

# LAW ENFORCEMENT EFFICIENCY OR ORWELL’S 1984? SUPREME COURT TO DECIDE WHETHER “BIG BROTHER” IS HERE AT LAST

David J. Stein\*

## TABLE OF CONTENTS

I.	Introduction .....	489
II.	Background .....	491
	A. GPS Technology and Law Enforcement Use .....	491
	B. Fourth Amendment Privacy Rights and Enhanced Surveillance Law ....	492
III.	Analysis.....	494
	A. A First Look at GPS Surveillance .....	494
	B. Conflicting Outcomes Muddle the Issue .....	495
	1. <i>United States v. Pineda-Moreno</i> .....	495
	2. <i>United States v. Maynard</i> .....	496
	C. Moving Forward with GPS Surveillance Jurisprudence .....	498
IV.	Prediction and Recommendation .....	500
	A. The “Quantity” Problem .....	501
	B. Improper reliance on a <i>Kyllo</i> Based Rationale .....	501
	C. Consistency of Judicial Caution Against “Dragnet” Surveillance .....	502
V.	Conclusion .....	503

## I. INTRODUCTION

Is “big brother” surveillance finally upon us? Much of the media and several federal judges certainly think so.<sup>1</sup> In recent years, as Global Positioning System (“GPS”) technology grew in popularity, law enforcement agencies similarly turned to the use of GPS systems as a means of surveillance over criminal suspects, often affixing the devices to the suspected offenders’ automobiles.<sup>2</sup> This practice was immediately controversial, giving rise to a

---

\* J.D., *summa cum laude*, *Order of the Coif*, University of Illinois College of Law, 2011; A.B., Washington University in Saint Louis, 2007. I am indebted to Professor Andrew Leipold, the distinguished Edwin M. Adams Professor at the University of Illinois College of Law for his two semesters of instruction in Federal Criminal Procedure, for growing my interest in Fourth Amendment issues, and for his continuous wit while doing so. I also wish to thank him for taking the time to review this piece and offer his valuable comments and critiques.

1. Adam Liptak, *Court Case Asks if ‘Big Brother’ Is Spelled GPS*, N.Y. TIMES, Sept. 11, 2011, at A1, available at <http://www.nytimes.com/2011/09/11/us/11gps.html>.

2. John S. Ganz, *It’s Already Public: Why Federal Officers Should Not Need Warrants to Use GPS*

clash between law enforcement efficiency and a citizen's right to privacy while drawing conflicting results from the federal courts.<sup>3</sup> Initially, these courts took a realist approach to interpreting what constitutes a search under the Fourth Amendment to the Constitution in the vein of enhanced surveillance techniques, stating that "the meaning of a Fourth Amendment search must change to keep pace with the march of science."<sup>4</sup> However, as GPS technology allowed police departments and other agencies across the nation ever-increasing access into citizens' daily lives, many commentators argued for restraint, concerned by eroding Fourth Amendment protections.<sup>5</sup> To these commentators, George Orwell's "1984 may have come a bit later than predicted, but it's here at last."<sup>6</sup>

This Recent Development considers one small subset of GPS tracking by police departments: law enforcement's increasingly common practice of covertly attaching GPS tracking devices to potential criminal defendants' automobiles and using those devices to monitor the movements and activities of these suspects. Additionally, this Recent Development analyzes only federal court cases, although state courts have also addressed this issue with conflicting results.<sup>7</sup> Part II briefly explores relevant prior Fourth Amendment jurisprudence in the area of law enforcement use of enhanced surveillance techniques. Part II also provides a brief background of GPS technology itself. Part III analyzes two federal appellate cases initiated after law enforcement attached GPS tracking devices to criminal suspects' automobiles, including the case of *United States v. Maynard*, currently pending in the United States Supreme Court. The analysis examines these decisions in the context of their consistency with prior Fourth Amendment precedent, their consistency with each other, and their effect on subsequent cases. Part IV offers a recommendation that rebuts commentators who argue law enforcement use of GPS should be deemed a search. Finally, Part IV offers a prediction that, based the proper interpretation of prior federal court case law, the Supreme Court will hold that use of GPS tracking by law enforcement is not a Fourth Amendment search.

---

*Vehicle Tracking Devices*, 95 J. CRIM. L. & CRIMINOLOGY 1325, 1325–26, 1330–32 (2005).

3. Compare *United States v. Maynard*, 615 F.3d 544, 566–68 (D.C. Cir. 2010) (finding an unreasonable search under the Fourth Amendment), with *United States v. Marquez*, 605 F.3d 604, 610 (8th Cir. 2010) (finding no search under the Fourth Amendment), and *United States v. Pineda-Moreno (Pineda-Moreno I)*, 591 F.3d 1212, 1216–17 (9th Cir. 2010) (finding no search), and *United States v. Garcia*, 474 F.3d 994, 997 (7th Cir. 2007) (finding no search).

4. *Garcia*, 474 F.3d at 997.

5. See *United States v. Cuevas-Perez*, 640 F.3d 272, 286 (7th Cir. 2011) (Wood, J., dissenting); *United States v. Pineda-Moreno (Pineda-Moreno II)*, 617 F.3d 1120, 1121 (9th Cir. 2010) (Kozinski, J., dissenting from denial of rehearing *en banc*).

6. *Pineda-Moreno II*, 617 F.3d at 1121.

7. See *Commonwealth v. Connolly*, 913 N.E.2d 356, 369 (Mass. 2009) (finding a seizure and requiring a warrant for installation of a GPS device under Massachusetts Constitution); *People v. Weaver*, 909 N.E.2d 1195, 1202 (N.Y. 2009) (finding a search and requiring a warrant for installation of a GPS device under the New York Constitution, but cautioning that the court did not presume to decide the question as a matter of federal law); *Foltz v. Commonwealth*, 698 S.E.2d 281, 292–93 (Va. Ct. App. 2010) (finding no search and no seizure); *State v. Jackson*, 76 P.3d 217, 224 (Wash. 2003) (finding a search and requiring a warrant for installation of a GPS device under the Washington Constitution); *State v. Sveum*, 787 N.W.2d 317, 337 (Wis. 2010) (assuming without deciding that a search or seizure occurred and that a warrant was required to install the GPS tracking device on the defendant's automobile).

