No. 10-1259

In the Supreme Court of the United States

UNITED STATES OF AMERICA, PETITIONER

v.

ANTOINE JONES, RESPONDENT

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF OF AMICUS CURIAE THE CONSTITUTION PROJECT IN SUPPORT OF RESPONDENT

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INTEREST OF AMICUS CURIAE[1]

The Constitution Project ("Amicus") is an independent, nonprofit, bipartisan organization that promotes and defends constitutional safeguards. Amicus brings together legal and policy experts from across the political spectrum to promote consensus solutions to pressing constitutional issues, frequently appearing as amicus curiae before the United States Supreme Court, the federal courts of appeals, and the highest state courts in support of constitutional rights.

In the wake of September 11, 2001, Amicus created the Liberty and Security Committee, a blue-ribbon, bipartisan committee of prominent Americans dedicated to protecting both national security and civil liberties. As part of that mission, the Committee develops policy recommendations on issues, including governmental surveillance, which emphasize the need for all three branches of government to play a role in safeguarding constitutional rights. In 2006, the Committee released *Guidelines for Public Video Surveillance: A Guide to Protecting Communities and Preserving Civil Liberties*, analyzing how rapid changes in technology have eroded the distinction between private and public spaces in the context of public video surveillance systems. On September 21, 2011, the Committee released its *Statement on Location Tracking*, in which Committee

[1] The parties have consented to the filing of this brief in letters on file with the Clerk. No counsel for any party authored this brief in whole or in part, and no person or entity, other than amicus curiae, its members, or its counsel, made a monetary contribution intended to fund the preparation or submission of this brief.

members urged that we must "carry forward Fourth Amendment safeguards into the Digital Age."[2] The Committee concluded that the Fourth Amendment requires law enforcement to obtain a warrant before installing a GPS device on an individual's property, and before employing GPS technology to conduct prolonged tracking of an individual's movements, even if on public streets.

Amicus is dedicated to ensuring that transformative changes in surveillance technology do not undermine the protections of property interests and privacy rights that the Framers enshrined in the Fourth Amendment. Accordingly, Amicus has a substantial interest in the important issues raised in this case.

SUMMARY OF ARGUMENT

GPS technology constitutes an inexpensive and exceedingly powerful government tool that makes possible prolonged and exceptionally detailed surveillance far beyond the capacity of human beings. Installation of a GPS device on a private vehicle requires government agents to tamper with the vehicle, raising constitutional concerns about government interference with the owner's possessory interests in the vehicle. Technological intrusions into public and private spaces can significantly infringe upon a legitimate expectation of privacy. Installation of a GPS device on private prop-

[2] The report is available at http://www.constitutionproject.org/pdf/locationtrackingreport.pdf. A list of the Committee's members joining the report is provided in the Appendix attached hereto.

erty to conduct protracted, pervasive, and continuous remote surveillance constitutes both a seizure and a search, in violation of the Fourth Amendment.

1. While the Court's Fourth Amendment jurisprudence has shifted from a rigid property-based inquiry to an examination of objective and subjective privacy interests, the Court has never retreated from its holdings that the Fourth Amendment protects possessory property interests even in cases implicating no privacy deprivations. Even de minimis instances of trespass and other physical encroachments can interfere with an owner's right to exclusive use of his property and rise to the level of a constitutional deprivation. Vehicles are "effects" under the meaning of the Fourth Amendment and therefore fall under the sweep of its protections, absent exigent circumstances that do not exist in this case.

Moreover, affixing a GPS device to a vehicle conscripts that private property into the service of the government by improperly converting the private vehicle into a public surveillance tool, amounting to an unconstitutional seizure. Far from the de minimis interference that the government describes, installation of a GPS device on a vehicle effectively commandeers it for prolonged use as a police surveillance tool, infringing upon the owner's possessory property interest.

Thus, when the government's use of GPS monitoring requires installing a device on an individual's vehicle or other property in violation of the right to exclude, this triggers Fourth Amendment protection, necessitating a warrant substantiated by probable cause.

2. Employing GPS technology to conduct continuous and comprehensive monitoring of Jones's vehicle for twenty-eight days without a valid warrant constituted an impermissible search. This Court has never addressed whether prolonged, warrantless GPS surveillance is constitutional, and its quarter-century-old holding in *United States* v. *Knotts*, 460 U.S. 276 (1983), does not control. The government acknowledges that *Knotts* was not intended to apply to future misuses of electronic surveillance, nor does it genuinely dispute that GPS represents a powerful and transformative change in surveillance technology. Instead, the government spends most of its opening brief arguing that prolonged, warrantless GPS monitoring is merely sense-augmenting and conveys the same type of information as beeper technology. Those arguments are mistaken.

The government is wrong in contending that GPS merely assists government agents making observations in public view. Gov't Br. at 22. Technology has conflated private and public spaces, expanding dramatically the scope of private information exposed to public view. While the GPS surveillance at issue here occurred as Jones drove on public streets, Fourth Amendment protections are not geographically restricted. See *Katz* v. *United States*, 389 U.S. 347 (1967). Rather, the reasonableness of privacy expectations hinges on the nature of the government's intrusion.

GPS has made pervasive and continuous location tracking possible in a way that human observation never could. Light years more advanced than the beeper technology that *Knotts* considered in 1983, GPS is re-

mote, automated, and entirely extrasensory. No method of natural human observation or sense-augmented observation even approaches the broad sweep of surveillance information that GPS yields. GPS technology thus does not "assist" human surveillance by any stretch of the definition; to the contrary, it displaces the need for human actors completely. Also unlike the beepers at issue in *Knotts*—which were incapable of data collection or storage—GPS can collect massive quantities of surveillance data and transmit this data to government computers for unlimited storage, processing, and analysis. Aggregated data collected via GPS affords the government access to comprehensive information concerning a person's behavioral patterns, not merely isolated movements. GPS thus enables the government to examine and pry into a subject's "way of life," including constitutionally protected, lawful associations. Such pervasive monitoring of an individual's movements reveals information that most Americans expect to remain private, even if their discrete, individual movements occur in public.

