

Unmanned Stakeouts: Pole-Camera Surveillance and Privacy After the *Tuggle* Cert Denial

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ABSTRACT. This Essay analyzes the implications of the Supreme Court’s denial of certiorari in *Tuggle v. United States*, a Seventh Circuit opinion upholding law enforcement’s warrantless, eighteen-month pole-camera surveillance of a criminal suspect’s home. By declining to take up the case, the Supreme Court missed an opportunity to update its outmoded Fourth Amendment search doctrine. That doctrine has failed to evolve alongside modern surveillance technology and has been inconsistently applied by lower courts. Taking a privacy-rights-focused view, this Essay suggests and evaluates alternative avenues for protecting civil liberties in the wake of the Court’s refusal to do so. Promising alternative paths for civil-rights advocates include strategic litigation in state courts centering a “mosaic” theory of surveillance as well as legislative advocacy in favorable state and local jurisdictions.

INTRODUCTION

On February 22, 2022, the Supreme Court declined to review the Seventh Circuit’s decision in *Tuggle v. United States*.¹ That denial effectively upheld the Seventh Circuit’s holding that law enforcement’s warrantless, prolonged video surveillance of a person’s home did not violate the Fourth Amendment.² The facts of *Tuggle* resemble many recent prolonged pole-camera surveillance cases. *Tuggle*, a civilian believed to be distributing methamphetamine, was targeted for extensive surveillance by law enforcement.³ Without obtaining a warrant, federal law-enforcement agents erected three pole cameras offering varying views of the exterior of *Tuggle*’s home.⁴ Effectively a round-the-clock, unmanned

1. *Tuggle v. United States*, 142 S. Ct. 1107 (2022) (mem.).

2. See *United States v. Tuggle*, 4 F.4th 505 (7th Cir. 2021).

3. See *United States v. Tuggle*, No. 16-cr-20070, 2018 WL 3631881, at *1 (C.D. Ill. July 31, 2018).

4. See *Tuggle*, 4 F.4th at 511; *Tuggle*, 2018 WL 3631881, at *1.

stakeout, the cameras captured footage of Tuggle's home for approximately a year and a half.⁵ Both the District Court for the Central District of Illinois⁶ and the Seventh Circuit⁷ held that the surveillance was lawful under the Fourth Amendment. In 2021, Tuggle petitioned for the Supreme Court to hear the case.⁸ In February 2022, the Supreme Court declined Tuggle's petition.⁹

The Supreme Court's abdication has left lower courts to wrestle with uncertain Court precedent. For example, shortly after the Court denied certiorari in *Tuggle*, the First Circuit in *United States v. Moore-Bush* narrowly upheld the long-term pole-camera surveillance of a person's home on good-faith exception grounds.¹⁰ Illustrating the confusion caused by the Court's current approach to new surveillance technology, the en banc panel of judges in *Moore-Bush* was evenly divided in how it interpreted recent Supreme Court surveillance precedent.¹¹

The Founders recognized the significance of privacy from state encroachment.¹² Modern surveillance technologies, however, would not only be unimaginable to those alive at the time of the Founding – the evolution and proliferation of surveillance technologies in recent years has outpaced even modern legal thinkers. Government actors can increasingly achieve precise and detailed surveillance cheaply and through indirect means. For example, they can now purchase sensitive data captured by ordinary, ubiquitous technologies like smartphone applications.¹³ Elective private surveillance is also a growing trend,

5. *See id.*

6. *Tuggle*, 2018 WL 3631881.

7. *Tuggle*, 4 F.4th 505.

8. Petition for a Writ of Certiorari at 8-15, *Tuggle v. United States*, 142 S. Ct. 1107 (2022) (No. 21-541).

9. *Tuggle*, 142 S. Ct. at 1107.

10. *United States v. Moore-Bush*, 36 F.4th 320 (1st Cir. 2022) (en banc) (per curiam).

11. *See id.* at 320 (Barron, C.J., Thompson & Kayatta, JJ., concurring); *id.* at 361 (Lynch, Howard & Gelpí, JJ., concurring).

12. *See* Brian Frazelle & David Gray, *What the Founders Would Say About Cellphone Surveillance*, ACLU (Nov. 17, 2017), <https://www.aclu.org/blog/privacy-technology/location-tracking/what-founders-would-say-about-cellphone-surveillance> [<https://perma.cc/3K2P-MG4V>].

13. Just two years after the Supreme Court decided *Carpenter v. United States*, 138 S. Ct. 2206 (2018), in which it held that a warrant was required for cell-site location surveillance, federal government agencies began to circumvent this ruling by purchasing location data tracked through smartphone apps. *See* Hamed Aleaziz & Caroline Haskins, *DHS Authorities Are Buying Moment-by-Moment Geolocation Cellphone Data to Track People*, BUZZFEED NEWS (Oct. 30, 2020), <https://www.buzzfeednews.com/article/hamedaleaziz/ice-dhs-cell-phone-data-tracking-geolocation> [<https://perma.cc/PY3S-ZRJ6>].

with personal doorbell cameras becoming increasingly affordable and popular.¹⁴ At times, government agencies can tap into these private surveillance systems – widening their monitoring capacity even further.¹⁵

Pole-camera surveillance, at issue in *Tuggle* and *Moore-Bush*, has also evolved rapidly and will likely continue to evolve.¹⁶ Pole cameras today include features like night vision and thermal detection, and functions like pan, tilt, and zoom are increasingly being automated using artificial intelligence.¹⁷ Modern pole cameras can also produce remarkably precise images, including capturing “the lettering on the side of an aircraft from eleven miles away” or a “serial number . . . [viewed] from 100 feet away.”¹⁸ Sophisticated analytical technology can also be integrated into pole cameras or applied to footage on the back end. Law enforcement is already developing, marketing, and purchasing software that can recognize faces, read text and license plates, identify objects, and filter through hours of footage.¹⁹ Video analytical software currently on the market boasts capabilities like combing through and organizing footage to “show[] every pedestrian or vehicle that appeared at [a] location across many hours . . . within minutes.”²⁰

The marginalized are disproportionately vulnerable to all these surveillance tools. This is in part because marginalized communities, particularly communities of color, are overpoliced and overcriminalized.²¹ It is also because

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14. See, e.g., John Herrman, *Who’s Watching Your Porch?*, N.Y. TIMES (Jan. 19, 2020), <https://www.nytimes.com/2020/01/19/style/ring-video-doorbell-home-security.html> [<https://perma.cc/FC93-VT7E>]; Sarah Lageson, *Do People Caught on Ring Cameras Have Privacy Rights?*, WIRED (May 19, 2022), <https://www.wired.com/story/ring-surveillance-privacy-law> [<https://perma.cc/GR52-4KG2>]; Ronda Kaysen, *My Neighbor’s Door Camera Faces My Apartment. Is That Legal?*, N.Y. TIMES (Aug. 28, 2021), <https://www.nytimes.com/2021/08/28/realestate/my-neighbors-door-camera-faces-my-apartment-is-that-legal.html> [<https://perma.cc/35NT-C5NQ>].
 15. See *infra* note 155 and accompanying text.
 16. See Brief of *Amici Curiae* Electronic Frontier Foundation et al. in Support of Petitioner at 6-12, *Tuggle v. United States*, 142 S. Ct. 1107 (2022) (No. 21-541).
 17. See, e.g., *SP Thermal Camera*, INDIGOVISION, <https://www.indigovision.com/products/cameras-and-encoders/sp-camera-range/thermal> [<https://perma.cc/D2LA-4MLJ>]; *Video Analytics Software*, VISEUM, <https://www.viseum.co.uk/cctv-products/video-analytics-software> [<https://perma.cc/V9K5-M6CL>].
 18. See Brief of *Amici Curiae* Electronic Frontier Foundation et al. in Support of Petitioner, *supra* note 16, at 7-8 (citations omitted).
 19. See *id.* at 8.
 20. See *id.*
 21. See Elizabeth Hinton, LeShae Henderson, & Cindy Reed, *An Unjust Burden: The Disparate Treatment of Black Americans in the Criminal Justice System* 1-10, VERA INST. OF JUST. (May 2018), <https://www.vera.org/downloads/publications/for-the-record-unjust-burden-racial->

marginalized groups, particularly low-income people, are more likely to live in environments where physical privacy is inaccessible.²² Many large communities of color in the United States are in metropolitan areas with relatively denser populations.²³ In cities where densely packed businesses have security cameras that may be accessed by law enforcement,²⁴ and where most people live in multi-unit housing without the benefit of large swathes of land and fences, achieving physical privacy requires extraordinary resources – if it is even possible.

The Supreme Court’s decision not to review *Tuggle* could leave these vulnerable communities – and, indeed, all American residents – virtually unprotected in the face of rapidly evolving surveillance tools and dwindling privacy safeguards. This Essay analyzes the aftermath of the Supreme Court’s denial of *Tuggle*’s petition for certiorari and explores potential paths for achieving privacy protections against the kind of prolonged pole-camera surveillance endured by *Tuggle*. Part I discusses surveillance’s connection to policing and disproportionate impact on marginalized communities. Part II examines the recent Fourth Amendment jurisprudence that serves as a backdrop for the legal question at issue in *Tuggle*. Next, Part III analyzes the facts of *Tuggle* and the district-court and Seventh Circuit decisions. Finally, Part IV discusses alternative advocacy opportunities in the absence of Supreme Court action.

disparities.pdf [https://perma.cc/JA94-HYSU]; Osagie K. Obasogie & Zachary Newman, *Police Violence, Use of Force Policies, and Public Health*, 43 AM. J. L. & MED. 279, 293-294 (2017); Philip Bump, *The Facts About Stop-and-Frisk in New York City*, WASH. POST (Sept. 27, 2016) (discussing racial disparities in New York stop-and-frisks), <https://www.washingtonpost.com/news/the-fix/wp/2016/09/21/it-looks-like-rudy-giuliani-convicted-donald-trump-that-stop-and-frisk-actually-works> [https://perma.cc/CG9V-TSJW]; see also Barton Gellman & Sam Adler-Bell, *The Disparate Impact of Surveillance*, CENTURY FOUND. 6 (Dec. 21, 2017), <https://production-tcf.imgix.net/app/uploads/2017/12/03151009/the-disparate-impact-of-surveillance.pdf> [https://perma.cc/DE5N-2MQB] (connecting surveillance to policing and, by extension, to “its origins” in “the slave economy”).

