BALANCING EFFECTIVENESS WITH PRIVACY: WHAT THE NEW YORK CITY SUBWAY SEARCH CASE DOES NOT TELL US ABOUT TECHNOLOGY AND THE FOURTH AMENDMENT

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INTRODUCTION

On July 22, 2005, New York City and the New York City Police Department (NYPD) implemented a policy of randomly searching subway passengers' bags and containers as a counter-terrorism measure.¹ The program was implemented in response to terrorist attacks on the London subway system during the previous two weeks.² On August 4, 2005, individuals selected to be searched under the program brought suit in the Southern District of New York in the case of MacWade v. Kelly,³ alleging the use of warrantless, suspicionless searches was a violation of the Fourth and Fourteenth Amendments and requesting injunctive relief.⁴ Plaintiffs were represented by the New York Civil Liberties Union (NYCLU).⁵ The applicable Fourth Amendment doctrine states that warrantless searches, unless falling within "'a few specifically established and well-delineated exceptions,' [are] per se unreasonable and are therefore prohibited by the Fourth Amendment."⁶ The court ultimately upheld the searches as constitutional after finding the program fell under the exception

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^{1.} MacWade v. Kelly, No. 05CIV6921RMBFM, 2005 WL 3338573, at *1 (S.D.N.Y. Dec. 7, 2005), *aff*^{*}d, No. 05-6754 CV, 2006 WL 2328723 (2d Cir. Aug. 11, 2006).

^{2.} MacWade, 2005 WL 3338573, at *1, *5.

^{3.} Id. at *8. Some had been searched, others refused to be searched and left the system. Id.

^{4.} *Id.* at *1.

^{5.} *Id*.

^{6.} United States v. Taborda, 635 F.2d 131, 136 (2d Cir. 1980) (quoting Katz v. United States, 389 U.S. 347, 357 (1967)).

known as the "special needs" doctrine.⁷ The doctrine allows law enforcement to search individuals who are not themselves suspected of criminal activity if: (1) there is a compelling state interest to do so; (2) the program is reasonably effective; and (3) the program interferes only minimally with individual liberty.⁸

When reaching its decision regarding the legality of the subway searches, the court declined to consider the relevance to the outcome of the case of the experimental explosive detection technology being tested by the NYPD.⁹ In doing so, the court missed an opportunity to articulate a clear and judicially-manageable standard for dealing with the effects of emerging technology in the context of the Fourth Amendment. In its appeal to the Second Circuit, the NYCLU did not raise any claims related to the technology, and so a second chance for judicial guidance escaped.¹⁰ Lack of clear jurisprudential guidelines on how to consider technological innovation in the criminal procedure realm has produced illogical results, giving little guidance to either law enforcement personnel or lower courts on which search technologies are constitutionally permissible and which are not.

9. See MacWade, 2005 WL 3338573, at *8.

^{7.} MacWade, 2005 WL 3338573, at *15-17, 20.

^{8.} *Id.* at *16. The public is probably most familiar with this type of search scheme in the context of driver intoxication checkpoints. All cars are stopped and drivers questioned, even if police have no reason to believe the drivers have been drinking. *See, e.g.*, Mich. Dep't of State Police v. Sitz, 496 U.S. 444 (1990). This test has been articulated and refined in a number of cases decided by the Supreme Court, which the court relies on in *MacWade*. *See, e.g.*, Illinois v. Lidster, 540 U.S. 419, 427 (2004) (balancing gravity of public concern, advancement of public interest, and severity of interference with individual liberty); Bd. of Educ. of Indep. Sch. Dist. No. 92 v. Earls, 536 U.S. 822, 830 (2002) (using "fact-specific balancing of the intrusion on . . . Fourth Amendment rights against the promotion of legitimate governmental interests"); Mich. Dep't of State Police v. Sitz, 496 U.S. 444, 448–49 (1990) (balancing state's interest, effectiveness of state method, and level of intrusion); Nat'l Treasury Employees Union v. Von Raab, 489 U.S. 656, 665–66 (1989) (balancing individual's privacy expectations against government's interest).

^{10.} *MacWade*, 2006 WL 2328723 at *1 (listing the three claims raised by the NYCLU on appeal: (1) the special needs doctrine applies only in scenarios where there is a diminished expectation of privacy, unlike the situation on the subway, where riders have a full expectation of privacy; (2) the District Court erred in finding a "special need"; and (3) if a special need does exist, the District Court erred in balancing the relevant factors because (a) the searches are intrusive; (b) there is no immediate terrorist threat to the New York City subway system; and (c) the City did not establish as a matter of law that the searches are effective).

I.