Finally, GPS technology enables the simultaneous surveillance of a nearly infinite number of subjects. Unchecked by judicial oversight, the continued proliferation and development of GPS raises the specter of an Orwellian society in which the government has free reign to subject any citizen to prolonged and limitless monitoring via powerful extrasensory surveillance technology. The government's unsupported assurances notwithstanding, recent examples of government abuse of GPS surveillance have already provoked public outcry and threaten to undermine the Framers' intent of

safeguarding citizens from unreasonable government encroachments.

Requiring a warrant for prolonged GPS monitoring will not undermine the technology's efficacy as a law enforcement tool. GPS data is, by its nature, most valuable over an extended period. The short time required to obtain a warrant is therefore highly unlikely to impede law enforcement or national security objectives. Law enforcement may avail itself of exigent-circumstances exceptions—such as "hot pursuit" doctrine—in appropriate situations.

Accordingly, this Court should affirm the judgment below and establish a bright-line rule that law enforcement obtain a warrant prior to conducting GPS surveillance that exceeds a twenty-four-hour period, a single trip, or mere sense-augmentation. Such a warrant requirement comports with this Court's "frank recognition that the Constitution requires the sacrifice of neither security nor liberty." *Schneckloth* v. *Bustamonte*, 412 U.S. 218, 225 (1973).

ARGUMENT

I. ATTACHING A GPS DEVICE TO A PRIVATE VEHICLE INFRINGES THE OWNER'S PROPERTY INTERESTS AND CONSTITUTES A "SEIZURE" UNDER THE FOURTH AMENDMENT

By physically tampering with Jones's vehicle to install the GPS device and later change its battery, federal agents committed a trespass. This violated his property interests wholly apart from any incursion into privacy interests. The Court should decline the Government's invitation to excuse its intrusion as a "technical trespass." Gov't Br. at 15. The Government violated Jones's possessory interests in the vehicle and his right to exclude not only by physically interfering with his vehicle, but also by covertly using GPS technology to conscript the private vehicle into a government surveillance tool.

A. The Fourth Amendment Continues to Protect Property Interests, in Addition to Privacy Interests

While the Court's Fourth Amendment jurisprudence has evolved over the past century from a strict property-based analysis to a broader privacy inquiry, modern cases "unmistakably hold that the Amendment protects property as well as privacy." *Soldal* v. *Cook County, Ill.*, 506 U.S. 56, 62 (1992).

Early Fourth Amendment cases emphasized property rights, grounded in traditional property concepts such as trespass. See, *e.g.*, *Olmstead* v. *United States*, 277 U.S. 438, 457 (1928) (wiretapping did not violate the

Fourth Amendment simply because "[t]he insertions were made without trespass upon any property of the defendants."). As technology advanced, enabling the government to monitor citizens in entirely new ways, the Court began shifting its analysis from the "technicality of a trespass" to an inquiry into "the reality of an actual intrusion into a constitutionally protected area." *Silverman* v. *United States*, 365 U.S. 505, 512 (1961). In its 1967 decision in *Katz* v. *United States*, the Court retreated from its earlier view that "surveillance without any trespass and without the seizure of any material object fell outside the ambit of the Constitution." 389 U.S. 347, 352-353 (1967). Rather, the Court held that even in the absence of a physical trespass or seizure, invasion of privacy-based interests could implicate the Fourth Amendment. *Id.*

While the Fourth Amendment inquiry is no longer strictly a property-based analysis, the Court has never "abandoned use of property concepts in determining the presence or absence of the privacy interests protected by" the Fourth Amendment. *Rakas* v. *Illinois*, 439 U.S. 128, 143 n.12 (1978). To the contrary, "[o]ne of the main rights attaching to property is the right to exclude others" and "one who owns or lawfully possesses or controls property will, in all likelihood, have a legitimate expectation of privacy by virtue of the right to exclude." *Ibid.* The Fourth Amendment analysis may have "shift[ed] in emphasis from property to privacy," but the Court has given "no suggestion that this shift in emphasis * * * snuffed out the previously recognized protection for property under the Fourth Amendment." *Soldal*, 506 U.S. at 64.

Under the Court's modern analysis, a "seizure" of property within the meaning of the Fourth Amendment occurs when "there is some meaningful interference with an individual's possessory interests in that property." *United States* v. *Karo*, 468 U.S. 705, 712 (1984) (quoting *United States* v. *Jacobsen*, 466 U.S. 109, 113 (1984)). This is true even if the interference implicates no privacy or liberty interest. *Soldal*, 506 U.S. at 65 ("We thus are unconvinced that any of the Court's prior cases supports the view that the Fourth Amendment protects against unreasonable seizures of property only where privacy or liberty is also implicated."). Accordingly, while the Government trumpets that Jones lacked any expectation of *privacy* in the exterior of his vehicle, that is irrelevant to the property and seizure analyses.