22. Gellman & Adler-Bell, *supra* note 21, at 9-10 (“[P]rotection against ‘unreasonable search and seizure’ depends on conditions that money can buy and the poor cannot hope to afford.”); see also *id.* at 7-9 (discussing how the Fourth Amendment’s focus on privacy of property and “space” created precedent that resulted in fewer privacy rights for lower income people).
23. See Jenny Schuetz, Arturo Gonzalez, Jeff Larrimore, Ellen A. Merry & Barbara J. Robles, *Are Central Cities Poor and Non-White?*, FED. RSRV. (May 15, 2017), <https://www.federalreserve.gov/econres/notes/feds-notes/are-central-cities-poor-and-non-white-20170515.html> [https://perma.cc/953C-X4M2] (showing, among other things, that Black residents of several major metropolitan areas tend to reside closer to the center of the city, as opposed to the suburbs, and Hispanic residents of Detroit and Los Angeles tend to reside similarly).
24. See, e.g., *infra* note 155 and accompanying text.

**I. SURVEILLANCE: A POLICING TOOL WITH
DISPROPORTIONATE HARMS**

Surveillance is a tool of policing and, more broadly, state control.²⁵ The government agencies that employ surveillance tools are almost always law-enforcement agencies or other government entities that maintain state control—state and local police; federal law enforcement like the Federal Bureau of Investigation (FBI)²⁶ or Immigration and Customs Enforcement (ICE);²⁷ or other government security agencies like the Department of Defense²⁸ or the National Security

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25. All policing is an exercise of state control. A sympathetic perspective on policing views this exercise as a “legitimate mechanism for using force in the interests of the whole society.” See ALEX S. VITALE, *THE END OF POLICING* 32 (2018). By contrast, the police-abolitionist perspective sees the police as “a system for managing and even producing inequality by suppressing social movements and tightly managing the behaviors of poor and nonwhite people.” *Id.* at 34. A sympathetic perspective on policing views the harms of policing as imperfect implementations of an otherwise legitimate system, while an abolitionist perspective views those harms as integral to policing by design. See *id.* at 32-34; see also *id.* at 43-54 (tracing the origins of American police in American colonialism and anti-Black oppression). For more information about abolitionism, see ANGELA Y. DAVIS, GINA DENT, ERICA R. MEINERS & BETH E. RICHIE, *ABOLITION. FEMINISM. NOW.* (2022); DERECKA PURNELL, *BECOMING ABOLITIONISTS: POLICE, PROTESTS, AND THE PURSUIT OF FREEDOM* (2021); and Mariame Kaba, *So You’re Thinking About Becoming an Abolitionist*, in *WE DO THIS ‘TIL WE FREE US: ABOLITIONIST ORGANIZING AND TRANSFORMING JUSTICE 2* (Tamara K. Nopper ed. 2021).
26. See, e.g., Stephanie Kirchgaessner, *FBI Confirms It Obtained NSO’s Pegasus Spyware*, *GUARDIAN* (Feb. 2, 2022, 8:22 AM EST), <https://www.theguardian.com/news/2022/feb/02/fbi-confirms-it-obtained-nsos-pegasus-spyware> [<https://perma.cc/8XFJ-LK8A>]; Peter Aldous, *The FBI Used Its Most Advanced Spy Plane to Watch Black Lives Matter Protests*, *BUZZFEED NEWS* (June 20, 2020, 10:35 AM EST), <https://www.buzzfeednews.com/article/peteraldous/fbi-surveillance-plane-black-lives-matter-dc> [<https://perma.cc/L7PT-T8R6>]; Ryan Mac, Caroline Haskins & Logan McDonald, *Clearview’s Facial Recognition App Has Been Used by the Justice Department, ICE, Macy’s, Walmart, and the NBA*, *BUZZFEED NEWS* (Feb. 27, 2020, 11:37 PM EST), <https://www.buzzfeednews.com/article/ryanmac/clearview-ai-fbi-ice-global-law-enforcement> [<https://perma.cc/K3DA-V4ZD>].
27. See, e.g., Nina Wang, Allison McDonald, Daniel Bateyko & Emily Tucker, *American Dragnet: Data-Driven Deportation in the 21st Century*, *CTR. ON PRIV. & TECH.* (May 10, 2022), <https://americandragnet.org> [<https://perma.cc/YFY7-AN7D>] (detailing Immigration and Customs Enforcement’s (ICE’s) use of domestic surveillance).
28. See, e.g., Joseph Cox, *How the U.S. Military Buys Location Data from Ordinary Apps*, *VICE MOTHERBOARD* (Nov. 16, 2020, 10: 35 AM), <https://www.vice.com/en/article/jgqm5x/us-military-location-data-xmode-locate-x> [<https://perma.cc/C7YA-ZHJU>].

Agency (NSA).²⁹ Indeed, Tuggle himself was surveilled by the FBI as part of a law-enforcement investigation into his alleged criminal misconduct.³⁰

Fundamentally, policing and surveillance, as methods of state control, are restrictions on liberty.³¹ Privacy is an essential right, and the encroachment of that right is a harm in and of itself.³² But even beyond the injury of this encroachment, being subjected to government surveillance produces other harms as well, including economic, emotional, physical, and relational harms.³³ These harms disproportionately impact minorities and marginalized communities.³⁴

Communities with high proportions of minorities are more likely to be widely surveilled. For example, a study by Amnesty International found higher concentrations of “facial recognition compatible CCTV cameras” in New York City neighborhoods with “higher . . . proportion[s] of non-white residents.”³⁵ Similar patterns exist in other cities and with other surveillance technologies. In 2016, reports revealed Baltimore was disproportionately operating cell-site

29. See, e.g., Ewan Macaskill & Gabriel Dance, *NSA Files: Decoded*, *GUARDIAN* (Nov. 1, 2013), <https://www.theguardian.com/world/interactive/2013/nov/01/snowden-nsa-files-surveillance-revelations-decoded> [<https://perma.cc/S3NA-XX38>].

30. *United States v. Tuggle*, No. 16-cr-20070, 2018 WL 3631881, at *1 (C.D. Ill. July 31, 2018).

31. Some may view this restriction on liberty as for the greater good: a voluntary relinquishment of rights in return for state protection, a protection which may itself secure a person’s liberty. See, e.g., JOHN LOCKE, *TWO TREATISES OF GOVERNMENT* 184-86 (Thomas I. Cook ed., Hafner Press 1947) (1690). Others view this restriction of liberty as necessarily oppressive, by design and/or in effect. See, e.g., Frazelle & Gray, *supra* note 12.

32. See, e.g., DANIEL J. SOLOVE, *NOTHING TO HIDE: THE FALSE TRADEOFF BETWEEN PRIVACY AND SECURITY* 4 (2011); Jay Stanley, *Plenty to Hide*, *ACLU* (June 7, 2012, 1:57 PM), <https://www.aclu.org/blog/national-security/privacy-and-surveillance/plenty-hide> [<https://perma.cc/ZAV6-V9ZF>]; see also Nick Taylor, *State Surveillance and the Right to Privacy*, 1 *SURVEILLANCE & SOC’Y* 66, 67-68 (2002) (discussing the right to privacy under U.K. law and under Article 8 of the European Convention on Human Rights). Even though the Supreme Court’s recent decision in *Dobbs v. Jackson Women’s Health Organization*, 142 S. Ct. 2228, 2245 (2022), calls into question the entrenchment of a right to privacy in the Constitution, other Supreme Court opinions recognizing the right to privacy still stand. See, e.g., *Lawrence v. Texas*, 539 U.S. 558, 564-65 (2003); *Griswold v. Connecticut*, 381 U.S. 479, 483-86 (1965).

33. See Danielle Keats Citron & Daniel J. Solove, *Privacy Harms*, 102 *B.U. L. REV.* 793, 830-61 (2022) (providing a breakdown of types of privacy harms); see also SOLOVE, *supra* note 32, at 29-32.

34. See Gellman & Adler-Bell, *supra* note 21, at 2-3; Dorothy Roberts & Jeffrey Vagle, *Racial Surveillance Has a Long History*, *HILL* (Jan. 4, 2016, 5:11 PM ET), <https://thehill.com/opinion/oped/264710-racial-surveillance-has-a-long-history> [<https://perma.cc/36ZU-M5DS>].

35. Thomas Brewster, *Racial Minorities ‘More at Risk’ of Being Spied on by New York City’s Massive Facial Recognition Surveillance Machine*, *FORBES* (Feb. 14, 2022, 7:00 EST), <https://www.forbes.com/sites/thomasbrewster/2022/02/14/new-york-facial-recognition-surveillance-puts-minorities-at-risk-says-amnesty> [<https://perma.cc/H2QR-TU6K>].

simulators in predominantly Black neighborhoods.³⁶ Further, in the last few years, federal law-enforcement agencies – including the Department of Homeland Security (DHS) and FBI – as well as local police departments have also targeted Black Lives Matter and other racial-justice protests using surveillance.³⁷ Government surveillance of Black activists is, of course, not a new phenomenon.³⁸ Moreover, DHS agencies ICE and Customs and Border Protection have increasingly adopted surveillance technologies to investigate undocumented immigrants and migrants.³⁹ And Muslims, as well as Middle Eastern, South Asian, and African immigrants, have been targeted with heightened levels of government surveillance in the years since the September 11 attacks.⁴⁰

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36. Jennifer Lynch, *Civil Rights Coalition Files FCC Complaint Against Baltimore Police Department for Illegally Using Stingrays to Disrupt Cellular Communications*, ELEC. FRONTIER FOUND. (Aug. 17, 2016), <https://www.eff.org/deeplinks/2016/08/civil-liberties-groups-file-fcc-complaint-arguing-baltimore-police-are-illegally> [https://perma.cc/6T3A-7KDS].
 37. Aldhous, *supra* note 26; *Ethnic Minorities at Greater Risk of Oversurveillance After Protests*, PRIV. INT'L (June 15, 2020), <https://privacyinternational.org/news-analysis/3926/ethnic-minorities-greater-risk-oversurveillance-after-protests> [https://perma.cc/SS7K-6YKF]; Antonia Noori Farzan, *Memphis Police Used Fake Facebook Account to Monitor Black Lives Matter, Trial Reveals*, WASH. POST (Aug. 23, 2018, 6:32 AM EDT), <https://www.washingtonpost.com/news/morning-mix/wp/2018/08/23/memphis-police-used-fake-facebook-account-to-monitor-black-lives-matter-trial-reveals> [https://perma.cc/6GLQ-GUCC].
 38. Ashley D. Farmer, *Tracking Activists: The FBI's Surveillance of Black Women Activists Then and Now*, OAH (2020), <https://www.oah.org/tah/issues/2020/history-for-black-lives/tracking-activists-the-fbis-surveillance-of-black-women-activists-then-and-now> [https://perma.cc/DXH5-9GY3]; Michael German, *The FBI Has a Long History of Targeting Black Activists. That's Still True Today*, GUARDIAN (June 26, 2020, 5:41 AM EDT), <https://www.theguardian.com/commentisfree/2020/jun/26/fbi-black-activism-protests-history> [https://perma.cc/E4WT-4G42].
 39. See Wang et al., *supra* note 27; Anil Kalhan, *Immigration Surveillance*, 74 MD. L. REV. 1, 27-53 (2014).
 40. See Saher Khan & Vignesh Ramachandran, *Post-9/11 Surveillance Has Left a Generation of Muslim Americans in a Shadow of Distrust and Fear*, PBS (Sept. 16, 2021, 4:56 PM EDT), <https://www.pbs.org/newshour/nation/post-9-11-surveillance-has-left-a-generation-of-muslim-americans-in-a-shadow-of-distrust-and-fear> [https://perma.cc/Q3RY-8S8P]; see, e.g., *FactSheet: The NYPD Muslim Surveillance Program*, ACLU, <https://www.aclu.org/other/factsheet-nypd-muslim-surveillance-program> [https://perma.cc/R9ZS-N4P4]; see also Removal of Regulations Relating to Special Registration Process for Certain Nonimmigrants, 81 Fed. Reg. 9423, 8 C.F.R. §§ 214, 264 (Dec. 23, 2016) (eliminating the NSEERS program, a post-9/11 Department of Homeland Security (DHS) program promulgated in 2002 that required males 16 and older from certain designated countries (mostly in the Middle East, Asia, and Africa) to submit to a government registry and have their fingerprints taken).