BACKGROUND: OPERATION PROCEDURES FOR THE NYPD SUBWAY SEARCHES

The NYPD has developed specific procedures and policies for administering the subway inspection program. First, the NYPD randomly selects different locations for the container inspection checkpoints.¹¹ The randomness is intended to create unpredictability and uncertainty,¹² while maintaining flexibility to respond to changing threat levels.¹³ Notice of the checkpoint is provided to passengers wishing to enter the subway system.¹⁴ The supervising officer determines the frequency of passengers to be inspected (*i.e.*, every tenth or twentieth passenger) and notes this in his or her activity log.¹⁵

Individuals who are selected for inspection are asked to open their packages and manipulate the contents as necessary for the officers to perform a visual check for explosive devices.¹⁶ If required, for safety reasons or otherwise, officers are permitted to manipulate the items themselves.¹⁷ The NYPD has instructed its officers that the searches are to be "as minimally intrusive as possible,"18 and to perform searches in "seconds and not minutes."¹⁹ Officers are not to look for other types of contraband or to read any printed material in the container, nor are they to search items or compartments of containers that are too small to contain an explosive device.²⁰ An individual may refuse to be searched and walk away.²¹ While a refusal does not constitute probable cause for arrest, the individual will not be allowed to enter the subway system with the uninspected items.²² In the program's first three months, at least two individuals were arrested after refusing to submit to a search and then attempting to enter the subway system through a different entrance.²³

- 12. Id.
- 13. MacWade, 2005 WL 3338573, at *7.
- 14. Id. at *6.
- 15. Id. at *5.
- 16. Id. at *6.
- 17. Id.
- 18. *Id*.
- 19. See id. at *6.
- 20. Id.
- 21. Preston, *supra* note 11.
- 22. MacWade, 2005 WL 3338573, at *6.
- 23. Id. at *7 n.14.

^{11.} See Julia Preston, Police Searches in the Subways Are Upheld, N.Y. TIMES, Dec. 3, 2005, at B1.

In November 2005, the NYPD began field testing explosive detection technology for possible use in the container search program.²⁴ The technology consists of a small swab that is run across the surface of the container being inspected.²⁵ The swab is then inserted into a device that can detect the presence of chemicals used in explosives.²⁶ The entire process takes between thirty and fifty seconds.²⁷ If the analysis results in a positive indicator, the individual is asked to submit to a visual inspection of her container and to provide identification.²⁸

On November 15, 2005, after the trial had concluded but before the court rendered its decision, the NYCLU requested the record be reopened to include evidence on the swabs.²⁹ Christopher Dunn, associate legal director of the NYCLU, indicated that replacing visual searches with swabs would "be a substantial step toward curbing the privacy violations that have concerned us."³⁰ The NYPD maintained that the swab process is not an adequate replacement for visual inspections due to the limited number of explosives the technology can detect.³¹ The court ultimately found the swabs to be "a pilot or experimental project which does not alter the legal analysis of the Container Inspection Program."³²

II.

The Court's Analysis of the Subway Searches and the Special Needs Doctrine

According to the *MacWade* court, there is little doubt that the risk of an attempted terrorist attack on the New York City subway system "is substantial and real."³³ As discussed above, when evaluating the legality of the subway searches, the court utilized the special needs doctrine, which asks whether: (1) there is a compelling state interest for the search; (2) the program is reasonably effective; and (3)

27. Id.

- 29. Id.
- 30. Baker & Chan, supra note 24.
- 31. MacWade, 2005 WL 3338573, at *7.
- 32. Id. at *8.
- 33. Id. at *17.

^{24.} Al Baker & Sewell Chan, *New Devices Will Search for Explosives in Subways*, N.Y. TIMES, Nov. 12, 2005, at B3. The NYPD indicated that, at least during the pilot program, the technology would not replace visual searches. *MacWade*, 2005 WL 3338573, at *7.

^{25.} Baker & Chan, supra note 24.

^{26.} MacWade, 2005 WL 3338573, at *7.

^{28.} Id.

the program interferes only minimally with individual liberty.³⁴ When considering the three prongs of the special needs doctrine, the prong most easily disposed of in this case is the "compelling governmental interest" prong: the court recognized the need to preserve human life as a "governmental interest of the very highest order."³⁵ More interesting and complex, however, are the prongs of the special needs analysis involving the program's efficacy and its level of intrusiveness.

A. Subway Searches Are Reasonably Effective

When considering whether the program was "reasonably effective" so as to meet the standard of the special needs doctrine, the court's analysis was grounded in the effectiveness inquiries developed by the Second Circuit in Mollica v. Volker and the Supreme Court decisions in Board of Education of Independent School District No. 92 v. Earls and Michigan Department of State Police v. Sitz.³⁶ Mollica and *Earls* emphasize that a court's role is to determine that the search method used is a reasonably effective way of deterring the prohibited conduct.³⁷ As the *MacWade* court noted, these cases also indicate that the method used does not need to be the most effective measure possible.38 Importantly, the MacWade court cited Sitz's warning against a "searching examination of 'effectiveness'" by courts in special needs situations.³⁹ This grants a high level of deference to law enforcement officers, indicating the court's unwillingness to second-guess the expert judgment of counter-terrorism officials on such sensitive matters. Such deference means that even if the court had found that the swabbing technology was more effective than the visual searches, so long as the court found the visual searches to be reasonably effective, it would not force the substitution of the technology.