B. The Government's Installation of The GPS Device Trespassed on Jones's Vehicle, Transforming It Into a Government Surveillance Tool

1. Jones had a protected property interest in the vehicle

Vehicles are subject to constitutional protection. *Coolidge* v. *New Hampshire*, 403 U.S. 443, 461 (1971) ("The word 'automobile' is not a talisman in whose presence the Fourth Amendment fades away and disappears."). This Court has recognized that the Fourth Amendment protects both privacy interests in vehicles, see *Arizona* v. *Gant*, 556 U.S. 332, 497 (2009), as well as property interests, *Soldal*, 506 U.S. at 65 (observing that, in *Cardwell* v. *Lewis*, 417 U.S. 583 (1974), "both

the plurality and the dissenting Justices considered the defendant's auto deserving of Fourth Amendment protection even though privacy interests were not at stake").

Nobody contests that Jones has a possessory interest in the Jeep Cherokee to which the police affixed the GPS device in this case. Jones therefore enjoys standing to vindicate his property interest in the Jeep, a critical distinction between this case and *Knotts*, in which the respondent lacked standing to challenge the original installation of the beeper. 460 U.S. 276, 280 n.** (1983). Indeed, Justice Brennan observed at the time that *Knotts* would have been a "much more difficult case if respondent had challenged * * * [the beeper's] original installation." *Id.* at 286-288 (Brennan, J., concurring). Similarly, in *Karo*, federal agents installed a beeper in a can of ether in which respondent had no property interest. 468 U.S. at 708.

2. The physical installation of the GPS device amounted to a trespass

Federal agents made unauthorized physical contact with Jones's Jeep at least twice, including affixing the GPS device to the vehicle and later returning to the vehicle to replace the GPS device's battery. These encroachments on the Jeep unquestionably constituted government trespass and a violation of Jones' right to exclude. "[T]he attachment of such a[n electronic surveillance] device, without consent or judicial authorization, is an actual trespass." *United States* v. *Shovea*, 580 F.2d 1382, 1387 (10th Cir. 1978), cert. denied, 440

U.S. 908 (1979)[3]; see also *United States* v. *Holmes*, 521 F.2d 859, 865 (5th Cir. 1975) ("[T]he 'beeper' installation was accomplished by an actual trespass."). While the government appears grudgingly to concede the point, it argues that a "technical trespass on the space occupied by the device" does not rise to the level of a seizure. Gov't Br. at 15-16. The government is wrong in claiming that its trespass here can be excused as merely "technical."

As this Court has recognized, even a seemingly minimal physical incursion into an individual's private property in violation of that individual's right to exclude can have constitutional implications. In the Fifth Amendment takings context, the Court has held that the constitutionality of an unauthorized, permanent occupation of space does not depend on the size or volume of the space occupied. "[W]hether the installation is a taking does not depend on whether the volume of space it occupies is bigger than a breadbox." *Loretto* v. *Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 438 n.16 (1982). Thus the *Loretto* Court held that a cable company's invocation of statutory authority to install two cable boxes on an owner's roof constituted an unconstitutional taking, despite the small size (approximately 1.5 cubic feet) of the space occupied and despite the owner not discovering the occupation until years after installation. *Id.* at 438.

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[3] In *Shovea*, the Court of Appeals did not reach the question of whether the trespass rose to the level of a Fourth Amendment violation because it found that exigent circumstances justified the seizure. No exigent circumstances were present in this case.

Nor do this Court's Fourth Amendment cases excuse a government interference with property interests as "technical" based on the small size of the space occupied or the limited nature of the encroachment. In *Silverman*, the Court held that installation of a listening device on the defendants' property through a heating duct in a shared wall was an "unauthorized physical encroachment within a constitutionally protected area," even though the device in question penetrated the defendants' property by less than an inch. 365 U.S. at 510. The presence of a "physical penetration into the premises occupied by" defendants, while de minimis, was central to the Court's finding of an unconstitutional property intrusion, in violation of the Fourth Amendment. *Id.* at 509.

Perhaps recognizing that *Silverman* may compel a ruling in Jones's favor, the government relegates discussion of *Silverman* to a footnote, weakly suggesting that *Silverman*'s trespass analysis is no longer applicable in light of *Katz*. Gov't Br. at 46-47 n.6. The government is mistaken. While *Katz* held that a government trespass is not *required* for a Fourth Amendment deprivation, it did not "snuff[] out the previously recognized protection for property under the Fourth Amendment." *Soldal*, 506 U.S. at 64. Post-*Katz*, the Court has repeatedly cited *Silverman* with approval and has recognized the continuing vitality of *Silverman*'s property analysis. See, *e.g.*, *Kyllo* v. *United States*, 533 U.S. 27, 34 (2001); *Dalia* v. *United States*, 441 U.S. 238, 247 (1979); *United States* v. *White*, 401 U.S. 745, 748 (1971).

In sum, the government's installation of a GPS device on Jones's vehicle without a valid warrant was no less an unconstitutional trespass than was the compelled installation of cable boxes on the roof of an apartment building in *Loretto*, or the installation of a listening device that encroached upon defendants' property by less than one inch in *Silverman*.

3. The GPS device converted Jones's vehicle to a police tool, interfering with his legitimate possessory interests

In *Silverman*, the police installed a "spike mike" that minimally encroached defendants' property, but made contact with a heating duct, "thus converting their entire heating system into a conductor of sound." 365 U.S. at 506-507. Here, similarly, federal agents' attaching a GPS device to the Jeep effectively converted the vehicle to a police surveillance tool, working a meaningful interference with Jones's possessory interest in the Jeep.