## II. BACKGROUND

One Fourth Amendment scholar often states that just when an understanding of the Fourth Amendment seems within reach, a new subset of issues presents itself to “draw us back from the brink of clarity.”<sup>8</sup> GPS technology and its application to Fourth Amendment doctrine is yet another one of these areas.

### A. *GPS Technology and Law Enforcement Use*

GPS technology has become commonplace in many Americans’ lives. An increasing number of Americans have GPS systems in their automobiles and use GPS technology on their cellular phones.<sup>9</sup> The powerful benefits of GPS officially began in 1978 with the launch of eleven satellites into orbit by the Rockwell International Corporation.<sup>10</sup> These first generation satellites were only intended for military use, but by the 1980s the United States Government made the system available to civilians as well.<sup>11</sup> In simple terms, GPS operates on three levels: satellites orbiting the Earth; control and monitoring stations on Earth; and the GPS receivers owned by users.<sup>12</sup> GPS receivers owned by users obtain information from the satellites in orbit and utilize triangulation technology to determine the exact location of the receiver.<sup>13</sup>

Since 1999, law enforcement agencies have had access to this technology through specially designed “under vehicle” GPS tracking devices.<sup>14</sup> These easily concealed GPS systems are approximately the size of a standard wallet.<sup>15</sup> The devices are installed on the undercarriage of an automobile with strong magnets that bond the device to the metal undercarriage of the suspect’s car.<sup>16</sup> Power is supplied to the system through eight common “C” batteries, which last for approximately eight hours.<sup>17</sup> Each system is typically powered by four power packs, which can be “changed in seconds” by law enforcement officers.<sup>18</sup> If longer surveillance is needed, officers can also hard-wire the GPS system to the automobile’s power source in order to avoid constant changing

---

8. Interview with Andrew Leipold, Professor, Univ. of Ill. Coll. of Law, in Champaign, Ill. (2011).

9. See ZD Net Research, *Portable GPS Navigation Market Statistics*, ZD NET (Aug. 15, 2006, 12:30 AM), <http://www.zdnet.com/blog/itfacts/portable-gps-navigation-market-statistics/11523> (noting 96.6% growth in sales of portable GPS devices from 2005 to 2006).

10. Renée McDonald Hutchins, *Tied up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 414 (2007).

11. *Applications*, GARMIN, <http://www8.garmin.com/aboutGPS/applications.html> (last visited Sept. 27, 2011).

12. *The Global Positioning System*, GPS. GOV, <http://www.gps.gov/systems/gps> (last visited Sept. 27, 2011).

13. *What is GPS?*, GARMIN, <http://www8.garmin.com/aboutGPS/index.html> (last visited Sept. 27, 2011).

14. LAW-ENFORCEMENT-GPS-TRACKERS.COM, <http://www.law-enforcement-gps-trackers.com/> (last visited Sept. 27, 2011).

15. *See id.*

16. John Bellah, *Vehicle Technology: GPS-Web Device*, L. ENFORCEMENT TECH., Oct. 2002, at 168, available at <http://appliedinnovativesolutions.net/spycompany.com/let/let%20pg%20168.htm>.

17. *Id.* at 170.

18. *Id.*

of the power packs.<sup>19</sup> The system even transitions to hibernation mode if the tracked automobile is not in motion for thirty minutes.<sup>20</sup> During testing of the device, automobiles were driven over speed bumps, dips, and rough roadway terrain, all with the GPS system successfully remaining in place on the vehicle.<sup>21</sup>

Information from the GPS device is automatically transmitted to a secure website via cellular technology and can be accessed through any secure law enforcement Internet connection.<sup>22</sup> The tracking history is generally saved for the prior three months and is easily downloaded.<sup>23</sup> Additionally, if multiple units are used, the tracking history can be combined and compared.<sup>24</sup> The simplicity, effectiveness, and efficiency of these systems greatly enhance law enforcement's ability to track criminal suspects.

#### B. Fourth Amendment Privacy Rights and Enhanced Surveillance Law

The Fourth Amendment to the United States Constitution, drafted long before the advent of GPS systems, guarantees that the "right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated."<sup>25</sup> In the context of enhanced surveillance cases, such as GPS surveillance, the question becomes whether the government action constituted a "search" under the Fourth Amendment.

In 1967, the Supreme Court adopted its modern test for determining an individual's expectation of privacy, and thus what constitutes a search, under the Fourth Amendment.<sup>26</sup> In *Katz v. United States*, the Supreme Court adopted a reasonableness test for Fourth Amendment searches.<sup>27</sup> The "*Katz* test" is drawn from Justice Harlan's concurring opinion in the case.<sup>28</sup> Its two prongs require that: (1) the defendant "exhibited an actual (subjective) expectation of privacy" and (2) that the expectation of privacy "be one that society is prepared to recognize as 'reasonable.'"<sup>29</sup> While in theory the Fourth Amendment protects people and not places, Harlan's concurrence emphasized that the defendant must have a reasonable expectation of privacy in the "place" where surveillance occurs.<sup>30</sup> Employing the *Katz* test, courts have routinely found that surveillance used was not a search under the Fourth Amendment if a defendant did not have a reasonable expectation of privacy in his location

---

19. *Id.*

20. *Id.* at 171–72.

21. *Id.* at 172.

22. *Id.* at 171.

23. *Id.*

24. *Id.*

25. U.S. CONST. amend. IV.

26. *Katz v. United States*, 389 U.S. 347, 361 (1967). Prior to *Katz*, the Supreme Court applied the "physical trespass" test adopted in *Olmstead v. United States*, 277 U.S. 438, 455–57 (1927). The physical trespass test limited a Fourth Amendment violation to "an actual physical invasion of [defendant's] house 'or curtilage.'" *Id.* at 466. The Supreme Court's ruling in *Katz* explicitly overruled *Olmstead*. *Katz*, 389 U.S. at 353.

