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United States v. Pineda-Moreno, Tracking Down Individuals' Reasonable Expectation of Privacy in the Information Age

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NOTE

UNITED STATES v. PINEDA-MORENO: TRACKING DOWN INDIVIDUALS' REASONABLE EXPECTATION OF PRIVACY IN THE INFORMATION AGE

> "It may be said that it is the obnoxious thing in its mildest and least repulsive form; but illegitimate and unconstitutional practices get their first footing in that way, namely by silent approaches and slight deviations from legal modes of procedure."[1]

INTRODUCTION

The fantastic technological progress of the twenty-first century has provided law enforcement with more efficient methods to fight crime, pressing courts across the country to define the limits of what tactics the government may employ before it has violated an individual's Fourth Amendment rights.[2] Like many Americans, law enforcement agencies are eager to purchase the newest and most advanced technologies.[3]

[1] Boyd v. United States, 116 U.S. 616, 635 (1886).

[2] *See, e.g.*, Kyllo v. United States, 533 U.S. 27, 33-34 (2001) ("It would be foolish to contend that the degree of privacy secured to the citizens by the Fourth Amendment has been entirely unaffected by the advance of technology."); Lopez v. United States, 373 U.S. 427, 441 (1963) (Warren, C.J., concurring) (remarking "that the fantastic advances in the field of electronic communication constitute a great danger to the privacy of the individual; [and] that indiscriminate use of such devices in law enforcement raises grave constitutional questions under the Fourth and Fifth Amendments"); United States v. Pineda-Moreno, 617 F.3d 1120 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc); United States v. Garcia, 474 F.3d 994, 998 (7th Cir. 2007) ("Technological progress poses a threat to privacy by enabling an extent of surveillance that in earlier times would have been prohibitively expensive.")

[3] Lyle Denniston, *Police and High-Tech Monitoring*, SCOTUS BLOG (Nov. 22, 2010, 6:32 PM), http://www.scotusblog.com/2010/11/police-and-high-tech-monitoring/.

Among the devices that police agencies have adopted are Global Positioning System ("GPS") transmitters[4] to track the movement of individuals.[5] By recording precise geographic locations, GPS technology is an ideal alternative to visual surveillance of an individual's whereabouts.[6] However, the constitutional implications of this technology on privacy in America are unresolved, since the Supreme Court has not yet decided the issue.[7] As a result, we are left with the question whether police use of such technological advancements has propelled us into "the age of no privacy, where everyone is open to surveillance at all times."[8] As a court that covers one fifth of the country's population, the Ninth Circuit plays a major role in this developing Fourth Amendment issue.[9] Recently, it confronted the intersection of Fourth Amendment protections and law enforcement's use of GPS tracking devices in *United States v. Pineda-Moreno*.[10]

In *Pineda-Moreno*, the Ninth Circuit held that prolonged police monitoring of a defendant's precise location through the use of GPS transmitters did not constitute a search.[11] In so holding, the Ninth Circuit

[4] A GPS transmitter "records the date, time, latitude and longitude of the transmitter in programmed intervals of two to three minutes each time the GPS device moves. The GPS transmitter is approximately the size of a pack of cigarettes, and is powered by batteries, which last approximately two to three weeks. The GPS transmitter has a cellular modem component that permits remote access to the stored tracking information and current location of the transmitter." Morton v. Nassau Cnty. Police Dep't, No. 05-CV-4000 (SJF)(AKT), 2007 WL 4264569, at *1 (E.D.N.Y. Nov. 27, 2007).

[5] Ben Hubbard, *Police Turn to Secret Weapon: GPS Device*, THE WASHINGTON POST, Aug. 13, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/08/12/AR2008081203275.html.

[6] Lyle Denniston, *Police and High-Tech Monitoring*, SCOTUS BLOG (Nov. 22, 2010, 6:32 PM), http://www.scotusblog.com/2010/11/police-and-high-tech-monitoring/; *see* Ben Hubbard, *Police Turn to Secret Weapon: GPS Device*, THE WASHINGTON POST, Aug. 13, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/08/12/AR2008081203275.html (noting that officers argue that "GPS is essentially the same as having an officer trail someone, just cheaper and more accurate").

[7] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 674 (2005); *see* Matthew Mickle Werdegar, Note, *Lost? The Government Knows Where You Are: Cellular Telephone Call Location Technology and the Expectation of Privacy*, 10 STAN. L. & POL'Y REV. 103, 107 (1998) (noting that the Supreme Court has made no decision regarding GPS technology).

[8] Osborn v. United States, 385 U.S. 323, 341 (1966) (Douglas, J., dissenting).

[9] *See* United States v. Pineda-Moreno, 617 F.3d 1120, 1126 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc); Adam Cohen, The Government's New Right to Track Your Every Move With GPS, TIME, Aug. 25, 2010, http://www.time.com/time/nation/article/0,8599,2013150,00.html.

[10] United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010).

[11] *Id*. at 1217.

relied on the Supreme Court decision in *United States v. Knotts*.[12] *Knotts* 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."[13] Prior to the Ninth Circuit's decision in *Pineda-Moreno*, most federal appellate courts interpreted *Knotts* to hold that location tracking outside the home is analogous to physical surveillance and therefore does not constitute a search under the Fourth Amendment.[14] Since *Pineda-Moreno*, however, other courts have disagreed with the Ninth Circuit and have held that prolonged GPS monitoring of a defendant's movements does constitute a search.[15]

Part I of this Note presents the facts and procedural history of *United States v. Pineda-Moreno*, followed by a discussion of relevant Fourth Amendment jurisprudence, highlighting the Supreme Court's public-exposure doctrine as described in *United States v. Knotts*. Part II argues that the Ninth Circuit based its decision in *Pineda-Moreno* on the precise issue the Supreme Court declined to decide in *Knotts*: whether prolonged twenty-four-hour electronic surveillance of an individual constitutes a search. In Part III, this Note goes on to analyze how the Ninth Circuit's misinterpretation of the *Knotts* holding compelled it to prematurely reject Pineda-Moreno's Fourth Amendment claim without analyzing whether he had a justifiable expectation of privacy. Part IV concludes that law enforcement's use of GPS technology to monitor Pineda-Moreno's movements over the course of four months constituted a search because it violated his reasonable expectation of privacy. In Part V, this Note proposes a practical two-step analysis that balances the Supreme Court's public-exposure doctrine with the privacy interest at stake when the government utilizes advanced technology, like GPS tracking, to conduct comprehensive surveillance of an individual.

I. BACKGROUND

The Ninth Circuit decided two issues in *Pineda-Moreno*: first, whether Pineda-Moreno possessed a reasonable expectation of privacy in the undercarriage of his vehicle when it was parked in his driveway, on the street, or in a public parking lot;[16] and second, whether the use of

[12] United States v. Knotts, 460 U.S. 276 (1983).

[13] *Id*. at 282.

[14] *See* United States v. Marquez, 605 F.3d 604, 609-10 (8th Cir. 2010); United States v. Garcia, 474 F.3d 994, 996 (7th Cir. 2007).

[15] United States v. Maynard, 615 F.3d 544, 555-56 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[16] United States v. Pineda-Moreno, 591 F.3d 1212, 1214-15 (9th Cir. 2010).

GPS devices to monitor the totality of Pineda-Moreno's movements in his vehicle over the course of four months constituted a search under the Fourth Amendment.[17]

A. FACTUAL AND PROCEDURAL HISTORY OF *UNITED STATES V. PINEDA-MORENO*

While shopping at a Home Depot on May 28, 2007, a Drug Enforcement Administration (DEA) special agent noticed a group of men purchasing a large quantity of fertilizer.[18] The agent recognized the fertilizer as a type commonly used to grow marijuana.[19] The men left the store in a 1997 Jeep Grand Cherokee, later identified as belonging to Juan Pineda-Moreno.[20]

Over the next month, Pineda-Moreno and his partners purchased irrigation equipment and a large quantity of groceries, using his vehicle on several of these occasions.[21] After the men purchased a large amount of groceries for the second time, store security staff alerted the police, who followed the men back to Pineda-Moreno's rental mobile home.[22]

Agents began surveillance of Pineda-Moreno's home.[23] On seven different occasions, agents installed three types of mobile tracking devices onto the undercarriage of Pineda-Moreno's vehicle without a warrant: four times while his Jeep was parked on a public street in front of his trailer, twice while it was parked in his driveway, just a few feet from his home, and once while it was parked in a public parking lot.[24]

Using these mobile tracking devices, agents monitored the location of Pineda-Moreno's vehicle over the course of four months.[25] Two of the devices used GPS technology that relayed the exact location of the vehicle to police.[26] The other device was a cell phone that transmitted signals to cell-phone towers.[27] Agents could remotely access

[17] *Id*. at 1216-17.