While agents' installation of the GPS device and subsequent continuous monitoring was surreptitious and did not deprive Jones of the ability to drive the Jeep, "by using the GPS device on the vehicle to track its movements *the police asserted control over it*, converting the [vehicle] to their own use notwithstanding the defendant's continued possession." *Commonwealth* v. *Connolly*, 913 N.E.2d 356, 370 (Mass. 2009) (emphasis added).[4]

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[4] No exigent circumstances excused federal agents' conscription of Jones's vehicle as a law-enforcement tool without first ob-

The government's interference with Jones's possessory interests in the vehicle was exacerbated by its extended and indefinite duration. The GPS device occupied space on the Jeep continuously, day after day and week after week, ceasing only when the government elected to remove it. While the government may be correct in asserting that a parking official may mark with chalk the tire of a vehicle parked in a public space, such a physical intrusion is truly ephemeral in nature. Once the chalked vehicle drives away, the chalk streak dissolves, as does the government's interference with the vehicle owner's property interest. The government is not, however, entitled to spray-paint a vehicle or otherwise mark or molest it in a manner that is of continuous or permanent duration.

The government notes *Karo*'s holding that transferring to defendants a government-owned can of ether containing a beeper did not amount to a seizure. Gov't Br. at 43 (citing *Karo*, 468 U.S. at 712). In *Karo*, however, the government did not trespass on defendants' property as it did in *Silverman*, *Loretto*, and here. Agents installed the beeper in the can under authority of court order, and it was the government—and not the defendants—who owned the can at the moment of installation. By contrast, here the government did not own the Jeep, and agents trespassed upon the vehicle

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taining a valid warrant. *United States* v. *Russell*, 80 U.S. 623, 627-28 (1871) (holding that government commandeering of a vehicle is permissible only "cases of extreme necessity in time of war or of immediate and impending public danger, in which private property may be impressed into the public service, or may be seized and appropriated to the public use").

to install the GPS device. This infringed Jones's possessory interests in the vehicle in a manner that was far more substantial and offensive than the *Karo* defendants' minimal property interests in the can of ether they received from a government informant.

The government also notes the holdings of several circuit courts that installing a GPS device does not amount to a seizure absent a showing that the intrusion causes damage to the affected vehicle, affects its driving qualities, draws from its power, or occupies space that could have been used for packages or passengers. See *United States* v. *Hernandez*, 647 F.3d 216, 220 n.4 (5th Cir. 2011); *United States* v. *Garcia*, 474 F.3d 994, 996 (7th Cir. 2007), cert. denied, 552 U.S. 883 (2007); *United States* v. *McIver*, 186 F.3d 1119, 1133 (9th Cir. 1999), cert. denied, 528 U.S. 1177 (2000). These cases, however, fail to address in their analyses this Court's binding precedents in *Silverman* and *Soldal*. Nor do they acknowledge that the government's attaching a GPS device to a vehicle amounts to a usurpation of control over that vehicle—even if silent and clandestine—that meaningfully interferes with property interests in the vehicle.

The Founders well understood that property rights encompass the right to exclude others from its use, even if this use does not impede one's own enjoyment or cause any damage. Blackstone described the contemporaneous understanding of property as "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right to any other individual in the un-

iverse." 2 William Blackstone, *Commentaries* *2. Indeed, that is still recognized as a fundamental aspect of property: "[o]ne who intentionally enters land in the possession of another without the consent of the possessor or other privilege so to do, is liable for a trespass * * * although his presence on the land causes no harm to the land, its possessor or to any thing or person in whose security the possessor has a legally protected interest." Restatement (Second) of Torts § 163.

Government interference with a private owner's right to exclude can trigger constitutional protection even if the interference appears minimal and does not render the property unusable. See, e.g., *Loretto*, 458 U.S. at 422-424 (illustrating that the cable installation did not preclude residents from enjoying unfettered access to all uses of the property); *Kaiser Aetna* v. *United States*, 444 U.S. 164, 179-180 (1979) (holding that even public accommodations can suffer takings absent an ability to exclude whomever an owner wishes). Rather, the encroachment occurs when an individual loses the right to exclude whomever he wishes. See *Skip Kirchdorfer, Inc.* v. *United States*, 6 F.3d 1573, 1582-583 (Fed. Cir. 1993). Thus, even though the GPS device did not hinder Jones' operation of the Jeep, its installation and occupation of space infringed his right to exclude others from use of that vehicle.

For the foregoing reasons, the Court should require law enforcement to obtain a warrant prior to trespassing on private vehicles to install surveillance devices or similar technology to transform vehicles into police surveillance tools.

II. Prolonged GPS Monitoring Violates an Individual's Privacy Interests and Constitutes a "Search" Under the Fourth Amendment

The government's warrantless conscription of the Jeep into police service as a monitoring tool impermissibly violated not only Jones's property interests, but his legitimate privacy interests as well. Using GPS technology to monitor constantly and comprehensively the Jeep's every movement for a period of twenty-eight days constituted an impermissible search, in violation of the Fourth Amendment.

"It would be foolish to contend that the degree of privacy secured to citizens by the Fourth Amendment has been entirely unaffected by the advance of technology." *Kyllo* v. *United States*, 533 U.S. 27, 33-34 (2001). Advanced surveillance technology blurs the distinction between private and public spaces and raises "especially sensitive" Fourth Amendment concerns. *United States* v. *Knotts*, 460 U.S. 276, 287-288 (1983) (Stevens, J., concurring). In our increasingly technology-dependent society, preserving constitutional freedoms requires limiting the "power of technology to shrink the realm of guaranteed privacy." *Kyllo*, 533 U.S. at 34. Such an exercise requires limiting the government's warrantless use of technology to commandeer an individual's private vehicle into service as the government's data aggregator.

