

**JONESING FOR A TEST:
FOURTH AMENDMENT PRIVACY IN THE WAKE OF
*UNITED STATES V. JONES***

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“And as we grieve the loss of the Fourth Amendment, we’ll be forced to look deep in our hearts—and at the little pieces of plastic dangling from our keychains—and ask ourselves if it was all worth it.”¹

—Judge Alex Kozinski

“You have zero privacy anyway . . . [g]et over it.”²

—Scott McNealy, CEO of Sun Microsystems

The evolution of surveillance technologies over the last few decades has led some observers to wonder if the Fourth Amendment will become irrelevant in the digital age.³ Privacy protections are eroding, as law enforcement is able to access more information that is voluntarily shared by technology-utilizing citizens. The extent of privacy protection for location-tracking information is particularly important given the pervasiveness of GPS tracking technology today, as law enforcement can now obtain location information without relying on government-issued GPS trackers. A recent study found that 85% of the U.S. population owns a cell phone (at minimum, locatable with cell tower triangulation technology), and 45% own a smartphone (precisely locatable with installed GPS technology),⁴ with countless more driving cars containing built-in precise tracking devices. Documents provided in response to Congressional and nonprofit group inquiries in 2012 revealed that law enforcement aggressively relies on cell

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1. Alex Kozinski & Stephanie Grace, *Pulling Plug on Privacy: How Technology Helped Make the 4th Amendment Obsolete*, THE DAILY, (June 22, 2011), <http://www.thedaily.com/page/2011/06/22/062211-opinions-oped-privacy-kozinski-grace-1-2/>.

2. Polly Sprenger, *Sun on Privacy: ‘Get over It,’* WIRED.COM, (Jan. 26, 1999), <http://www.wired.com/politics/law/news/1999/01/17538>.

3. See Kozinski & Grace, *supra* note 1.

4. Joanna Brenner, *Pew Internet: Mobile*, PEW INTERNET & AMERICAN LIFE PROJECT (Dec. 4, 2012), <http://pewinternet.org/Commentary/2012/February/Pew-Internet-Mobile.aspx>.

phone location and usage data and frequently accesses such information without warrants through phone companies.⁵ In 2011, cellphone companies responded to 1.3 million demands from law enforcement agencies for text messages and other information about subscribers.⁶ Some police departments even acquired their own cell tracking equipment to avoid reliance on phone companies.⁷

Given the prevalence of location-tracking information today and lack of judicial guidance on the matter, many looked to the recent Supreme Court case *United States v. Jones*⁸ as a case that would breathe fresh life into the relevance of the constitutional standards for reasonable search and possibly stop the erosion of Fourth Amendment protections.⁹ The various opinions in *Jones*, however, answered few questions about how the Fourth Amendment should be applied in the face of new technology—such as remote GPS tracking—that can transmit information without a trespass. Yet, while the *Jones* majority did little to stop the erosion of Fourth Amendment protections because it focused exclusively on the government's trespass on the defendant's vehicle, the two concurrences suggest future judicial evaluation of changing expectations of privacy in the digital age.

This Note reviews prior standards for Fourth Amendment search, and explores the effects of the *Jones* opinions on the development of Fourth Amendment law. It analyzes the opinions in *Jones*, as well as the lower D.C. Circuit decision, in order to shed light on the implications of the case for pressing Fourth Amendment questions in the Information Age.

5. See Eric Lichtblau, *More Demands on Cell Carriers in Surveillance*, N.Y. TIMES, July 9, 2012, at A1, available at <http://www.nytimes.com/2012/07/09/us/cell-carriers-see-uptick-in-requests-to-aid-surveillance.html>; Eric Lichtblau, *Police Are Using Phone Tracking as Routine Tool*, N.Y. TIMES, Apr. 1, 2012, at A1, available at <http://www.nytimes.com/2012/04/01/us/police-tracking-of-cellphones-raises-privacy-fears.html>.

6. *Id.* While such location data is often useful for the purposes of locating a victim in an emergency, the practice was not limited to emergency incidents. *Id.*

7. See Lichtblau, *More Demands on Cell Carriers in Surveillance*, *supra* note 5; Lichtblau, *Police Are Using Phone Tracking as Routine Tool*, *supra* note 5.

8. *United States v. Jones*, 132 S. Ct. 945 (2012).

9. See, e.g., Erica Goldberg, *How United States v. Jones Can Restore Our Faith in the Fourth Amendment*, 110 MICH. L. REV. 62 (2011); Julia Angwin & Scott Thurm, *Judges Weigh Phone Tracking*, WALL ST. J., Nov. 9, 2011, <http://online.wsj.com/article/SB10001424052970203733504577024092345458210.html>; Adam Liptak, *Court Case Asks if 'Big Brother' Is Spelled GPS*, N.Y. TIMES, Sept. 11, 2011, at A1, available at http://www.nytimes.com/2011/09/11/us/11gps.html?_r=0; Lyle Denniston, *Argument preview: High-tech policing*, SCOTUSBLOG (Nov. 5, 2011, 12:03 AM), <http://www.scotusblog.com/?p=131095>; Marcia Hofmann, *Supreme Court Agrees to Hear Key Warrantless GPS Tracking Case*, ELECTRONIC FRONTIER FOUNDATION, (June 27, 2011), <https://www.eff.org/deeplinks/2011/06/supreme-court-agrees-hear-key-warrantless-gps>.

Part I frames the later discussion by examining the legal history of reasonable search, focusing on the shift from a trespass-based standard to one that turns on a person's reasonable expectation of privacy. In particular, Section I.C highlights the role of technology in increasing the relevance of the reasonable-expectation-of-privacy test given the frequency with which citizens "voluntarily" share their data and actions in the Information Age.

Part II lays out the facts and judicial history of *Jones* and examines the majority and concurring opinions.

Part III explores the practical implications of *Jones*, reviewing the effects that the case has already had on judicial decisions and legislation. It examines the effects both of the binding aspects from the majority *Jones* decision related to trespass, as well as the dicta and potential second holding from the concurrences related to reasonable expectations of privacy in the Information Age.

Part IV explores the unresolved questions raised by the *Jones* concurrences as to whether, and how, judicial understandings of reasonable expectations of privacy should adapt to the Information Age. It analyzes opinions from the cases examined in Part I and from *Jones* to focus on third party doctrine and mosaic theory in reexamining the volition at the heart of "voluntary" communication of information today.

Finally, Part V notes the shortcomings of *Jones* in addressing pressing Fourth Amendment questions in the Information Age. It concludes that courts may need to reexamine what constitutes voluntary communication of information in order for the Fourth Amendment to remain relevant in the Information Age.

I. GETTING TO *JONES*

This Part traces the historic development of the standard for identifying a Fourth Amendment search; from a standard pegged to physical trespass in early cases towards one based on a person's reasonable expectation of privacy after the Supreme Court's 1967 decision in *Katz v. United States*.¹⁰ It then explores the judicial application of the reasonable-expectation-of-privacy test post-*Katz*, and the challenges that advancing norms and technologies have posed to courts' applications of the test. In particular, Section I.C, *infra*, focuses on the development of judicial interpretation

10. See 1 WAYNE R. LAFAVE, SEARCH AND SEIZURE: A TREATISE ON THE FOURTH AMENDMENT §§ 1.1–1.2 (5th ed. 2011). Justice Scalia in his *Jones* opinion disputes this commonly understood characterization. See *infra* note 28; discussion *infra* Section II.B.

regarding the “voluntariness” of communication under the reasonable-expectation-of-privacy test as technology evolves.

In its first opportunity to revise the Constitution, the country’s first Congress in 1789 approved an Amendment declaring that “[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated.”¹¹ The impetus for the Amendment stemmed from frustration over England’s overuse of customs searches in prerevolutionary America, as well as concern over freedom of press and association.¹² Evidence collected in violation of the Amendment was eventually excluded from trial.¹³ Over the course of two centuries, courts have offered varying interpretations of what constitutes a “search” under the Fourth Amendment. During the twentieth century, the standard for search transitioned from turning on law enforcement’s trespass on physical places and items in order to obtain information to turning on violation of an individual’s reasonable expectation of privacy in their person and property.¹⁴ The definition of a “reasonable expectation of privacy” continues to evolve with societal and technological advances, but defining what is reasonable in light of such changes is essential to maintaining the relevance of the Fourth Amendment in the Information Age.

A. THE PHYSICAL TRESPASS TEST

Courts barely explored the Fourth Amendment for over a century after its adoption, but encountered particular difficulty in the late eighteenth and early nineteenth centuries defining a Fourth Amendment search.¹⁵ However, by the second quarter of the twentieth century, the Supreme Court established a test in *Olmstead v. United States*,¹⁶ holding that wiretaps did not violate the Fourth Amendment rights of citizens when the placing of the wiretap did not include a physical trespass on private property.¹⁷ The Court held that federal agents did not conduct a Fourth Amendment search when installing several small wires alongside telephone wires that extended from the homes and an office of suspected conspirators because the outdoor sections of the wires that the officers traversed were not considered part of

11. U.S. CONST. amend. IV.

12. LAFAVE, *supra* note 10.

13. Potter Stewart, *The Road to Mapp v. Ohio and Beyond: The Origins, Development and Future of the Exclusionary Rule in Search-and-Seizure Cases*, 83 COLUM. L. REV. 1365 (1983).

14. See LAFAVE, *supra* note 10.

15. *Id.* § 1.1(b)–(c).

16. *Olmstead v. United States*, 277 U.S. 438 (1928).