People of color and immigrant communities are also disproportionately criminalized,⁴¹ and their communities are generally more likely to be policed.⁴² Because surveillance is a tool of policing, it follows that more-policed communities—that is, marginalized communities—are generally more likely to be surveilled. For example, current law in the United States makes undocumented immigrants subject to detention and deportation.⁴³ When police departments and ICE conduct investigations to find undocumented people, they employ surveillance as a tool in their investigations.⁴⁴ If or when ICE detains an undocumented immigrant, ICE may subject them to additional surveillance.⁴⁵ As these ICE investigations primarily target undocumented people and other members of immigrant communities, the surveillance tools they use also disproportionately affect undocumented people and immigrant communities. This connection between disproportionate criminalization and disproportionate surveillance exists in numerous other contexts involving marginalized people.⁴⁶ The “War on

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41. I use the term “criminalized” both to refer strictly to their increased likelihood of facing criminal liability and harsher sentencing, as well as more loosely to encompass forms of civil liability that closely resemble criminal liability in practice—that is, immigrant detention and removal.
42. See Radley Balko, *There’s Overwhelming Evidence that the Criminal Justice System Is Racist. Here’s the Proof.*, WASH. POST (June 10, 2020), <https://www.washingtonpost.com/graphics/2020/opinions/systemic-racism-police-evidence-criminal-justice-system/> [https://perma.cc/K98K-83Q8].
43. 8 U.S.C. § 1227(a)(1)(C)-(D) (2018).
44. See Wang et al., *supra* note 27; Dana Khabbaz, *DHS’s Data Reservoir: ICE and CBP’s Capture and Circulation of Location Information*, ELEC. PRIV. INFO. CTR. 5-6 (Aug. 2022), <https://epic.org/wp-content/uploads/2022/08/DHS-Data-Reservoir-Report-Aug2022.pdf> [https://perma.cc/MC7S-R48L].
45. See Ali Panjwani & Hannah Lual, *Tracked & Trapped: Experiences from ICE Digital Prisons*, AFR. BUREAU IMMIGR. & SOC. AFFS. ET AL. 4, 7-9 (May 2022), https://notechforice.com/wp-content/uploads/2022/05/TrackedTrapped_final.pdf [https://perma.cc/YR6D-US8Q].
46. There are countless other examples of disproportionate surveillance of marginalized people, including in criminal contexts as well as in noncriminal contexts that are nonetheless closely entwined with the criminal legal system. See, e.g., Sara Geoghegan & Dana Khabbaz, *Reproductive Privacy in the Age of Surveillance Capitalism*, ELEC. PRIV. INFO. CTR. (July 7, 2022), <https://epic.org/reproductive-privacy-in-the-age-of-surveillance-capitalism> [https://perma.cc/AM2C-A9X4]; Jane Lytvynenko, *Data Collection and State Surveillance Put LGBTQ People at Risk Online and Off*, BUZZFEED NEWS (July 14, 2020, 10:03 AM), <https://www.buzzfeednews.com/article/janelytvynenko/data-collection-and-state-surveillance-put-lgbtq-people-at> [https://perma.cc/43XY-79J9]. For example, surveillance in public schools has consequences for all students but especially marginalized students who are more likely to be criminalized for their behavior, or LGBTQ+ students who face consequences such as being outed without their consent. See Erica R. Meinters, *Arresting the Carceral State, in WE DO THIS ‘TIL WE FREE US: ABOLITIONIST ORGANIZING AND TRANSFORMING JUSTICE*, *supra* note 25, at 76; James Factora, *Surveillance Programs Are Reportedly Targeting, Outing LGBTQ+ Students*, THEM (Oct. 19, 2021), <https://www.them.us/story/surveillance-programs->

Drugs,” for example, has notoriously impacted people of color disproportionately.⁴⁷ Surveillance is certainly used for drug investigations (the surveillance of Tuggle himself is a prime example); it thus seems reasonable to assume that people of color also face disproportionate surveillance in the drug-criminalization context.

Because of the inequities in how surveillance is wielded, government surveillance threatens not only individual liberty, but also core principles of equality and justice. These realities are essential context for this Essay, as they may provide a clue into *why* protections against surveillance are outdated and weak and *who* must bear the bulk of the consequences of these deficiencies.

II. THE LEGAL BACKDROP TO *UNITED STATES V. TUGGLE*

The panel in *Tuggle* was faced with the task of applying and interpreting a string of Fourth Amendment cases stemming from the beginnings of the digital age. The Supreme Court has developed numerous doctrinal tests in the context of Fourth Amendment searches, all the while repeatedly communicating uncertainty (and concern) about the applicability of pre-digital-age Fourth Amendment rationales to uncharted territory. The Supreme Court’s struggle to adjust to the challenges of the digital age is perhaps most evident in the federal-circuit split that has emerged on the issue of prolonged pole-camera surveillance of a home. Prolonged pole-camera surveillance, as the term is used in this Essay, refers to government surveillance using a pole-mounted camera lasting for a period of approximately a month or longer. The prolonged nature of the surveillance reflects the large quantity of information gathered by the pole camera – a quantity of information that would otherwise be difficult or cost-prohibitive to gather through a traditional, manned stakeout. This Part discusses Supreme Court precedent on the topic of surveillance and describes the resulting divisions across circuit courts.

reportedly-targeting-outing-lgbtq-students [https://perma.cc/EUB6-KTG2]. Surveillance under the child-welfare system also disproportionately impacts families of color and particularly Black mothers. See Charlotte Baughman, *The Surveillance Tentacles of the Child Welfare System*, 11 COLUM. J. RACE & L. 501 (2021); Roberts & Vagle, *supra* note 34.

47. Nkechi Taifa, *Race, Mass Incarceration, and the Disastrous War on Drugs*, BRENNAN CTR. (May 10, 2021), <https://www.brennancenter.org/our-work/analysis-opinion/race-mass-incarceration-and-disastrous-war-drugs> [https://perma.cc/C6F8-MKTZ]; Graham Boyd, *The Drug War Is the New Jim Crow*, NACLA REP. ON AMS., July/Aug. 2001, at 18, 18-22.

A. *The Supreme Court's Fourth Amendment "Search" Doctrine*

The issue of prolonged pole-camera surveillance of a home intersects with several legal issues that the Supreme Court has tackled in the last few decades. Specifically, *Tuggle* implicates overarching Fourth Amendment doctrine, which governs an individual's constitutional protection from warrantless searches. Under current Fourth Amendment doctrine, to trigger an individual's Fourth Amendment rights, first, a person must have a reasonable expectation of privacy in a certain object or area; and second, a constitutional search of that object or area must occur.⁴⁸

To find a reasonable expectation of privacy, the Supreme Court has recognized a two-part test from Justice Harlan's concurrence in *Katz v. United States*.⁴⁹ Under the test, a person has a reasonable expectation of privacy in something if, one, they have "manifested a subjective expectation of privacy" in it; and two, "society [is] willing to recognize that expectation as reasonable."⁵⁰ The Court has found that erecting a fence around one's backyard easily fulfills the subjective requirement,⁵¹ but the Court has not required people to protect their homes from thermal imaging or take measures to prevent their phones from connecting to cell towers.⁵² Regarding the second, "objective" requirement, the Court has determined that "individuals have a reasonable expectation of privacy in the whole of their physical movements"⁵³ and has repeatedly held that when the government surveillance is of a home, the objective expectation of privacy is "most heightened."⁵⁴

After determining that one has a reasonable expectation of privacy concerning an object or place, the second principal condition for Fourth Amendment protection is for a search to have occurred for constitutional purposes. Long-term pole-camera surveillance of a home implicates several different but overlapping wrinkles in Supreme Court doctrine: the issue of visual surveillance, a

48. The two prongs are not necessarily wholly distinct. In fact, Justice Sotomayor has described the test for whether a search has violated the Fourth Amendment as "when the government violates a subjective expectation of privacy that society recognizes as reasonable." *United States v. Jones*, 565 U.S. 400, 414 (2012) (Sotomayor, J., concurring) (quoting *Kyllo v. United States*, 533 U.S. 27, 33 (2001)).

49. *Katz v. United States*, 389 U.S. 347, 360 (1967).

50. *California v. Ciraolo*, 476 U.S. 207, 211 (1986).

51. *Id.* at 211-12.

52. See Brief Amicus Curiae of the ACLU, the ACLU of Massachusetts, Inc., the Electronic Frontier Foundation & the Center for Democracy & Technology at 19, *Commonwealth v. Mora*, 150 N.E.3d 297 (Mass. 2020) (No. SJC-12890), 2020 WL 2106914, at *19.

53. *Carpenter v. United States*, 138 S. Ct. 2206, 2209-10 (2018).

54. *Ciraolo*, 476 U.S. at 212-13.

search of a person's curtilage (the area surrounding one's home), surveillance using advanced technologies, and surveillance that captures a large amount of information.