[18] Opening Brief of Appellee, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[19] *Pineda-Moreno*, 591 F.3d at 1213.

[20] *Id*.

[21] *Id*.

[22] Opening Brief of Appellee, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[23] *Id*.

[24] United States v. Pineda-Moreno, 591 F.3d 1212, 1213 (9th Cir. 2010).

[25] *Id*.

[26] *Id*.

[27] Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

information collected by the devices; the devices could also store the data, which police would then download to a computer after removing the device from Pineda-Moreno's vehicle.[28]

Alerted by one of the mobile tracking devices that Juan Pineda-Moreno's Jeep was leaving a suspected marijuana grow site, DEA agents followed and pulled over Pineda-Moreno.[29] During this stop, the agents noticed the odor of marijuana coming from a passenger in the backseat.[30] An immigration agent arrived to interview the men in Spanish and determined that the men were in the United States illegally.[31] He obtained consent from Pineda-Moreno to search both his vehicle and home.[32] The agents found two garbage bags of marijuana, as well as some other, smaller packages of marijuana,[33] comprising a total of approximately twenty-nine pounds.[34]

A grand jury indicted Pineda-Moreno on one count of conspiracy to manufacture marijuana and one count of manufacturing marijuana.[35] Pineda-Moreno moved to suppress the evidence collected by the mobile tracking devices.[36] He argued that the government invaded an area in which he possessed a reasonable expectation of privacy when they installed the devices onto the undercarriage of his vehicle, thereby violating his Fourth Amendment rights.[37] The district court denied his motion to suppress, concluding that Pineda-Moreno had no legitimate expectation of privacy because the agents installed the devices when his vehicle was parked in his open driveway, on the street and in a public

[28] *Id*.

[29] *Pineda-Moreno*, 591 F.3d at 1214.

[30] *Id*. at 1214; Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[31] *Pineda-Moreno*, 591 F.3d at 1214; Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[32] *Pineda-Moreno*, 591 F.3d at 1214; Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[33] Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260.

[34] Brief of Appellee, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611261.

[35] *Pineda-Moreno*, 591 F.3d at 1214; *see* 21 U.S.C.A. §§ 841(a)(1), (b)(1)(A)(vii), 846(a)(1), (b)(1)(A)(vii) (Westlaw 2011).

[36] *Pineda-Moreno*, 591 F.3d at 1214.

[37] *Id*. Defendant did not argue that the agents violated his Fourth Amendment rights by monitoring his vehicle's movements with the tracking devices until he appealed the denial of his motion to suppress. Brief of Appellee, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611261.

parking lot.[38] Pineda-Moreno entered a conditional guilty plea and reserved the right to appeal the denial of his motion to suppress.[39]

1. Installation of GPS Tracking Devices as an Invasion of Privacy

The Ninth Circuit affirmed the district court's denial of Pineda-Moreno's motion to suppress.[40] It held that the government did not violate Pineda-Moreno's Fourth Amendment rights by affixing mobile tracking devices, without a warrant, to the underside of his vehicle when it was parked in his driveway, on a public street, and in a parking lot.[41] The court reasoned that Pineda-Moreno did not have a reasonable expectation of privacy in the undercarriage of his vehicle or in any of the areas in which agents attached the devices to his parked vehicle.[42] Since the court determined that Pineda-Moreno had no legitimate expectation of privacy, the government did not conduct a search when they attached the devices to his vehicle without a warrant;[43] therefore, Pineda-Moreno could claim no violation of his Fourth Amendment rights.[44]

2. Extended Monitoring as a "Search"

On appeal, Pineda-Moreno argued that the government's use of the devices to monitor the movements of his vehicle over an extended period of time constituted an unreasonable search, thereby violating his Fourth Amendment rights.[45] The Ninth Circuit concluded that this argument did

[38] Brief of Appellee, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611261.

[39] *Pineda-Moreno*, 591 F.3d at 1214.

[40] *Id*. at 1217.

[41] *Id*. at 1214-15.

[42] *Id*.

[43] *Id*. at 1215.

[44] *Id*. This Case Note will not address the issue of the installation of the tracking devices or the court's reasoning behind its finding that there was no Fourth Amendment violation; instead, it will focus on the court's determination that extended police monitoring of Pineda-Moreno's movements did not constitute a search and therefore did not violate his Fourth Amendment rights.

[45] Opening Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611260. Since Pineda-Moreno did not raise this specific ground in the district court, the government contended that the Ninth Circuit should review the district court's decision only for plain error. Conversely, Pineda-Moreno argued that a de novo standard of review should be applied on two bases: first, his motion to suppress was broad enough to cover such a challenge; and second, the government broadly addressed the use of the device in its response to his motion so that the issue was brought to the court's attention. The Ninth Circuit did not resolve this dispute, concluding that under either standard, the district court committed no error in denying his motion to suppress. United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010).

not present a valid ground for granting his motion to suppress.[46] The court held that police did not conduct a search by monitoring Pineda-Moreno's travels through the use of tracking devices over a four-month period, because he did not have a justifiable expectation of privacy in his movements on public roads.[47] To reach this conclusion, the court examined Fourth Amendment jurisprudence concerning the circumstances in which a defendant has a reasonable expectation of privacy in his or her vehicle's movements.[48]

B. RELEVANT FOURTH AMENDMENT LAW

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.[49]

According to the Supreme Court, the Fourth Amendment to the U.S. Constitution entitles each person "to know that he will remain free from unreasonable searches and seizures."[50] However, before determining whether a search was "reasonable," and evaluating the ramifications of that determination on the admissibility of the evidence produced,[51] the critical threshold inquiry is whether a search ever occurred.[52]

1. Searches and the Reasonable Expectation of Privacy Doctrine

To qualify as a search, and therefore implicate the Fourth Amendment and its protections, two conditions must be fulfilled. First, the government must be performing the search; the Fourth Amendment

[46] *See Pineda-Moreno*, 591 F.3d at 1217.

[47] *See id*.; United States v. Pineda-Moreno, 617 F.3d 1120 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc).

[48] *See Pineda-Moreno*, 591 F.3d at 1216-17.

[49] U.S. CONST. amend. IV.

[50] Katz v. United States, 389 U.S. 347, 359 (1967).

[51] If the evidence is obtained through an illegal (i.e., unreasonable) search or seizure, then the remedy is the exclusion of that evidence. *See* Weeks v. United States, 232 U.S. 383 (1914) (holding that evidence obtained in violation of Fourth Amendment is inadmissible in federal courts); *see also* Mapp v. Ohio, 367 U.S. 643 (1961) (holding that all evidence obtained through illegal searches and seizures is inadmissible in state courts).

[52] *See, e.g.*, Kyllo v. United States, 533 U.S. 27, 31 (2001); Smith v. Maryland, 442 U.S. 735, 745-46 (1979); Katz v. United States, 389 U.S. 347, 352-53 (1967).

does not extend its protections to searches performed by private actors.[53] Second, according to the test articulated in *Katz v. United States*, the government must have conducted the search in an area in which an individual had a reasonable expectation of privacy.[54]

While there is no bright-line rule indicating whether an expectation of privacy is one that society will accept as reasonable, whether that "expectation relates to information that has been 'exposed to the public'" is significant to the analysis.[55] Under the Supreme Court's public-exposure doctrine, an individual generally does not have a reasonable expectation of privacy in his or her activities that he or she exposes to the public.[56] Following this doctrine, the Supreme Court decided *United States v. Knotts*,[57] the seminal case that influences—if not controls—cases in which law enforcement uses electronic surveillance to track defendants' locations.[58]

2. United States v. Knotts

In *United States v. Knotts*, the Supreme Court held that law enforcement does not conduct a search by using a beeper [59] to track a vehicle because "[a] person traveling in an automobile on public

[53] Burdeau v. McDowell, 256 U.S. 465, 475 (1921).