The government advances a broad argument that individuals enjoy no reasonable expectation of privacy when in public places. Gov't Br. at 17-39. But Fourth

Amendment protections—which extend to "people, not places," *Katz* v. *United States*, 389 U.S. 347, 351 (1967)—cannot be so geographically cabined. Rather, what an individual "seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected." *Ibid.* In cases of technology-enabled surveillance, the reasonableness of a person's privacy expectations hinges on the nature of the government's intrusion.

In *Knotts*, the Court took up the issue of relatively primitive beeper technology for limited durations, specifically deferring the question of the constitutionality of prolonged, technology-aided surveillance. 460 U.S. at 283-284. The invasive realities of GPS technology now squarely present the Court with the occasion to set forth "clear specification of those methods of surveillance that require a warrant." *Kyllo*, 533 U.S. at 40. To this end, the Court should establish a bright line rule mandating that law enforcement obtain a warrant prior to conducting prolonged GPS surveillance.[5]

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[5] Amicus defines "prolonged" surveillance as any GPS monitoring that exceeds a twenty-four-hour period or a single trip. Alternatively, the line could be drawn at any surveillance that exceeds mere sense-augmentation. This Court has recognized that it must "articulate more clearly the boundaries of what is permissible under the Fourth Amendment," and, although the Court may "hesitate to announce that the Constitution compels a specific time limit, it is important to provide some degree of certainty," to enable law enforcement to establish procedures that "fall within constitutional bounds." *County of Riverside* v. *McLaughlin*, 500 U.S. 44, 56 (1991) (setting forth bright-line rule that defendants are entitled to judicial determination of probable cause within forty-eight hours of arrest).

A. GPS Surveillance Over an Extended Period Exceeds the Capacity of Human Observation and Violates Reasonable Expectations of Privacy

1. The extrasensory nature of GPS technology violates reasonable expectations of privacy

Developed by the U.S. Department of Defense, GPS is a satellite-based navigation system that autonomously and continuously renders precise location information. When equipped with a transmitter or recorder, GPS enables government agents to conduct unlimited, pervasive, and continuous remote extrasensory surveillance. Viewed and analyzed in the aggregate, GPS data reveals otherwise imperceptible patterns of individual and group behavior.

The government suggests that GPS merely assists government agents in "mak[ing] observations in public view." Gov't Br. at 22. The government's characterization is wrong. GPS technology does not "assist" naked-eye surveillance efforts; Rather, it supplants them wholesale. No method of human surveillance comes close to rivaling GPS in the technology's capacity for generating comprehensive, continuous, and accurate information.

This Court has required that surveillance employing extrasensory technology can enhance mere observation to such a degree that it transforms the observation into a search subject to Fourth Amendment requirements. *Kyllo*, for example, held that warrantless surveillance using thermal-imaging technology re-

vealed information that was "otherwise imperceptible" to human observation, 533 U.S. at 38 n.5, and thus constituted a search requiring a warrant. Similarly, in *Dow Chemical Co.* v. *United States*, the Court recognized that "surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant." 476 U.S. 227, 238 (1986); *cf. Walter* v. *United States*, 447 U.S. 649 (1980) (holding that warrantless use of a film projector to screen lawfully obtained evidence violated the Fourth Amendment even though the private search doctrine permitted a visual review of the same materials in plain sight).

While *Kyllo* involved the "sanctity of the home," 533 U.S. at 37, Fourth Amendment protections "do not vanish when the search in question is transferred from the setting of a home." *Katz*, 389 U.S. at 359. *Katz*, for example, recognized that an individual enjoys a reasonable expectation of privacy while in a public telephone booth, despite having knowingly exposed his presence to the public, transmitting his voice over public telephone lines, and unknowingly speaking into a government-installed listening device that did not trespass on private space. *Ibid.* A person's reasonable expectation of privacy extends to vehicles as well: the Court has recognized that a motorist's privacy interest in his vehicle, while less substantial than in his home, "is nevertheless important and deserving of constitutional protection." *Arizona* v. *Gant*, 556 U.S. 332, 497 (2009).

2. Prolonged GPS surveillance reveals not just "a day in the life" but the "way of life" of the subject, violating reasonable expectations of privacy

The government's characterization of GPS technology as merely conveying location information to "anyone who wants to look", (Gov't Br. at 22), woefully understates the power of the technology. In addition to enabling extrasensory monitoring, GPS aggregates data in a manner that the beeper technology addressed in *Knotts* did not: GPS works independently around the clock collecting and transmitting to government computers detailed information for unlimited storage and automated digital analysis.

Government agents "simply sit back and let the data—time, date, speed, direction, duration, and location —amass. * * * The data may be stored infinitely; new information—based on the stored data and a variety of government needs—may be generated at any time and per any governmentally-requested calculus / formula / permutation / coordinates." Lenese Herbert, *Challenging the (Un)Constitutionality of Governmental GPS Surveillance*, 26 J. Crim. Just. 34, 35 (2011). GPS does not merely augment sensory observation, it completely displaces it: not only in terms of pervasiveness, but in the technology's power to facilitate comprehensive pattern and behavioral analysis beyond the capacity of human observation and processing.

The Framers, as Justice Brandeis famously observed, "sought to protect Americans in their beliefs, their thoughts, their emotions and their sensations.

They conferred, as against the government, the right to be left alone—the most comprehensive of rights and the right most valued by civilized man." *Olmstead*, 277 U.S. at 478 (Brandeis, J., dissenting). Yet when government agents affix a GPS device to a person's private vehicle, the government transforms the vehicle into a tool for amassing data about that person's religious beliefs, physical and mental health, private habits and encounters, political and professional associations, and sexual orientation, to name but a few examples. This hardly protects monitored citizens in the privacy of their beliefs, thoughts, emotions, or sensations.

