it offers specific and articulable facts showing reasonable grounds to believe that the records sought are relevant and material to an ongoing criminal investigation.

71. *Carpenter*, 138 S.Ct. at 2212.

72. *Id.* Each time a cell phone taps into the wireless network, the carrier logs a time-stamped record of the cell site and particular sector that were used. *Id.*

73. *Id.* at 2217.

74. *Id.* at 2223 (quoting Olmstead v. United States, 277 U.S. 438, 473-74 (1928)).

75. Leaders of a Beautiful Struggle v. Balt. Police Dep't., 2 F.4th 330 (2021).

76. *Id.* at 333.

operation violates the Fourth Amendment."[77] Hence, because the AIR Program opens "'an intimate window' into a person's associations and activities, it violates the reasonable expectation of privacy individuals have in the whole of their movements."[78]

The court reasoned that the AIR Program practically "'tracks every movement' of every person outside in Baltimore."[79] Additionally, because AIR data is retained for at least forty-five days, it is a "'detailed, encyclopedic' record of where everyone came and went within the city during daylight hours over the prior month-and-a-half."[80] The majority contends that this allows law enforcement to then "travel back in time" to observe a target's movements forwards and backwards.[81] Further, without this technology, the police can of course attempt to tail suspects, but "AIR data is more like 'attaching an ankle monitor' to every person in the city."[82]

The court notes that "whoever the suspect turns out to be," they have "effectively been tailed" for the prior six weeks, and thus, the "retrospective quality of the data" is enabling police to "retrace a person's whereabouts," granting access to otherwise "unknowable" information.[83] Relying on *Carpenter*, the court notes that the program allows for "photographic, retrospective location tracking in multi-hour blocks," and due to this "wealth of detail," "people do not expect 'that their movements will be recorded and aggregated in a manner that enables the government to ascertain' details of their private life."[84]

The majority also reasoned that accessing the AIR data violates the Fourth Amendment because "the AIR Program's surveillance is not 'short-term' and transcends mere augmentation of ordinary police capabilities."[85] People understand that they may be filmed on city streets by security cameras or staked out or tailed by police officers at their home or in their vehicle, "but capturing everyone's movements outside during the daytime for 45 days goes beyond that ordinary capacity."[86] The court further observed that it is well-established that the public interest favors protecting constitutional rights, and only when BPD "continuously records public movements," then "tracks movements related to specific investigations," can BPD ultimately "separate the wheat from the chaff"

77. *Id.* at 346.

78. *Id.* at 342 (quoting *Carpenter*, 138 S.Ct. at 2218-19).

79. *Leaders of a Beautiful Struggle*, 2 F.4th at 341 (quoting *Carpenter*, 138 S.Ct. at 2215-19).

80. *Id.* (quoting Carpenter, 138 S.Ct. at 2215-19).

81. *Id.* (quoting *Carpenter*, 138 S.Ct. at 2218).

82. *Id.* (quoting *Carpenter*, 138 S.Ct. at 2218).

83. *Id.* at 342 (quoting *Carpenter*, 138 S.Ct. at 2218).

84. *Leaders of a Beautiful Struggle*, 2 F.4th at 342 (quoting *Jones*, 565 U.S. at 415-17) (Sotomayor, J., concurring)).

85. *Leaders of a Beautiful Struggle*, 2 F.4th at 345.

86. *Id.*

because they are "harvesting location data from the entire population."[87] Finally, the court recognized that "[a]llowing the police to wield this power unchecked is anathema to the values enshrined in our Fourth Amendment;"[88] however, the majority importantly notes, "[t]hat is not to express our opposition to innovation in policing or the use of technology to advance public safety," just that "the role of the warrant requirement remains unchanged as new search capabilities and technological advancements arise."[89]

The dissent makes clear their direct opposition to the majority's holding, commenting that "[i]n its indecorous rush to quash any experimentation on Baltimore's part, the majority has signaled to American cities that future initiatives and attempts at solving the rapid rise of violent crime will likely meet with disfavor from the courts."[90] The dissent further argues that this decision is not justified by law because it nullifies decades of Supreme Court precedent and dramatically transforms *Carpenter*.[91] Moreover, the dissent contends that shutting the door on the AIR Program "may force cities to embrace surveillance systems posing a greater threat to privacy" than the type of method the majority invalidated here.[92] Lastly, the dissent pointed to the significant amount of community support the AIR Program received by community leaders,[93] as well as from Governor Larry Hogan and from the business community.[94]

IV. ANALYSIS

In *Leaders of a Beautiful Struggle v. Baltimore Police Department*, the Fourth Circuit ruled that "[b]ecause the AIR program [allows] police to deduce from the whole of individuals' movements," accessing its data is a search, and its warrantless operation violates the Fourth Amendment's principle surrounding citizen's reasonable expectation of privacy.[95] The court made the correct judgement in this case because it properly applied Supreme Court precedent that saw the use of

87. *Id.* at 346-47.