27. *Katz*, 389 U.S. at 353.

28. *Id.* at 360–63 (Harlan, J., concurring).

29. *Id.* at 361.

30. *Id.*

when law enforcement used the challenged surveillance technique.<sup>31</sup> Although often criticized, the *Katz* test has withstood the test of time and controls Fourth Amendment analysis to this day, including in the area of enhanced surveillance.<sup>32</sup>

The Supreme Court foreshadowed its upcoming analysis of GPS surveillance with a similar evaluation of enhanced surveillance in *United States v. Knotts*.<sup>33</sup> In *Knotts*, the Court evaluated whether tracking the location and movements of a defendant’s automobile with a “beeper” was a search under the Fourth Amendment.<sup>34</sup> The tracking beeper utilized by law enforcement was placed in a drum of chemicals sold to the defendant who drove his automobile to what police later discovered was a laboratory for manufacturing methamphetamine.<sup>35</sup> In holding that use of the beeper was not a search, the Supreme Court emphasized that, under the reasoning of the *Katz* test, “a person travelling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another.”<sup>36</sup> The Court analogized use of the beeper to law enforcement following the automobile on public highways, stating that “nothing in the Fourth Amendment prohibited police from augmenting the sensory faculties bestowed upon them at birth with such enhancement as science and technology afforded them in this case.”<sup>37</sup> The Court came down decidedly in favor of law enforcement, seemingly opening the door to more invasive enhanced surveillance techniques. The Court emphatically concluded: “We have never equated police efficiency with unconstitutionality, and we decline to do so now.”<sup>38</sup>

The Supreme Court’s most recent foray into enhanced surveillance techniques came in *Kyllo v. United States*.<sup>39</sup> *Kyllo* was unlike *Knotts* in that the issue in *Kyllo* did not involve law enforcement tracking a potential defendant in his automobile.<sup>40</sup> Rather, the issue was whether the police could

---

31. See *United States v. Pineda-Moreno (Pineda-Moreno I)*, 591 F.3d 1212, 1215–1217 (2010) (finding no search as defendant did not have a reasonable expectation of privacy in his automobile on public streets); *Dow Chemical Co. v. United States*, 476 U.S. 227, 237–39 (1986) (finding no search as defendant did not have a reasonable expectation of privacy in law enforcement taking aerial photographs of its industrial complex); *Smith v. Maryland*, 442 U.S. 735, 742–46 (1979) (finding no search as defendant had no reasonable expectation of privacy in pen registers at phone company that law enforcement utilized to determine telephone numbers dialed by defendant).

32. See *Kyllo v. United States*, 533 U.S. 27, 32 (2001) (stating that the Supreme Court applies the principle “first enunciated in *Katz v. United States*” to determine whether or not law enforcement conducted a search under Fourth Amendment protections).

33. *United States v. Knotts*, 460 U.S. 276, 277 (1983).

34. *Id.* at 279–80.

35. *Id.* at 278–79.

36. *Id.* at 281.

37. *Id.* at 282.

38. *Id.* at 284. *But see* *United States v. Karo*, 468 U.S. 705, 719 (1984) (finding a search in a similar “beeper” case where law enforcement tracked the beeper inside the defendant’s home in addition to over the public roadways). In distinguishing *Knotts*, the Court emphasized that in *Knotts* there was no information gained by law enforcement that would be otherwise unavailable through visual surveillance. *Id.* at 715. In *Karo*, however, the agents were able to obtain information about the inside of the defendant’s home, an area unavailable to the general view of visual surveillance, and thus giving rise to a search and subsequent Fourth Amendment protections. *Id.* at 719.

39. *Kyllo v. United States*, 533 U.S. 27, 29–30 (1983).

40. *Id.*

use a thermal imaging gun, an enhanced surveillance technique, to gain information from inside the defendant's home.<sup>41</sup> The Court in *Kyllo* agreed with the defendant that using enhanced surveillance to obtain information from the inside of a home was a violation of the Fourth Amendment.<sup>42</sup> Unlike *Knotts*, where the Court reasoned there was no expectation of privacy in the movements of a car on the road, the Supreme Court held that enhanced surveillance of the inside of the home where "privacy expectations are most heightened" was a search, and found that search unreasonable.<sup>43</sup> Importantly, although Fourth Amendment protections under the *Katz* test have eroded over time, the interior of the home consistently stands as a bastion of a citizen's reasonable expectation of privacy.<sup>44</sup> This distinction will prove important when analyzing law enforcement use of GPS technology and the arguments both for and against classifying GPS tracking of criminal suspects as a search under the Fourth Amendment.

### III. ANALYSIS

Against the backdrop of *Knotts* and *Kyllo*, the U.S. military developed GPS technology and later made the technology available to the civilian population. With GPS technology now available to the general public, as well as to law enforcement, those agencies predictably employed the technology as an investigative aid. Not surprisingly, that use of GPS technology was quickly challenged in the courts.

#### A. *A First Look at GPS Surveillance*

The Seventh Circuit was the first federal appellate court to address the issue of GPS surveillance in *United States v. Garcia*.<sup>45</sup> The defendant in *Garcia* was convicted of offenses related to the manufacture and sale of methamphetamine which the police discovered by tracking the defendant's vehicle with a GPS device installed underneath the car's rear bumper.<sup>46</sup>

*Garcia* is significant for two reasons. First, *Garcia* directly analyzed police installation of a GPS tracking device onto a defendant's car for the first time.<sup>47</sup> The Seventh Circuit specifically acknowledged that the Supreme Court in *Knotts* "left open the question whether installing the device in the vehicle converted the subsequent tracking into a search."<sup>48</sup> The court resolved the open question by drawing an analogy to police using lamppost cameras or real

---

41. *Id.* at 30–31.

42. *Id.* at 40. *Accord* *Payton v. New York*, 445 U.S. 573, 590 (1980).