Indeed, prolonged GPS surveillance reveals not just a "day in the life" but the "way of life" of the subject. *United States* v. *Maynard*, 615 F.3d 544, 561-562 (D.C. Cir. 2010). That discrete movements may occur publicly does not strip individuals of their expectation of privacy in the *aggregation* of their movements over a protracted time period. Travel to houses of worship, psychiatrist offices, partisan strategy meetings, or trysts are, by necessity, exposed to the public in isolation. Absent continuous GPS monitoring, however, natural limitations on human powers of observation and data compilation and analysis prevent in-depth examination of a person's movements over time. Around-the-clock monitoring treads upon not only Fourth Amendment protections, but upon First Amendment "freedom to associate and privacy in one's associations." See *NAACP* v. *Alabama*, 357 U.S. 449, 462 (1958). Thus the patterns and sequencings of peoples' movements constitute information that most Americans seek to preserve as—and reasonably expect to remain—

private and away from the prying eye of government. See *Katz*, 389 U.S. at 351.

Despite most motorists' reasonable expectation that government is not employing powerful surveillance technology to monitor and analyze their every movement, the government blithely dismisses this possibility, asserting that the "likelihood" of observation is irrelevant to the constitutional analysis. Gov't Br. at 23-25. This Court, however, has counseled a more common-sense approach to analyzing reasonable expectations. In *Bond* v. *United States*, 529 U.S. 334, 338-339 (2000), the Court held that a Border Patrol agent violated a bus passenger's Fourth Amendment rights by physically manipulating a bag that the passenger had stored in a publicly accessible overhead compartment. Although a bus passenger expects that others may handle his bag, the Court reasoned, the passenger does not expect a government agent to feel his bag in an "exploratory manner."

Bond went on to observe that "[p]hysically invasive inspection is simply more intrusive than purely visual inspection." 529 U.S at 337. It surely follows that around-the-clock, technological monitoring and data aggregation is "more intrusive" than necessarily-limited human visual inspection of a vehicle's movements. Most Americans would reasonably not expect the government to conduct GPS monitoring any more than they would expect agents physically to manipulate the outside of bags stored in publicly-accessible spaces.

3. Knotts contemplated an entirely different type of technology and is inapposite here

The government is incorrect in contending that GPS technology "convey[s] the same type of information that the beeper conveyed in *Knotts*." Gov't Br. at 38. GPS technology is distinct from beepers in numerous and significant ways.

First, beepers transmit an insufficient signal to permit remote and autonomous surveillance, requiring continuous human involvement. Accordingly, *Knotts* characterized beeper technology as merely sense-augmenting and *not* extrasensory. *Knotts*, 460 U.S. at 281; see also *id.* at 282 ("Visual surveillance from public places * * * would have sufficed to reveal all facts to the police."); *id.* at 283-84 (observing that the beeper did not exceed the capacity of sensory observation); *id.* at 285 ("[T]he beeper was [not] used in any way to reveal information * * * that would not have been visible to the naked eye"); see also *United States* v. *Karo*, 468 U.S. 705, 714 (1984) (explaining that a Fourth Amendment violation may occur where a beeper provided information unobservable "by the naked eye"). By contrast, GPS technology works independently and autonomously, requiring no human involvement.

Second, beepers function passively, with zero capacity for data collection or storage. Beeper surveillance is thus necessarily limited to a discrete journey. *Knotts*, 460 U.S. at 285. *Knotts* emphasized the "limited use which the government made of the signals from [the] beeper," explaining that nothing "indicate[d] that the beeper signal was received or relied upon after

it had * * * ended its [] journey." *Id.* at 284-285. At most, therefore, the sense-augmentation afforded by beepers reveals "a day in the life" of an individual subject. GPS technology, on the other hand, collects and stores vast amounts of data susceptible to government analysis, and reveals a wealth of private information in its aggregation.

Moreover, the *Knotts* Court specifically disclaimed any intent to sanction "twenty-four hour surveillance of any citizen of this country * * * without judicial knowledge or supervision." 460 U.S. at 284. While permitting the use of lawfully installed beepers, the Court specifically deferred the question of whether the government must obtain warrants to employ technology capable of prolonged surveillance. *Ibid.* (deferring analysis until "such dragnet-type law enforcement practices as respondent envisions should eventually occur"); see also *Karo*, 468 U.S. at 715 (recognizing that different types of information warrant protection from tracking). The advent of GPS technology—light-years more powerful and intrusive than the beeper technology contemplated in *Knotts*—now presents the Court with the opportunity to "determine whether different constitutional principles may be applicable" to advanced surveillance technology affixed to a person's vehicle. 460 U.S. at 284.

B. Absent a Warrant Requirement, Any American Would Be Subject to Possible Prolonged and Unchecked Monitoring Via Ever More Intrusive Technology

The Court has expressed a "strong preference for

warrants" as a "more reliable safeguard against improper searches than the hurried judgment of a law enforcement officer engaged in the often competitive enterprise of ferreting out crime." *United States* v. *Leon*, 468 U.S. 897, 913-914 (1984) (quotation omitted); see also *Vernonia Sch. Dist. 47J* v. *Acton*, 515 U.S. 646, 653 (1995). The GPS technology at issue in this case is particularly susceptible to abuse by "well-intentioned but mistakenly over-zealous * * * law enforcement." *Coolidge* v. *New Hampshire*, 403 U.S. 443, 481 (1971) (quotation omitted). Absent a warrant requirement, rapid advances in GPS and other sophisticated technologies would infringe upon the critical protection for personal privacy that the Fourth Amendment has provided against an all-knowing and all-seeing government.