88. *Id.* The court remarks that protections against such harms remains a vital constitutional function. *Id.* Moreover, the majority gives some insight into how thoroughly surveilled Baltimore already is, and how over-surveillance, which tends to lead to over-policing, tends to have its worst impact on communities already disadvantaged by their poverty, race, religion, and ethnicity, and immigration status. *Id.*

89. *Id.*

90. *Id.* at 353 (Wilkinson, J., dissenting).

91. *Id.* The dissent stated that there is now effectively a ban on all short-term warrantless tracking of public movements due to the majority's decision. *Id.*

92. *Id.* at 365. The dissent points to Chicago, which relies on a powerful surveillance system that "employs a network of at least 35,000 on-the-ground cameras," as well as Newark, NJ, which relies on its "Citizen Virtual Patrol" program that "provides anyone the ability to monitor the city's CCTV camera system in real time." *Id.*

93. *Id.* at 367-68.

94. *Id.*

95. *Leaders of a Beautiful Struggle*, 2 F.4th at 333, 346.

various governmental methods of surveillance,[96] and the court took the necessary societal and public policy expectations into account by recognizing that although law enforcement need to be able investigate criminal activity to the fullest extent, police technology cannot get to the point where constitutional rights are being violated as a trade-off.[97] Lastly, the dissent's rebuttal of the majority relies on the faulty premise that policing ameliorates violence, and restraining police worsens it, and its reasoning seems to reach the level of hyperbole in suggesting that practically no other technological advancements can be constitutionally implemented following the court's ruling.[98] Thus, the court's holding was reasonable and accurate.

A. The Court Correctly Interpreted Precedent on the Fourth Amendment Issue

Similar to *Leaders of a Beautiful Struggle*, where the Fourth Circuit dealt with a first-of-its-kind aerial surveillance program, *Carpenter* dealt with a "new phenomenon": cell-site location information (CSLI).[99] The court properly analyzed and applied *Carpenter*, because similar to the Supreme Court's reasoning as applied to CSLI from *Jones'* precedent, the AIR program can reveal not only individuals' particular movements, but through them their "familial, political, professional, religious, and sexual associations."[100] Due to the fact that this gives the police a "wealth of detail," it enables law enforcement to make deductions about what goes to the privacies of life, which is the "epitome of information expected to be beyond the warrantless reach of the government."[101] The government was able to deduce this information only because it recorded "*everyone's* movements," and because *Leaders of a Beautiful Struggle* importantly considers when the government "*accesse[s]*" the gathered data, *Carpenter's* controlling precedent steadily applies to this case, and was properly analyzed by the majority.[102]

Furthermore, the court's use of *Jones* as controlling precedent was valid, similar to how *Carpenter* also used *Jones* in regard to the reasonable expectation of privacy issue.[103] Although the surveillance in *Jones* only tracked driving and was precise "within fifty to one-hundred feet," the surveillance still surpassed ordinary expectations of law enforcement's capacity and provided enough information "to

96. *See infra* Section IV.A.

97. *See infra* Section IV.B.

98. *See infra* Section IV.C.

99. *Leaders of a Beautiful Struggle*, 2 F.4th at 340 (citing Carpenter v. United States, 138 S.Ct. 2206, 2213-23 (2018)).

100. *Leaders of a Beautiful Struggle*, 2 F.4th at 341 (citing *Carpenter,* 138 S.Ct. at 2217-18 (quoting *Jones*, 565 U.S. at 415)).

101. *Leaders of a Beautiful Struggle*, 2 F.4th at 342 (citing *Carpenter*, 138 S.Ct. at 2214, 2218).

102. *Id.* at 342-44 (citing *Carpenter*, 138 S.Ct. at 2218, 2219-20).