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

44. *See id.* (holding that exploring the details of the home that are unavailable without physical intrusion is a search and presumptively unreasonable); *Karo v. United States*, 468 U.S. 705, 719 (1984) (holding that law enforcement's actions of monitoring a tracking beeper inside the defendant's home were a search); *Payton*, 445 U.S. at 590 (stating that there is a "firm line at the entrance to the house" under the Fourth Amendment).

45. *United States v. Garcia*, 474 F.3d 994, 995 (7th Cir. 2007).

46. *Id.* at 995–96.

47. *See id.* at 997 (collecting cases where law enforcement utilized tracking devices such as beepers or other magnetic devices but none where police yet obtained information from a GPS locator).

48. *Id.* at 996–97.

time satellite imagery to track a defendant’s movements.<sup>49</sup> The court noted that “in the imaging cases nothing touches the vehicle, while in the case at hand, the tracking device does . . . a distinction without any practical difference” to the court.<sup>50</sup> Secondly, the court made an important distinction between the use of GPS technology to track the movements of a defendant’s vehicle and the use of enhanced surveillance to obtain information from inside the home.<sup>51</sup> The court reasoned that while *Kyllo* was correctly decided, GPS surveillance is a substitute for “following a car on a public street, [an activity] that is unequivocally not a search within the meaning of the amendment.”<sup>52</sup> In contrast, obtaining information from inside the home, as in *Kyllo*, is “a form of search unequivocally governed by the Fourth Amendment.”<sup>53</sup>

### B. *Conflicting Outcomes Muddle the Issue*

Following the Seventh Circuit’s ruling in *Garcia*, litigation over GPS tracking by law enforcement increased in both state and federal courts. Just as the appellate circuits began forging a consensus that GPS tracking was not a search, the District of Columbia Circuit presented a conflicting opinion.<sup>54</sup> The court held that in at least some cases, a search takes place when law enforcement utilizes GPS to track a suspect’s vehicle,<sup>55</sup> setting the stage for Supreme Court review.

#### 1. *United States v. Pineda-Moreno*

The Ninth Circuit issued the second federal appellate decision analyzing GPS tracking of suspects’ automobiles. In a remarkably similar set of facts to *Garcia*, the defendant in *United States v. Pineda-Moreno* was tracked using GPS devices attached to the underside of his car.<sup>56</sup> Like the court in *Garcia*, the Ninth Circuit stated that attaching a GPS tracking device to the defendant’s vehicle did not constitute a search for purposes of the Fourth Amendment.<sup>57</sup> The court reasoned that “the undercarriage is part of the car’s exterior, and as such, is not afforded a reasonable expectation of privacy.”<sup>58</sup> The court also

---

49. *Id.* at 997.

50. *Id.*

51. *Id.*

52. *Id.*

53. *Id.*

54. *United States v. Maynard*, 615 F.3d 544, 557–58 (D.C. Cir. 2010).

55. *Id.*

56. *United States v. Pineda-Moreno (Pineda-Moreno I)*, 591 F.3d 1212, 1213 (9th Cir. 2010). In the spring of 2010, the Eighth Circuit decided yet another similar GPS tracking case in *United States v. Marquez*, 605 F.3d 604, 607 (8th Cir. 2010). The defendant in *Marquez* was tracked via a GPS device affixed to the bumper of his automobile. *Id.* at 607–08. Consistent with *Knotts* and *Garcia*, the Eighth Circuit held that no search occurred under the Fourth Amendment. *Id.* at 610.

57. *Id.* at 1214 (citing *United States v. McIver*, 186 F.3d 1119, 1126–27 (9th Cir. 1999) for the proposition that law enforcement’s use of a mobile tracking device was not a search). The Ninth Circuit’s prior ruling in *McIver* addressed law enforcement’s use of a more primitive mobile tracking device rather than a GPS tracker; however, the court in both cases applied similar lines of reasoning to determine that there was no expectation of privacy in the placement of a mobile tracking device on the exterior of a suspect’s vehicle and subsequently utilizing information received from the device. *McIver*, 186 F.3d at 1126.

58. *Pineda-Moreno I*, 591 F.3d at 1214.

rejected the defendant's argument that *Kyllo*, rather than *Knotts*, should control.<sup>59</sup> Relying on the Seventh Circuit's decision in *Garcia*, the court stated that there was no search of a constitutionally protected area and all that the GPS device provided to law enforcement was "information the agents could have obtained by following the [defendant's] car."<sup>60</sup> Following the court's decision, the defendant petitioned for a rehearing by an en banc panel of the Ninth Circuit.<sup>61</sup> Although the rehearing was denied, Chief Judge Alex Kozinski authored a stinging dissent that argued the majority decision dismantled the zone of privacy the Fourth Amendment was designed to provide.<sup>62</sup> Many in the media agreed with Judge Kozinski, describing the court's holding as "bizarre," "scary," and "dangerous."<sup>63</sup>

## 2. *United States v. Maynard*

Just as courts began forging a consensus as to GPS tracking and its application to the Fourth Amendment, the D.C. Circuit issued its opinion in *United States v. Maynard*, which for the first time classified GPS tracking by law enforcement as a search.<sup>64</sup> The court noted but declined to follow the decisions in the prior appellate cases, arguing that in each of those cases, the defendant failed to raise the issue of prolonged surveillance, whereas in *Maynard*, the length of the surveillance was the issue directly presented for review.<sup>65</sup> In coming to its conclusion, the court quoted *Knotts*, stating that *Knotts* should not be read to endorse "twenty-four hour surveillance of any citizen of this country."<sup>66</sup> Based on that language, the court concluded that *Knotts* did not control.<sup>67</sup>

After determining that *Knotts* did not control its decision, the court undertook an exhaustive analysis of whether prolonged surveillance of a defendant gives rise to a reasonable expectation of privacy.<sup>68</sup> First, the court determined that although the defendant's discrete movements over a period of time were all exposed to the public, "the whole of one's movements over the course of a month is not *actually* exposed to the public because the likelihood anyone will observe all those movements is effectively nil."<sup>69</sup> The court further stated that the "whole" of prolonged surveillance reveals more than "the sum of its parts," adopting a rule that the aggregation of all of the

---

59. *Id.* at 1216.