17. *Id.* at 465–66.

the property.¹⁸ Namely, the Court held that an action must involve a physical imposition on material entities belonging to a person to constitute a Fourth Amendment search, noting that “[t]he well-known historical purpose of the Fourth Amendment . . . was to prevent the use of governmental force to search a man’s *house, his person, his papers, and his effects*, and to prevent their seizure against his will.”¹⁹

B. REASONABLE EXPECTATIONS

The *Olmstead* standard remained until the Court’s 1967 decision in *Katz v. United States*,²⁰ which experts considered the “landmark decision” for judicial interpretation of the Fourth Amendment²¹—at least until *Jones*.²² The opinions in *Katz* created a new standard for determining the occurrence of a Fourth Amendment search—shifting from the *Olmstead* common-law trespass test towards a consideration of whether the search violated a person’s “reasonable expectation of privacy.”²³ The Court held that the FBI’s placement of a recording device on the outside of a public telephone booth without a warrant qualified as a search that violated the “reasonable expectation of privacy” of a phone user who enclosed himself in the booth in order to use the telephone, even if the device did not physically penetrate the walls of the booth or his person or property.²⁴ The *Katz* opinions led to the creation of a two-part test for identifying a Fourth Amendment search of a person or property: “first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as ‘reasonable.’”²⁵

The reasonableness standard established in *Katz* rests on the distinction between a person’s reasonable expectation of privacy inside their home,

18. *Id.* at 456–57, 466.

19. *Id.* at 463 (emphasis added).

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

21. See LAFAVE, *supra* note 10, § 2.1(a) (“[I]n 1967 the Supreme Court announced the ‘seminal’ and ‘landmark decision’ in *Katz v. United States*.”).

22. See *United States v. Jones*, 132 S. Ct. 945, 950–51 (2012); LAFAVE, *supra* note 10, § 2.1(b) (“Thus, it is no overstatement to say, as the commentators have asserted, that *Katz* ‘marks a watershed in fourth amendment jurisprudence’ because the Court ‘purported to clean house on outmoded fourth amendment principles’ and moved ‘toward a redefinition of the scope of the Fourth Amendment.’” (citations omitted)).

23. See *Katz*, 389 U.S. at 361 (Harlan, J., concurring).

24. *Id.* at 353 (majority opinion).

25. *Id.* at 361 (Harlan, J., concurring). Justice Harlan’s concurrence in *Katz* has come to be relied upon for creating the test that resulted from *Katz*. LAFAVE, *supra* note 10 § 2.1(b) (“[L]ower courts attempting to interpret and apply *Katz* quickly came to rely upon the Harlan elaboration, as ultimately did a majority of the Supreme Court.” (citations omitted)). See also *California v. Ciraolo*, 476 U.S. 207 (1986); *Smith v. Maryland*, 442 U.S. 735 (1979).

office, or other area they seek “to preserve as private,” in contrast with objects, activities, or statements that a person exposes to plain view.²⁶ The test to determine whether a person has a reasonable expectation of privacy turns largely on actions the person takes to prevent exposure to the public, as an area that is technically accessible to the public can become constitutionally protected if an individual takes actions to preserve it as private.²⁷

Whether the *Katz* reasonable-expectation-of-privacy test replaced or augmented the prior standard for defining a Fourth Amendment search remains a point of contention among scholars and judges,²⁸ despite the clear language with which the *Katz* Court seemed to explicitly reject the physical invasion standard: “[t]he premise that property interests control the right of the Government to search and seize has been discredited.”²⁹ Regardless, *Katz* undeniably *changed* the standard by determining that the Fourth Amendment protects people rather than places or “constitutionally protected areas,” and that a violation thus occurs when the government invades a person’s reasonable expectation of privacy even without invading their physical space.³⁰

C. CHANGING EXPECTATIONS IN THE INFORMATION AGE: THE NEW RELEVANCE OF NONTRESPASSORY, “VOLUNTARY” EXPOSURE TO REASONABLE EXPECTATIONS OF PRIVACY

Conceptions of reasonableness under the *Katz* test eventually had to adjust to new patterns of commerce and technology in the Information Age. Americans’ relationships with previously “private” information shifted with the advent of phones and banks (and later smartphones, email, and GPS)

26. *Katz*, 389 U.S. at 361.

27. *Id.* Crucially in *Katz*, Justice Harlan noted that while a telephone booth is often accessible to the public, once a person enters it, shuts the door and begins using it, it becomes “a temporarily private place whose momentary occupants’ expectations of freedom from intrusion are recognized as reasonable.” *Id.*

28. In *Jones*, Justice Scalia argued that the *Katz* reasonable-expectation-of-privacy test augmented but did not replace the preexisting trespass test. *United States v. Jones*, 132 S. Ct. 945, 951 (2012). Justice Alito, in contrast, argued that the *Katz* replaced the prior trespass standard. *Id.* at 959–60 (Alito, J., concurring). Others argue that the trespass test never existed. Orin Kerr, *Why United States v. Jones Is Subject to So Many Different Interpretations*, VOLOKH CONSPIRACY (Jan. 30, 2012, 4:59 PM) <http://www.volokh.com/2012/01/30/why-united-states-v-jones-is-subject-to-so-many-different-interpretations> (refuting the contention that the standard ever actually existed and arguing that the trespass test was always treated as a reasonable-expectation-of-privacy test).

29. *Katz*, 389 U.S. at 353 (quoting *Warden, Md. Penitentiary v. Hayden*, 387 U.S. 294, 304 (1967)). The Court in *Katz* stated that even oral statements recorded without technical trespass could violate Fourth Amendment rights. *Id.*

30. *Id.* at 350–51.

that transfer personal information from the seclusion of a desk to the ownership of a company, making opportunities for trespass-less surveillance easier and more ubiquitous. Not only does violation of a person's privacy today no longer require physical interaction with their property, but citizens also "voluntarily" communicate increasing amounts of information to third parties as part of their participation in an information economy.³¹ The reasonable-expectation-of-privacy test would be stymied if the Court presumed that people have no expectation of privacy in information they "voluntarily" communicate to third party companies or observers—from the numbers they text to their GPS location. Judicial evaluation of reasonableness under the *Katz* test should consider whether the volitional nature of these actions really means that every individual who acts has no reasonable expectation of privacy in the communicated information. This consideration is one of the most pressing modern questions related to search under the Fourth Amendment; this Note will thus explore the relevance of the *Jones* concurrences to resolving it despite the majority's avoidance. This Section will explore judicial treatment of this consideration before *Jones*, and Part IV will explore the potential effect of and questions raised by *Jones*, using third-party doctrine and aggregation (mosaic) theory as case studies.

When analyzing voluntariness, it is helpful to draw a distinction between a person's passive knowledge that a third party might collect information they voluntarily share—for instance, when driving down the street with the passive acknowledgement that someone could be observing their car's movements via plane—versus voluntary communication of information with the active knowledge that a third party will collect it—for example, downloading an app knowing that it will use their location information to recommend nearby restaurants. The *Jones* concurrences will shed light on judicial treatment of both types of volunteering of information. This Section discusses judicial treatment of both kinds of voluntariness before *Jones*.

The Supreme Court recently explored the need to adapt what the law considers reasonable under the *Katz* test to new technologies for passive voluntary communication of information in *Kyllo v. United States*.³² The Court held that the use of a thermal imaging device on the outside of a person's home constituted a Fourth Amendment search even in the absence of a physical trespass because the use of the device invaded a person's reasonable

31. See, e.g., Brenner, *supra*, note 4; JAMES B. MURRAY, JR., WIRELESS NATION (2001); Joanna Brenner, *Trend Data (Adults)*, PEW INTERNET & AMERICAN LIFE PROJECT, <http://www.pewinternet.org/Static-Pages/Trend-Data-%28Adults%29/Device-Ownership.aspx> (last visited Feb. 20, 2013).

32. *Kyllo v. United States*, 533 U.S. 27 (2001).

expectation of privacy inside their own home.³³ The majority opinion written by Justice Scalia noted that this could be a search because the Court had “decoupled violation of a person’s Fourth Amendment rights from trespassory violation of her property.”³⁴ He reasoned that while naked-eye observation of a home may be conducted without constituting a Fourth Amendment search, such observation with the aid of technology cannot, noting that “[t]he question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy.”³⁵ He emphasized the importance of adapting the Courts’ decisions to technology by noting that while the technology in *Kyllo* was not particularly advanced, “the rule [the Court] adopt[s] must take account of more sophisticated systems that are already in use or in development.”³⁶ It is unclear from the text of *Kyllo*, however, that the Court believes this protection in the face of new surveillance technologies should extend to a person or their property outside of the home. The conclusion in *Kyllo* may simply reflect the Court’s tendency to apply a higher standard to protect the privacy of the home, which is for many justices the heart of the Fourth Amendment.³⁷

In order to respond to more active, deliberate voluntary communication of information unrelated to the home, the Court created the “third-party doctrine” in 1976.³⁸ The doctrine dictates that when a person voluntarily gives her information up to a third party, she relinquishes her control over when or whether that information can be passed on to the government.³⁹ Such “active” volunteering of information initially applied to mostly physical actions—such as walking to the bank to deposit a check that became part of a bank record—but thanks to technology, it now applies to tasks that require minimal physical effort or planning—such as typing on one’s smartphone to find directions to a restaurant or locate nearby ATMs.

The original standard governing a third party’s ability to give its users’ information to the government was established towards the end of the 19th century in *Boyd v. United States* when the Court strengthened Fourth

33. *Id.* at 40.

34. *Id.* at 32 (citing *Rakas v. Illinois*, 439 U.S. 128, 143 (1978)).

35. *Id.* at 34.

36. *Id.* at 36.

37. *See, e.g., id.* at 28; *United States v. Karo*, 468 U.S. 705 (1984); *Dow Chemical Co. v. United States*, 476 U.S. 227, 238 (1986). The importance of protecting the home was obviously far more ingrained in the Constitution’s framers than the importance of protecting electronic data, which did not become relevant until nearly 200 years after they wrote the text.

38. *United States v. Miller*, 425 U.S. 435 (1976).