Supreme Court opinions in the last few decades have held that traditional visual surveillance is not a search that would trigger Fourth Amendment protections.⁵⁵ But the Court has found that visual surveillance exceeding the capacities of traditional visual surveillance may constitute a search, especially if a home was surveilled. In *Kyllo*, the Court held that thermal imaging used by law enforcement on a home was a search because the technology was “not in general public use” and was used “to explore details of the home that would previously have been unknowable without physical intrusion.”⁵⁶ Because thermal-imaging cameras are nonpublic technology used to uncover details from *within* a home, they crossed a threshold into an unconstitutional search. Importantly, however, the Court did not go so far as to hold that *any* new application of visual-surveillance technology would trigger Fourth Amendment protections. Instead, the Court preserved its 1986 decision in *Dow Chemical Co. v. United States*,⁵⁷ in which it reasoned that “[t]he mere fact that human vision is enhanced somewhat [through the use of aerial photography] . . . does not give rise to constitutional problems.”⁵⁸ It was the additional factors present in *Kyllo*—namely, the surveillance of a home's curtilage—that “heightened” the “privacy expectations” and triggered Fourth Amendment protections.⁵⁹

Other Justices have recognized an additional exception that can make an otherwise nonphysical surveillance a search: the extent of the information obtained. Here, the Court has begun to acknowledge a mosaic theory of the Fourth

55. For example, Justice Scalia called visual surveillance “unquestionably lawful” in *Kyllo v. United States*, 533 U.S. 27, 31–32 (2001), and reiterated that point in *United States v. Jones*, 565 U.S. 400, 412 (2012). Justices Thomas and Gorsuch have espoused similar interpretations, where Fourth Amendment searches hinge on a foundation of trespass and property rights. In *Carpenter*, Justice Thomas criticized the *Katz* test as distorting the original constitutional understanding of a “search.” The Fourth Amendment, Justice Thomas argued, applies to searches of property, and “privacy” as a matter of civil liberties was not “part of the political vocabulary” during the Founding. *Carpenter v. United States*, 138 S. Ct. 2206, 2239 (2018) (Thomas, J., dissenting) (quoting Morgan Cloud, *Property is Privacy: Locke and Brandeis in the Twenty-First Century*, 55 AM. CRIM. L. REV. 37, 42 (2018)). In a separate dissenting opinion in *Carpenter*, Justice Gorsuch agreed with Justice Thomas that whether a search has occurred depends not on whether a person's privacy right has been infringed upon, but on whether a person's property has. *Id.* at 2264 (Gorsuch, J., dissenting).

56. *Kyllo*, 533 U.S. at 40.

57. 476 U.S. 227, 238 (1986).

58. *Dow Chemical*, 476 U.S. at 238; see *Kyllo*, 533 U.S. at 33, 37 (distinguishing *Dow Chemical*).

59. *Kyllo*, 533 U.S. at 33.

Amendment.⁶⁰ A mosaic theory of the Fourth Amendment posits that when surveillance captures a large amount of information, such that the aggregate of that information is far more revealing than “the sum of its parts,” that surveillance becomes a Fourth Amendment search.⁶¹ Justice Alito implicitly recognized the theory in his concurrence in *Jones*, where the duration of the GPS surveillance at issue in that case – twenty-eight days – mattered far more than the physical trespass of the GPS tracker itself.⁶² Similarly, Justice Sotomayor’s concurrence in the same case emphasized the “precise, comprehensive record of a person’s public movements that reflects a wealth of detail about her familial, political, professional, religious, and sexual associations” as critical factors that made the GPS tracking a search, in addition to the physical intrusion.⁶³ In 2018’s *Carpenter v. United States*, the majority opinion applied *Jones* to cell-site location surveillance, holding that, much like in *Jones*, the information obtained through the cell-phone surveillance was “detailed, encyclopedic, and effortlessly compiled.”⁶⁴

B. Federal Circuit Split and Other Lower Court Interpretations of the Doctrine

Lower courts have recently struggled to apply Supreme Court precedent uniformly to contemporary surveillance cases. Specifically, courts have wrestled with outdated Supreme Court guidance on visual surveillance when examining modern, digital visual surveillance. Courts have also grappled with defining and applying the mosaic theory of surveillance, struggling to determine how much weight the *amount* of information collected should receive in determining whether a search occurred.

The federal courts of appeals have split on the issue of whether long-term pole-camera surveillance of a person’s home or curtilage constitutes a Fourth Amendment search.⁶⁵ In 1987, the Fifth Circuit held in *United States v. Cuevas-*

60. See Recent Case, *Seventh Circuit Holds Long-Term, Warrantless Video Surveillance is Not an Illegal Search*: *United States v. Tuggle*, 135 HARV. L. REV. 928, 930-32 (2022) (discussing the Supreme Court’s application of the mosaic theory in prolonged surveillance cases); Paul Ohm, *The Many Revolutions of Carpenter*, 32 HARV. J.L. & TECH. 357, 373-76 (2019). Other courts have also recognized *Carpenter*’s reasoning as an application of a “mosaic theory” of surveillance. *E.g.*, *United States v. Moore-Bush*, 36 F.4th 320, 358 (2022) (Barron, C.J., Thompson & Kayatta, JJ., concurring); *United States v. Tuggle*, 4 F.4th 505, 519 (7th Cir. 2021).

61. See Recent Case, *supra* note 60, at 930 (quoting *Tuggle*, 4 F.4th at 524-25) (defining the mosaic theory).

62. *United States v. Jones*, 565 U.S. 400, 424-25 (2012) (Alito, J., concurring).

63. *Id.* at 415 (Sotomayor, J., concurring).

64. *Carpenter v. United States*, 138 S. Ct. 2206, 2216 (2018).

65. See, *e.g.*, *United States v. Houston*, 813 F.3d 282 (6th Cir. 2016); *United States v. Trice*, 966 F.3d 506, 516-20 (6th Cir. 2020) (reaffirming and applying *Houston*); *United States v. Cuevas-Sanchez*, 821 F.2d 248 (5th Cir. 1987).

Sanchez that continuous, two-month-long pole-camera surveillance of a person's backyard constituted a search.⁶⁶ The longevity of the surveillance was especially significant, as it rendered the surveillance distinct from what a "casual observer" might witness.⁶⁷ By contrast, the Sixth Circuit in *United States v. Houston*⁶⁸ held the opposite: that a ten-week pole-camera surveillance of a home was not a search, no matter the length of the surveillance, because the camera "captured the same views enjoyed by passersby on public roads."⁶⁹ Similarly, in *United States v. Jackson*, the Tenth Circuit held in 2000 that the warrantless pole-camera surveillance of a person's houses did not violate the Fourth Amendment since the cameras observed only the exterior of the houses.⁷⁰ *United States v. Moore-Bush*,⁷¹ discussed below,⁷² is the latest in a string of divided federal appellate decisions concerning the applicability of the Fourth Amendment to prolonged pole-camera surveillance.

In other recent decisions involving extensive and long-term surveillance using new technologies, courts have applied a version of the mosaic theory by considering the magnitude of information collected. For example, in *Leaders of a Beautiful Struggle v. Baltimore Police Department*, the Fourth Circuit issued an en banc decision holding that a program involving aerial surveillance of a city likely violated the Fourth Amendment.⁷³ The Fourth Circuit interpreted *Carpenter* as "solidif[ying] the line between short-term tracking of public movements . . . and prolonged tracking that can reveal intimate details through habits and patterns."⁷⁴ It thus mattered to the Fourth Circuit that the aerial surveillance at issue was "detailed, encyclopedic," and "retrospective."⁷⁵ After considering the aggregate of information collected by the visual surveillance program, the Fourth Circuit held that plaintiffs were likely to succeed in their claim that the surveillance violated the Fourth Amendment.

66. *Cuevas-Sanchez*, 821 F.2d at 251.

67. *Id.*

68. 813 F.3d 282 (6th Cir. 2016).

69. *Id.* at 287-88.

70. 213 F.3d 1269, 1280-81 (10th Cir. 2000); see generally *Petition for a Writ of Certiorari*, *supra* note 8, at 8-15 (discussing the circuit split).

71. 36 F.4th 320 (1st Cir. 2022) (en banc) (per curiam).

72. See *infra* Section III.C.

73. 2 F.4th 330 (4th Cir. 2021) (reversing the district court's denial of the plaintiffs' motion for a preliminary injunction and remanding the case).

74. *Id.* at 341.

75. *Id.* at 341-42 (quoting *Carpenter v. United States*, 138 S. Ct. 2206, 2216, 2218 (2018)).

III. UNITED STATES V. TUGGLE

Between 2014 and 2016, FBI agents used three pole cameras to monitor Travis Tuggle's home. Two of the cameras were aimed at the front of Tuggle's home and driveway. The third camera captured both the outside of Tuggle's home and a codefendant's shed.⁷⁶ Though the cameras captured imagery of Tuggle's property, the cameras themselves were physically located on public property, mounted to utility poles in an alley and on a street.⁷⁷ Tuggle's home was in a residential neighborhood in an Illinois city, and his house had no fence or other physical obstruction blocking it from view.⁷⁸

Footage from the pole cameras supplied evidence the FBI would use to indict Tuggle on "conspiracy to distribute and possess with intent to distribute methamphetamine."⁷⁹ The cameras provided twenty-four-hour coverage, with "[r]udimentary lighting technology" assisting the cameras in night hours.⁸⁰ The cameras were operable remotely, and agents could pan, tilt, and zoom the cameras while observing footage in real time.⁸¹ In addition to providing a live video feed, footage was also stored at an FBI office and available for historical review.⁸² The video footage provided the basis for search warrants that, in turn, facilitated Tuggle's two indictments.⁸³

A. Tuggle: *The District-Court Opinion*

Prior to his trial, Tuggle filed a motion to suppress evidence from the pole cameras, "arguing that use of the cameras constituted a warrantless search in violation of the Fourth Amendment."⁸⁴ The district court first held that the surveillance of Tuggle's home, not being a "physical intru[sion]" onto the property, was not necessarily a search.⁸⁵ Next, applying *Kyllo*, the district court held that since Tuggle had not "attempt[ed] to obscure his driveway or residence from

76. *United States v. Tuggle*, 4 F.4th 505, 511 (7th Cir. 2021); *United States v. Tuggle*, No. 16-cr-20070, 2018 WL 3631881, at *1 (C.D. Ill. July 31, 2018).

77. *Tuggle*, 4 F.4th at 511.

78. *Tuggle*, 2018 WL 3631881, at *1.

79. *Id.* at *1; *see also Tuggle*, 4 F.4th at 512.

80. *Tuggle*, 4 F.4th at 511.

81. *Id.*

82. *Id.*

83. *Id.* at 511-12.

84. *Id.* at 512; *see Tuggle*, 2018 WL 3631881, at *1.