103. *Carpenter*, 138 S.Ct. at 2209.

deduce [details] from the whole of individuals' movements."[104] Because AIR data is a photographic record of movements which surpasses the precision of the GPS data obtained in *Jones*,[105] law enforcement can then analyze the habitual patterns of the "people behind the pixels."[106] If the Constitution is meant to "protect *all*, those suspected or known to be offenders as well as the innocent,"[107] how can the type of aerial surveillance at issue be constitutionally valid when at least some individuals' being surveilled are being tracked contrary to what society understands as reasonable privacy?

Katz properly provided the Fourth Circuit with the appropriate test[108] for determining whether an individual has a reasonable expectation of privacy.[109] Comparing *Leaders of a Beautiful Struggle* with a case like *Knotts*, which upheld the use of a radio beeper when the police then tracked that beeper, the technology used here is unlike beeper tracking specifically because the beeper "only augmented, to a permissible degree, warrantless capabilities the police had even before the technology,"[110] whereas everyone's movements outside in Baltimore are retroactively tracked no matter the situation in the case at hand.[111] The district court that first heard the claims brought in *Leaders of a Beautiful Struggle* noted that warrantless pole cameras and flyovers by planes and helicopters, which precedent has generally upheld, are far more intrusive means of aerial surveillance than the AIR Program.[112] This contention is unfitting, however, because the cases that involved such surveillance involved some discrete operation surveilling *individual* targets.[113] Just because flyovers and pole cameras can potentially reveal more intimate information than the AIR Program does not mean that "the AIR program's citywide prolonged surveillance campaign must be permissible as well."[114] Thus, the Fourth Circuit properly utilized Supreme Court precedent to ensure that the "Fourth Amendment remain[s] a bastion of liberty in a digitizing world,"[115] and that Baltimore does not "experience the Fourth Amendment as a

104. *Leaders of a Beautiful Struggle*, 2 F.4th at 342-43, 346.

105. *Id.* at 343. GPS-tracking data in *Jones* is less precise than AIR data because it only records variable location points from which movements can be reconstructed. *Id.*

106. *Id.*

107. *Id.* at 347 (quoting Go-Bart Importing Co. v. United States, 282 U.S. 344, 356-57 (1931)).

108. *See supra* note 39 and accompanying text.

109. United States v. Katz, 389 U.S. 347, 361 (1967). More specifically, the two discrete questions of the test ask whether the individual, by their conduct, has "exhibited an actual (subjective) expectation of privacy," and whether this subjective expectation of privacy is one that "society is prepared to recognize as 'reasonable.'" *Id.*

110. *Leaders of a Beautiful Struggle*, 2 F.4th at 341.

111. *Id.* at 340.

112. Leaders of a Beautiful Struggle v. Balt. Police Dep't, 456 Supp. 3d 699, 712-14 (2020).

113. *Leaders of a Beautiful Struggle*, 2 F.4th at 345 (emphasis added).

114. *Id.* at 346.

115. *Id.* at 348.

system of surveillance, social control, and violence,"[116] due to the fact that the AIR program was utilized as a "21st century general search."[117]

B. Technological Advancements are Important, but Societal Expectations and Public Policy Cannot Allow Advances to Reach the Extent of Impermissible Enhancement

Balancing what society perceives as reasonable privacy and what state, local, and federal governments deem their citizenry's privacy expectations actually are seems to encapsulate the key concerns surrounding Fourth Amendment privacy issues. *Jones* is a clear example of when location-tracking technology "crossed the line from merely augmenting to impermissibly enhancing."[118] As aptly noted in the concurring opinions in *Jones*, based on traditional surveillance capacity in the pre-computer age, society's expectation was that police would not "secretly monitor and catalogue every single movement of an individual's car for a very long period."[119] Thus, if in the pre-computer age, society's expectations of privacy were even as simple as stated in *Jones*, does that mean that in the age of technology society has come so far as to transform and alter their privacy expectations to no longer encapsulate what the Court has already established? People do not surrender all of their Fourth Amendment protections by venturing into the public sphere,[120] and further, people do not expect "that their movements will be recorded and aggregated in a manner that enables the government to ascertain" details of their private lives.[121] Solely because technology has advanced so rapidly since the turn of the century cannot be enough of a reason to insinuate that just because citizens voluntarily leave their homes, they should be subject to any or all possible kinds of surveillance. The warrantless reach of the government cannot go so far as to hinder the individual rights of privacy guaranteed by the Fourth Amendment, and as such, technology's impermissible enhancement of that reach cannot be allowed.[122]

116. *Id.* at 348 (quoting Devon W. Carbado, *From Stopping Black People to Killing Black People: The Fourth Amendment Pathways to Police Violence*, 105 CALIF. L. REV. 125, 130 (2017)).