[54] *Katz*, 389 U.S. at 360 (Harlan, J., concurring).

[55] United States v. Maynard, 615 F.3d 544, 558 (2010) (quoting Katz v. United States, 389 U.S. 347, 353 (1967) (Harlan, J., concurring)).

[56] *See, e.g.*, Kyllo v. United States, 533 U.S. 27, 34 (2001) (holding a reasonable expectation of privacy exists inside a home); California v. Ciraolo, 476 U.S. 207, 213-14 (1986) (holding no reasonable expectation of privacy exists in a fenced-in backyard since it was visible to the public from a plane flying overhead); *Karo*, 468 U.S. at 714-16 (holding an individual has a reasonable expectation of privacy in an object's movements within a home, since they were not visible to the public); United States v. Knotts, 460 U.S. 276, 280-84 (1983) (holding an individual has no reasonable expectation of privacy in his or her movements over public roads); Smith v. Maryland, 442 U.S. 735, 743-44 (1979) (holding an individual has no reasonable expectation of privacy in phone numbers dialed from a private telephone since the numbers were conveyed to the telephone company, a third party outside the home); *Katz*, 389 U.S. at 351 (Harlan, J., concurring) (holding that the Fourth Amendment does not protect "what a person knowingly exposes to the public," but it may protect what that person "seeks to preserve as private, even in an area accessible to the public.").

[57] *See Knotts*, 460 U.S. at 278 (noting movements observed by police were "voluntarily conveyed to anyone who wanted to look").

[58] *See* United States v. Marquez, 605 F.3d 604, 609 (8th Cir. 2010); United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010) (holding that *Knotts* is controlling on the issue of prolonged electronic surveillance of an individual); United States v. Garcia, 474 F.3d 994, 996 (7th Cir. 2007). *But see* United States v. Maynard, 615 F.3d 544, 558 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[59] As defined by the Supreme Court, "a beeper is a radio transmitter, usually battery operated, which emits periodic signals that can be picked up by a radio receiver." United States v. Knotts, 460 U.S. 276, 277 (1983).

thoroughfares has no reasonable expectation of privacy in his movements from one place to another."[60] In *Knotts*, police planted a beeper in a container of chemicals before one of Knotts's co-conspirators purchased it.[61] Using the beeper, the police followed the car carrying the device about 100 miles from the container's place of purchase to Knotts's cabin.[62] Relying on the signal from the beeper, and intermittent visual surveillance of the cabin, law enforcement obtained a warrant to search the cabin, eventually discovering a drug laboratory inside.[63] The Court held that police monitoring of the beeper over public roads did not constitute a search, because the driver "voluntarily conveyed to anyone who wanted to look" the direction of his travels, his destination, and any stops he made along the way. [64] In other words, the driver knowingly exposed his whereabouts to the public, thereby relinquishing any reasonable expectation of privacy in his travels and destination.[65]

Federal appellate courts have uniformly interpreted *Knotts* as holding that location tracking outside the home is analogous to physical surveillance.[66] However, the circuits have issued conflicting decisions concerning whether this holding extends to *prolonged* electronic surveillance.[67] More specifically, the circuits are in disagreement over whether *Knotts* left unanswered the issue of prolonged surveillance or mass surveillance.[68]

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[60] *Id*. at 281.

[61] *Id*. at 278.

[62] *Id*.

[63] *Id*. at 279.

[64] *Id*. at 281-82.

[65] *Id*. at 282.

[66] *See* United States v. Marquez, 605 F.3d 604, 610 (8th Cir. 2010); United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010); United States v. Garcia, 474 F.3d 994, 996 (7th Cir. 2007).

[67] *Compare Marquez*, 605 F.3d at 610 (deciding that no search took place when law enforcement used a GPS to track a drug trafficking operation's truck) *and Pineda-Moreno*, 591 F.3d at 1216-17 (police did not conduct a search of the defendant's car by warrantless monitoring for of its movements over two months through GPS devices) *and Garcia*, 474 F.3d at 996 (holding no search or seizure when police retrieved car's travel history from GPS device placed on car's undercarriage) *with* United States v. Maynard, 615 F.3d 544, 556 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010) (holding prolonged GPS-monitoring of vehicle's travels constituted a Fourth Amendment search).

[68] *Compare Marquez*, 605 F.3d at 610 (leaving open the question whether "mass" electronic surveillance constitutes a search under the Fourth Amendment, requiring a warrant) *and Pineda-Moreno*, 591 F.3d at 1217 (reserving the issue of "mass" electronic surveillance) *and Garcia*, 474 F.3d 994, 998 (7th Cir. 2007) (noting that the *Knotts* Court reserved the issue of "mass" electronic surveillance) *with Maynard*, 615 F.3d at 556 (noting that the *Knotts* Court pointedly declined to decide the issue of prolonged, twenty-four hour electronic surveillance of an individual).

II. THE NINTH CIRCUIT BASED ITS DECISION ON AN INCORRECT UNDERSTANDING OF *KNOTTS*

In *Pineda-Moreno*, the Ninth Circuit held that law enforcement's prolonged and warrantless use of GPS tracking devices to monitor the defendant's vehicle's movements did not constitute a search and therefore was not subject to the reasonableness requirement of the Fourth Amendment.[69] The court arrived at this conclusion based on its analysis of the Supreme Court's holding in *Knotts v. United States*;[70] however, the court's analysis failed to account for the limited scope of the *Knotts* holding. As a result, the Ninth Circuit based its decision in *Pineda-Moreno* on the precise issue the Supreme Court declined to decide in *Knotts*: whether prolonged twenty-four-hour electronic surveillance of an individual constitutes a search.

A. THE *PINEDA-MORENO* COURT DID NOT RECOGNIZE THE LIMITED HOLDING IN *KNOTTS*

By analogy, the Ninth Circuit determined that the facts of *Pineda-Moreno* fell squarely within the *Knotts* decision.[71] It reasoned that, in both cases, technology provided police with a substitute for following the defendants' vehicles on public streets, and "the only information the agents obtained from the tracking devices was a log of the locations where Pineda-Moreno's car traveled, information the agents could have obtained by following the car."[72] Like the beeper in *Knotts*, the court reasoned, the GPS device merely provided police with a more efficient form of tracking Pineda-Moreno's vehicle on public streets.[73] Since the Fourth Amendment does not prevent police from "augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them in this case,"[74] the court deduced that following a car on a public street is not a search.[75] Thus, according to the Ninth Circuit, the GPS devices attached to the defendant's vehicle merely provided an efficient substitute for police to follow Pineda-Moreno's Jeep on public roads—an activity that falls outside the scope

[69] *Pineda-Moreno*, 591 F.3d at 1217.
[70] *See id*. at 1216.
[71] *See id*.
[72] *Id*.
[73] *Id*.
[74] *Id*. (quoting United States v. Knotts, 460 U.S. 276, 282 (1983)).
[75] *Id*. at 1217 (quoting United States v. Garcia, 474 F.3d 994, 997 (7th Cir. 2007)).

of the Fourth Amendment.[76] Although the Ninth Circuit concluded that *Pineda-Moreno* was factually analogous to *Knotts*, a closer look reveals that the Supreme Court actually reserved the exact issue posed in *Pineda-Moreno*.

1. The Knotts *Court Declined to Analyze the Issue of Prolonged Surveillance*

The Ninth Circuit interpreted the *Knotts* holding as conclusive authority concerning the issue of prolonged surveillance.[77] However, as the language of the *Knotts* opinion established, the Court actually declined to analyze whether prolonged surveillance of an individual by the government constitutes a search cognizable under the Fourth Amendment.[78]

In *Knotts*, the Court reserved the issue of whether a warrant would be required in a case that involved twenty-four-hour surveillance.[79] The Court stated, "if such dragnet-type law enforcement practices as respondent envisions should eventually occur, there will be time enough then to determine whether different constitutional principles may be applicable."[80] By reserving the issue of "dragnet" practices, the Court referred directly to Knotts's contention that prolonged "twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision."[81] In other words, the Court explicitly rejected Knotts's concern that its decision would lead to the endorsement of warrantless twenty-four-hour tracking of individuals.[82] Thus, contrary to what the Ninth Circuit concluded in *Pineda-Moreno*,

[76] *Id*. at 1216.