60. *Id.*

61. *United States v. Pineda-Moreno (Pineda-Moreno II)*, 617 F.3d 1120, 1120 (9th Cir. 2010).

62. *Id.* at 1121 (Kozinski, J., dissenting from denial of rehearing *en banc*). While Kozinski's dissent offered several arguments, none were grounded in the controlling issue of whether attaching a GPS surveillance tracker to a suspect's automobile when the automobile is in a public area is a search. *Id.* Kozinski made arguments regarding the curtilage of defendant's property, relying on a faulty *Kyllo* based rationale, and policy arguments regarding the affluence of federal judges and dragnet surveillance. *Id.* at 1121–26.

63. Adam Cohen, *The Government can use GPS to Track your Moves*, TIME (Aug. 25, 2010), <http://www.time.com/time/nation/article/0,8599,2013150,00.html>.

64. *United States v. Maynard*, 615 F.3d 544, 555 (D.C. Cir. 2010).

65. *Id.* at 557–58.

66. *Id.* at 556–57.

67. *Id.*

68. *Id.*

69. *Id.* at 558.



defendant’s movements by GPS surveillance made the intrusion more invasive than each individual piece of surveillance, and thus gave rise to an unreasonable search.<sup>70</sup> The court, in making this assertion, overlooked the fact that law enforcement agencies have been performing long-term continuous surveillance of suspects for many years.<sup>71</sup> The court refuted this notion by reasoning that “practical 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 . . . .”<sup>72</sup>

In order to deflect criticism from this flawed reasoning, the court next focused on the open question in *Knotts* as to whether twenty-four hour surveillance of a suspect was constitutional, contradicting the Seventh Circuit’s reasoning in *Garcia*.<sup>73</sup> Taken to the theoretical extreme, the government would have been able to monitor the defendant twenty-four hours a day if he was continually moving about in his automobile.<sup>74</sup> In reality, however, the court used this logical fiction to justify its conclusions that the GPS tracking was a search.<sup>75</sup> Contrary to the court’s conclusion, however, the facts of the case actually demonstrate that law enforcement utilized its GPS surveillance only in order to build a case against the defendant based on his movements in the targeted automobile.<sup>76</sup> The government did not and could not track the defendant twenty-four hours a day.<sup>77</sup>

It is important to note that although the controlling issue in *Maynard*, namely the length of GPS surveillance, was not raised in *Garcia*, *Pineda-Moreno*, or an almost identical case decided by the Eighth Circuit, *United States v. Marquez*, the courts in two of these three cases had no difficulty accepting the premise that prolonged surveillance was not a search under the Fourth Amendment.<sup>78</sup> Specifically, in *Marquez*, the court stated that law enforcement officers “determine[d] that the truck was traveling back and forth to Denver [from Des Moines, Iowa]” from May 2007 until October 2007, a period of six months.<sup>79</sup> The court approvingly noted that “[i]nvestigators in Iowa teamed with police in Denver for live surveillance of the truck while it was in Denver and Des Moines.”<sup>80</sup> Similarly, in *Pineda-Moreno*, the court stated that “[o]ver a four-month period, agents repeatedly monitored Pineda-Moreno’s Jeep using various types of mobile tracking devices.”<sup>81</sup> While it is

---

70. *Id.*

71. *Id.* at 562.

72. *Id.* at 565 (footnote omitted).

73. *Id.* at 565–66.

74. See LAW-ENFORCEMENT-GPS-TRACKERS.COM, *supra* note 14; Bellah, *supra* note 16 at, 170–171 (describing the functionality and uses of under vehicle GPS tracking technology utilized by law enforcement and noting that the under vehicle tracking technology hibernates when the automobile being tracked is in an idle position for thirty minutes or more).

75. *Maynard*, 615 F.3d at 566.

76. *Id.* at 548–49.

77. *Id.*

78. See *United States v. Pineda-Moreno (Pineda-Moreno I)*, 591 F.3d 1212, 1213 (9th Cir. 2010) (discussing four-month surveillance period); *United States v. Marquez*, 605 F.3d 604, 607 (8th Cir. 2010) (discussing six-month surveillance period).

79. *Marquez*, 605 F.3d at 607.

80. *Id.*

81. *Pineda-Moreno I*, 591 F.3d at 1213.

true that these courts did not receive direct challenges to the length of surveillance time, they nonetheless found that surveillance conducted for four and six-month time periods did not give rise to a reasonable expectation of privacy, a stark contrast to *Maynard*.<sup>82</sup>

As with *Pineda-Moreno*, the decision in *Maynard* garnered significant media attention. The press generally praised the court's decision, one article going as far as to say that it "admirably upheld the Constitution."<sup>83</sup> Another article commented that the court was "sharply divided" in its decision, a prelude to the certain petition for rehearing en banc.<sup>84</sup> The government petitioned for such a hearing, and as was the case in *Pineda-Moreno*, the full panel of the D.C. Circuit denied the petition.<sup>85</sup> In dissent, Chief Judge Sentelle refuted the logic of the majority, stating that "[t]here is no material difference between tracking [a suspect's] movements . . . with a beeper and . . . a GPS."<sup>86</sup> Additionally, Sentelle refuted the majority's argument that the defendant's movements were somehow constructively private because they were over a period of time.<sup>87</sup> Sentelle noted "[t]he fact that no particular individual sees [the movements] does not make the movements any less public."<sup>88</sup> Thus, argued Sentelle, there is no expectation of privacy in what a person knowingly exposes to the public, as "[t]he sum of an infinite number of zero-value parts is also zero."<sup>89</sup>

Finally, Sentelle noted that the majority opinion conceded the installation of the GPS device was not an invasion of privacy.<sup>90</sup> Rather, what gave rise to an unreasonable search was the aggregation of information over a nearly one-month timespan.<sup>91</sup> Under this rule, the "novel aggregation approach" utilized by the court would "prohibit not only GPS-augmented surveillance, but any other police surveillance of sufficient length to support consolidation of data into the sort of pattern or mosaic contemplated" by the majority.<sup>92</sup> Accepting the logic of the majority would lead the judiciary on a slippery slope towards the exclusion of evidence in a much broader array of criminal investigations, and discount extensive police work conducted over time and with the intent of building a case against suspected offenders.