85. *Tuggle*, 2018 WL 3631881, at *3.

public view,” he had not “manifested” a subjective expectation of privacy and no subjective expectation of privacy was reasonable.⁸⁶

Seemingly critical to the district court’s decision to deny Tuggle’s motion were three major understandings of the pole-camera surveillance used on Tuggle. First, because the cameras could only capture footage of the exterior of the house, they “only captured what would have been visible to any passerby in the neighborhood.”⁸⁷ Second, unlike the cell-site location surveillance at issue in *Carpenter*, “the surveillance here used ordinary video cameras that have been around for decades.”⁸⁸ Third, the long-term character of the pole-camera surveillance did not make it a search since, unlike the GPS surveillance at issue in *Jones*, the pole-camera surveillance of Tuggle was “limited to a fixed location and capture[d] only activities in camera view.”⁸⁹

Tuggle filed a motion to reconsider and a second motion to suppress the pole-camera evidence in 2019, both of which the district court denied.⁹⁰ Tuggle entered a conditional guilty plea, “reserving his right to appeal the court’s denials of his motions to suppress.”⁹¹ After sentencing, Tuggle appealed the denials of the motions to suppress to the Seventh Circuit.

B. Tuggle’s Appeal and the Seventh Circuit Decision

Tuggle advanced two principal arguments in his appeal to the Seventh Circuit: first, that warrantless pole-camera surveillance of his home violated the Fourth Amendment; and second, that the “long-term, warrantless surveillance over a period of approximately eighteen months’ amounted to a Fourth Amendment violation” under the mosaic theory.⁹² Considering each element of Tuggle’s appeal, the Seventh Circuit applied *Katz*’s two-part test; the court inquired whether Tuggle “manifested a subjective expectation of privacy” and whether “society [is] willing to recognize that expectation as reasonable.”⁹³

Applying the two-part test to Tuggle’s first argument, the Seventh Circuit held that Tuggle “clearly” had not manifested a subjective expectation of privacy

86. *Id.*

87. *Id.*

88. *Id.*

89. *Id.*

90. *United States v. Tuggle*, No. 16-cr-20070, 2019 WL 3915998, at *2 (C.D. Ill. Aug. 19, 2019).

91. *United States v. Tuggle*, 4 F.4th 505, 512 (7th Cir. 2021).

92. *Id.* at 513.

93. *Id.* (quoting *California v. Ciraolo*, 476 U.S. 207, 211 (1986)).

since he had not acted to “shield his yard or driveway from public view.”⁹⁴ After considering the objective prong of the test, regarding the reasonableness of Tuggle’s expectation of privacy, the court held that the use of pole cameras to observe the exterior of the home did not constitute a Fourth Amendment search.⁹⁵ The court reasoned that the pole cameras used on Tuggle’s home “undoubtedly g[a]ve [the government] more detailed information than naked-eye views” but “did not do so to a degree that ‘g[a]ve rise to constitutional problems.’”⁹⁶ While the court did not provide clear guidance as to which technological capabilities *would* produce “constitutional problems,” the court noted several mitigating factors from Tuggle’s case: the pole cameras were “only used . . . to identify who visited Tuggle’s house and what they carried, all things that a theoretical officer could have observed without a camera;”⁹⁷ the technological features of the pole cameras used are features available for general public use;⁹⁸ and the cameras did not “penetrate walls or windows” and thus did not capture confidential information or access “details of the home . . . unknowable without physical intrusion.”⁹⁹

The Seventh Circuit next considered Tuggle’s argument “that the prolonged and uninterrupted use of [the pole] cameras constituted a search.”¹⁰⁰ The Seventh Circuit considered this argument as advancing a “mosaic theory,” wherein Tuggle was arguing that the surveillance he endured constituted a search because “when it comes to people’s reasonable expectations of privacy, the whole is greater than the sum of its parts.”¹⁰¹ The Seventh Circuit acknowledged that the Supreme Court and other circuits have applied the mosaic theory in Fourth Amendment opinions, including the Supreme Court’s majority opinion in *Carpenter*.¹⁰² But the Circuit expressed skepticism of the theory’s merits and concluded that there was no “binding caselaw indicating that [it] *must* apply the mosaic theory.”¹⁰³ Even under the mosaic theory, the Seventh Circuit argued, the

94. *Id.*

95. *Id.* at 515-16.

96. *Id.* at 516 (quoting *Dow Chem. Co. v. United States*, 476 U.S. 227, 238 (1986)).

97. *Id.* at 517 (citing *United States v. Thompson*, 811 F.3d 944, 950 (7th Cir. 2016)).

98. *Id.* at 516.

99. *Id.* at 516 (first quoting *Dow Chem.*, 476 U.S. at 239; and then quoting *Kyllo v. United States*, 533 U.S. 27, 40 (2001)).

100. *Id.* at 517.

101. *Id.* (quoting Matthew B. Kugler & Lior Jacob Strahilevitz, *Actual Expectations of Privacy, Fourth Amendment Doctrine, and the Mosaic Theory*, 2015 SUP. CT. REV. 205, 205).

102. *Tuggle*, 4 F.4th at 519; see also *Ohm*, *supra* note 60, at 373 (explaining that the Court “in effect endorse[d] the mosaic theory of privacy” in *Carpenter*).

103. *Tuggle*, 4 F.4th at 520.

pole camera footage was “far from capturing the ‘whole of his physical movements,’” as it only captured footage of Tuggle’s home.¹⁰⁴ The Seventh Circuit went on to write—in contrast with a Fourth Circuit decision published less than a month before the *Tuggle* opinion¹⁰⁵—that because the pole-camera footage obtained by law enforcement was limited to the period of surveillance, the surveillance was “real-time” and distinct from the historical cell-site location information at issue in *Carpenter*, which involved “tap[ping] into an expansive, pre-existing database.”¹⁰⁶

Despite finding the surveillance constitutional, the Seventh Circuit concluded its opinion with a note of caution, stating that it was “not without unease about the implications of [the pole-camera surveillance used on Tuggle] for future cases. The eighteen-month duration of the government’s pole camera surveillance . . . is concerning, even if permissible.”¹⁰⁷ The issue of duration, the court wrote, poses a “line-drawing problem” that the Seventh Circuit was not comfortable deciding.¹⁰⁸ The Seventh Circuit further issued a warning about the advancement and expansion of surveillance technologies and the relative weakness of present Fourth Amendment jurisprudence. “It might soon be time to revisit the Fourth Amendment test established in *Katz*,” the court wrote, calling on the Supreme Court and Congress to serve as decisive regulators of this developing issue.¹⁰⁹ Despite this urgent call to action, the Supreme Court denied certiorari.¹¹⁰

C. Moore-Bush: *The Aftermath of the Tuggle Cert Denial*

The consequences of the Supreme Court’s denial of certiorari for *Tuggle* are perhaps most obvious in *United States v. Moore-Bush*, where the full First Circuit split on the application of *Carpenter* to prolonged pole-camera surveillance of a home.¹¹¹ While unanimous in its ruling, the First Circuit was divided in its

^{104.} *Id.* at 524 (quoting *Carpenter v. United States*, 138 S. Ct. 2206, 2219 (2018)).

^{105.} *Cf.* *Leaders of a Beautiful Struggle v. Balt. Police Dep’t*, 2 F.4th 330, 340 (4th Cir. 2021) (applying a mosaic-like theory to find that plaintiffs were likely to succeed in their claim that a city’s aerial-surveillance program was unconstitutional, even though the program stored most footage for only forty-five days and reviewed only footage taken by the imaging system—not external, preexisting databases).

^{106.} *Tuggle*, 4 F.4th at 525.

^{107.} *Id.* at 526.

^{108.} *Id.*

^{109.} *Id.* at 528–29.

^{110.} *Tuggle v. United States*, 142 S. Ct. 1107 (2022) (mem.).

^{111.} *United States v. Moore-Bush*, 36 F.4th 320 (1st Cir. 2022) (en banc) (per curiam).

interpretation of *Carpenter*, producing two concurring opinions and no majority. Half of the en banc panel supported a holding that prolonged pole-camera surveillance required a warrant under *Carpenter*,¹¹² and the other half was staunchly opposed.¹¹³

The judges differed in their interpretations of whether Supreme Court precedent generally prohibits warrantless prolonged surveillance. Chief Judge Barron, Judge Thompson, and Judge Kayatta interpreted the Supreme Court's 2018 decision in *Carpenter* as “embrac[ing] something akin to the mosaic theory”¹¹⁴ and argued that *Carpenter* “support[s] . . . the conclusion that the government conducted a search.”¹¹⁵ Building on the Court's reasoning in *Jones*, Barron, Thompson, and Kayatta interpreted *Carpenter* as distinguishing between the “practical limits” of “a single-point stakeout” in the predigital age and the digital surveillance that now makes it possible to “effectively and perfectly capture *all* that visibly occurs in front of a person's home over the course of months – and in a manner that makes all of the information collected readily retrievable at a moment's notice.”¹¹⁶ Barron, Thompson, and Kayatta also addressed the Seventh Circuit's *Tuggle* decision, dismissing the Seventh Circuit's skepticism about mosaic theory and the Seventh Circuit's concern about a “line-drawing problem” when analyzing the legality of pole-camera surveillance based on the “aggregate” of information revealed.¹¹⁷ Despite their reservations, the trio ultimately joined the other judges on the First Circuit panel in upholding the surveillance based on an application of the “‘good faith’ exception to the Fourth Amendment's warrant requirement.”¹¹⁸

By contrast, Judges Lynch, Howard, and Gelpí interpreted Supreme Court precedent differently, determining that *Carpenter* did not apply to pole-camera surveillance.¹¹⁹ The judges pointed to the statement in *Carpenter* that its “decision . . . is a narrow one” and quoted *Carpenter*'s language that it did not “call into question conventional surveillance techniques and tools, such as security cameras.”¹²⁰ Lynch, Howard, and Gelpí wrote that pole cameras are “plainly a conventional surveillance tool” of the sort to which the Supreme Court was

112. *Id.* at 321 (Barron, C.J., Thompson & Kayatta, JJ., concurring).

113. *Id.* at 360 (Lynch, Howard & Gelpí, JJ., concurring).

114. *Id.* at 358 (Barron, C.J., Thompson & Kayatta, JJ., concurring).

115. *Id.* at 321.

116. *Id.* at 334.

117. *Id.* at 357 (quoting *United States v. Tuggle*, 4. F.4th 505, 526 (7th Cir. 2021)).

118. *Id.* at 321 (Barron, C.J., Thompson & Kayatta, JJ., concurring); *id.* at 363 (Lynch, Howard & Gelpí, JJ., concurring).

119. *Id.* at 363–64 (Lynch, Howard, Gelpí, JJ., concurring).

120. *Id.* at 363 (quoting *Carpenter v. United States*, 138 S. Ct. 2206, 2220 (2018)).

referring in *Carpenter*. The judges also compared the fixed pole-camera surveillance of the outside of a home to the location-information surveillance at issue in *Carpenter* and found the facts distinguishable.¹²¹

Without recent Supreme Court guidance on pole-camera surveillance, the First Circuit panel was left to rely primarily on the Supreme Court's decision in *Carpenter*—the facts of which concerned a different form of surveillance. The two groups of concurring judges came to opposing conclusions in their interpretations of *Carpenter*'s application to pole-camera surveillance and differed in their interpretations of privacy expectations for one's curtilage. Decided after the Supreme Court declined to review *Tuggle*, the First Circuit's divided stance exemplifies the confusion that lingers among the lower courts in the absence of clarity from the Supreme Court.