39. *Id.*

Amendment protections by ruling against “compulsory production of a man’s private papers to establish a criminal charge against him.”⁴⁰ Almost one hundred years later and nine years after the establishment of the reasonable-expectation-of-privacy test in *Katz*, the Court in *United States v. Miller*⁴¹ seemingly overturned the *Boyd* standard when it held that a customer’s bank records were instead property of the bank, which had discretion to disclose the records to the government.⁴² The Court held that “the Fourth Amendment does not prohibit the obtaining of information revealed to a third party and conveyed by him to Government authorities.”⁴³ In creating the third-party doctrine, the Court held that the voluntary nature of the customer’s communication of information to the bank expunged any expectation of privacy she had in the information.⁴⁴ The Court emphasized that this principle holds “even if the information is revealed on the assumption that it will be used only for a limited purpose and the confidence placed in the third party will not be betrayed.”⁴⁵ It further concluded that “[w]hat a person knowingly exposes to the public . . . is not a subject of Fourth Amendment protection.”⁴⁶

The third-party doctrine eventually extended beyond bank records, when the Court in 1979 held in *Smith v. Maryland* that voluntary conveyance of dialed numbers to a phone company eliminated any reasonable expectation of privacy a customer might have in the list of numbers.⁴⁷ The Court contended that because all telephone users actively *know* that they convey the numbers they dial to their telephone company but choose to dial them anyway,⁴⁸ they must not harbor any expectation of secrecy in the numbers⁴⁹ and thus “assume[] the risk of disclosure.”⁵⁰

The transition of the test for search under the Fourth Amendment from one based on common-law trespass to one based on reasonable expectations of privacy allowed the Fourth Amendment to remain relevant in American

40. *Boyd v. United States*, 116 U.S. 616, 622 (1886).

41. *Miller*, 425 U.S. at 435.

42. *Id.* at 443.

43. *Id.*

44. *Id.* at 442–43.

45. *Id.* at 443 (citing *United States v. White*, 401 U.S. 745, 752 (1971); *Hoffa v. United States*, 385 U.S. 293, 302 (1966); *Lopez v. United States*, 373 U.S. 427 (1963)).

46. *Miller*, 425 U.S. at 442.

47. *See Smith v. Maryland*, 442 U.S. 735 (1979).

48. *Id.* at 742 (noting that customers presumably know that the companies routinely use this information “for the purposes of checking billing operations, detecting fraud and preventing violations of the law”).

49. *Id.* at 743.

50. *Id.* at 744 (internal quotation omitted).

jurisprudence despite vast societal changes over the past hundred years. However, the Supreme Court has not yet fully addressed the challenge of applying the reasonable-expectation-of-privacy test in the Information Age. While *Jones* did not resolve the difficulty of doing so, the *Jones* concurrences did shed light on this crucial challenge for the future of Fourth Amendment jurisprudence.

II. *UNITED STATES V. JONES*

In January 2012, the Supreme Court decided *Jones*, unanimously holding that the attachment and use of a GPS tracking device to monitor the movements of Jones' car constituted a "search" under the Fourth Amendment.⁵¹ Some considered *Jones* to be the most significant Supreme Court case to tackle the Fourth Amendment since *Katz*,⁵² and that it countered the presumption that the Fourth Amendment was dead in the Information Age.⁵³ However, while the decision was unanimous, the justices filed three opinions, each representing a distinct approach to the law. The majority focused on the common-law trespass test, while the two concurrences articulated their opinions on the evolution of the reasonable expectation of privacy in the Information Age.⁵⁴

A. FACTS/BACKGROUND

Jones concerned the legality of law enforcement's warrantless installation and use of a GPS tracking device on a car.⁵⁵ Suspicions of drug trafficking led law enforcement officers to place a tracking device on a car used by Antoine Jones while it was parked in a public parking lot, in order to track Jones' whereabouts.⁵⁶ Law enforcement tracked the car for twenty-eight days, and location information collected from the device through satellite connections

51. *United States v. Jones*, 132 S. Ct. 945 (2012).

52. *See, e.g.*, Fabio Arcila, Jr., *GPS Tracking Out of Fourth Amendment Dead Ends: United States v. Jones and the Katz Conundrum*, 91 N.C. L. REV. 1 (2012); *News Release: Civil Liberties and Defense Groups Seek to Require Warrants for Police GPS Surveillance*, NATIONAL ASSOCIATION OF CRIMINAL DEFENSE LAWYERS, (Oct. 5, 2011), <http://www.nacdl.org/NewsReleases.aspx?id=22360&libID=22330>.

53. *See* Daniel T. Pesciotta, *I'm Not Dead Yet: Katz, Jones, and the Fourth Amendment in the 21st Century*, 63 CASE W. RES. L. REV. 187 (2012); Kozinski, *supra* note 1 and accompanying text; Micah W.J. Smith & Babak Siavoshi, *The Fourth Amendment's Future*, ACS BLOG, (Jan. 24, 2012), www.acslaw.org/acslawblog/the-fourth-amendment's-future (discussing the relevance of Judge Kozinski's quote after *Jones*).

54. *See Jones*, 132 S. Ct. at 954 (Sotomayor, J., concurring); *id.* at 957 (Alito, J., concurring).

55. *Id.* at 948 (majority opinion).

56. *Id.*

was transferred to law enforcement via cellular signal.⁵⁷ The information contributed to the indictment of Jones and others on drug trafficking conspiracy charges.⁵⁸

Jones filed a motion to suppress the location information collected and relayed by the GPS tracker.⁵⁹ The D.C. Circuit, in a case titled *United States v. Maynard*, sided with Jones on this claim and stated that the evidence obtained by the warrantless search in violation of the Fourth Amendment could not be used in court.⁶⁰ The D.C. Circuit relied on a “mosaic theory” of exposure to hold that individuals have a greater expectation of privacy in the summation of their exposed movements than in each individual movement.⁶¹ Under this theory, the court distinguished between actual and constructive exposure and concluded that a person’s vehicular movements over the course of one month, while *actually* exposed to the public because they took place on public streets, were not *constructively* exposed because “the likelihood a stranger would observe all those movements is not just remote, it is essentially nil.”⁶² The court argued that the unlikelihood of such observation rendered Jones’ expectation that it would not occur reasonable under the *Katz* test.⁶³ The court analogized the “intimate details” that would inevitably be collected during long-term surveillance of a car to the “intimate details” that were originally considered important enough to lead to the sanctity of the home under the Fourth Amendment.⁶⁴

In forming the mosaic theory, the D.C. Circuit drew a parallel between Jones and the criminals in *U.S. Department of Justice v. Reporters Committee for Freedom of Press* who had a reasonable expectation of privacy in their rap sheets even though each individual incident listed on the sheet was public

57. *Id.* Law enforcement had previously obtained a warrant for placement and use of this device on the car, but it expired the day before the tracker was placed on Jones’ car. *Id.* Additionally, the original warrant was for use in the District of Columbia, not the state of Maryland where it was placed. *Id.*

58. *Id.*

59. *Id.*

60. *Id.* at 949 (citing *United States v. Maynard*, 615 F.3d 544 (D.C. Cir. 2010), *aff’d sub nom.* *United States v. Jones* 132 S. Ct. 945 (2012)).

61. *Maynard*, 615 F.3d at 560.

62. *Id.* at 560.

63. *Id.* at 563 (“Society recognizes Jones’s expectation of privacy in his movements over the course of a month as reasonable, and the use of the GPS device to monitor those movements defeated that reasonable expectation.”).

64. *Id.* at 564–65 (“[P]rolonged GPS monitoring reveals an intimate picture of the subject’s life that he expects no one to have—short perhaps of his spouse . . . [t]he intrusion such monitoring makes into the subject’s private affairs . . . exceeds the intrusions occasioned by every police practice the Supreme Court has deemed a search under *Katz*.”).

information.⁶⁵ In *Maynard*, the court similarly held that Jones' interest in the combined whole of his movements was stronger than that in information regarding one or several trips because the combined whole was capable of revealing a complete story about his actions and whereabouts.⁶⁶ The D.C. Circuit argued this concept was an implicit assumption in the Supreme Court's decision in *Smith v. Maryland*, because "[i]f . . . the privacy interest in a whole [list of phone numbers dialed] could be no greater (or no different) than the privacy interest in its constituent parts, then the Supreme Court would have had no reason to consider at length whether Smith could have a reasonable expectation of privacy in the list of numbers he had called."⁶⁷

The U.S. Supreme Court unanimously affirmed the D.C. Circuit's decision on the grounds that the attachment and use of the GPS to monitor the car's movements constituted a search under the Fourth Amendment, but used different reasoning than the D.C. Circuit.⁶⁸ Although the result was unanimous, the justices did not agree as to *why* the use of the GPS device constituted a search. Justice Scalia authored the majority opinion onto which Chief Justice Roberts and Justices Kennedy, Thomas, and Sotomayor joined; Justice Alito authored a concurrence onto which Justices Ginsberg, Breyer, and Kagan joined⁶⁹ with Justice Sotomayor agreeing in part;⁷⁰ and Justice Sotomayor wrote a sole concurrence.⁷¹

B. THE MAJORITY OPINION IN *JONES*: TRESPASS IS ENOUGH

Justice Scalia authored the majority opinion in *Jones*, which held that the physical intrusion onto Jones's property that occurred when law enforcement placed the GPS tracker on his vehicle, combined with its use to obtain information without a warrant, constituted a search under the Fourth Amendment.⁷² The majority opinion avoided reaching the *Katz* reasonable-expectation-of-privacy test and focused instead on the common-law trespass

65. U.S. Dep't of Justice v. Reporters Comm. for Freedom of Press, 489 U.S. 749 (1989).

66. *Maynard*, 615 F.3d at 562 ("Prolonged surveillance reveals types of information not revealed by short-term surveillance, such as what a person does repeatedly, what he does not do, and what he does ensemble. These types of information can each reveal more about a person than does any individual trip viewed in isolation.").

67. *Id.* at 561.

68. *United States v. Jones*, 132 S. Ct. 945 (2012).