117. *Leaders of a Beautiful Struggle*, 2 F.4th at 348.

118. *Id.* at 341; *see supra* notes 56-61 and accompanying text.

119. *Jones*, 565 U.S. at 430 (Alito, J., concurring); *see also id.* at 415 (Sotomayor, J., concurring) (agreeing with Justice Alito that "longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy.").

120. Carpenter v. United States, 138 S.Ct. 2206, 2217 (2018).

121. *Jones*, 565 U.S. at 415-17 (Sotomayor, J., concurring).

122. *Leaders of a Beautiful Struggle*, 2 F.4th at 342 (citing *Carpenter*, 138 S.Ct. at 2214, 2218).

In the public policy sphere of this debate, it is understood that the legislature, not the judiciary, should take the lead in policymaking matters.[123] The dissent in this case points out that Baltimore saw the AIR Program as an opportunity for public policy to evolve organically and empirically, relying on what works for the people instead of the fixed visions of bureaucrats, central planners, or judges.[124] While the dissent gives a fair and reasonable interpretation of the circumstances by which the AIR Program came to fruition, it attempts to present a complex democratic process in too simple a fashion.[125] Bureaucracy, no matter the issue, is always prevalent in policymaking decisions, and as renowned jurist Richard Posner observes, "[m]any public policies are better explained as the outcome of a pure power struggle – clothed in a rhetoric of public interest that is mere figleaf – among narrow interest or pressure groups."[126] Hence, even though public interest is meant to be taken into consideration when crafting legislation, is the will of the people actually considered at all, or is most legislation just simply "the product of the constitutionally created political process of our society?"[127] In a way, the process by which the AIR Program was created, through a type of community reform,[128] seems more favorable than waiting for politicians to argue about what may not even be the best interests of the people they represent. However, even in these processes, the only thing working for the people are the interests of groups that command political power who have the resources to meaningfully get involved in political processes, such as through their money, votes, cohesiveness, and even other factors unrelated to the merits of the issues.[129] So, even in instances such as this, it did not seem as if public policy even had the chance to evolve organically and empirically like the dissent mentioned, when so many competing interest groups retroactively had their hands all over the process.[130] In its essence, public policy demands that the will of the people be taken into account. But when competing ideologies and political agendas are constantly at odds with one another, it is why in cases like this that the judiciary is tasked with determining the constitutionality of programs and initiatives that fall

123. *Id.* at 350 (Wynn, J., concurring); *see also id.* at 364 (Wilkinson, J., dissenting) ("The power to define crime is primarily the responsibility of state governments, and the power to prevent it belongs substantially to local governments, like the City of Baltimore.").

124. *Id.* at 366-67 (Wilkinson, J., dissenting) (The dissent points to the strong community support and open enthusiasm of members of Baltimore's community.).

125. *Id.* at 348-350 (Gregory, C.J., concurring).

126. Jerome A. Barron et al., CONSTITUTIONAL LAW: PRINCIPLES AND POLICY, 701, 8th ed. 2012 (quoting Richard A. Posner, *The DeFunis Case and the Constitutionality of Preferential Treatment of Racial Minorities*, 1974 SUP. CT. REV. 1, 27 (1974)).

127. *Id.*

128. *Leaders of a Beautiful Struggle*, 2 F.4th at 362 (Wilkinson, J., dissenting).