IV. ALTERNATIVE AVENUES FOR PRIVACY PROTECTIONS

By failing to update its case law on pole-camera surveillance—and on evolving surveillance technology generally—the Supreme Court missed an opportunity to clarify and modernize its Fourth Amendment jurisprudence. The First Circuit's recent difficulty in interpreting the Court's doctrine with respect to prolonged pole-camera surveillance of a home is but one example of the consequences of this continued doctrinal ambiguity. If the parties in *Moore-Bush* petition the Supreme Court to review the First Circuit's decision, the Court may get an additional opportunity to correct its inaction. Without federal judicial guidance, however, state-court litigation and legislative advocacy may serve as the most viable options for protecting privacy rights in the face of government pole-camera surveillance.

A. State Courts

Without favorable federal constitutional precedent on protections from warrantless pole-camera surveillance, litigation centered around state constitutional rights may be a way forward. The Massachusetts state courts, in particular, have issued notable and influential decisions applying the mosaic theory of surveillance. One recent decision from the Massachusetts Supreme Court weighed the extent of information collected in considering whether pole-camera surveillance constituted a search under the Massachusetts Constitution. In *Commonwealth v. Mora*, the Massachusetts Supreme Court held that five- and two-month-long pole-camera surveillances of the defendants' homes were searches requiring a

121. *Id.* at 363-67.

warrant under the Massachusetts Constitution.¹²² The court utilized the mosaic theory, in considering “whether the surveillance was so targeted and extensive that the data it generated, *in the aggregate*, exposed otherwise unknowable details of a person’s life.”¹²³

Massachusetts’s constitution is not the only state constitution that provides protection analogous to the U.S. Constitution’s Fourth Amendment. For example, Section 6 of the state constitution of Illinois, Tuggle’s home state, provides protection against “unreasonable searches.”¹²⁴ In addition to providing another forum for vindicating rights violated by prolonged pole-camera surveillance, state-level litigation may also be a way to create favorable precedent advancing the mosaic theory. This precedent may not only help litigants themselves realize their rights at the state level; it may also—in the absence of clear federal doctrine—help influence federal-court decisions as well. Indeed, Massachusetts’s mosaic-theory cases have been cited by federal courts—including in the Seventh Circuit’s *Tuggle* decision—as influential precedent.¹²⁵

B. Federal Legislation

In the absence of Supreme Court action safeguarding privacy rights from long-term visual surveillance of a person’s home, federal legislation is a theoretically viable but practically unreliable alternative. Nevertheless, lessons from successfully enacted privacy laws and legislative proposals may provide clues for strategic federal advocacy.

1. Federal Privacy Laws: Recent History and Patterns

The United States is due for federal legislative action on privacy. The last notable federal law relating to privacy was the Fair and Accurate Credit Transactions Act of 2003, which provided consumers the right to free credit reports and implemented identity-theft protections.¹²⁶ In the 1990s, Congress enacted the

122. 150 N.E.3d 297, 297 (Mass. 2020).

123. *Id.* at 310 (emphasis added) (internal citations omitted).

124. ILL. CONST. art. I, § 6.

125. See *United States v. Tuggle*, 4 F.4th 505, 524 (7th Cir. 2021).

126. Fair and Accurate Credit Transactions Act of 2003, Pub. L. No. 108-159, 117 Stat. 1952 (codified as amended in scattered sections of 15 U.S.C.); see also *Grading on a Curve: Privacy Legislation in the 116th Congress*, ELEC. PRIV. INFO. CTR 2 (Apr. 2020), <https://epic.org/wp-content/uploads/2022/01/EPIC-GradingOnACurve-Apr2020.pdf> [https://perma.cc/5SEC-PWWW] [hereinafter EPIC, *Grading on a Curve*].

Telephone Consumer Protection Act,¹²⁷ which regulated telemarketing and automated telephone communications; the Health Insurance Portability and Accountability Act,¹²⁸ which protected patient health data; and the Children's Online Privacy Protection Act,¹²⁹ which protected children's data privacy online. These statutes largely aimed to protect consumer privacy, or the public's privacy from private actors. Federal legislation safeguarding the public's privacy from *government* actors, however, has been much rarer.

The last significant federal statute that provided progressive privacy protection to the public from the government was the Electronic Communications Privacy Act (ECPA) in 1986, which restricted the government's access to private digital communications.¹³⁰ Since the 1980s, the protections of the ECPA have eroded as the data-broker industry has emerged—the ECPA does not prevent the government from accessing information from private sellers, who operate outside of the ECPA's coverage.¹³¹ There have been several major attempts to update the ECPA in the twenty-first century, but none have been successful.¹³² Congressional failure to update the ECPA—despite several attempts to do so—reflects the challenge of passing protective privacy legislation in the twenty-first century.

Compared to consumer-privacy protections—the enactments of which have been few and far between in the last few decades—there have been even fewer federally enacted protections against government surveillance. Federal protections against government surveillance hit a low point with the passage of the USA PATRIOT Act in 2001, which severely expanded government surveillance

127. Telephone Consumer Protection Act of 1991, 47 U.S.C. § 227 (2018); see EPIC, *Grading on a Curve*, *supra* note 126, at 2.

128. Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936 (codified as amended in scattered sections of 26, 29, and 42 U.S.C.); see EPIC, *Grading on a Curve*, *supra* note 126, at 2.

129. Children's Online Privacy Protection Act of 1998, 15 U.S.C. §§ 6501-6506 (2018); see EPIC, *Grading on a Curve*, *supra* note 126, at 2.

130. Electronic Communications Privacy Act, Pub. L. No. 99-508, 100 Stat. 1848 (1986).

131. See Carey Shenkman, Sharon Bradford Franklin, Greg Nojeim & Dhanaraj Thakur, *Legal Loopholes and Data for Dollars: How Law Enforcement and Intelligence Agencies are Buying Your Data from Brokers*, CTR. FOR DEMOCRACY & TECH. 15-17 (Dec. 2021), <https://cdt.org/wp-content/uploads/2021/12/2021-12-08-Legal-Loopholes-and-Data-for-Dollars-Report-final.pdf> [<https://perma.cc/VLA6-5G5K>].

132. See RICHARD M. THOMPSON II & JARED P. COLE, CONG. RSCH. SERV., R44036, STORED COMMUNICATIONS ACT: REFORM OF THE ELECTRONIC COMMUNICATIONS PRIVACY ACT (ECPA) 8 (2015); Charles H. Kennedy, *An ECPA for the 21st Century: The Present Reform Efforts and Beyond*, 20 COMM'LAW CONSPECTUS 129, 153-57 (2011).

authority to a degree some have argued was unconstitutional.¹³³ In the two decades since the Act's enactment, some of its most harmful surveillance provisions, particularly Section 215, have expired.¹³⁴ Still, other elements of the PATRIOT Act have been extended.¹³⁵ Indeed, it seems that in the last two decades, the only times Congress came to an agreement on government surveillance were the times it *increased* surveillance – sacrificing rather than upholding privacy rights.

In sum, Congress has been largely ineffective at protecting Americans' privacy: it has failed to enact any privacy legislation recent in decades as it has expanded government surveillance capabilities. This recent past paints a grim picture for the future, as partisan legislative gridlock is likely even higher now than it was in the early 2000s.¹³⁶ But as the need for new federal action on privacy continues to grow, partisan gridlock may not prove fatal to federal privacy legislation.

2. Recent Federal Privacy Policy Proposals and Actions

There have been several recent federal legislative proposals aimed at protecting data privacy. Some, such as the Fourth Amendment Is Not For Sale Act, have garnered significant support from advocacy groups,¹³⁷ and others, such as the

133. See, *Doe v. Holder*, 664 F. Supp. 2d 426 (S.D.N.Y. 2009); *The USA PATRIOT Act*, ELEC. PRIV. INFO. CTR. (Nov. 17, 2005), <http://epic.org/privacy/terrorism/usapatriot/#Analysis> [<https://perma.cc/4VXB-MXJR>]; see also Shirin Sinnar, Note, *Patriotic or Unconstitutional? The Mandatory Detention of Aliens Under the USA Patriot Act*, 55 STAN. L. REV. 1419, 1420 (2003) (discussing the PATRIOT Act's detention provisions).

134. Section 215 was a provision in the PATRIOT Act that allowed the government to issue secret requests to the court to obtain phone records from telecommunications companies. See USA PATRIOT ACT of 2001, Pub. L. No. 107-56, § 215, 115 Stat. 272, 287-88.

135. See, e.g., *The FISA Amendments Reauthorization Act of 2017: Enhanced Privacy Safeguards for Personal Data Transfers Under Privacy Shield*, OFF. OF THE DIR. OF NAT'L INTEL. 1 (Oct. 15, 2018), <https://www.dni.gov/files/documents/icotr/Summary-FISA-Reauthorization-of-2017---10.15.18.pdf> [<https://perma.cc/3NER-C2D3>] (summarizing the FISA Amendments Reauthorization Act of 2017); R. Lawler, *Trump Signs Bill Extending NSA's Warrantless Surveillance*, ENGADGET (Jan. 20, 2018, 4:58 AM), <https://www.engadget.com/2018-01-20-trump-signs-bill-extending-nsas-warrantless-surveillance.html> [<https://perma.cc/6TQP-CD45>].

136. See Drew Desilver, *The Polarization in Today's Congress Has Roots that Go Back Decades*, PEW RSCH. (Mar. 10, 2022), <https://www.pewresearch.org/fact-tank/2022/03/10/the-polarization-in-todays-congress-has-roots-that-go-back-decades> [<https://perma.cc/SY9Y-AJ9X>] (demonstrating increased congressional polarization over the course of the last five decades, particularly on the part of Republicans).

137. See Press Release, Free Press, Dozens of Consumer-Advocacy, Media-Justice and Privacy-Rights Groups Call on Congress to Kickstart the Fourth Amendment Is Not for Sale Act (Jan. 26, 2022), <https://www.freepress.net/news/press-releases/groups-urge-congress-pass-fourth-amendment-is-not-for-sale-act> [<https://perma.cc/8V9G-JG54>] (describing and

American Data Privacy and Protection Act, have made notable advances in congressional committees.¹³⁸ Neither of these proposals, however, would directly address prolonged pole-camera surveillance. Nevertheless, the growing traction of certain privacy-legislation proposals – after a decades-long drought in enacted privacy laws – may point to a future where federal legislation protecting against prolonged pole-camera surveillance might be possible.