[77] Citing the Seventh Circuit in *United States v. Garcia*, the *Pineda-Moreno* court wrote that "[s]hould [the] government someday decide to institute programs of mass surveillance of vehicular movements, it will be time enough to decide whether the Fourth Amendment should be interpreted to treat such surveillance as a search." *Pineda-Moreno*, 591 F.3d at 1217 n.2.

[78] United States v. Maynard, 615 F.3d 544, 558 (2010), *cert. denied*, 131 S. Ct. 671 (2010); United States v. Pineda-Moreno, 617 F.3d 1120, 1126 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc); Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 457 (2007); *see also* United States v. Knotts, 460 U.S. 276, 283 (1983).

[79] *Knotts*, 460 U.S. at 283-84 (1983).

[80] *Id*. at 284.

[81] *Id*. at 283 (quoting Brief of Respondent at 9-10, United States v. Knotts, 460 U.S. 276 (1983) (No. 81-1802)). The quoted section of the defendant's brief stated, "we respectfully submit that the Court should remain mindful that should it adopt the result maintained by the government, twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision."

[82] *Maynard*, 615 F.3d at 558; *see Knotts*, 460 U.S. at 283.

the Court did not decide whether prolonged twenty-four-hour monitoring constituted a search, thereby limiting its holding to the facts before it.[83]

However, the Ninth Circuit did not interpret this passage in the *Knotts* decision to mean that the Court declined to decide the issue of prolonged twenty-four-hour surveillance; rather, it reasoned that the Court reserved the issue of "mass" electronic surveillance, apparently based on the Court's use of the term "dragnet."[84] Although the *Pineda-Moreno* court did not define "mass" electronic surveillance, it referred to another circuit's decision that defined the issue as tracking the movements of numerous vehicles.[85]

2. Other Courts Acknowledge That Knotts *Did Not Decide the Issue of Prolonged Surveillance*

Since the Ninth Circuit's decision in *Pineda-Moreno*, the D.C. Circuit concluded that the *Knotts* Court pointedly declined to evaluate whether prolonged electronic tracking constituted a search.[86] In *United States v. Maynard*, the D.C. Circuit resoundingly rejected the notion that what the *Knotts* Court left unanswered was the question "whether 'wholesale' or 'mass' electronic surveillance of many individuals requires a warrant."[87] While the court did not dispute that a defendant has no reasonable expectation of privacy in his or her movements during a discrete journey under *Knotts*, it observed that the Supreme Court specifically avoided holding that the Fourth Amendment condoned *prolonged* warrantless location tracking.[88] Applying this understanding of *Knotts* to the case before it, the D.C. Circuit held that police violated the defendant's reasonable expectation of privacy when they monitored a GPS device attached to his vehicle around-the-clock for twenty-eight

[83] *Maynard*, 615 F.3d at 558 (citing *Knotts*, 460 U.S. at 283).

[84] The *Pineda-Moreno* court wrote that "[s]hould [the] government someday decide to institute programs of mass surveillance of vehicular movements, it will be time enough to decide whether the Fourth Amendment should be interpreted to treat such surveillance as a search." United States v. Pineda-Moreno, 591 F.3d 1212, 1217 n.2 (9th Cir. 2010).

[85] When the *Pineda-Moreno* court reserved the issue of mass surveillance, it cited the Seventh Circuit decision in *United States v. Garcia*. *Pineda-Moreno*, 591 F.3d at 1217 (9th Cir. 2010). In *Garcia*, the court similarly reserved the issue mass government electronic surveillance of vehicular movements after envisioning a hypothetical law requiring all new cars to come equipped with a GPS device so that the government could track all vehicular movement. United States v. Garcia, 474 F.3d 994, 998 (7th Cir. 2007).

[86] United States v. Maynard, 615 F.3d 544, 557 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010); *see also Pineda-Moreno*, 591 F.3d at 1217.

[87] *Maynard*, 615 F.3d at 558.

[88] *Id*. at 556.

days.[89] The court concluded that in doing so, law enforcement conducted a search.[90]

Likewise, other courts have recognized that the Supreme Court did not decide the issue of unlimited and prolonged government electronic surveillance of individuals. In *United States v. Butts*, the Fifth Circuit emphasized the limited police use of a signal device to track the defendant, writing "[a]s did the Supreme Court in *Knotts*, we pretermit any ruling on worst-case situations that may involve persistent, extended, or unlimited violations of a warrant's terms."[91] Additionally, the New York Court of Appeals pointed out in *People v. Weaver* that *Knotts* concerned a "single trip" and the Court specifically reserved the issue of twenty-four-hour surveillance.[92] Therefore, "[a]ccording to the [Supreme] Court, its decision [in *Knotts*] should not be read to sanction 'twenty-four hour surveillance of any citizen of this country.'"[93]

At least two district courts have adopted the *Maynard* interpretation of the *Knotts* holding.[94] Like the D.C. Circuit in *Maynard*, the Eastern District of New York and the Southern District of Texas also noted that *Knotts* is not dispositive on the issue of prolonged tracking.[95] Based in part on this determination, the courts denied the government's requests for access to several months' worth of historical cell-site location records.[96]

Alternatively, circuit precedent (as well as a number of district-court decisions),[97] supports the Ninth Circuit's interpretation of *Knotts*;[98]

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[89] *Id*.

[90] *Id*.

[91] United States v. Butts, 729 F.2d 1514, 1518 n.4 (5th Cir. 1984).

[92] People v. Weaver, 909 N.E.2d 1195, 1198-201 (N.Y. 2009).

[93] Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 457 (2007).

[94] *See* In re Application of the U.S. for Historical Cell Site Data, NOS. H-10-998M, H-10-981M, 2010 WL 4286365, at *8 (S.D. Tex. Oct. 29, 2010); *see also* In re Application of the U.S. for an Order Authorizing the Release of Historical Cell-Site Info., No. 10-MC-0897 (JO), 2010 WL 5437209, at *3 (E.D.N.Y. Dec. 23, 2010).

[95] *See* In re Application of the U.S. for Historical Cell Site Data, NOS. H-10-998M, H-10-981M, 2010 WL 4286365, at *8 (S.D. Tex. Oct. 29, 2010); *see also* In re Application of the U.S. for an Order Authorizing the Release of Historical Cell-Site Info., No. 10-MC-0897 (JO), 2010 WL 5437209, at *3 (E.D.N.Y. Dec. 23, 2010).

[96] *See* In re Application of the U.S. for Historical Cell Site Data, NOS. H-10-998M, H-10-981M, 2010 WL 4286365, at *8 (S.D. Tex. Oct. 29, 2010); *see also* In re Application of the U.S. for an Order Authorizing the Release of Historical Cell-Site Info., No. 10-MC-0897 (JO), 2010 WL 5437209, at *3 (E.D.N.Y. Dec. 23, 2010).