69. *Id.*

70. *Id.* at 955 (Sotomayor, J., concurring).

71. *Id.* at 945.

72. *Id.* at 949 ("We have no doubt that such a physical intrusion would have been considered a 'search' within the meaning of the Fourth Amendment when it was adopted.").

test from *Olmstead*.⁷³ Though Justice Alito’s concurrence challenged the majority’s reasoning by arguing that the trespass standard was explicitly overturned in *Katz*,⁷⁴ and some scholars argue the standard never existed in the first place,⁷⁵ the opinion of the *Jones* majority—that the *Katz* reasonable-expectation-of-privacy test augmented the trespass standard rather than replacing it—will control in future cases. The *Jones* majority explained that the common-law trespass test was essentially a minimum test and that the *Katz* test was “added to, not substituted for, the common-law trespassory test,”⁷⁶ citing several post-*Katz* cases which they alleged did not follow *Katz*.⁷⁷ They concluded that the fact that law enforcement “physically occupied private property” in *Jones* by encroaching on a “constitutionally protected area” (the car) “for the purpose of obtaining information” was sufficient to decide the case.⁷⁸ The majority’s opinion mandated that factors beyond trespass for purposes of collecting information need not be considered in future Fourth Amendment cases once trespass is found.⁷⁹

C. JUSTICE SOTOMAYOR AND JUSTICE ALITO’S CONCURRENCES:
REASONABLE EXPECTATIONS IN *JONES*

Justice Alito (joined by Justices Ginsburg, Breyer, Kagan, and Sotomayor in part) and Justice Sotomayor’s concurrences acknowledged the importance of reevaluating citizens’ expectations of privacy in the Information Age and shed significant light on how these expectations might be evaluated by the Court in the future.⁸⁰ Justice Alito found their consideration essential to deciding *Jones*; he argued strongly that the Court should have applied the *Katz*

73. *Id.* at 950 (“[W]e need not address the Government’s contentions, because Jones’s Fourth Amendment rights do not rise or fall with the *Katz* formulation.”).

74. Justice Alito’s concurrence criticized the majority opinion for relying on antiquated law and misunderstanding the role that the *Katz* reasonable-expectation-of-privacy test played in the development of Fourth Amendment jurisprudence, arguing that the test eliminated the old reliance on physical trespass rather than augmenting it. *Id.* at 959–60 (Alito, J., concurring). To buttress his argument, Justice Alito drew a distinction between *installation* and *use* of a device to gather evidence, noting that it is the *use* of the device in collecting information that allows the incident to be considered a search rather than a trespass of no consequence to the Fourth Amendment. *Id.* at 961.

75. *See* Kerr, *supra* note 28.

76. *Jones*, 132 S. Ct. at 952 (majority opinion).

77. *Id.* at 950–51 (citing *Alderman v. United States*, 394 U.S. 165, 176, 180 (1969); *Soldal v. Cook County*, 506 U.S. 56, 60–62 (1992)). In his concurrence, Justice Alito challenged this conclusion, stating that these cases are barely analogous to the facts in *Jones*. *Id.* at 960–61 (Alito, J., concurring) (“[T]he majority is hard pressed to find support in post-*Katz* cases for its trespass-based theory.”).

78. *Id.* at 949, 952 (majority opinion).

79. *Id.* at 953–54.

80. *See id.* at 954–57 (Sotomayor, J., concurring); *id.* at 963–64 (Alito, J., concurring).

test instead of the common-law trespass test because *Katz* eliminated the trespass test.⁸¹ Justice Sotomayor, in contrast, found exploration of the evolutions of citizens' expectations of privacy important in the context of *Jones*, but agreed with the majority that trespass was sufficient to decide the case.⁸² Both concurrences expressed concern that the majority's decision would provide no guidance in a case where significant amounts of tracking data were obtained without a physical trespass, through voluntarily communicated information.⁸³

While both Justice Alito⁸⁴ and Justice Sotomayor⁸⁵ agreed that advancing technologies can change individuals' expectations of privacy, they offered different responses to this development. Even though Justice Sotomayor's decision in *Jones* did not rest on application of the *Katz* test, she went further than Justice Alito in emphasizing the importance of updating the Court's evaluation of expectations of privacy in the Information Age.⁸⁶ Justice Alito suggested that individuals actively (and inevitably) trade privacy for the convenience afforded to them by technology and thus suggested the Court's approach should stay largely the same until statutes are changed, as the legislature is best positioned to increase protections through statute like they did with the Wiretap Act.⁸⁷ The best that he thought the Court could do to keep pace with these changes would be to reflect the level of privacy that a reasonable person in today's society *anticipates*.⁸⁸ Accordingly, Justice Alito argued that U.S. citizens today do not anticipate long-term surveillance of the location of their cars, and that the surveillance in *Jones* thus constituted a search.⁸⁹

81. *Id.* at 959–60 (Alito, J., concurring).

82. *Id.* at 954, 957 (Sotomayor, J., concurring).

83. *Id.* at 955; *id.* at 962 (Alito, J., concurring).

84. Justice Alito noted that before the Information Age, most privacy protections were the result of practical rather than legal constraints—noting that the type of surveillance data collected in *Jones* previously would have required a large team of agents, multiple vehicles, and aerial assistance. *Id.* at 963. It would thus have been previously warranted only by investigations of great importance whereas the same information can today be collected with the touch of a button. *Id.* at 964.

85. *Id.* at 955 (Sotomayor, J., concurring) (“As Justice Alito incisively observes, the same technological advances that have made possible nontrespassory surveillance techniques will also affect the *Katz* test by shaping the evolution of societal privacy expectations.”).

86. *Id.* at 954–64 (Sotomayor, J., concurring) (Alito, J., concurring).

87. *Id.* at 962–64 (Alito, J., concurring) (“A legislative body is . . . well situated to gauge changing public attitudes, to draw detailed lines, and to balance privacy and public safety in a comprehensive way.”).

88. *Id.* at 964.

89. *Id.* (“[R]elatively short-term monitoring of a person's movements on public streets accords with expectations of privacy that our society has recognized as reasonable. . . . But

Justice Sotomayor seemed to argue—in contrast to Justice Alito—that it is precisely because large proportions of society passively make the tradeoff of convenience for privacy that the Court *should* adapt the reasonable-expectation-of-privacy standard so that diminutions of expectations of privacy would not be inevitable.⁹⁰ Justice Sotomayor agreed with Justice Alito that long-term surveillance qualifies as a search,⁹¹ thus lending the influence of five Justices to that position, but she took the critique one step further by examining more circumstances in which the Court should update its conception of what is reasonable given the norms to which society has adjusted.⁹² By highlighting several shortcomings of current judicial treatment of “voluntary” communication of information, Justice Sotomayor brought attention to circumstances in which citizens do currently have an expectation of privacy that is not currently recognized by the Court.

Justice Sotomayor focused on two primary circumstances in which voluntary communication of information enabled by technology leads to exploitation of citizens’ expectation of privacy that the *Katz* test should protect: first, the ability of third-party information collectors to pass information to the government and, second, the ability of law enforcement to easily and warrantlessly ascertain and aggregate the totality of a person’s movements. She noted it may be necessary to reevaluate the concept that information “voluntarily” given up to a third party can be turned over to governmental requestors at the third party’s discretion.⁹³ She argued that the third-party doctrine is “ill suited to the digital age, in which people reveal a great deal of information about themselves to third parties in the course of

the use of longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy.”). The 28-day surveillance in this case was sufficiently long for Justice Alito to consider it a violation of Jones’ reasonable expectation of privacy in his movements under *Katz* because “society’s expectation has been that law enforcement agents and others would not—and . . . could not—secretly monitor and catalogue every single movement of an individual’s car for a very long period.” *Id.* However, Justice Alito did not propose a test for determining when exactly surveillance becomes long-term, which led the majority to conclude that his “test” would lead to “thorny problems” that need not be resolved in *Jones*. *Id.* at 954 (majority opinion).

90. *Id.* at 957 (Sotomayor, J., concurring) (“[Individuals’ data] can attain constitutionally protected status only if our Fourth Amendment jurisprudence ceases to treat secrecy as a prerequisite for privacy.”).

91. *Id.* at 955.

92. *Id.* at 956–57.

93. *Id.* at 957 (“[I]t may be necessary to reconsider the premise that an individual has no reasonable expectation of privacy in information voluntarily disclosed to third parties.”); *id.* (“Those who disclose certain facts to a bank or phone company for a limited business purpose need not assume that this information will be released to other persons for other purposes.” (quoting *Smith v. Maryland*, 442 U.S. 735, 749 (1979))).

carrying out mundane tasks.”⁹⁴ She additionally addressed, albeit indirectly, the D.C. Circuit’s argument that the assembling or “sum” of data documenting a person’s public movements has a greater bearing on invasions of privacy than documentation of one or several movements.⁹⁵ She highlighted that evaluating society’s belief of whether an expectation of privacy in the sum of one’s movement is reasonable should require considering “whether people reasonably expect that their movements will be recorded and *aggregated* in a manner that enables the Government to ascertain, more or less at will, their political and religious beliefs, sexual habits, and so on,” and that such information would be “amenable to misuse.”⁹⁶ She cautioned that the current legal standards applied to these circumstances have the potential to alter “the relationship between citizen and government in a way that is inimical to democratic society.”⁹⁷

III. A DISCUSSION: THE IMPLICATIONS OF *JONES*

Though some credit *Jones* for reviving the Fourth Amendment in the modern era,⁹⁸ the majority in *Jones* bypassed the timely and important issues that the concurrences addressed pertaining to reasonable expectations of privacy in the Information Age. As a result, the decision did little to resolve many pressing legal questions for police surveillance. Fourth Amendment scholar Orin Kerr may have characterized *Jones* best when he stated that “[i]f anything is clear from the Supreme Court’s decision . . . in *United States v. Jones*, it’s that not very much is clear from the Supreme Court’s decision in *United States v. Jones*.”⁹⁹ Despite these shortcomings, however, the case has already had legal consequences in subsequent lower court decisions and both state and federal legislation, the effects of which are discussed in the following sections. The month after the decision, the Supreme Court granted certiorari in order to vacate and remand two circuit court cases for

94. *Id.* at 957. This applies not just to data obtained warrantlessly by law enforcement, but also information acquired lawfully by the government, as well as other entities.