1. Permitting warrantless GPS surveillance would jeopardize the Fourth Amendment's role as a bulwark against unreasonable government infringement on our privacy

The Framers intended the Fourth Amendment to defend free society from the tyranny of a police state. See, *e.g.*, 2 *Legal Papers of John Adams* 140-143 (L. Kinvin Wroth & Hiller B. Zobel eds. 1965) (summarizing James Otis' condemnation of general writs that were "an instrument of arbitrary power," that transformed officers into "tyrant[s]," "[delegated] vast powers," and failed even to impose the usual safeguard of requiring an officer to file a "return" with the issuing court); 3 *The Debates in the Several States Conventions on the Adoption of the Federal Constitution* 588 (Jonathan Elliott ed. 2d ed. 1838) (quoting John Henry's con-

cern at the Virginia ratification convention of 1788 that, absent constitutional protection, "[e]very thing the most sacred may be searched and ransacked by the strong hand of power"). Inspired by the evils of indiscriminate searches and seizures that "placed 'the liberty of every man in the hands of every petty officer,'" *Payton* v. *New York*, 445 U.S. 573, 583 n.21 (1980) (quoting James Otis), the Fourth Amendment "took its origin in the determination of the framers" to create safeguards against such abuses. *Weeks* v. *United States*, 232 U.S. 383, 390 (1914). Surely the Framers would have recoiled at envisioning the "strong hand of power" wielded by the government's unchecked use of around-the-clock and limitless GPS surveillance of private citizens.

The government claims that "practical considerations" minimize the threat of "widespread, suspicionless GPS monitoring." Gov't Br. at 14. This is hardly reassuring. GPS technology enables continuous, remote, and inexpensive surveillance across public and private areas. The surveillance devices are small, rugged, reliable, and easy to install and operate. At minimal cost, installation of a GPS device and archiving data transmitted from it permits automatic and remote monitoring of a person across a broad spectrum of time, yielding troves of comprehensive, accurate, and otherwise unobtainable information. See Nat'l Coordination Off. for Space-Based Positioning, Navigation & Timing, http://www.gps.gov/support/faq/ (last visited Sept. 10, 2011). GPS satellites can support a nearly infinite number of surveillance devices, thereby enabling cost-effective, networked, mass-monitoring of Americans'

movements and patterns of behavior. Without a requirement of judicial oversight, the only thing preventing the practice of "widespread, suspicionless GPS monitoring" is the government's own uncorroborated assurance of self-restraint.

Furthermore, the Court's ruling in this case will affect future surveillance technologies as well. Whatever Fourth Amendment rule this Court adopts here "must take account of more sophisticated systems that are already in use or in development." *Kyllo*, 533 U.S. at 36. GPS technology, already powerful and omnipresent, will likely become more prevalent as government monitoring becomes even more inexpensive and efficient. Standardization of GPS in cellular phones enables still greater surveillance precision, because phones—unlike vehicles—remain with their users constantly. Ubiquitous cell phone tracking methods, facial-recognition software, and drone technology further enable comprehensive monitoring. Electronic tagging technology such as Radio Frequency Identification ("RFID") can implant identification information in the human body. And developments in nanotechnology and bioengineering promise to expand radically, both in kind and in capacity, the potential for government surveillance. That this information "radiates" out from the person into the public—as did the sound waves that hit the phone booth in *Katz* or the heat emanating from the home's exterior in *Kyllo*—does not diminish the user's reasonable expectation that no body, including the government, is collecting and aggregating that information to assemble and analyze the most intimate details of our lives.

Justice Bradley admonished: "[I]llegitimate and unconstitutional practices get their first footing * * * by silent approaches and slight deviations from legal modes of procedure * * *. It is the duty of courts to be watchful for the constitutional rights of the citizen, and against any stealthy encroachments thereon." *Boyd* v. *United States*, 116 U.S. 616, 635 (1886). Here, permitting limitless GPS monitoring would force all Americans to assume the risk that their every vehicle movement is subject to government monitoring, recording, aggregation and analysis. Doing so would grant the government carte blanche to monitor citizens' comings and goings, absent any criminal suspicion. "Whether motivated by an honest desire to ferret out criminal conduct or nothing more than sheer curiosity, the government will be entitled to check whether we spend our lunch hour at the gym, at the temple, or at the strip club." See Renée McDonald Hutchins, *Tied Up In Knotts? GPS Technology and the Fourth Amendment*, 55 U.C.L.A. L. Rev. 409, 459 (2007). As technology advances and changes over time, "the changes have made the values served by the Fourth Amendment more, not less, important." *Coolidge*, 403 U.S. at 455.

The government, assuming the role of judge of its own actions, assures the Court that "law enforcement has not abused GPS technology." Gov't Br. at 14. Beyond its self-serving nature, this unsupported assertion rings hollow in light of documented instances of apparent abuse. For example, recently a twenty-year-old Muslim-American college student discovered a GPS device affixed to his vehicle. Forty-eight hours after removing it and requesting help online to identify it,

the FBI arrived at his home, retrieved the device, and indicated that he was under surveillance. "We have all the information we needed," the FBI explained. "You don't need to call your lawyer. Don't worry, you're boring." See Kim Zetter, *Caught Spying on Student, FBI Demands GPS Tracker Back*, Wired, Oct. 7, 2010. To date, the government has not charged the student with any crime. Nobody outside the government knows how much covert government-sponsored warrantless GPS monitoring goes undetected. The 2011 landscape demonstrates the prescience of Justice Brennan's 1977 warning that "accessibility of computerized data vastly increase[s] the potential for abuse." *Whalen* v. *Roe*, 429 U.S. 589, 606-607 (1977) (Brennan, J., concurring).