[97] *See, e.g.*, United States v. Walker, No. 2:10-cr-32, 2011 WL 651414, at *2 (W.D. Mich. Feb. 11, 2011) (concluding that police did not conduct a search by monitoring signals from a GPS attached to the defendants car because the defendant "knowingly exposed her vehicle's location to the public when she drove on public roads"); United States v. Sparks, No. 10-10067-WGY, 2010

however, this precedent is similarly flawed. Prior to the *Pineda-Moreno* decision, two circuits held that the use of a GPS tracking device to monitor an individual's movements in his vehicle over a prolonged period was *not* a search.[99] In *United States v. Garcia*, the Seventh Circuit read *Knotts* to endorse all "tracking of a vehicle on public streets."[100] In *United States v. Marquez*, the Eighth Circuit came to the same conclusion in a similar case.[101] After holding that the defendant had no standing to challenge the use of the GPS device, that court noted that, even if he did have standing, no search took place when law enforcement used the device to track a drug trafficking operation's truck.[102] Like the Ninth Circuit in *Pineda-Moreno*, both courts identified and declined to decide the same issue they mistakenly believed the Supreme Court left open in *Knotts*: whether "mass" electronic surveillance required a warrant.[103] These courts did not recognize that the Supreme Court drew a distinction in *Knotts* between short-term and prolonged surveillance—not the issue of "mass" surveillance of multiple individuals.[104]

The Ninth Circuit faced the precise issue the Supreme Court reserved in *Knotts*: whether prolonged electronic surveillance by the government constitutes a search.[105] In *Pineda-Moreno*, law enforcement monitored the defendant's whereabouts twenty-four hours a day for four months.[106] Like *Maynard* and other courts that faced similar issues, the

WL 4595522, at *6 (D. Mass. Nov. 10, 2010) (holding the monitoring of a GPS device attached to undercarriage of defendant's vehicle did not implicate Fourth Amendment protections); United States v. Jesus-Nunez, No. 1:10-CR-00017-01, 2010 WL 2991229, at *4-5 (M.D. Pa. July 27, 2010) (holding government monitoring of a GPS device placed on defendant's van did not constitute a search under the Fourth Amendment); United States v. Burton, 698 F. Supp. 2d 1303, 1307-08 (N.D. Fla. 2010) (holding monitoring of GPS device placed on defendant's vehicle did not violate his Fourth Amendment rights since he had no reasonable expectation of privacy in his vehicle's movements); United States v. Moran, 349 F. Supp. 2d 425, 467 (N.D.N.Y. 2005) (holding that the warrantless use of a GPS device to track the defendant's vehicle did not violate the Fourth Amendment because the defendant had no expectation of privacy in his vehicle's travels on public roads).

[98] *See* United States v. Marquez, 605 F.3d 604, 609-10 (8th Cir. 2010); United States v. Garcia, 474 F.3d 994, 996 (7th Cir. 2007).

[99] *See* United States v. Marquez, 605 F.3d 604, 609-10 (8th Cir. 2010); United States v. Garcia, 474 F.3d 994, 996 (7th Cir. 2007).

[100] United States v. Maynard, 615 F.3d 544, 556 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010); *see Garcia*, 474 F.3d at 996.

[101] *Marquez*, 605 F.3d at 610.

[102] *Id*.

[103] *See id*.; *Garcia*, 474 F.3d at 998.

[104] *See Maynard*, 615 F.3d at 564-65.

[105] *See* United States v. Knotts, 460 U.S. 276, 283-84 (1983); United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010).

[106] *Pineda-Moreno*, 591 F.3d at 1213.

Ninth Circuit should have recognized the limited holding of *Knotts*.[107] Accordingly, the court should have then proceeded to analyze whether Pineda-Moreno had a reasonable expectation of privacy in his movements over time.[108] Instead, by failing to recognize that the facts presented in *Pineda-Moreno* fell outside the scope of the *Knotts* holding, the Ninth Circuit prematurely ended its analysis of Pineda-Moreno's Fourth Amendment claim.

III. PROLONGED GPS MONITORING REVEALS AN INTIMATE PICTURE OF THE SUBJECT'S LIFE

Like the courts in *Knotts* and *Maynard*, the Ninth Circuit should have "explicitly distinguished between the limited information discovered by use of [a] beeper—movements during a discrete journey—and more comprehensive or sustained monitoring at issue in [*Pineda-Moreno*]."[109] This analysis involves two issues: the duration of the electronic monitoring and the GPS technology that enabled such surveillance. On both of these issues, the facts of *Knotts* are entirely distinguishable from those in *Pineda-Moreno*. In fact, the prolonged GPS tracking involved in *Pineda-Moreno* revealed fundamentally different information from that collected during the short-term surveillance enabled by the beeper used in *Knotts*.[110] However, the Ninth Circuit addressed neither of these issues, thereby precluding the court from finding that Pineda-Moreno had a reasonable expectation of privacy in the totality of his movements.

A. DURATION OF TRACKING

The *Knotts* Court emphasized the limited information law enforcement collected by following signals that were emitted from the beeper placed in the defendant's vehicle during a single 100-mile trip.[111] In particular, the Court carefully noted the "limited use which the

[107] *See* United States v. Maynard, 615 F.3d 544, 556 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[108] *Id*. at 564-65 (concluding that *Knotts* was not dispositive on the issue of prolonged surveillance, the D.C. Circuit proceeded to analyze whether the defendant had an expectation of privacy in his movements that society recognized as reasonable).

[109] *Maynard*, 615 F.3d at 558 (citing United States v. Knotts, 460 U.S. 276, 283-85 (1983)).

[110] *Compare Knotts*, 460 U.S. at 278 (using signals relayed from a beeper placed in a container of chemicals placed in the vehicle, police tracked its route for approximately 100 miles during one discrete trip) *with Pineda-Moreno*, 591 F.3d at 1213 (agents tracked Pineda-Moreno's vehicle's movements over the course of four months using GPS).

[111] *See Knotts*, 460 U.S. at 284-85.

government made of the signals from this particular beeper" and explained that "nothing in this record indicates that the beeper signal was received or relied upon after it had indicated that the [container] had ended its automotive journey at rest on respondent's premises."[112] In part, these observations led the Court to conclude that police did not conduct a search when they followed the driver from one location to another just 100 miles away by monitoring signals relayed by the beeper attached to the vehicle.[113] Thus, the Court emphasized the limited use of the beeper by highlighting the fact that law enforcement used it only to track the defendant's travels during one discrete trip.[114]

The D.C. Circuit adopted the Supreme Court's distinction between short- and long-term surveillance when analyzing whether electronic surveillance constituted a search in *United States v. Maynard*.[115] In its analysis, that court highlighted the fact that police tracked the defendant's movements twenty-four hours a day for twenty-eight days—not just during one trip, as was the case in *Knotts*.[116] As a result, that court concluded,

> [T]he police used the GPS device not to track [the driver's] "movements from one place to another," . . . but rather to track [the driver's] movements 24 hours a day for 28 days as he moved among scores of places, thereby discovering the totality and pattern of his movements from place to place to place.[117]

Consequently, the *Maynard* court recognized that the amount and type of information revealed by the GPS tracking in the case before it greatly exceeded that gathered in *Knotts*.[118] The court reasoned that an isolated trip reveals only limited information about the driver; in contrast, prolonged surveillance exposes patterns in a driver's movements from which onlookers can easily infer the private activities, interests, and relationships of the subject.[119] This recognition of the fundamental difference between the information gathered in *Knotts* and that acquired in *Maynard* caused the D.C. Circuit to conclude that law enforcement did

[112] *Id*. The Supreme Court also emphasized the fact that law enforcement never monitored the signal from the interior of the defendant's cabin. *Id*. at 284.

[113] *Id*. at 285.

[114] *See id*.

[115] *See* United States v. Maynard, 615 F.3d 544, 556-58 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[116] *See id*. at 558.

[117] *Id*.

[118] *Id*.

[119] *Id*. at 562.

conduct a search.[120]

Unlike the Supreme Court in *Knotts* and the D.C. Circuit in *Maynard*, the Ninth Circuit noted no distinction between short- and long-term surveillance.[121] Not only did law enforcement track Pineda-Moreno three months longer than they tracked the defendant in *Maynard*, they tracked him continuously during scores of trips, in contrast to the single trip in *Knotts*.[122] Pineda-Moreno contended that surveillance conducted "over an extended period of time" significantly affected the "amount, quality and nature" of the information revealed.[123] The Ninth Circuit declined to address this argument in its analysis of whether Pineda-Moreno had a reasonable expectation of privacy in his movements.[124] In addition to arguing that the prolonged duration of law enforcement's surveillance violated his reasonable expectation of privacy, Pineda-Moreno also argued that the capabilities of GPS tracking technology further distinguished the facts of *Knotts* from his case.[125]

B. GPS TECHNOLOGY VS. BEEPERS

The Ninth Circuit failed to distinguish between the technology used in *Knotts*—a beeper—and the far more technologically advanced GPS tracking devices used in *Pineda-Moreno*.[126] This distinction bears on the Ninth Circuit's analysis of Pineda-Moreno's Fourth Amendment claim because it reveals that GPS tracking is less like visual surveillance, as the Ninth Circuit reasoned,[127] than the beeper tracking in *Knotts*.[128]

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[120] *See id*. at 565.