The most notable recent federal legislative privacy proposal is a bill called the American Data Privacy and Protection Act, the draft of which was first released in June 2022 by a bipartisan congressional coalition.¹³⁹ While remarkably comprehensive, the bill predominantly addresses consumer privacy, setting forth a foundation for Federal Trade Commission-enforced regulations on technology companies – especially companies that deal with consumer data.¹⁴⁰ As for privacy protections against government surveillance, the bill disappointingly proposes sweeping privacy exceptions for federal agencies in law-enforcement and national-security contexts.¹⁴¹ As such, this Act would be unlikely to directly protect against the type of surveillance faced by Tuggle.

Other promising federal proposals that do not directly fix the prolonged pole-camera surveillance problem nonetheless may reveal a growing appetite for privacy laws. These include Senator Kirsten Gillibrand’s Data Protection Act of 2020, which would establish an independent Data Protection Agency to protect data privacy.¹⁴² Also in 2020, Senator Ron Wyden and Representative Zoe Lofgren introduced the Safeguarding Americans’ Private Records Act. That legislation would reform the Foreign Intelligence Surveillance Act to end the NSA telephone-surveillance program, institute warrant requirements for government access of location and internet-browsing history, and strengthen the Privacy and Civil Liberties Oversight Board.¹⁴³

linking a letter from dozens of organizations, including several focused on privacy rights, calling for hearings on the Fourth Amendment Is Not for Sale Act).

138. See JONATHAN M. GAFFNEY, CHRIS D. LINEBAUGH & ERIC N. HOLMES, CONG. RSCH. SERV., LSB10776, OVERVIEW OF THE AMERICAN DATA PRIVACY AND PROTECTION ACT, H.R. 8152, at 1 (2022) (“On July 20, 2022, the House Energy and Commerce Committee voted 53-2 to advance the American Data Privacy Protection Act (ADPPA), H.R. 8152, to the full House of Representatives.”).

139. H.R. 8152, 117th Cong. (2022).

140. *Id.* § 401.

141. See *id.* § 2(9)(B).

142. S. 3300, 116th Cong. (2020).

143. S. 3242, 116th Cong. (2020); H.R. 5675, 116th Cong. (2020).

In 2021, Senator Wyden, a Democrat, and Senator Rand Paul, a Republican, also introduced the Fourth Amendment Is Not for Sale Act.¹⁴⁴ The legislation was cosponsored by a bipartisan group of eighteen senators and restricts government purchases of Americans' data from data brokers. The legislation purports to close a legal loophole by which government officials can currently skirt around Fourth Amendment warrant requirements to obtain location and other private data from Americans.¹⁴⁵ While this legislation does not protect against the pole-camera surveillance Tuggle experienced, it may provide some privacy safeguards for future targets of pole-camera surveillance. Law-enforcement agencies are increasingly using analytical software on video-surveillance footage.¹⁴⁶ As data from data brokers may be used by analytical software to analyze footage, the passage of the Fourth Amendment Is Not for Sale Act might disincentivize some of the technological advancements that could make pole-camera surveillance more intrusive in the future.

Other nonlegislative congressional actions have demonstrated some willingness on the part of Congress to address privacy concerns at the federal level. In February 2022, numerous bipartisan members of Congress opposed the Internal Revenue Service's adoption of ID.me, an identify-verification software that relied on facial-recognition technology.¹⁴⁷ In April 2022, the House Oversight Committee and Coronavirus Subcommittee issued a letter to ID.me's CEO, highlighting privacy concerns raised by privacy-rights advocacy groups.¹⁴⁸ And in September 2022, members of Congress wrote to ICE urging the agency to end its surveillance practices.¹⁴⁹ Several members of Congress also recently wrote to the DHS Secretary, calling on the agency to cease its use of facial-recognition

144. Press Release, Ron Wyden, Wyden, Paul and Bipartisan Members of Congress Introduce the Fourth Amendment Is Not for Sale Act (Apr. 21, 2021), <https://www.wyden.senate.gov/news/press-releases/wyden-paul-and-bipartisan-members-of-congress-introduce-the-fourth-amendment-is-not-for-sale-act> [https://perma.cc/543Y-D3Q7].

145. *Id.*

146. See, e.g., *What Is Video Analytics?*, BRIEFCAM, <https://www.briefcam.com/technology/video-analytics> [https://perma.cc/2WCQ-UHWH].

147. Letter from Reps. Carolyn B. Maloney & James E. Clyburn to Blake Hall, CEO, ID.me (Apr. 14, 2022), <https://oversight.house.gov/sites/democrats.oversight.house.gov/files/2022-04-14.CBM%20JEC%20to%20Hall-ID.me%20re%20Use%20of%20FRT.pdf> [https://perma.cc/KEM4-Z8HD].

148. See *Members of Congress Call-On IRS to Reverse Facial Recognition Plans*, ELEC. PRIV. INFO. CTR. (Feb. 7, 2022), <https://epic.org/members-of-congress-call-on-irs-to-reverse-facial-recognition-plans> [https://perma.cc/Q6P8-GLRT].

149. See Letter from Sens. Edward J. Markey & Ron Wyden to Acting Dir. Tae D. Johnson, U.S. Immigr. & Customs Enf't (Sept. 12, 2022), https://www.markey.senate.gov/imo/media/doc/senators_markey_and_wyden_-_letter_to_ice.pdf [https://perma.cc/64JP-WAB6].

technology.¹⁵⁰ These examples may indicate an increased congressional interest in restricting government visual surveillance in other areas.

While the appetite for privacy-rights legislation at the federal level seems promising, there is little evidence to indicate that any legislation, if enacted, would successfully address the type of surveillance Tuggle faced. Tuggle was the target of extensive, long-term surveillance that included the collection of eighteen months of historical footage. The political appeal of curtailing this type of targeted surveillance of an individual person likely differs from the appeal of limiting *mass* surveillance. Mass surveillance, as I use the term, affects Americans regardless of criminal liability, race, or social class. Restrictions on mass surveillance are therefore more likely to be a priority for large numbers of constituents. As a result, most of the recent legislative proposals, when they address government surveillance at all, address mass government surveillance – consisting of massive amounts of data collected on large groups of people.¹⁵¹

For all the above reasons, it is highly unlikely that Congress will enact federal legislation that directly addresses long-term, warrantless pole-camera surveillance. But while federal legislation cannot wholly compensate for the Supreme Court’s inaction on privacy rights, it can address some of the technological features that may make pole-camera surveillance more harmful. For example, numerous members of Congress have expressed concerns about the misuse of facial-recognition technology.¹⁵² Federal legislative proposals, such as the Fourth Amendment Is Not for Sale Act, also address data privacy.¹⁵³ As discussed above, pole-camera technology can be combined with facial-recognition technology, and video analytical software can efficiently analyze footage and cross-reference that footage to databases.¹⁵⁴ Legislation restricting law enforcement’s use of either of these two technologies might therefore indirectly protect the privacy rights of some future targets of pole-camera surveillance.

150. Letter from Sens. Edward J. Markey & Jeffrey A. Merkley & Reps. Pramila Jayapal & Ayanna Pressley to Alejandro N. Mayorkas, Sec’y of Homeland Sec. (Feb. 9, 2022), https://www.markey.senate.gov/imo/media/doc/letters_-_federal_gov_use_of_clearview_ai.pdf [<https://perma.cc/272M-853L>].

151. It is worth noting that the mass surveillance framing is not a new strategy for privacy-rights advocates, especially those who have advocated for data privacy. While I believe the framing is a worthwhile strategy in this context, I do not assume that the framing, alone, will be enough to overcome the entrenched interests that benefit from erosions to privacy rights. For further reading, see SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM* (2018); and SOLOVE, *supra* note 32.

152. See Letter from Sen. Edward J. Markey et al., *supra* note 150.

153. See *supra* note 144 and accompanying text.

154. See *supra* notes 16-20 and accompanying text.

3. *Federal Legislative Advocacy: Strategies to Consider*

While the federal legislative landscape provides few avenues for optimism, several of its lessons may prove useful for those seeking to safeguard the privacy rights of targets of government pole-camera surveillance.

First, to the extent possible, policy advocates should characterize pole-camera surveillance as a mass-surveillance problem. For example, certain technologies that may be integrated with pole-camera surveillance, such as facial recognition and data aggregation and analytics, can more easily be characterized as mass surveillance problems as compared to traditional pole camera technology. And, indeed, these and other technological advancements that make extensive and long-form surveillance easy, cheap, and efficient mean that pole-camera surveillance is, or at the very least will soon become, a mass-surveillance problem.

Second, policy advocates should tackle aspects of pole-camera surveillance that intersect with consumer-privacy issues – as opposed to exclusively issues concerning government surveillance. Legislation currently proposed in Congress may prove fruitful, and other measures can also be advanced to safeguard public privacy from private companies. In the area of video surveillance, for example, the advancement and proliferation of private video-surveillance cameras is a growing concern for antisurveillance advocates. One study in New York City revealed that police can access footage from scores of private surveillance cameras, effectively mapping out large portions of the city.¹⁵⁵ Additionally, the data-broker industry that is behind some of the technologies that can be tacked onto pole-camera surveillance, such as facial recognition technology and data aggregation and analytics, is ripe for regulation. Given apparent congressional amenability to protecting consumer privacy from private actors, advocacy that focuses on private contributors to government surveillance may be likelier to succeed.

C. *State and Local Progress*

Because of the bleak federal landscape, legislative action at the state and local levels is likely the most favorable avenue for policy change. Several progressive localities across the country have proposed or imposed notable restrictions on police surveillance in recent years.

155. *Surveillance City: NYPD Can Use More than 15,000 Cameras to Track People Using Facial Recognition in Manhattan, Bronx and Brooklyn*, AMNESTY INT'L (June 3, 2021), <https://www.amnesty.org/en/latest/news/2021/06/scale-new-york-police-facial-recognition-revealed> [<https://perma.cc/M3GE-ZSF8>].

1. *New York*

In New York, these privacy-protective measures have included New York City's passage of the Public Oversight of Surveillance Technology (POST) Act in 2020.¹⁵⁶ The POST Act heightens transparency requirements for the use of surveillance technologies by the New York Police Department (NYPD).¹⁵⁷ The law also requires the NYPD to implement impact and use policies for any new surveillance technologies it adopts, and to allow for public comment when proposing the adoption of these technologies.¹⁵⁸ In a national landscape where many government agencies stealthily adopt increasingly advanced surveillance technologies, the POST Act stands as a model for increasing constituents' power to oversee and review government use of surveillance.