95. *Id.* at 956.

96. *Id.*

97. Justice Sotomayor warned that the government’s ability to easily and cheaply acquire, store, and assemble “a precise, comprehensive record of a person’s public movements that reflects a wealth of detail about [the person’s] familial, political, professional, religious, and sexual associations” with today’s technology has significant implications for democracy, has the potential to “chill[] associational and expressive freedoms.” *Id.* at 956.

98. See Pesciotta, Kozinski & Smith, *supra* note 53.

99. Kerr, *supra* note 28.

reconsideration in light of *Jones*.¹⁰⁰ As for practical consequences, the FBI turned off approximately 3,000 GPS trackers within one month of the *Jones* decision.¹⁰¹ This Part explores *Jones*' effects on Fourth Amendment law by surveying how courts and legislatures have responded to the decision.

A. COURTS' APPLICATION OF THE FOURTH AMENDMENT POST-*JONES*

Circuit courts have encountered few difficulties applying the majority's common-law-trespass test in the wake of *Jones*. They largely accept the *Jones* majority's assertion that the *Katz* reasonable-expectation test added to, but did not replace, the common-law trespass test.¹⁰² Some use *Jones* only as precedent for guidance in applying the pre-existing common-law trespass test,¹⁰³ seeing the majority opinion as reiterating¹⁰⁴ the existence of the test or clarifying how it should be applied.¹⁰⁵ For example, the Ninth Circuit stated that *Jones* clarified its confusion about whether the trespass test replaced or augmented prior tests,¹⁰⁶ thus reviving the trespass test in the Circuit.¹⁰⁷

100. *United States v. Cuevas-Perez*, 640 F.3d 272 (7th Cir. 2011), *vacated*, 132 S. Ct. 1534 (2012); *Pineda-Moreno v. United States*, 591 F.3d 1212 (9th Cir. 2010), *vacated*, 132 S. Ct. 1533 (2012), *remanded*, 688 F.3d 1087 (9th Cir. 2012).

101. See Julia Angwin, *FBI Turns off Thousands of GPS Devices after Supreme Court Ruling*, WALL ST. J. (Feb. 25, 2012, 3:36 PM), <http://blogs.wsj.com/digits/2012/02/25/fbi-turns-off-thousands-of-gps-devices-after-supreme-court-ruling/>.

102. See, e.g., *Free Speech Coal., Inc. v. Att'y Gen. of U.S.*, 677 F.3d 519, 543–44 (3rd Cir. 2012); *United States v. Cowan*, 674 F.3d 947, 956 (8th Cir. 2012), *reh'g denied* (May 11, 2012), *cert. denied*, 133 S. Ct. 379 (2012); *Lavan v. City of Los Angeles*, 693 F.3d 1022, 1029 (9th Cir. 2012); *United States v. Patel*, 485 Fed. App'x 702, 710–11 (5th Cir. 2012); *Patel v. City of Los Angeles*, 686 F.3d 1085, 1087 (9th Cir. 2012); *United States v. Perea-Rey*, 680 F.3d 1179, 1185–86 (9th Cir. 2012).

103. See, e.g., *United States v. Skinner*, 690 F.3d 772, 780 (6th Cir. 2012) (distinguishing *Jones* because no physical trespass was involved); *United States v. Wahchumwah*, No. 11-30101, 2012 WL 5951624, at *3 (9th Cir. Mar. 4, 2012) (same); *United States v. Davis*, 690 F.3d 226, 241 n.23 (4th Cir. 2012) (same); *United States v. Harrison*, 689 F.3d 301, 307 n.2 (3d Cir. 2012) (same).

104. See *Lavan*, 693 F.3d at 1028–29 (“The Supreme Court has recently [in *Jones*] reiterated that a reasonable expectation of privacy is not required for Fourth Amendment protections to apply because ‘Fourth Amendment rights do not rise or fall with the *Katz* formulation.’”).

105. See, e.g., *Free Speech Coal., Inc.*, 677 F.3d at 543 (“[A]s the Supreme Court’s recent decision in *Jones* makes clear, a Fourth Amendment search . . . occurs where the government unlawfully, physically occupies private property for the purpose of obtaining information.”); *United States v. Duenas*, 691 F.3d 1070, 1080–81 (9th Cir. 2012) (“[A]s the Supreme Court recently clarified in [*Jones*] . . . the *Katz* ‘expectation of privacy’ test extends the traditional reach of the Fourth Amendment.”).

106. See *Perea-Rey*, 680 F.3d at 1185–86. In *Perea-Rey*, the court stated this holding in *Katz* has created some confusion about the interaction between the reasonable expectation of privacy standard and ‘the traditional pre-*Katz* interpretation of the Fourth Amendment’ . . . [t]his

However, courts have struggled to apply the *Jones* concurrences' writings on long-term surveillance and have not fully assessed *Jones*'s implications for the reasonable-expectation-of-privacy test.¹⁰⁸ While some looked to *Jones* as a reaffirmation of the (albeit nonexclusive) viability of the *Katz* reasonable-expectations test,¹⁰⁹ many courts' attempts to apply that test highlight Justice Alito's concern that *Jones* would "present particularly vexing problems in cases involving surveillance that is carried out by making electronic, as opposed to physical, contact with the item to be tracked."¹¹⁰ These attempts are explored in the remainder of this Part.

In *United States v. Graham*, the court struggled to apply *Jones* and noted that it was relevant but not controlling when applied to technology companies that track a person's location without a physical trespass and disclose the information to the government without a warrant.¹¹¹ The court rejected the defendant's argument that the continuous tracking of his cellphone location violated his reasonable expectation of privacy.¹¹² The court noted that while the long-term surveillance and mosaic theories were

confusion has persisted for decades . . . [t]he Supreme Court [in *Jones*] recently and emphatically repudiated [the] reasoning . . . [that the] *Katz* reasonable-expectation-of-privacy test . . . substituted for the common-law trespassory test.

Id.

107. *See id.* at 1185; *United States v. Pineda-Moreno*, 688 F.3d 1087, 1091 (9th Cir. 2012). However, in *United States v. Pineda-Moreno*, the Ninth Circuit refused to apply *Jones* retroactively. *Pineda-Moreno*, 688 F.3d at 1091 (holding that while the warrantless attachment of a GPS tracker to a car clearly constitutes a search under *Jones*, prior Ninth Circuit precedent did not yield this result, such that an incident occurring before the *Jones* decision was not subject to the *Jones* holding).

108. *See United States v. Graham*, 846 F. Supp. 2d 384, 394 (D. Md. 2012). The court stated:

[I]t appears as though a five justice majority is willing to accept the principle that government surveillance over time can implicate an individual's reasonable expectation of privacy. However . . . the factual differences between the GPS technology considered in the *Jones* case and the historical cell site location data in the present case lead this Court to proceed with caution in extrapolating too far from the Supreme Court's varied opinions in *Jones*.

Id.

109. *See United States v. Skinner*, 690 F.3d 772, 780 (6th Cir. 2012).

110. *United States v. Jones*, 132 S. Ct. 945, 962 (2012) (Alito, J., concurring).

111. *Graham*, 846 F. Supp. 2d at 385 n.2. ("[T]he Supreme Court of the United States recently issued an opinion that is relevant but not controlling in this case, *United States v. Jones* . . . This Court did not order further briefing regarding the implications of [*Jones*] insofar as further briefing would not aid this Court's decision.")

112. *Id.* at 389.

compelling, the split nature of the *Jones* decision did not establish a clear test for determining what kind of cumulative surveillance constitutes a search.¹¹³

Additionally, the *Graham* court stated that “Justice Sotomayor’s apparent endorsement of Justice Alito’s concurrence” in *Jones* “can [allow *Jones* to] be plausibly understood as having two separate majority opinions.”¹¹⁴ The court previewed potential future applications of *Jones* by noting that “it appears as though a five-to-four majority of the Court might, in the future, endorse and craft some version of a mosaic Fourth Amendment doctrine”¹¹⁵—a view reiterated by several courts¹¹⁶—but did not apply it in this case due to the absence of an explicit Supreme Court ruling on the mosaic theory or clear test for long-term trespass in *Jones*.

In the meantime, several district courts functionally applied the long-term surveillance test by applying the D.C. Circuit’s mosaic theory from *Maynard* to hold that a warrant is required for extended periods of historical cell site location data acquisition.¹¹⁷

B. LEGISLATION POST-*JONES*

In his *Jones* concurrence, Justice Alito suggested that legislatures rather than courts should update the laws to protect reasonable expectations of privacy in the Information Age because legislatures are “well situated to gauge changing public attitudes, to draw detailed lines, and to balance privacy and public safety in a comprehensive way.”¹¹⁸ Debates around the proper role of the legislatures versus the courts are longstanding, and cannot be resolved within the scope of this Note. Some scholars argue that the rapid pace of technological advancement means that courts should only adapt Fourth Amendment law with caution, and should defer to legislatures to update

113. *Id.* at 394 (“Until the Supreme Court or the United States Court of Appeals for the Fourth Circuit definitively conclude that an aggregation of surveillance records infringes a Fourth Amendment legitimate expectation of privacy, this Court must apply the facts of this case to the law as currently interpreted.”).

114. *Id.* at 404 n.15.

115. *Id.*

116. *See, e.g.*, *United States v. Brooks*, No. CR 11-2265-PHX-JAT-003, 2012 WL 5984804, at *6 (D. Ariz. Nov. 28, 2012); *United States v. Hanna*, No. 11-20678-CR, 2012 WL 279435, at *3–4 (S.D. Fla. Jan. 30, 2012) (explaining the result of the case under both the *Jones* majority opinion and concurring opinions).