129. Barron et al., *supra* note 123.

130. *Leaders of a Beautiful Struggle*, 2 F.4th at 330. The number of interest groups involved in this case can be seen solely from the number of Amici in support of a rehearing, as well as the input from Governor Larry Hogan and the outside funding and support of the AIR Program by private companies. *Id.*

into the Constitution's gray areas, while at least attempting to make sure that the court's analysis "stay[s] rooted in constitutional principles, rather than turn[ing] on naked policy judgements derived from our perception of the beneficial effects of novel police techniques."[131]

C. Valid Concerns Raised by the Dissent, but the Faulty Premise Relied upon, and the Ways Technology Could be Implemented by Police

The solution to violent crime may be simple for some: allow the police to do their job without hinderance, and proper policing will prevent and deter violence, but as this court's opinion has demonstrated, such a reality is not such a simple feat to achieve.[132] The dissent takes aim at the majority for contributing to the continuation of violence in Baltimore, while asserting itself as the guardian for "our dispossessed communities" and "the most vulnerable among us."[133] These general criticisms from the dissent, however, rely on a faulty premise: that "[p]olicing ameliorates violence, and restraining police authority exacerbates it."[134] While there is no doubt the dissent, as well as the majority, have both attempted to keep Baltimoreans' interests at heart while holding steadfast to their respective constitutional interpretations, the dissent seems to disregard the "systems, relationships, and foundational problems that have perpetuated Baltimore's epidemic of violence."[135] Baltimore spends more on policing, per capita, than virtually any other comparable city in America.[136] In 2017, a greater proportion of Baltimore's general operating fund was allocated to policing than to housing, education, and transportation combined.[137] Combine this with the fact that in 2019, law enforcement in Baltimore cleared homicides at a rate of just 32.1%,[138] and less than a quarter (24%) of all 1,336 homicides from the beginning of 2017 to the end

131. *Id.* at 348-49 (quoting United States v. Curry, 965 F.3d 313, 336-37 (2020) (Gregory, C.J., concurring)).

132. *Leaders of a Beautiful Struggle*, 2 F.4th at 330.

133. *Id.* at 348 (Gregory, C.J., concurring).

134. *Id.* ("[T]he dissent takes for granted that policing is the antidote to killing.").

135. *Id.* The concurrence notes that Baltimore was the first city to implement formal racial segregation in 1910, which subsequently led to further redlining of the city – assigning racial categories to city blocks and restricting homebuying accordingly. *Id.* From this, many measures of resource distribution and public well-being now track the same geographic pattern, thus leading to cycles of poverty and crime, absent reinvestment. *Id.* at 348-49.

136. *Id.* at 349 (Gregory, C.J., concurring) (citing *What Policing Costs: A Look at Spending in America's Biggest Cities*, VERA, (June 2020), https://www.vera.org/publications/what-policing-costs-in-americas-biggest-cities).

137. *Leaders of a Beautiful Struggle*, 2 F.4th at 349 (Gregory, C.J., concurring) (citing Ctr. for Popular Democracy, et al., *Freedom to Thrive: Reimagining Safety & Security in Our Communities*, 2, 16-17 (2017)).

138. *Id.* at 366 (Wilkinson, J., dissenting) (citing Jessica Anderson, *Baltimore Ending the Year with 32% Homicide Clearance Rate, One of the Lowest in Three Decades*, THE BALT. SUN (Dec. 30, 2019, 6:19 PM)).

of 2020 resulted in an arrest,[139] it is clear that all urban problems cannot primarily or exclusively be addressed through the lens of policing.[140]

Just because the AIR Program was a possible way of trying to solve this problem, striking down the use of the Program's data should not be seen as "antithetical to self-governance, and devoid of any forward illumination,"[141] but a signal to law enforcement agencies that there are other, potentially more efficient and effective, methods of crime-solving[142] that can be used in conjunction with one another, ones that may not force "Baltimoreans [to] sacrifice their constitutional rights to obtain equal governmental protection."[143]

Baltimore is already a thoroughly and heavily surveilled city.[144] Baltimore is also an over-policed, under-policed, and also arguably a plainly poorly policed city.[145] The problem with BPD's policing tactics, specifically surrounding the AIR Program, seems to be that although technological advancements are having a positive impact on U.S. law enforcement agencies, as a whole, technology has not had a game-changing impact on policing in terms of altering philosophies and strategies used for preventing crime, responding to crime, or improving public safety.[146] This seems to be because the strategic planning process appears to be severely overlooked by many agencies despite being integral to the success or failure of a technology, as well as the fact that police department decision-makers and technology experts are not sufficiently collaborating on technology

139. Dan Rodricks, *A Data Dive on Baltimore Homicides Shows the Need to Stop Retaliatory Violence | COMMENTARY*, THE BALT. SUN (Mar. 9, 2021, 3:22 PM), https://www.baltimoresun.com/opinion/columnists/dan-rodricks/bs-ed-rodricks-0310-por-homicide-arrests-20210309-qieucrgalfaxdaguvoihow2vru-story.html.