### C. *Moving Forward with GPS Surveillance Jurisprudence*

With the decision in *Maynard*, the Seventh, Eighth, Ninth, and D.C. Circuits have all ruled on the issue of warrantless GPS tracking of suspected

---

82. *Id.* at 1213, 1217; *Marquez*, 605 F.3d at 607, 610.

83. *Get a Warrant for GPS Tracking*, PITTSBURGH TRIB. REV., Nov. 27, 2010, [http://www.pittsburghlive.com/x/pittsburghtrib/opinion/s\\_711111.html](http://www.pittsburghlive.com/x/pittsburghtrib/opinion/s_711111.html).

84. Jim McElhatton, *Appeals Court Derails Use of GPS in Case, Decides Tracking for Drugs Violates the Fourth Amendment*, WASH. TIMES, Nov. 23, 2010, <http://www.washingtontimes.com/news/2010/nov/22/appeals-court-derail/>.

85. *United States v. Jones*, 625 F.3d 766, 767 (D.C. Cir. 2010) (denying rehearing *en banc*).

86. *Id.* at 768 (Sentelle, J., dissenting from denial of rehearing *en banc*).

87. *Id.*

88. *Id.*

89. *Id.* at 769.

90. *Id.*

91. *Id.*

92. *Id.*

criminal activity; in addition, two separate district courts in New York, one district court in Florida, and one district court in Kentucky all ruled on the issue.<sup>93</sup> While all the rulings prior to *Maynard* were consistent in holding that such GPS tracking did not constitute a search, *Maynard* provided at least a marginal split in federal circuit authority.<sup>94</sup> Additionally, although the decision in *Maynard* indicated that short term tracking might be acceptable, the court gave no indication as to when the length of tracking magically becomes unreasonable, and thus becomes a search under the Fourth Amendment.<sup>95</sup> Mike Masnick, a legal technology blogger, framed the question as follows: “[H]ow about 2 weeks? 1 week? 1 day? 1 hour? I have no idea . . . [and e]ven stranger, the [] theory has the bizarre consequence of creating retroactive unconstitutionality.”<sup>96</sup> How long is too long under the *Maynard* rule, and what are the implications of *Maynard*’s retroactive unconstitutionality analysis? These unanswered questions were evident in the two most significant GPS tracking cases decided since *Maynard*, *United States v. Cuevas-Perez* and *United States v. Sparks*.<sup>97</sup> In *Sparks*, the District of Massachusetts declined to follow *Maynard*, instead relying on *Garcia*, *Pineda-Moreno* and other cases while attacking *Maynard*’s aggregation rule as “vague and unworkable.”<sup>98</sup> The court struggled with *Maynard*’s analysis, as Masnick predicted, stating that it was “unclear when surveillance becomes so prolonged as to have crossed the threshold” into unreasonable, and thus becomes an invasion of privacy.<sup>99</sup> Similarly, the Seventh Circuit declined to follow *Maynard* in *Cuevas-Perez*.<sup>100</sup> While the majority simply distinguished *Maynard* on the basis that the time period of surveillance was sixty hours as opposed to the twenty-eight days in *Maynard*, Judge Flaum’s concurrence more accurately hit the mark, stating that *Maynard* is not “doctrinally sound—or all that workable as a practical matter.”<sup>101</sup> However, the continuing concerns about overly invasive surveillance were again evident in Judge Wood’s dissent, as she became the latest jurist to invoke Orwell’s *1984* as a warning against Big Brother surveillance.<sup>102</sup>

---

93. *United States v. Maynard*, 615 F.3d 544, 557–58 (D.C. Cir. 2010); *United States v. Marquez*, 605 F.3d 604, 607 (8th Cir. 2010); *United States v. Pineda-Moreno (Pineda-Moreno I)*, 591 F.3d 1212, 1216–17 (9th Cir. 2010); *United States v. Garcia*, 474 F.3d 994, 997 (7th Cir. 2007); *United States v. Burton*, 698 F. Supp. 2d 1303, 1307 (N.D. Fla. 2010) (finding no search); *United States v. Williams*, 650 F. Supp. 2d 633, 669 (W.D. Ky. 2009) (finding no search); *Morton v. Nassau Cnty. Police Dep’t*, No. 05-cv-4000, 2007 WL 4264569, at \*3 (E.D.N.Y. 2007) (finding no search); *United States v. Moran*, 349 F. Supp. 2d 425, 468 (N.D.N.Y. 2005) (finding no search or seizure).

94. See discussion *supra* Part III. B.

95. Mike Masnick, *Appeals Court Rules Against Long Term Warrantless GPS Tracking of Suspect; Sets up Inevitable Supreme Court Case*, TECHDIRT (Aug. 6, 2010, 3:04 PM), <http://www.techdirt.com/articles/20100806/12442410531.shtml>.

96. *Id.*

97. *United States v. Cuevas-Perez*, 640 F.3d 272, 272 (7th Cir. 2011); *United States v. Sparks*, 750 F. Supp. 2d 384, 384 (D. Mass. 2010). Other district courts across the country continue to confront this issue, further demonstrating the need for Supreme Court guidance. See, e.g., *United States v. Walker*, 771 F. Supp. 2d 803, 805 (W.D. Mich. 2011); *United States v. Jesus-Nunez*, 2010 WL 299129, \*1, 5 (M.D. Pa. 2010).

98. *Sparks*, 750 F. Supp. 2d at 392.

99. *Id.*

100. *Cuevas-Perez*, 640 F.3d at 275–76.

101. *Id.* at 280 (Flaum, J., concurring).