117. *See Graham*, 846 F. Supp. 2d at 388–89 (citing *In re Application of the U.S.*, No. 11-MC-0113, 2011 WL 679925, at *1, *2 (E.D.N.Y. Feb. 16, 2011); *In re Application of the U.S.*, 809 F. Supp. 2d 113, 117–18 (E.D.N.Y. 2011)).

118. *United States v. Jones*, 132 S. Ct. 945, 963–64 (2012) (Alito, J., concurring); *see also Graham*, 846 F. Supp. 2d at 394.

standards.¹¹⁹ Others push back against this view, arguing that legislatures are not as well positioned to adapt the law to new circumstances and that legislative adaptations are often deleteriously delayed.¹²⁰ Regardless of the value of legislative rather than judicial action, legislatures have historically played such a role in regulating access to electronic information by passing the Electronic Communications Privacy Act and the Stored Communications Act.¹²¹ Legislatures could enact statutes that protect individuals' privacy in a way that *Jones* did not.

Several legislatures took action in the wake of the *Jones* decision to reaffirm the privacy that people have in their location data. The impetus for action increased in the summer of 2012 when nine major cellphone carriers and 250 police departments released records for the first time that revealed an explosion of cellphone surveillance within the last five years, accompanied by a decrease in warrants for wiretapping.¹²² Most of the police departments that released their records revealed that they did not obtain warrants before acquiring mobile location data.¹²³ In response, state legislatures in Delaware, Maryland, and Oklahoma proposed bills that would require law enforcement to obtain a warrant before requesting location data from cellphone carriers (except in cases of emergency).¹²⁴ California passed such a bill¹²⁵ but Governor Jerry Brown vetoed it, questioning whether it appropriately balanced the needs of law enforcement and individual expectations of privacy.¹²⁶ The U.S. House of Representatives also considered, but failed to pass, similar legislation.¹²⁷

119. See Orin S. Kerr, *The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution*, 102 MICH. L. REV. 801 (2004).

120. See Daniel J. Solove, *Fourth Amendment Codification and Professor Kerr's Misguided Call for Judicial Deference*, 74 FORDHAM L. REV. 747 (2005).

121. Pub. L. No. 99-508, 100 Stat. 1848 (1986), codified at 18 U.S.C. §§ 2510–2522.

122. See Eric Lichtblau, *Wireless Firms Are Flooded by Requests to Aid Surveillance*, N.Y. TIMES, July 9, 2012, at A1, available at <http://www.nytimes.com/2012/07/09/us/cell-carriers-see-uptick-in-requests-to-aid-surveillance.html>; *Cell Phone Location Tracking Public Records Request*, ACLU, Sept. 10, 2012, <http://www.aclu.org/protecting-civil-liberties-digital-age/cell-phone-location-tracking-public-records-request>.

123. See *Cell Phone Location Tracking Public Records Request*, *supra* note 122.

124. Somini Sengupta, *Courts Divided over Searches of Cellphones*, N.Y. TIMES, Nov. 26, 2012, at A1, available at <http://www.nytimes.com/2012/11/26/technology/legality-of-warrantless-cellphone-searches-goes-to-courts-and-legislatures.html>.

125. S.B. 1434, 2011–2012 Leg. Sess. (Ca. 2012), available at http://www.leginfo.ca.gov/cgi-bin/postquery?bill_number=sb_1434&sess=1112 (last visited Feb. 20, 2013).

126. David Kravets, *California Governor Vetoes Landmark Location-Privacy Law*, WIRED.COM (Oct. 2, 2012), <http://www.wired.com/threatlevel/2012/10/mobile-privacy-law-vetoed/>.

127. H.R. 6529 Bill Summary & Status, 112th Congress (2011–2012): All Congressional Actions, THE LIBRARY OF CONGRESS: THOMAS, <http://thomas.loc.gov/cgi-bin/bdquery/>

While legislatures retain the ability to draw new lines regarding privacy, it remains the judiciary's role to interpret current law,¹²⁸ thus the latitude to apply the reasonable-expectation-of-privacy test still rests in the courts. The next Part addresses the challenges they face applying this test today.

IV. EVALUATING REASONABLENESS UNDER THE REASONABLE-EXPECTATION-OF-PRIVACY TEST TODAY

While the trespass standard ostensibly controls in the wake of *Jones*, it bears little relevance to the pressing Fourth Amendment questions facing courts in the Information Age. In a time when the founder and CEO of a billion member social network¹²⁹ declares “the end of privacy”¹³⁰ because so many people volunteer their information to technology companies daily, courts examining Fourth Amendment questions should consider whether such statements reflect citizens' *actual* expectations of privacy, as well as the expectation of privacy that society should seek to preserve. Advancing technologies have changed the relevance of trespass to search both because a trespass is generally not required to obtain the information from devices and services that individuals regularly use—from cell phone location data to toll booth records and vehicular location trackers—and because new surveillance technologies can now remotely detect information like heat levels emanating from a person's garage¹³¹ and home energy use patterns.¹³² The pervasiveness of mobile phones and the accompanying availability of location data mean that the days of visual observation and in-person eavesdropping as methods of law enforcement are long gone.¹³³ To continue to honor the presumption of the *Katz* test that the Fourth Amendment protects people rather than

z?d112:HR06529:@@X (last visited Feb. 20, 2013); Declan McCullagh, *Privacy bill requires search warrants for e-mail, cell tracking*, CNET.COM, Sept. 25, 2012, http://news.cnet.com/8301-13578_3-57520147-38/privacy-bill-requires-search-warrants-for-e-mail-cell-tracking.

128. See *Marbury v. Madison*, 5 U.S. 137, 177 (1803) (“It is emphatically the province and duty of the judicial department to say what the law is. Those who apply the rule to particular cases, must of necessity expound and interpret that rule.”).

129. See Ashlee Vance, *Facebook: The Making of 1 Billion Users*, BLOOMBERG BUSINESSWEEK (Oct. 4, 2012), <http://www.businessweek.com/articles/2012-10-04/facebook-the-making-of-1-billion-users>.

130. See Marshall Kirkpatrick, *Facebook's Zuckerberg Says the Age of Privacy Is Over*, READWRITE (Jan. 9, 2010), http://www.readwriteweb.com/archives/facebook_s_zuckerberg_says_the_age_of_privacy_is_ov.php.

131. See *Kyllo v. U.S.*, 533 U.S. 27 (2001).

132. Jack I. Lerner & Deirdre K. Mulligan, *Taking the “Long View” on the Fourth Amendment Stored Records and the Sanctity of the Home*, 2008 STAN TECH. L. REV. 3 (2008).

133. *United States v. Jones*, 132 S. Ct. 945, 963–64 (2012) (Alito, J., concurring).

places, the judiciary will have to look beyond trespass towards changing expectations of privacy when evaluating Fourth Amendment privacy in the future.¹³⁴

The debate about how to evaluate changing expectations of privacy in the information age will undoubtedly be rekindled when the Supreme Court considers its next case of trespass-less search. It is accordingly useful to explore prior judicial opinions on this matter in light of the *Jones* concurrences in order to gain an understanding of how, and whether, judicial conceptions of reasonableness will change. This Part will begin by exploring judicial approaches to the evolution of the definition of a “search” under the Fourth Amendment and will proceed by focusing on the two biggest questions raised by the concurrences in *Jones* regarding the reasonable-expectation-of-privacy test: the relevance of voluntariness of exposure first, to the third-party doctrine; and second, to the mosaic theory used by the D.C. Circuit in *Maynard*.

A. THE SUPREME COURT’S STRUGGLE TO APPLY THE FOURTH AMENDMENT IN CHANGING TIMES

Justice Alito and Justice Sotomayor in their *Jones* concurrences appeared to advocate reconsidering reasonable expectations of privacy based on changing norms and realities—with Justice Alito proposing the long-term surveillance test and Justice Sotomayor agreeing but going further to question the third-party doctrine¹³⁵ and conceivably extend the long-term surveillance test into a characterization of the “mosaic” theory.¹³⁶ Both inevitably encountered difficulty applying a centuries-old Amendment to realities that could not have been envisioned at the time of its creation.

The *Jones* majority did not preclude such updating when it stated that the Court “must assur[e] preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted,” though they did not explore the question further in the context of *Jones*.¹³⁷ Justice Scalia even previously mentioned in *Kyllo*, as discussed *supra* Section I.C that “[t]he question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy,”¹³⁸ noting that “the rule [the Court] adopt[s] must take account of more sophisticated systems

134. *Katz v. United States*, 389 U.S. 347, 351 (1967); *id.* at 361 (Harlan, J., concurring).

135. *See Jones*, 132 S. Ct. at 955–57 (2012) (Sotomayor, J., concurring); *id.* at 962–64 (Alito, J., concurring).

136. *See* discussion *infra* Section IV.C.

137. *Jones*, 132 S. Ct. at 950.