New York state is also currently debating a bill to ban geofence warrants.¹⁵⁹ When a law-enforcement agency obtains a geofence warrant, it can instruct private companies to search their location databases, other records for phones that were in a particular location at a particular time, and even records from users who searched specific keywords within a certain time frame.¹⁶⁰ Through geofence warrants, law enforcement can obtain massive amounts of data on countless people, including people who are not subject to criminal liability. The bill to ban these warrants has widespread public support, including from several major tech companies, making its enactment more likely.¹⁶¹ The New York state legislature is also considering a bill prohibiting warrantless drone surveillance and banning the use of facial-recognition technology with footage obtained through drone surveillance.¹⁶² The introduction of these bills in New York shows not only an interest in advancing privacy protections generally but also a willingness to address new and emerging privacy-rights issues.

¹⁵⁶. New York, N.Y., Law 2020/065 (July 15, 2020).

¹⁵⁷. *The Public Oversight of Surveillance Technology (POST) Act: A Resource Page*, BRENNAN CTR. (last updated Mar. 5, 2021), <https://www.brennancenter.org/our-work/research-reports/public-oversight-surveillance-technology-post-act-resource-page> [<https://perma.cc/2PV5-GNZN>].

¹⁵⁸. *See id.*

¹⁵⁹. A. 84A, State Assemb., 2021-2022 Leg., Reg. Sess. (N.Y. 2021).

¹⁶⁰. Zack Whittaker, *Google, Microsoft and Yahoo Back New York Ban on Controversial Search Warrants*, TECHCRUNCH (May 10, 2022, 8:07 PM EDT), <https://techcrunch.com/2022/05/10/google-new-york-geofence-keyword-warrant> [<https://perma.cc/6XJK-ECZ3>].

¹⁶¹. *See id.*

¹⁶². S. 675, State S., 2021-2022 Leg., Reg. Sess. (N.Y. 2021).

2. *California*

California provides another model for state legislation enhancing transparency and restricting police surveillance. California currently has a three-year moratorium in place on use of facial-recognition technology in police body-worn cameras.¹⁶³ In 2018, California enacted legislation for transparency of body-worn-camera footage, requiring state law enforcement to release body-worn-camera videos to the public within forty-five days of their recording.¹⁶⁴ California's Electronic Communications Privacy Act also prohibits warrantless searches of electronic communication information and location data for law-enforcement purposes and prohibits warrantless physical searches of digital devices.¹⁶⁵ In 2019, San Francisco and Oakland also banned local-government use of facial-recognition technology.¹⁶⁶ These legislative achievements address police surveillance—a context where marginalized people are perhaps most disproportionately impacted by surveillance. California's success in enacting surveillance restrictions in the policing context provides hope that the state could enact legislation protecting against prolonged pole-camera surveillance.

Privacy laws and proposed legislation in California and New York demonstrate a willingness on the part of both states and major cities to enact laws protecting constituents from police surveillance. Moreover, unlike most of the laws discussed at the federal level, these laws and legislative proposals do not only protect against mass surveillance. Many actively aim to protect constituents from targeted and individualized forms of police surveillance.

3. *Pros and Cons of a Focus on State and Local Policy*

There are disadvantages and advantages to prioritizing policy protections for people like Tuggle at the state and local level. The most obvious drawback of prioritizing localized protections is that localized protections could mean the

¹⁶³. Act of Oct. 8, 2019, ch. 579, 2019 Cal. Stat. 5210.

¹⁶⁴. Act of Sept. 30, 2018, ch. 960, 2018 Cal. Stat. 6354; *see also State Law Enforcement Body Camera Policies*, ELEC. PRIV. INFO. CTR., <https://epic.org/state-law-enforcement-body-camera-policies> [<https://perma.cc/R2ZJ-Z6DC>] (describing law-enforcement body-camera policies in various states, including California's requirement that body-camera footage be made publicly available within forty-five days).

¹⁶⁵. Act of Oct. 8, 2015, ch. 651, 2015 Cal. Stat. 5110; *see State Location Privacy Policy*, ELEC. PRIV. INFO. CTR., <https://epic.org/state-location-privacy-policy> [<https://perma.cc/2LDS-XM6B>].

¹⁶⁶. S.F., Cal., Ordinance 107-19 (2019) (codified as amended at S.F., CAL., ADMIN. CODE § 19B.1-.10); *see Sarah Ravani, Oakland Bans Use of Facial Recognition Technology, Citing Bias Concerns*, S.F. CHRON. (July 16, 2019, 8:33 AM), <https://www.sfchronicle.com/bayarea/article/Oakland-bans-use-of-facial-recognition-14101253.php> [<https://perma.cc/4QBZ-MQNA>].

absence of universal privacy protections. Without action at the federal level, those in jurisdictions less likely to enact privacy protections will remain susceptible to surveillance. Policy advocates with limited resources may thus face a difficult choice for where to direct their energy: toward federal policy advocacy that benefits all constituents but is less likely to be successful, or toward state and local advocacy that may deliver results but leave many unprotected.

On the other hand, local privacy protections in more progressive jurisdictions may protect those who are most vulnerable to pole surveillance. People in urban environments, people with fewer expendable funds, and people who rent and do not own their homes cannot easily erect fences and implement other measures to safeguard their homes from pole-camera surveillance.¹⁶⁷ Furthermore, historically, people of color and other minorities are subject to higher rates of government surveillance.¹⁶⁸ Together, these factors indicate that those most likely to be surveilled and least likely to be able to protect themselves from pole-camera surveillance are lower income people of color, living in urban environments, and renting their homes. Thus, because metropolitan areas have enacted some of the most progressive surveillance legislation in recent years,¹⁶⁹ prioritizing privacy protections in these progressive jurisdictions may serve to protect those communities most likely to be the targets of pole-camera surveillance.

Another advantage to prioritizing local legislation in progressive jurisdictions is that achievements in those jurisdictions create precedent for legislation in other jurisdictions. In other privacy contexts, novel and successful privacy legislation in certain local jurisdictions has served as a model for other jurisdictions.¹⁷⁰

167. See, e.g., Zack Whittaker, *A Bill to Ban Geofence and Keyword Search Warrants in New York Gains Traction*, TECHCRUNCH (Jan. 13, 2022, 10:02 AM EST), <https://techcrunch.com/2022/01/13/new-york-geofence-keyword-search-warrants-bill> [<https://perma.cc/UMG2-433K>] (quoting New York State Senator Zellnor Myrie) (“In dense, urban communities . . . hundreds or thousands of innocent people who merely live or walk near a crime scene could be ensnared by a geofence warrant that would turn over their private location data.”).

168. See, e.g., Brief *Amici Curiae* for the American Islamic Conference & the Muslim Public Affairs Council in Support of Petitioner at 8-11, *Tuggle v. United States*, 142 S. Ct. 1107 (2022) (No. 21-541).

169. See *supra* note 166 and accompanying text for examples of successful local legislation restricting surveillance enacted by metropolitan areas.

170. Policy advocates at the Electronic Privacy Information Center have used the Illinois Biometric Privacy Act, considered a successful and effective biometric privacy law, as a model for biometric privacy-law advocacy in other states. See, e.g., *EPIC to Maine Legislators: Enact Biometric Privacy Law*, ELEC. PRIV. INFO. CTR (Feb. 22, 2022), <https://epic.org/epic-to-maine-legislators-enact-biometric-privacy-law> [<https://perma.cc/7CE4-7SVA>].

CONCLUSION

In declining to review *Tuggle*, the Supreme Court missed an opportunity to clarify and strengthen its confusing and increasingly outdated Fourth Amendment jurisprudence. As lower-court divisions deepen, *Moore-Bush* may offer the Court a second chance to protect privacy rights against pole-camera surveillance and to clarify enduring questions about privacy and Fourth Amendment searches.

Still, policy advocates should not wait on the Supreme Court to squash the privacy threat posed by rapidly evolving surveillance technologies. State courts provide a ripe avenue for strategic litigation to create precedent establishing a mosaic theory of surveillance in search cases. In addition, strategic policy advocacy may include pursuing regulations for companies that produce or sell capabilities or data that make government surveillance more advanced and dangerous. It may also include focusing advocacy efforts on progressive jurisdictions where privacy protections are most likely to pass and using those jurisdictions as models for future piecemeal advocacy.

The fight for privacy from government surveillance has never been easy—particularly as privacy violations disproportionately impact the most marginalized and most stigmatized members of society. The result is that achieving widespread societal support for increased protections has been an uphill climb—one that grows steeper as law-enforcement surveillance budgets seem to increase.¹⁷¹ Staunch advocates and impacted communities will continue, as they long have, to adapt their efforts to protect privacy rights in the face of these obstacles. Nevertheless, the Court would do well not to continue its pattern of inaction and instead to act firmly to protect fundamental rights.

171. See Matthew Guariglia & Dave Maass, *How Police Fund Surveillance Technology Is Part of the Problem*, ELEC. FRONTIER FOUND. (Sept. 23, 2020) (discussing sources of police-surveillance funding, including federal grants), <https://www.eff.org/deeplinks/2020/09/how-police-fund-surveillance-technology-part-problem> [<https://perma.cc/TY45-DAGP>]; see, e.g., Tate Ryan-Mosley, *US Government Agencies Plan to Increase Their Use of Facial Recognition Technology*, MIT TECH. REV. (Aug. 24, 2021), <https://www.technologyreview.com/2021/08/24/1032967/us-government-agencies-plan-to-increase-their-use-of-facial-recognition-technology> [<https://perma.cc/67S7-GX8E>] (discussing plans to increase the facial-recognition technology budgets of several federal agencies, including DHS and the Department of Justice); see also Sidney Fussell, *The NYPD Had a Secret Fund for Surveillance Tools*, WIRED (Aug. 10, 2021), <https://www.wired.com/story/nypd-secret-fund-surveillance-tools> [<https://perma.cc/82SP-AVQZ>] (discussing the New York Police Department's spending \$159 million on surveillance technology without oversight from the city council or other municipal officials).

UNMANNED STAKEOUTS: POLE-CAMERA SURVEILLANCE AND PRIVACY AFTER THE
TUGGLE CERT DENIAL

Judicial Law Clerk, United States District Court for the District of Connecticut. 2021-2022 Yale Law Journal Justine Wise Polier Public-Interest Fellow at the Electronic Privacy Information Center (EPIC). Yale Law School, J.D. 2021. I am grateful to Jeramie Scott, Megan Iorio, and Alan Butler for their generous guidance, mentorship, and feedback. I am also indebted to my former colleagues at EPIC, along with the advocates at the Electronic Frontier Foundation and other privacy-rights organizations; their prior and ongoing advocacy work is foundational to the ideas I present here. Thank you also to Josh Lefkow and the Yale Law Journal editors for the consistently thoughtful and incisive edits. Finally, I thank my family and friends for their endless support. This Essay reflects only my personal views.