[121] United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010). Instead of addressing this distinction, the court addressed Pineda-Moreno's argument that *Kyllo v. United States*, 533 U.S. 27 (2001), had "heavily modified" analysis under the Fourth Amendment. In his brief, Pineda-Moreno argued that *Kyllo* modified analysis of advanced technology under the Fourth Amendment, including GPS. However, the court pointed out that in *Kyllo* law enforcement used thermal imaging technology to acquire information from within a home—an area traditionally accorded a much higher level of protection than a vehicle's movements in public. Since the areas considered in each case require two fundamentally different analyses, the court correctly rejected Pineda-Moreno's argument as a valid basis to grant his claim.

[122] *Compare Pineda-Moreno*, 591 F.3d at 1213, 1216, *with* United States v. Knotts, 460 U.S. 276, 278-79 (1983).

[123] Reply Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611262.

[124] *See Pineda-Moreno*, 591 F.3d at 1216.

[125] *See* Reply Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611262.

[126] *See Pineda-Moreno*, 591 F.3d at 1216.

[127] *Id*.

[128] *See* United States v. Knotts, 460 U.S. 276, 284 (1983); *see, e.g.*, State v. Jackson, 76 P.3d 217, 223 (Wash. 2003) (determining that GPS technology "does not merely augment the officers'

The Ninth Circuit opined that law enforcement's use of GPS to track Pineda-Moreno's movements over four months substituted for visual surveillance, asserting that such an activity is "unequivocally not a search" within the meaning of the Fourth Amendment.[129] In doing so, the court cited *Knotts*, in which the Supreme Court similarly compared beepers to an efficient form of visual surveillance.[130] While the Ninth Circuit correctly observed that increased efficiency offered by GPS, or even that of the less sophisticated *Knotts* beeper, does not automatically mean that its use constitutes a search,[131] it does require a court to approach it with greater caution.[132] Unlike the beeper in *Knotts*, the GPS tracking technology in *Pineda-Moreno* was much more than a "modest improvement over following a car by means of unaided human vision."[133]

The Ninth Circuit's reasoning does not fully appreciate the nature of the information revealed to law enforcement using GPS. Unlike beepers and visual surveillance, GPS technology enables a form of prolonged surveillance "that provides law enforcement with a comprehensive, detailed, and lengthy record of someone's movements."[134] Unless police resources were unlimited, creating such an extensive record of one's movements through physical visual surveillance would be impractical if not impossible.[135] Unencumbered by the constraints of time, money, and

senses, but rather provides a technological substitute for traditional visual tracking"); United States v. Berry, 300 F. Supp. 2d 366, 368 (D. Md. 2004) (noting that GPS surveillance could be considered either a high-tech "substitute for police surveillance" or a "more sophisticated beeper"); Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 457 (2007) (recognizing that "beeper and GSP technology are fundamentally different in terms of the quantity of information revealed by the science"); April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005) (arguing that GPS surveillance reveals information that neither visual surveillance nor beeper-attendant surveillance could gather).

[129] United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010) (quoting United States v. Garcia, 474 F.3d 994, 997 (7th Cir. 2007)).

[130] *Id*.

[131] *See Knotts*, 460 U.S. at 284; *Pineda-Moreno*, 591 F.3d at 1216.

[132] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005).

[133] *Garcia*, 474 F.3d at 998.

[134] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005).

[135] United States v. Maynard, 615 F.3d 544, 565 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010) ("[P]ractical considerations prevent visual surveillance from lasting very long. Continuous human surveillance for a week would require all the time and expense of several police officers, while comparable photographic surveillance would require a net of video cameras so dense and so

manpower, GPS tracking technology enables "a heretofore unknown type of intrusion into an ordinarily and hitherto private enclave."[136]

Chief Judge Kozinski's dissent to the Ninth Circuit's denial of Pineda-Moreno's petition for rehearing en banc recognized this capability of GPS.[137] He explained that since a GPS device performs tracking on its own and records its location—functions that beepers lack—the devices law enforcement used in *Pineda-Moreno* are completely unlike the primitive beepers used in *Knotts*.[138] The fantastic capabilities of GPS devices allow them to "record the car's movements without human intervention—quietly, invisibly, with uncanny precision," creating "a permanent electronic record that can be compared, contrasted and coordinated to deduce all manner of private information about individuals."[139] In this way, the GPS devices compile not only an increased *amount* of information, but also a different *type* of information by revealing personal details gleaned from patterns of movements over a period of time.[140]

In *Pineda-Moreno*, as in *Maynard*, law enforcement used the GPS device not to track Pineda-Moreno's movements from one place to another, but to track his movements around-the-clock for an extended period of time.[141] Consequently, the device continuously gathered information as Pineda-Moreno traveled to dozens of places, allowing law enforcement to discover the entirety of his movements and patterns as he

widespread as to catch a person's every movement, plus the manpower to piece the photographs together.") "Constant and close surveillance" of a suspect, according to the former Chief of the LAPD, is "not only more costly than any police department can afford, but in the vast majority of cases it is impossible." *Id.* at n.* (quoting W.H. Parker, *Surveillance by Wiretap or Dictograph: Threat or Protection?* 42 CAL. L. REV. 727, 734 (1954)).

[136] *Maynard*, 615 F.3d at 565.

[137] United States v. Pineda-Moreno, 617 F.3d 1120, 1124-25 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc).

[138] *Id*. at 1124.

[139] *Id*.

[140] *See Maynard*, 615 F.3d at 563-65 ("A person who knows all of another's travels can deduce whether he is a weekly church goer, a heavy drinker, a regular at the gym, an unfaithful husband, an outpatient receiving medical treatment, an associate of particular individuals or political groups—and not just one such fact about a person, but all such facts."); *Pineda-Moreno*, 617 F.3d at 1125 (Kozinski, C.J., dissenting from denial of rehearing en banc) ("By tracking and recording the movements of millions of individuals the government can use computers to detect patterns and develop suspicions. It can also learn a great deal about us because where we go says much about who we are. Are Winston and Julia's cell phones together near a hotel a bit too often? Was Syme's OnStar near an STD clinic? Were Jones, Aaronson and Rutherford at that protest outside the White House?"); Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 456 (2007) (explaining that GPS enables its user to collect an increased quantity of information, which in turn affects the quality of information revealed).

[141] *Pineda-Moreno*, 591 F.3d at 1214.

drove from place to place.[142] The GPS devices tracking Pineda-Moreno, therefore, did not merely provide a record of his travels on public roads; they provided four months worth of detail about his life, creating an "intimate picture"[143] of his life.[144] As Pineda-Moreno explained in his brief, GPS technology allowed law enforcement to acquire a type of information about Pineda-Moreno that the public could not have gathered through visual surveillance.[145] While he clearly was not "'imperceptible' to others" when he was driving, "his *exact* location, over an extended period of time, *is* information that is imperceptible except through the use"[146] of the GPS tracking device.[147] The accumulation of personal habits, travels and details easily inferred from Pineda-Moreno's exact locations over a prolonged time period revealed much more information than merely his travels over public roads.

Like the Supreme Court in *Knotts* and the D.C. Circuit in *Maynard*, the Ninth Circuit should have distinguished between short- and long-term surveillance and the technologies that enabled such surveillance. After all, the use of GPS tracking technology is "most productive for law enforcement, and most troublesome in constitutional terms, when it is used over extended spans of time."[148] Law enforcement's prolonged and unrelenting tracking of Pineda-Moreno stands in stark contrast to the brief intrusion occasioned by police in *Knotts*.[149] Had the Ninth Circuit considered the duration that Pineda-Moreno's vehicle was under

[142] *See id*. at 1216.