138. *Kyllo v. United States*, 533 U.S. 27, 34 (2001).

that are already in use or in development.”¹³⁹ Justice Alito agreed with the majority’s assertion that it is the Court’s role to preserve the degree of privacy that existed at the time of the Amendment’s creation, but noted that doing so still requires adapting to new circumstances since, for example, it is “almost impossible to think of late-18th-century situations that are analogous to what took place in [*Jones*].”¹⁴⁰ He contended that it would have been difficult for constables to secret themselves away in stagecoaches for the same amount of time that GPS devices are tracked today,¹⁴¹ and therefore the contemporary legislature might need to adapt the law in order to preserve the same degree of privacy against government intrusion as existed at that time.¹⁴² Justice Sotomayor goes further to reflect on the damage to democratic society if the standard is not reevaluated.¹⁴³

In advocating for modern reevaluation of considerations of privacy in light of new technologies, Justices Alito and Justice Sotomayor echoed the earlier decision in *Katz* in which the majority noted the importance of preserving privacy in the use of an important modern communication device. The *Katz* Court stated that interpreting the Constitution narrowly enough to say that a person who occupies a phone booth, pays the toll, and shuts the door cannot rely on the protection of the Fourth Amendment “is to ignore the vital role that the public telephone has come to play in private communication.”¹⁴⁴ Justice Stewart reiterated this point in his *Smith* dissent, noting that the private telephone has come to play an even more vital role than the public telephone in *Katz*, and judicial decisions should take the importance of the role of these devices to society into consideration.¹⁴⁵

The majority in *Olmstead*,¹⁴⁶ in contrast, argued against adapting the standard for the Fourth Amendment search because the Court “[could not] justify enlargement of the language employed beyond the possible practical meaning of houses, persons, papers, and effects, or so to apply the words search and seizure as to forbid hearing or sight.”¹⁴⁷ Justice Black in his *Katz* dissent similarly argued that he did “not believe that it is the proper role of [the Supreme] Court to rewrite the Amendment in order ‘to bring it into harmony with the times’ and thus reach a result that many people believe to

139. *Id.* at 36.

140. *Jones*, 132 S. Ct. at 958 (Alito, J., concurring).

141. *Id.*

142. *Id.* at 962–63 (citing 18 U.S.C. §§ 2510–2522 (2006)).

143. *Id.* at 955–57 (Sotomayor, J., concurring).

144. *Katz v. United States*, 389 U.S. 347, 350 (1967).

145. *Smith v. Maryland*, 442 U.S. 735, 746 (1979) (Stewart, J., dissenting).

146. *Olmstead v. United States*, 277 U.S. 438, 465 (1928).

147. *Id.*

be desirable.”¹⁴⁸ He advocated against adapting the standard despite acknowledging that wiretapping was a completely unknown possibility when the framers authored the Constitution; he argued that eavesdropping was an analogous practice at the time, so wiretapping could be treated similarly.¹⁴⁹

While the debate is far from settled, the prevalence of the *Katz* test mean that Courts will have to learn how to apply it in modern contexts, and will thus have to tackle the challenge of determining what is reasonable given existing realities. The following Sections will explore the most interesting concepts of reasonable expectations regarding voluntarily communicated information raised in the *Jones* concurrences: third-party doctrine and the summation of movements that form the “mosaic theory.”

B. CONCEPT ONE: THE THIRD-PARTY DOCTRINE

Justice Sotomayor strongly suggested in *Jones* that the Court revisit the third-party doctrine given new norms and circumstances, potentially planting a seed for reconsideration of the doctrine.¹⁵⁰ The doctrine has always been highly controversial among judges and scholars alike, and is increasingly relevant to expectations of privacy under the Fourth Amendment given the amount of information citizens voluntarily communicate to third parties today. Orin Kerr wrote that “[a] list of every article or book that has criticized the doctrine would make this the world’s longest law review footnote,”¹⁵¹ and Wayne LaFave’s influential Fourth Amendment treatise noted the Court’s decisions applying it are “dead wrong”¹⁵² and “make[] a mockery of the Fourth Amendment.”¹⁵³ Justice Sotomayor, as a sitting Justice, adds an important voice to the critique of the third-party doctrine in her *Jones* concurrence. This Section will explore Justice Sotomayor’s critique in the context of prior judicial and academic critique of the doctrine.

148. *Katz*, 389 U.S. at 364 (1967) (Black, J., dissenting).

149. *Id.*

150. *United States v. Jones*, 132 S. Ct. 945, 957 (2012) (Sotomayor, J., concurring) (“[I]t may be necessary to reconsider the premise that an individual has no reasonable expectation of privacy in information voluntarily disclosed to third parties.”) (“Those who disclose certain facts to a bank or phone company for a limited business purpose need not assume that this information will be released to other persons for other purposes.” (quoting *Smith v. Maryland*, 442 U.S. 735, 749 (1979))).

151. Orin S. Kerr, *The Case for the Third-Party Doctrine*, 107 MICH. L. REV. 561, 563 n.5 (2009).

152. LAFAVE, *supra* note 10, § 2.7(c).

153. *Id.* § 2.7(b).

1. *Judicial Treatment*

Several of the cases that established the third-party doctrine as discussed *supra* Section I.C, included dissents in which justices argued strongly against the doctrine. Justice Stewart noted in his *Smith* dissent that “[a] telephone call simply cannot be made without the use of telephone company property and without payment to the company for the service”¹⁵⁴ and argued that “[i]t is simply not enough to say, after *Katz*, that there is no legitimate expectation of privacy in the numbers dialed because the caller assumes the risk that the telephone company will disclose them to the police.”¹⁵⁵ Justice Marshall, who also dissented from the majority opinion in *Smith*, contested the idea that a person’s knowledge that numbers they dial from a private telephone will be recorded means that they expect that information to be made available to the public or the government.¹⁵⁶ He noted that “[p]rivacy is not a discrete commodity, possessed absolutely or not at all. Those who disclose certain facts to a bank or phone company for a limited business purpose need not assume that this information will be released to other persons for other purposes.”¹⁵⁷ Justice Marshall additionally rejected the majority’s assumption-of-risk argument and claimed that “[i]t is idle to speak of ‘assuming’ risks in contexts where, as a practical matter, individuals have no realistic alternative.”¹⁵⁸ He suggested a new standard for determining the legitimacy of privacy expectations based on *Katz* that “depends not on the risks an individual can be presumed to accept when imparting information to third parties, but on the risks he should be forced to assume in a free and open society.”¹⁵⁹ He concluded by noting that privacy is of interest not just to those accused of criminal activity but also to “political affiliation and journalistic endeavor that are the hallmark of a truly free society.”¹⁶⁰ This assertion parallels Justice Sotomayor’s statement in *Jones* that constant surveillance is “inimical to democratic society.”¹⁶¹

In *Miller*, Justice Brennan’s dissent pointed out that disclosure of financial affairs to a bank was in practice “not entirely volitional, since it is impossible

154. *Smith v. Maryland*, 442 U.S. 735, 746 (1979) (Stewart, J., dissenting).

155. *Id.* at 747.

156. *Id.* at 749 (Marshall, J., dissenting) (citing *Cal. Bankers Ass’n v. Shultz*, 416 U.S. 21, 95–96 (1974)).

157. *Id.*

158. *Id.* at 750. Justice Marshall argued that, “unless a person is prepared to forgo use of what for many has become a personal or professional necessity, he cannot help but accept the risk of surveillance.” *Id.* (citing *Lopez v. United States*, 373 U.S. 427, 465–66 (1963)).

159. *Id.* at 750.

160. *Id.* at 751.

161. *United States v. Jones*, 132 S. Ct. 945, 956 (2012) (Sotomayor, J., concurring).

to participate in the economic life of contemporary society without maintaining a bank account.”¹⁶² He emphasized that while the question in *Miller* focused on access to bank statements, the logical extension of the majority’s argument was that all financial information a person supplied to the bank under the presumption of confidentiality would be available to police officers upon request, “without any judicial control as to relevancy or other traditional requirements of legal process.”¹⁶³ He cautioned that the Court’s approach “open[ed] the door to a vast and unlimited range of very real abuses of police power.”¹⁶⁴

Justice Marshall also dissented in *Miller* and argued that although the Court’s conclusion about relinquishing privacy in *Miller* was broad, the policy rationale behind the decision was tied to the interpretation of an unconstitutional statute and thus may not be generally applicable. He found the Banking Secrecy Act to be unconstitutional because the recordkeeping requirements mandated “the seizure of customers’ bank records without a warrant and probable cause.”¹⁶⁵ He argued that this “giving up” of information was not voluntary because it was mandated by the government, and was thus a seizure under the Fourth Amendment.¹⁶⁶ The rule developed from the case may thus have been applicable only to those circumstances and not extendable to other circumstances.

Despite these judicial concerns voiced at the third-party doctrine’s inception, courts apply it in modern contexts. However, many academics continue to challenge its creation and applicability, continuing the debate about reasonable expectations of privacy in the Information Age.

2. *Academic Treatment*

As technology continues to advance well beyond touchtone telephones, proponents of the third-party doctrine argue that it ensures technological neutrality and provides clarity for the Fourth Amendment.¹⁶⁷ Orin Kerr, the doctrine’s primary academic advocate, argues that the doctrine serves these two useful functions—even though the Supreme Court has never provided a

162. *United States v. Miller*, 425 U.S. 435, 451 (1976) (Brennan, J. dissenting).

163. *Id.*

164. *Id.*

165. *Id.* at 456 (Marshall, J., dissenting).

166. *Id.* at 455 (citing *Cal. Bankers Ass’n v. Shultz*, 416 U.S. 21, 97 (1974)). Marshall stated that the Court held as it did largely because Congress, in enacting the Act, required maintenance of records, specifically because they “have a high degree of usefulness in criminal tax, and regulatory investigations and proceedings.” *Id.* at 442–43 (citing the Banking Secrecy Act, 12 U.S.C. § 1829b(a)(1)).