140. *Leaders of a Beautiful Struggle*, 2 F.4th at 349 (Gregory, C.J., concurring).

141. *Id.* at 353 (Wilkinson, J., dissenting).

142. Kevin Strom, *Research on the Impact of Technology on Policing Strategy in the 21st Century, Final Report*, NAT'L CRIM. JUST. REFERENCE SERV., 2-2 (2016), https://www.ojp.gov/pdffiles1/nij/grants/251140.pdf. These methods include, but are not limited to, geographic information system technology, cell phone tracking software, investigative case-management software, and predictive analytics software. This is not to say these methods may not come with their own civil rights concerns and drawbacks, it is simply to note that there are a variety of other methods, ones that may have already been deemed constitutional in some respect, that are worth investigating and considering.

143. *Leaders of a Beautiful Struggle*, 2 F.4th at 350 (Gregory, C.J., concurring).

144. *Id.* at 347; *see generally* J. Cavanaugh Simpson, *Spy Plane Experiment is Over, but Growing Surveillance of Baltimore Continues*, BALT. MAG. (Mar. 2021), https://www.baltimoremagazine.com/section/historypolitics/under-watch-police-spy-plane-experiment-over-but-growing-surveillance-baltimore-continues/ (discussing cell site simulators, helicopters, security cameras, police access to residential cameras, police body cameras, and facial recognition software).

145. *Leaders of a Beautiful Struggle*, 2 F.4th at 350, n.****. The concurrence's footnote goes into fair detail depicting how the BPD's shortcomings have negatively impacted Baltimoreans in recent years.

146. Kevin Strom, *Research on the Impact of Technology on Policing Strategy in the 21st Century, Final Report*, NAT'L CRIM. JUST. REFERENCE SERV., 2-3 (2016), https://www.ojp.gov/pdffiles1/nij/grants/251140.pdf.

decisions.[147] Although BPD held numerous townhall community meetings[148] and at least attempted to inform the community on the Program, the success of the implementation of new technology does not solely revolve around community factors, but also on agency[149] and the technology's[150] implementation itself. BPD's lack of cohesion with technology experts and lack of ability in crafting strategic objectives that the AIR Program would help BPD achieve ultimately abetted in the Program's mixed results and downfall.[151]

CONCLUSION

In *Leaders of a Beautiful Struggle v. Baltimore Police Department*, the Fourth Circuit held that a first-of-its-kind aerial surveillance program used by the BPD to track the movements of the citizens of Baltimore classified a warrantless and unreasonable search that violated the reasonable expectation of privacy right embedded within the Fourth Amendment.[152] The case was correctly decided because based on Supreme Court precedent such as *Carpenter*, *Kyllo*, *Katz*, *Knotts*, and *Jones*, all of which included law enforcement's use of various kinds of technology, the court's analysis of the relevant reasonable expectation of privacy factors correctly determined that the long-term tracking at issue here was constitutionally invalid.[153] Moreover, public policy and what society perceives as reasonable privacy both dictate that while technological advancements in policing are inevitable, technology cannot go so far as to impermissibly hinder the constitutional rights of the citizenry.[154] Lastly, solely relying on policing to ameliorate violence is an ineffective way of attempting to reduce violent crime, and the current fruitless methods used by the BPD in fighting violent crime need to be reevaluated in accordance with the creation of a well-informed, cohesive plan that takes into account already successful methods of technology.[155]

147. *Id.*

148. *Leaders of a Beautiful Struggle*, 2 F.4th at 333.

149. Strom, *supra* note 142. The agency element revolves around how organizational climate will influence the way the technology is approached and integrated into the department.

150. *Id.* The technology element involves looking at how the technology itself can be more intrinsically effective when it more closely parallels already successful technology in the market.

151. *Leaders of a Beautiful Struggle*, 2 F.4th at 335.

152. *Id.* at 330.

153. *See supra* Section IV.A.

154. *See supra* Section IV.B.

155. *See supra* Section IV.C.

Leaders of a Beautiful Struggle v. Baltimore Police Department