[143] Several courts have recognized that prolonged GPS monitoring reveals an intimate picture of one's life. *See Maynard*, 615 F.3d at 563-65 (prolonged GPS monitoring reveals an intimate picture of the subject's life that he expects no one to have-short perhaps of his spouse.); People v. Weaver, 909 N.E.2d 1195, 1199-200 (N.Y. 2009) (noting that prolonged GPS monitoring yields "a highly detailed profile, not simply of where we go, but by easy inference, of our associations—political, religious, amicable and amorous, to name only a few—and of the patterns of our professional and avocational pursuits"); State v. Jackson, 76 P.3d 217, 221 (Wash. 2003) ("In this age, vehicles are used to take people to a vast number of places that can reveal preferences, alignments associations, personal ails and foibles. The GPS tracking devices record all of these travels, and thus can provide a detailed picture of one's life."); April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005) (commenting that the capabilities of GPS tracking technology creates a "lengthy, detailed record of one's location [that] provides a comprehensive picture of one's life").

[144] *See Pineda-Moreno*, 591 F.3d at 1216.

[145] Reply Brief of Appellant, United States v. Pineda-Moreno, 591 F.3d 1212 (9th Cir. 2010) (No. 08-30385), 2009 WL 4611262.

[146] *Id*.

[147] *Id*.

[148] Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 463 (2007).

[149] *Compare* United States v. Pineda-Moreno, 591 F.3d 1212, 1213-14, 16 (9th Cir. 2010) *with* United States v. Knotts, 460 U.S. 276, 284 (1983).

surveillance, and the technology used to track it, the court would have found that he did not expose the "totality of his movements" to the public over the course of four months. Thus, in tracking Pineda-Moreno's movements for four months, law enforcement's conduct violated his reasonable expectation of privacy and constituted a search.

IV. PINEDA-MORENO HAD A REASONABLE EXPECTATION OF PRIVACY IN THE TOTALITY OF HIS MOVEMENTS

Since law enforcement's use of GPS tracking devices in *Pineda-Moreno* amounted to a search, the reasonableness test set out in *Katz* applies.[150] Application of the *Katz* test and its progeny to the facts of *Pineda-Moreno* leads to one conclusion: society recognized as reasonable Pineda-Moreno's expectation of privacy in his vehicle's movements over the course of four months. Further, law enforcement violated his reasonable expectation of privacy when it used GPS tracking technology to monitor his travels continuously for four months.

The Ninth Circuit's decision that Pineda-Moreno had no reasonable expectation of privacy in the totality of his movement centered largely on the court's application of the public-exposure doctrine to the facts of this case.[151] The court determined that Pineda-Moreno exposed his travels to the public by driving on public roads, thereby diminishing his expectation of privacy.[152] Indeed, it is a well-established principle that "[o]ne has a lesser expectation of privacy in a vehicle" because "a car has little capacity for escaping public scrutiny."[153] After all, it is unreasonable for law enforcement to avert their eyes from what an individual exposes to the rest of the public.[154] However, when considering GPS technology, the argument that an individual has no expectation of privacy in his or her travels on public roads whatsoever "misses the point."[155] Prolonged GPS monitoring does not merely provide a record of an individual's movement on public roads; rather, it

[150] *See* Katz v. United States, 389 U.S. 347, 353 (1967) (Harlan, J., concurring).

[151] *See Pineda-Moreno*, 591 F.3d at 1216.

[152] *Id*.

[153] Cardwell v. Lewis, 417 U.S. 583, 590 (1974); *see also Knotts*, 460 U.S. at 281-82; Rakas v. Illinois, 439 U.S. 128, 153-54 (1978).

[154] California v. Greenwood, 486 U.S. 35, 41 (1988); April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005).

[155] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 698 (2005).

reveals an intimate picture of that person's life.[156] It is in these personal details accumulated throughout the totality of his or her movements that a person reasonably expects privacy.[157]

An inquiry into what a person "exposes to the public" involves asking what a reasonable person might do, rather than what would be reasonably and legally possible for a person to do.[158] The Supreme Court has affirmed this approach in multiple cases.[159] For example, in *Bond v. United States*, the Court held that a Border Patrol agent violated a bus passenger's Fourth Amendment rights when he physically manipulated the passenger's bag.[160] The Court explained that a bus passenger undoubtedly expects that others may handle his bag, but he does not expect others to feel his bag in an "exploratory manner."[161] This explanation encapsulated the idea that a court should focus on what a reasonable person expects others might actually do, instead of what others might theoretically do.

According to the D.C. Circuit, it is unreasonable for a person to expect anyone to track and record for a prolonged period the collective whole of his or her vehicle's movements, much less each stop and the

[156] *See* United States v. Maynard, 615 F.3d 544, 563-65 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010); United States v. Pineda-Moreno, 617 F.3d 1120 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc); April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 698 (2005); Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 419 UCLA L. REV. 409, 457 (2007) ("In the case of GPS-enabled tracking, it is this aggregation of substantial amounts of personal data that makes the limitless use of the technology constitutionally troublesome.").

[157] *See* United States v. Maynard, 615 F.3d 544, 563-65 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010); United States v. Pineda-Moreno, 617 F.3d 1120 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc); April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 698 (2005); Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 419 UCLA L. REV. 409, 457 (2007) ("In the case of GPS-enabled tracking, it is this aggregation of substantial amounts of personal data that makes the limitless use of the technology constitutionally troublesome.").

[158] *Maynard*, 615 F.3d at 559.

[159] *See, e.g.*, *id*.; Florida v. Riley, 488 U.S. 445, 450 (1989) ("Here, the inspection was made from a helicopter, but as is the case with fixed-wing planes, 'private and commercial flight [by helicopter] in the public airways is routine' in this country, and there is no indication that such flights are unheard of in Pasco County, Florida." (quoting *Ciraolo*, 476 U.S. at 215)); *Greenwood*, 486 U.S. at 40 ("It is common knowledge that plastic garbage bags left on or at the side of a public street are readily accessible to animals, children, scavengers, snoops, and other members of the public."); California v. Ciraolo, 476 U.S. 207, 214-15 (1986) (holding defendant did not have a reasonable expectation of privacy in location that "[a]ny member of the public flying in this airspace who glanced down could have seen everything these officers observed").

[160] Bond v. United States, 529 U.S. 334, 338-39 (2000).

[161] *Id*.

corresponding inferences.[162] Instead, a person expects each of his or her movements "to remain disconnected and anonymous."[163] When the Supreme Court wrote in *Knotts* that the vehicle driver exposed his movements to "anyone who wanted to look,"[164] it merely summarized the notion "that one in public normally experiences a series of fleeting glances by a variety of individuals over time."[165] Therefore, the inquiry whether someone exposes his or her actions or location to the public should not depend on theoretical probabilities; instead, it should center around the "actual likelihood of discovery by a stranger."[166] Applying this analytical framework to Pineda-Moreno reveals that while he was subject to fleeting glances from various individuals, he did not expose the totality of his movements to the public.

Indeed, Pineda-Moreno exposed *each* of his movements to others by driving on public roads. After all, by going outside, Pineda-Moreno was not imperceptible to others. However, in actuality, he did not expose the totality of his movements over the course of four months to the public because "the likelihood that a stranger would observe all those movements is not just remote, it is essentially nil."[167] Like physical manipulation of the carry-on bag in *Bond*, the extended and surreptitious recordation of Pineda-Moreno's movements was not what he reasonably expected anyone to do.[168] The combination of GPS tracking capabilities coupled with prolonged monitoring prevented his movements from remaining "disconnected and anonymous."[169] Consequently, it was not

[162] United States v. Maynard, 615 F.3d 544, 563 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[163] *Id*. (quoting Nader v. Gen. Motors Corp., 255 N.E.2d 765, 772 (N.Y. 1970) (Breitel, J., concurring)).

[164] United States v. Knotts, 460 U.S. 276, 281 (1983).

[165] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005).

[166] *Maynard*, 615 F.3d at 560.

[167] *Id*.; *see also* Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 453 (2007) ("While individuals understand that portions of their route may be observed by others, it is unlikely that most people contemplate a comprehensive mapping of their whereabouts over a span of weeks or even months, including the location of each stop and the duration of every trip segment."); Stephen E. Henderson, *Nothing New Under the Sun? A Technologically Rational Doctrine of Fourth Amendment Search*, 56 MERCER L. REV. 507, 547-48 (2005) (advocating a "limited third party" approach to Fourth Amendment doctrine, noting that a driver "conveys his or her position to pedestrians and other drivers to avoid an accident. [However,] most drivers would not think they were conveying their entire driving route to bystanders.").