167. Kerr, *supra* note 151, at 564.

rationale for the doctrine when applying it.¹⁶⁸ First, he argues that the doctrine maintains technological neutrality of the Fourth Amendment by ensuring that evidence from crimes committed with the aid of technology is subject to the same rules as in crimes committed with the aid of a friend.¹⁶⁹ He maintains that there is no reason that technology companies with third party knowledge of the facts of a crime should not be allowed the same opportunity for disclosure to law enforcement as a tattletale comrade in a typical crime.¹⁷⁰ Second, by ensuring that all evidence possessed by third parties is subject to the same across-the-board disclosure rule, the doctrine provides “ex ante clarity” where the reasonable-expectation-of-privacy test cannot (since it, by definition, varies based on circumstances).¹⁷¹ In response to critics who find the doctrine persistently violates reasonable expectations of privacy, Kerr argues that the third-party doctrine is better understood in terms of consent, and that consent is clearly given when information is disclosed to third parties.¹⁷² This idea of consent arguably parallels Justice Alito’s argument in *Jones* that people consciously trade privacy for the convenience afforded by modern-day technological devices.¹⁷³

Academic critiques of the doctrine, however, are far more plentiful than endorsements.¹⁷⁴ They run the gamut from questioning the caselaw basis for creation of the doctrine¹⁷⁵ to suggesting that it be “retooled” for modern technologies¹⁷⁶ or overruled altogether given the prevalence of technology today.¹⁷⁷ Fourth Amendment scholar Richard Epstein argues in response to Orin Kerr that Kerr’s conception of the doctrine as a consent doctrine

168. *Id.* (explaining that the Supreme Court has regularly applied the third-party doctrine without explaining its reasoning).

169. *Id.*

170. *Id.*

171. *Id.* at 565.

172. *Id.* at 565, 589.

173. *United States v. Jones*, 132 S. Ct. 945, 962 (2012) (Alito, J., concurring).

174. See, e.g., Stephen E. Henderson, *Learning from All Fifty States: How to Apply the Fourth Amendment and Its State Analogs to Protect Third Party Information from Unreasonable Search*, 55 CATH. U. L. REV. 373 (2006); Stephen E. Henderson, *The Timely Demise of the Fourth Amendment Third Party Doctrine*, 96 IOWA L. REV. BULL. 39 (2011); Erin Murphy, *The Case Against the Case for Third-Party Doctrine: A Response to Epstein and Kerr*, 24 BERKELEY TECH. L.J. 1239 (2009).

175. Susan W. Brenner & Leo L. Clarke, *Fourth Amendment Protection for Shared Privacy Rights in Stored Transactional Data*, 14 J.L. & POL’Y 211 (2006); Arnold H. Loewy, *The Fourth Amendment as a Device for Protecting the Innocent*, 81 MICH. L. REV. 1229 (1983).

176. Matthew D. Lawless, Note, *The Third Party Doctrine Redux: Internet Search Records and the Case for a “Crazy Quilt” of Fourth Amendment Protection*, 11 UCLA J.L. & TECH. 1, 3–4 (2007).

177. Andrew J. DeFilippis, Note, *Securing Informationships: Recognizing a Right to Privity in Fourth Amendment Jurisprudence*, 115 YALE L.J. 1086, 1092 (2006).

changes very little; it is simply another way of saying individuals “assume risk” when using modern technological devices.¹⁷⁸ He argues that consent is irrelevant because these individuals are nonetheless unlikely to forego these devices given their utility in society.¹⁷⁹

The controversial nature of the third-party doctrine and its growing relevance in the Information Age suggest that the endorsement of a sitting Justice could lead to reconsideration of the third-party doctrine in future cases.

C. CONCEPT TWO: SUMMATION OF MOVEMENTS AND MOSAIC THEORY

The fact that Justice Sotomayor agreed with Justice Alito that length of surveillance could render a nontrespassory observance a search lent the weight of five justices to this conclusion. Although Justice Alito did not establish a clear threshold test for determining what constitutes “long-term,” the *Jones* concurrences nevertheless play an important role in the debate over the evolution of doctrine related to “voluntary” communication of information today.¹⁸⁰

The five-justice support for Justice Alito’s conclusion that long-term surveillance constitutes a search is closely tied to the argument by the D.C. Circuit that the summation of individual movements to create a mosaic of a person’s life violates a person’s reasonable expectation of privacy in a way that individual surveillance incidents do not.¹⁸¹ While Justice Alito and Justice Sotomayor did not equate the voluntariness implicated in each and thus reach no joint conclusion, these two concepts are closely related and judicial support for them is best explored in tandem.

Under the mosaic theory, the core argument is that a person’s interest in privacy regarding the totality of their movements is greater than that in each individual movement.¹⁸² The D.C. Circuit posited that reasonable people presume that they can be filmed at the bank and gas station without a warrant, but they may not necessarily presume that their every movement in between and thereafter could be similarly cataloged and pieced together to

178. Richard A. Epstein, *Privacy and the Third Hand: Lessons from the Common Law of Reasonable Expectations*, 24 BERKELEY TECH. L.J. 1199, 1204, 1206 (2009) (“The acceptance of a risk does not follow from knowledge of the risk. Whatever one thinks of Kerr’s conclusions, his analytical approach is wrong for its excessive reliance on consent.”).

179. *Id.*

180. Courts have already attempted to apply Justice Alito’s explanation of long-term surveillance as a test as explored in Section III.A, *supra*.

181. *United States v. Maynard*, 615 F.3d 544, 558 (D.C. Cir. 2010), *aff’d sub nom.* *United States v. Jones* 132 S. Ct. 945 (2012).

182. *Id.*

create a complete record of their movements.¹⁸³ As discussed in Section II.A, *supra*, the D.C. Circuit looked to *U.S. Department of Justice v. Reporters Committee for Freedom of Press* and *Smith v. Maryland* in order to argue that individuals clearly have a different privacy interest in a list of phone numbers dialed than they do in one phone number, as people have more privacy interest in a total rap sheet than a particular incident.¹⁸⁴ Even though individuals may know that they volunteer their location, the phone numbers they dial, and each criminal offense they commit, the D.C. Circuit argued that while Jones *actually* voluntarily and passively exposed the totality of his movements, these movements would not have been previously considered *constructively* exposed because constant, aggregated surveillance would have been very unlikely with prior technologies.¹⁸⁵ The D.C. Circuit characterized the *Katz* test by explaining that when “considering whether something is ‘exposed’ to the public as that term was used in *Katz*, we ask not what another person can physically and may lawfully do but rather what a reasonable person expects another might actually do.”¹⁸⁶ It thus held that Jones would not have anticipated continuous surveillance despite knowing the technology for such surveillance existed and that his voluntary actions would have enabled such observation.

A close examination of long-term surveillance as characterized by Justice Alito reveals that the issues under the mosaic theory and long-term surveillance are fundamentally the same. The Supreme Court has held that “[a] person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another”¹⁸⁷ because travel on public streets constitutes a voluntary conveyance of information regarding the person’s whereabouts to “anyone who wanted to look.”¹⁸⁸ However, five justices took issue with this sort of long-term surveillance in *Jones* precisely because of the way in which information can now be aggregated in a way that people do not anticipate—as Justice Alito mentioned in *Jones*, the surveillance methods may “involve[] a degree of intrusion that a reasonable person would not have anticipated.”¹⁸⁹ Justice Alito noted the relevance of advancing technology to these changes in what people reasonably anticipate. He stated that “[i]n the pre-computer age, the greatest protections of privacy were neither constitutional nor statutory,

183. *Id.* at 560.

184. *Id.* at 561.

185. *Id.* at 560.

186. *Id.* at 559.

187. *United States v. Knotts*, 460 U.S. 276, 281 (1983).

188. *Id.* at 281–82.

189. *United States v. Jones*, 132 S. Ct. 945, 963 (2012).

but practical” because such surveillance was much rarer due to the costs and difficulty it previously required.¹⁹⁰

Despite the absence of an explicit endorsement of the mosaic theory by either concurrence, the close relation of their alternative long-term surveillance arguments, endorsed by five justices, creates the possibility that the mosaic theory could prove successful in future cases. Moreover, both the Supreme Court and D.C. Circuit’s treatments of *Jones* present crucial questions about “voluntariness” generally that the Court will undoubtedly need to address in future cases implicating technology-enabled search without a trespass. If the Court considers reasonable expectations of privacy and “voluntariness” in the context of both aggregation arguments and the third-party doctrine, the Court would likely be able to adopt an understanding of Fourth Amendment searches that reflects reasonable expectations of privacy in the Information Age.

V. CONCLUSION

The binding elements of the *Jones* decision establish a minimum test for identifying Fourth Amendment violations. *Jones* considers all trespass for the purpose of collecting information to be a search; thus, courts do not need to consider *Katz*’s reasonable-expectations-of-privacy test when a trespass has occurred. Regardless of whether the test is a reversion or brand new, it will govern future cases and require courts to apply the reasonable-expectation-of-privacy test only in the absence of a physical trespass. Courts are already learning to apply this approach to new cases, and it provides clarity in many of them.

Additionally, Justices Alito and Sotomayor in *Jones* gave significant fodder to commentators and judges attempting to predict whether, and how, the Supreme Court will apply the reasonable-expectation-of-privacy test in the future. The *Jones* concurrences allowed for the possibility of five votes in favor of reconsidering the voluntariness at the heart of disclosure of information in today’s highly technological, data-intensive society. They indicate how Justices Alito, Sotomayor, and their cosigners may vote in future cases involving technologies that surveil without a trespass. The *Jones* concurrences seem to establish a five-justice majority for the proposition that long-term surveillance qualifies as a search even in the absence of a trespass. Lower courts, however, have indicated that they will need clarification before adopting this agreement as a rule. Lastly, Justice Sotomayor’s concurrence may have planted a seed for reconsidering the third-party doctrine.

190. *Id.*

In the opening quote of this Note, Ninth Circuit Court Judge Alex Kozinski questioned whether people will regret investing their personal data in keychains and online accounts, given what can occur when such information is out of one's own control. The question may well be moot, as individuals' use of technology to facilitate their personal and professional lives is already ingrained in modern society and unlikely to decrease, regardless of Fourth Amendment concerns. If the Fourth Amendment is going to retain value in the Information Age, it is difficult to accept the idea that law enforcement should not need a warrant to obtain cellphone location data in the same vein that they would need a warrant to attach a GPS tracker to a car. The question that remains is whether the law will primarily adjust to protect citizens given these shifting norms or to support law enforcement given their evolving capabilities. *Jones* does not answer this question or provide any clear test, but it lays the groundwork for future cases that may consider it and suggests the steps that courts and legislatures may take in adapting to the Information Age.