102. *Id.* at 286 (Wood, J., dissenting).

The Supreme Court will likely answer the legal questions raised by the *Maynard* case during its upcoming term. The United States Solicitor General's Office filed a petition for *certiorari* in the case (re-captioned *United States v. Jones* in the Supreme Court) on April 15, 2011, which was granted on June 27, 2011.<sup>103</sup> The Justice Department relied on three main arguments in its petition: first, that the *Maynard* court's decision and "aggregation" theory of Fourth Amendment privacy is squarely in conflict with *Knotts*;<sup>104</sup> second, that the decision in *Maynard* creates a genuine conflict between the Seventh and Ninth Circuits on the one hand and the D.C. Circuit on the other hand;<sup>105</sup> and third, that *Maynard* created "confusing or inconsistent case law with respect to GPS tracking" that hampers law enforcement interests and confuses the lower courts.<sup>106</sup> The Justice Department flatly rejected the D.C. Circuit's analysis in its petition, quoting from Judge Sentelle's dissent and supporting his "sum of an infinite number of zero-value parts is also zero" analysis.<sup>107</sup> The government's appeal will allow the Supreme Court to have the final say on whether GPS surveillance of a suspect's automobile on a public roadway is a search under the Fourth Amendment.

#### IV. PREDICTION AND RECOMMENDATION

The overwhelming body of case law, with the exception of *Maynard*, continues to trend against defining the placement of a GPS device on an automobile as a search while that automobile is in a public area. However, the *Maynard* court and other commentators have insisted that GPS surveillance should trigger Fourth Amendment protections.<sup>108</sup> The arguments raised both by commentators in favor of Fourth Amendment protections and by the *Maynard* majority are flawed for three main reasons, and thus it is likely that the Supreme Court will rule that GPS surveillance does not constitute a search under the Fourth Amendment. First, the argument that a vague quantity of surveillance in the aggregate should give rise to a heightened level of Fourth Amendment protection is an unreasonable burden to place on law enforcement and the courts. Second, advocates of a privacy right for individuals being tracked in their automobiles by GPS place an improper reliance on *Kyllo* in an effort to minimize *Knotts*. Finally, courts have uniformly remained vigilant against "dragnet" surveillance to avoid the Orwellian disaster predicted by those who argue against law enforcement use of GPS surveillance.

---

103. *United States v. Jones*, 131 S.Ct. 3064, 3064 (2011) (granting *certiorari*); Petition for Writ of Certiorari, *Jones*, 625 F.3d 766 (No. 10-1259), available at [http://legaltimes.typepad.com/files/doj\\_gps\\_cert.pdf](http://legaltimes.typepad.com/files/doj_gps_cert.pdf).

104. Petition for a Writ of Certiorari at 12-20.

105. *Id.* at 20-23.

106. *Id.* at 23-27.

107. *Id.* at 20 (citation omitted).

108. See *United States v. Maynard*, 615 F.3d 544, 568 (D.C. Cir. 2010) (defining prolonged GPS tracking of suspects as a search under the Fourth Amendment); Hutchins, *supra* note 10, at 454-60 (arguing that GPS tracking should be considered a search under the Fourth Amendment and be preauthorized by a warrant); 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, 697-702 (2005) (arguing that GPS tracking should be considered a search under a new privacy based rationale that expands protections seen in *Kyllo* to automobiles moving along "open roads and streets").

### A. *The “Quantity” Problem*

Prior scholarly arguments in favor of construing GPS tracking by law enforcement as a search relied upon an aggregation theory similar to that adopted in *Maynard* and rejected in *Sparks*.<sup>109</sup> The argument follows that the quantity of information revealed should serve as a “moderating agent,” and that courts should look to the “potential volume or detail” of the information gained through the search.<sup>110</sup> If the quantity of information exceeds some unspecified threshold, the court should grant increased constitutional protection.<sup>111</sup> In the absence of this threshold that converts several reasonable actions into an unreasonable search, the result is a “lengthy, detailed record of one’s location [that] then provides a comprehensive picture of one’s life.”<sup>112</sup> This analysis is unquestionably accurate, as the goal of extended surveillance of an individual by law enforcement is to obtain a comprehensive picture of an individual’s life that can aid that agency in linking the suspected offender to criminal activity.

The flaw in these critics’ argument is simply that, contrary to their assertions, accumulation of these personal details is not protected by the Fourth Amendment; these commentators concede as much by agreeing that travels on public roads are unprotected actions.<sup>113</sup> Further, as noted in *Sparks*, relying on a vague and ambiguous threshold to determine whether a Fourth Amendment violation occurs places an undue burden on law enforcement.<sup>114</sup> Additionally, it creates more confusion in the courts at a time when judges are looking for clarity as to issues of criminal procedure.<sup>115</sup> Courts cannot be expected to guess what amounts to a reasonable amount of time for an agency to track a suspected offender. Rather, as Sentelle simply stated in his *Maynard* dissent, the sum of multiple actions that are not in and of themselves violations of the Constitution cannot simply morph into a constitutionally unreasonable action at the stroke of a judge’s pen.<sup>116</sup>

### B. *Improper Reliance on a Kyllo Based Rationale*

The second major flaw in arguments against allowing GPS tracking of potential criminal suspects is an improper reliance on *Kyllo*,<sup>117</sup> which should not even apply to the analysis of GPS tracking of automobiles moving along public roadways. In an attempt to make the argument against GPS tracking devices more nuanced than it is, some commentators attempt to classify the use

---

109. Hutchins, *supra* note 10, at 438–442; Otterberg, *supra* note 107, at 697–699.

110. Hutchins, *supra* note 10, at 438–442.

111. *Id.*

112. *Id.*; Otterberg, *supra* note 107, at 697–699. See also Ramya Shah, Note, *From Beepers to GPS: Can the Fourth Amendment Keep up With Electronic Tracking Technology?*, 2009 U. ILL. J.L. TECH. & POL’Y 281, 287 (2009) (describing the ability of GPS surveillance to assemble a complete collection of the details in an individual’s life).