[168] *See* United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010); *see also* United States v. Maynard, 615 F.3d 544, 563 (D.C. Cir.), *cert. denied*, 131 S. Ct. 671 (2010).

[169] *See Maynard*, 615 F.3d at 563 (quoting Nader v. Gen. Motors Corp., 255 N.E.2d 765, 772

reasonable for Pineda-Moreno to expect every single movement to be secretly and continuously recorded for four months.[170] Pineda-Moreno had a reasonable expectation of privacy in the totality of his movements over four months. Thus, the actions of law enforcement in continuously monitoring his location were subject to the reasonableness requirement of the Fourth Amendment.

V. A PROPOSED ANALYSIS THAT ACCOUNTS FOR AN INDIVIDUAL'S PRIVACY INTERESTS UNDER FOURTH AMENDMENT JURISPRUDENCE

The Ninth Circuit's interpretation of the Supreme Court's public-exposure doctrine, particularly the analysis of that doctrine in *United States v. Knotts*, undermined its opinion in *Pineda-Moreno*. Specifically, the *Pineda-Moreno* court did not account for the privacy interest at stake when the government utilizes advanced technology, like GPS tracking, to conduct comprehensive surveillance of an individual. This Note proposes an approach to this issue that preserves the privacy guaranteed by the Fourth Amendment while comporting with the public-exposure doctrine, regardless of what new technologies law enforcement utilizes. This analysis involves two steps: first, the court should recognize the inherent limitations of the *Knotts* holding; second, when determining whether an individual had a justifiable expectation of privacy in his or her movements, the court should evaluate law enforcement's activity in light of what a reasonable person would expect others might actually do.

Refining an analysis of the public-exposure doctrine in *Knotts* requires that courts recognize the limitations of that holding. In doing so, courts will be able to determine the validity of a Fourth Amendment claim without prematurely ending the analysis. The Supreme Court has not addressed the monitoring of GPS signals under the Fourth Amendment;[171] therefore, *Knotts* is not controlling on the issue.[172]

(N.Y. 1970) (Breitel, J., concurring)).

[170] *See Pineda-Moreno*, 591 F.3d at 1216; *see also Maynard*, 615 F.3d at 563; April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 696 (2005).

[171] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 674 (2005); *see* Matthew Mickle Werdegar, Note, *Lost? The Government Knows Where You Are: Cellular Telephone Call Location Technology and the Expectation of Privacy*, 10 STAN. L. & POL'Y REV. 103, 107 (1998) (noting that the Supreme Court has made no decision regarding GPS technology).

[172] *See* Renee McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 453 (2007) (concluding that the constitutionality of GPS surveillance is not governed by *Knotts* for two reasons: first, the *Knotts* Court limited its decision to

Because of its limited scope, the *Knotts* holding only provides guidance in the approach courts should take to their application of the public-exposure doctrine.

An individual does not relinquish all of his or her privacy merely by stepping outside.[173] The Court's decision in *Knotts* reflects this principle because it merely held that a driver has no reasonable expectation of privacy in his movements from one place to another;[174] it did not hold that he or she has no reasonable expectation of privacy in his movements whatsoever.[175] After all, protecting people—not places—is the aim of the Fourth Amendment.[176] Thus, a refined analysis of an individual's privacy interest under the public-exposure doctrine should recognize that an individual who moves about in public does not knowingly expose to others (including law enforcement) the whole of his or her movements and the information that can be inferred from such movements.[177] Instead, by "walking or driving in public," a person only "knowingly exposes to others bits and pieces of his movements and activities."[178]

Evaluating the extent of law enforcement's intrusion during its surveillance helps determine whether an individual had a reasonable expectation of privacy. Furthermore, examining the quantity and type of information uncovered by the technology is significant to this analysis. In the case of *Pineda-Moreno*, this would have involved the consideration of the duration of the electronic surveillance and the technology that enabled it. With an eye toward an individual's practical expectations of what others might do, considering the accessibility of the technology, the extent of its use and the degree of resulting intrusion, a court can decide a Fourth Amendment case on its own facts, and "not by extravagant generalizations"[179] about the technology used. In this way, a court will thoroughly analyze an individual's reasonable expectation of privacy and objectively determine whether he or she exposed his or her

resolve only the question of the permissible use of beepers, thereby avoiding the issue of twenty-four-hour surveillance of individuals; second, and most importantly, "beeper and GPS technology are fundamentally different in terms of the quantity of information revealed by the science").

[173] *Maynard*, 615 F.3d at 563; *see* Katz v. United States, 389 U.S. 347, 351 (1967) ("[W]hat [one] seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.").

[174] United States v. Knotts, 460 U.S. 276, 283-85 (1983).

[175] *Maynard*, 615 F.3d at 558.

[176] *See Katz*, 389 U.S. at 352-53 (holding that application of the Fourth Amendment does not require trespass over physical boundaries).

[177] April A. Otterberg, Note, *GPS Tracking Technology: The Case for Revisiting Knotts and Shifting the Supreme Court's Theory of the Public Space Under the Fourth Amendment*, 46 B.C. L. REV. 661, 674 (2005).

[178] *Id*.

[179] Dow Chem. Co. v. United States, 476 U.S. 227, 238 n.5 (1986).

movements to the public. The result of this analysis ensures that courts will adhere to the public-exposure doctrine while protecting individuals' privacy in the Information Age.

The Supreme Court has recognized that law enforcement's utilization of more advanced forms of technology threatens to diminish the privacy guaranteed by the Fourth Amendment. [180] To avoid this, courts should "take the long view, from the original meaning of the Fourth Amendment forward,"[181] so as to protect the rights and privacy interests of the public.[182] While courts cannot read the Fourth Amendment as confining law enforcement to the technology and tactics available in the eighteenth century,[183] privacy concerns raised by fantastic technological advances oblige the Supreme Court to watch closely to safeguard fairness in the federal court system.[184] Federal courts, including the Ninth Circuit, share that burden with the Supreme Court when they face Fourth Amendment claims involving advanced technologies.

CONCLUSION

Pineda-Moreno highlights the convergence between Fourth Amendment protections and advanced technology that enables law enforcement to easily access individuals' personal information. In its analysis of this complex legal intersection, the Ninth Circuit was not sufficiently alert to the issue the Supreme Court reserved in *Knotts*: whether prolonged twenty-four-hour electronic surveillance of an individual constitutes a search. Instead, the Ninth Circuit based its decision on the assumption that the Supreme Court had decided that issue.[185] As a result, the court prematurely rejected Pineda-Moreno's Fourth Amendment claim without analyzing whether he had a reasonable expectation of privacy in the collective pattern of his movements over a four-month period. Close consideration of both the duration of the electronic monitoring and the GPS technology that enabled the surveillance would have revealed that law enforcement obtained information of a type that was not available to the public through simple (or even technologically enhanced) visual surveillance. Thus, law enforcement's use of GPS technology to monitor Pineda-Moreno's

[180] Kyllo v. United States, 533 U.S. 27, 34 (2001).

[181] *Id*. at 40.

[182] Carroll v. United States, 267 U.S. 132, 149 (1925).

[183] United States v. Garcia, 474 F.3d 994, 998 (7th Cir. 2007).

[184] Lopez v. United States, 373 U.S. 427, 441 (1963) (Warren, C.J., concurring).

[185] *See* United States v. Pineda-Moreno, 591 F.3d 1212, 1216 (9th Cir. 2010).

movements over the course of four months constituted a search because it violated his reasonable expectation of privacy.

Pineda-Moreno presents an argument for the placement of constitutional limitations on GPS tracking. The Supreme Court has recognized that "the Constitution requires the sacrifice of neither security nor liberty."[186] In other words, society should not have to surrender personal privacy at the feet of technology's progress. Instead, technological advancements should increase the judiciary's appreciation for the role of personal privacy in society, so as to spark its desire to manage it. After all, the GPS devices in Pineda-Moreno's case "are just advance ripples to a tidal wave of technological assaults on our privacy."[187]

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[186] Schneckloth v. Bustamonte, 412 U.S. 218, 225 (1973).

[187] United States v. Pineda-Moreno, 617 F.3d 1120, 1125 (9th Cir. 2010) (Kozinski, C.J., dissenting from denial of rehearing en banc).

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