2. A warrant requirement will not impede the value of GPS surveillance as a law enforcement tool

GPS technology is unquestionably a valuable law-enforcement tool. But adherence to Fourth Amendment protections will not "den[y] law enforcement the support of the usual inferences which reasonable men draw from evidence." *Johnson* v. *United States*, 333 U.S. 10, 13-14 (1948). It will merely require "that those inferences be drawn by a neutral and detached magistrate." *Ibid.*

Because GPS data is, by its nature, most valuable over a prolonged period, the time necessary for officers to obtain a warrant will unlikely stymie law enforcement or national security objectives. *Compare Maynard*, 615 F.3d at 558 (involving GPS monitoring for twenty-eight days), *United States* v. *Pineda-Moreno*,

591 F.3d 1212, 1213 (9th Cir. 2010) (same over four months), *United States* v. *Jesus-Nunez*, No. 1:10-cr-00017-01, 2010 WL 2991229, at *1-2 (M.D. Pa. July 27, 2010) (same for eleven months), *and People* v. *Weaver*, 909 N.E.2d 1195, 1195-1196 (N.Y. 2009) (same for sixty-five days), with *Knotts*, 460 U.S. at 279 (involving beeper monitoring for a discrete journey). In cases already before the courts, including the present case, government agents have applied for and received warrants to install and employ GPS devices. See, *e.g.*, *Maynard*, 615 F.3d at 566 (noting that a warrant was issued, but expired); *Commonwealth* v. *Connolly*, 913 N.E.2d 356, 370-371 (Mass. 2009) (finding GPS warrant valid); *State* v. *Jackson*, 76 P.3d 217, 221 (Wash. 2003) (ten-day GPS warrant issued). And the federal judiciary already has standards in place to address GPS warrants. See Fed. R. Crim. P. 41(b)(4).

In the event of exigent circumstances, officers may rely upon existing "well-delineated exceptions" to the warrant requirement. *Katz*, 389 U.S. at 357. Hot pursuit, for example, may excuse a warrantless use of GPS surveillance. See *Warden, Maryland Penitentiary* v. *Hayden*, 387 U.S. 294, 298 (1967). Some police departments have already equipped police cars with air guns that fire GPS "darts" at fleeing suspects' cars to permit real-time, remote surveillance of these cars. See StarChase, http://www.starchase.com (last visited Oct. 2, 2011). The Court has also established exceptions to the warrant requirement for investigating reasonably suspicious behavior and ensuring police safety, see, *e.g.*, *Terry* v. *Ohio*, 392 U.S. 1, 27 (1968), consent searches, see, *e.g.*, *Schneckloth* v. *Bustamonte*, 412 U.S. 218

(1973), searches conducted incident to arrest, see, *e.g.*, *New York* v. *Belton*, 453 U.S. 454 (1981), searches of regulated industries, see, *e.g.*, *New York* v. *Burger*, 482 U.S. 691 (1987), and "special need[s]" searches, see, *e.g.*, *Vernonia Sch. Dist. 47J*, 515 U.S. at 646. Indeed, "[t]he argument that a warrant requirement would oblige the Government to obtain warrants in a large number of cases is hardly a compelling argument against the requirement." *Karo*, 468 U.S. at 718.

3. The Court should require law enforcement to obtain a warrant prior to conducting prolonged GPS monitoring

The GPS surveillance in this case occurred continuously, twenty-four hours per day, for twenty-eight consecutive days. The GPS device at issue was calibrated to capture detailed location information every ten seconds, collecting more than 3,000 pages of data that proved instrumental to Jones's conviction. Neither human, nor beeper-augmented surveillance could have yielded such comprehensive, accurate results. Nor could federal agents have amassed this data without using GPS to convert the Jeep into a surveillance tool.

"Applying the Fourth Amendment to new technologies may sometimes be difficult, but when it is necessary to decide a case we have no choice * * *. The-times-they-are-a-changin' is a feeble excuse for disregard of duty." *City of Ontario* v. *Quon*, 130 S. Ct. 2619, 2635 (2010) (Scalia, J., concurring). To provide both the public and law enforcement officers with much-needed clarity, the Court should draw the line at the prolonged

use of GPS monitoring. "That line, we think, must be not only firm but also bright—which requires clear specification of those methods of surveillance that require a warrant." *Kyllo*, 533 U.S. at 40. Accordingly, this Court should affirm the D.C. Circuit and establish a bright-line rule that law enforcement obtain a warrant prior to conducting prolonged GPS surveillance, such as that which exceeds a twenty-four hour period, a single trip, or mere sensory-augmentation.[6] Imposing a warrant requirement under these circumstances "will have the salutary effect of ensuring that use of [new technology] is not abused." *Karo*, 468 U.S. at 717.

CONCLUSION

The Court should affirm the judgment of the court of appeals.

Respectfully submitted,

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OCTOBER 2011

[6] See *supra* n.5 (discussing possible lines for delineating "prolonged" surveillance).

APPENDIX

MEMBERS OF THE CONSTITUTION PROJECT'S LIBERTY AND SECURITY COMMITTEE ENDORSING THE STATEMENT ON LOCATION TRACKING[1]

CO-CHAIRS:

David Cole, Professor of Law, Georgetown University Law Center.

David Keene, Former Chairman, American Conservative Union.

MEMBERS:

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[1] Affiliations are for identification purposes only and describe the member as of the time he or she endorsed the Constitution Project's *Statement on Location Tracking*.

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John W. Dean, Counsel to President Richard Nixon.

Mickey Edwards, Vice President, Aspen Institute; former Member of Congress (R-OK) and chairman of the House Republican Policy Committee.

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