113. Hutchins, *supra* note 10, at 453; Otterberg, *supra* note 108, at 683–85.

114. *United States v. Sparks*, 750 F. Supp 2d 383, 392–93 (D. Mass. 2010).

115. *Id.*

116. *United States v. Jones*, 625 F.3d 766, 767–769 (D.C. Cir. 2010) (Sentelle, J., dissenting from denial of rehearing *en banc*).

117. Otterberg, *supra* note 108, at 699–701.

of GPS tracking as extrasensory, similar to the thermal imaging gun utilized to collect heat signatures from inside the home in *Kyllo*.<sup>118</sup> This argument quickly fails, as GPS tracking simply takes the place of, concededly, numerous man-hours and intense investigation. This investigation is “sensory enhancement” and not a “sensory substitute,” as was the case in *Kyllo*. The “sensory enhancement” theory has been accepted as reasonable by the Supreme Court on multiple occasions, and should be accepted again in this case.<sup>119</sup>

Even in the face of the sensory enhancement argument, one commentator still attempts to extend the *Kyllo* theory of protection over the home to “those less physical features that also provide privacy,” including automobiles travelling over public roadways.<sup>120</sup> This argument not only distorts the holding in *Kyllo*, but completely brushes aside the fact that GPS trackers are affixed to the outside of automobiles, an area knowingly exposed to the public which receives no Fourth Amendment protection whatsoever.

### C. Consistency of Judicial Caution Against “Dragnet” Surveillance

Finally, one of the chief concerns of an almost universal group of commentators, as well as the judiciary, is that advanced surveillance techniques will one day become the dragnet surveillance of Orwell’s 1984 world.<sup>121</sup> While a legitimate concern, the Supreme Court succinctly and appropriately dealt with this issue in *Knotts* and will likely do the same in this case.<sup>122</sup> The Court stated that although the use of advanced surveillance technology constructively allows twenty-four hour surveillance of any citizen, “the reality hardly suggests abuse.”<sup>123</sup> The Court continued by cautioning that “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.”<sup>124</sup>

In the wake of *Knotts*, lower courts have stayed true to these cautionary statements from the Supreme Court, beginning with the Seventh Circuit’s ruling in *Garcia*.<sup>125</sup> *Garcia* noted that GPS tracking was only used in that case

---

118. Hutchins, *supra* note 10, at 456–57. See also Eva Marie Dowdell, *You are Here! —Mapping the Boundaries of the Fourth Amendment With GPS Technology*, 32 RUTGERS COMPUTER & TECH. L.J. 109, 133 (2005).

119. See *Dow Chemical Co. v. United States*, 476 U.S. 227, 239 (1986) (reasoning that aerial photographs taken were not an unreasonable invasion of privacy as they were not extrasensory in nature); *United States v. Knotts*, 460 U.S. 276, 285 (1983) (stating that no information was gained by law enforcement that would otherwise be unavailable through visual surveillance).

120. Otterberg, *supra* note 108, at 701.

121. See *Knotts*, 460 U.S. at 283–84 (cautioning that if dragnet surveillance presents itself in the future, the Supreme Court can determine whether “different constitutional principles” classifying such dragnet surveillance as a search should govern); *United States v. Pineda-Moreno (Pineda-Moreno II)*, 617 F.3d 1120, 1125–26 (9th Cir. 2010) (arguing that cellular telephone companies pinging of customers and LoJack and OnStar services in fact already show dragnet surveillance); *United States v. Garcia*, 474 F.3d 994, 998 (7th Cir. 2007) (noting that programs of mass surveillance would warrant secondary judicial scrutiny of enhanced surveillance as a potential Fourth Amendment search).

122. *Knotts*, 460 U.S. at 283–84.

123. *Id.* at 283.

124. *Id.* at 284.

125. *Garcia*, 474 F.3d at 998.

when law enforcement had “a suspect in their sights.”<sup>126</sup> Again, however, the court cautioned that “[s]hould 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.”<sup>127</sup> Other courts take similar views to the Seventh Circuit, cautioning against random mass surveillance, but in each case finding that law enforcement had a particular suspicion that the individual subject to surveillance was targeted because of specific information relating to criminal activity.<sup>128</sup> The case currently pending in the Supreme Court is no different.

Based on multiple courts’ repeated caution against any future development of dragnet surveillance and the factual situations presented in the cases at issue, there can be no credible argument that the use of GPS tracking by law enforcement agencies permits to any type of dragnet surveillance of the general population. For these three main reasons, it is likely that the Supreme Court will reverse the decision of the D.C. Circuit and hold that GPS surveillance is not a Fourth Amendment search.

## V. CONCLUSION

The use of GPS based surveillance has become commonplace for law enforcement agencies across the country. When addressing the narrow issue of attaching a GPS tracking device to the exterior of an automobile, there are no simple answers. Ultimately, allowing law enforcement the opportunity to utilize this tool while remaining vigilant for future dragnet surveillance is the best outcome. Given the trend in federal appellate case law the Supreme Court’s upcoming ruling will likely determine that GPS surveillance of suspects automobiles on public roadways is not a Fourth Amendment search. Whatever the outcome in the Supreme Court, GPS technology is here to stay, providing tools to everyday Americans, the military, and our law enforcement agencies.

---

126. *Id.*

127. *Id.*

128. *See* *United States v. Marquez*, 605 F.3d 604, 610 (8th Cir. 2010) (“It is imaginable that a police unit could undertake ‘wholesale surveillance’ by attaching such devices to thousands of random cars . . . [but] [i]n this case, there was nothing random or arbitrary about the installation and use of the device.”); *United States v. Sparks*, 750 F.Supp.2d 384, 395–96 (D. Mass. 2010) (“It is simply unreasonable at this point, however, to conclude that any government—municipal, state, or federal—has the resources, or interest, to initiate personalized surveillance of every citizen . . . . [T]he type of ‘dragnet’ law enforcement practices postulated in *Knotts* . . . have yet to materialize, and are certainly not an issue in this case.”).