The *MacWade* court relied heavily on the testimony of the city's expert witnesses in finding the program effective.⁴⁰ The NYCLU put

^{34.} Id. at *16-19.

^{35.} Id. at *17.

^{36.} *Id.* at *17–18 (citing Mollica v. Volker, 229 F.3d 366 (2d Cir. 2000), Bd. of Educ. of Indep. Sch. Dist. No. 92 v. Earls, 536 U.S. 822 (2002), and Mich. Dep't of State Police v. Sitz, 496 U.S. 444 (1990)).

^{37.} Mollica, 229 F.3d at 370; Earls, 536 U.S. at 825-28.

^{38.} *MacWade*, 2005 WL 3338573, at *17; *see also Mollica*, 229 F.3d at 370; *Earls*, 536 U.S. at 837–38.

^{39.} MacWade, 2005 WL 3338573, at *17 (citing Sitz, 496 U.S. at 454).

^{40.} *Id.* at *18. The City's witnesses were NYPD Deputy Commissioner for Intelligence David Cohen, a thirty-five year veteran of the Central Intelligence Agency; NYPD Deputy Commissioner for Counter-Terrorism Michael Sheehan, a former National Security Council member and veteran of a counterterrorism unit of the Special Forces of the United States Army; and Richard A. Clarke, who previously served as

forth expert witnesses claiming that the program's allowance for individuals to refuse searches, walk away, and potentially re-enter at another location renders its deterrent effect "close to zero."⁴¹ Yet the court simply did not find the NYCLU testimony persuasive. The court emphasized the deterrent rather than the detection value of the program, focusing on the uncertainty created by the random selection of checkpoints⁴² and the "some is better than none" logic advanced at trial.⁴³

B. Subway Searches Are Not Overly Intrusive

Similar to the effectiveness prong, the intrusion prong of the special needs doctrine does not require that the method be the least intrusive to an individual's Fourth Amendment rights.⁴⁴ The method need only be narrowly tailored to the government's interest.⁴⁵ The court considered numerous factors in determining that the program met the intrusion standard, including the notice provided to passengers prior to reaching the search checkpoints, the transparency of the search process, the ability of passengers to refuse and walk away, the individual officers' lack of discretion in determining whom to search, and the brief duration and light intensity of the search.⁴⁶ Using the two measurements of intrusion articulated in *Sitz*—objective and subjective⁴⁷—the court found the program to be narrowly tailored and minimally intrusive upon passengers' privacy interests.⁴⁸ The court did not consider the swabbing technology in its analysis, however.⁴⁹

42. *See id.* at *18 (citing testimony of Deputy Commissioners Sheehan and Cohen). 43. *Id.* at *12 n.21.

44. *Id.* at *19 (citing Bd. Of Educ. Of Indep. Sch. Dist. No. 92 v. Earls, 536 U.S. 822, 837 (2002)).

45. Id. (citing United States v. Lifshitz, 369 F.3d 173, 192 (2d Cir. 2004)).

46. Id.

48. *Id*.

Assistant Secretary of State for Politico-Military Affairs, Deputy Assistant Secretary of State for Intelligence, and Chair of the Counter-Terrorism Security Group for the National Security Council. *Id.* at *9–11.

^{41.} *Id.* at *9. The NYCLU witnesses included Gene Russianoff, a staff attorney for the New York Public Interest Research Group's Straphangers Campaign with "twenty-four years of experience as a transit advocate and 'extensive knowledge of the New York City subway system,'" and Charles Pena, employed by the Tauri Group, which provides consulting services to the Department of Defense and Department of Homeland Security, and a former researcher with the Cato Institute. *Id.* at *8–9. Pena's expertise is in systems analysis, and he admitted at trial that he "is not a career expert in counterterrorism," perhaps a fatal flaw in his testimony. *Id.* at *9.

^{47.} *Id.* ("objective intrusion measured by duration and intensity, subjective intrusion measured by potential for creating fear and surprise") (citing Mich Dep't of State Police v. Sitz, 496 U.S. 444, 452 (1990)).

^{49.} Id. at *19 n.33.

Had the court considered the swabbing technology, it likely would have had to acknowledge that it is a less intrusive method than the visual inspections.

III.

Warrantless Use of Technology in Conducting Searches Outside of the Special Needs Context

As demonstrated by another area of Fourth Amendment law, namely warrantless searches that are not special needs, inconsistent results can ensue when courts do not establish clear guidelines by which to evaluate new technology.⁵⁰ Courts have developed what can best be described as a haphazard method of dealing with the warrantless use of technology when conducting inspections. An area is usually protected from warrantless intrusion by the government if the owner has a reasonable expectation of privacy in that area.⁵¹ For example, a business owner can expect her records will not be searched if they are stored in a filing cabinet. If they are lying out on a table in the reception area of her office, which is open to the public, she cannot expect the same degree of protection.⁵² The more steps a person takes to secure an object or an area, the greater the expectation of privacy,

^{50.} Commentators have criticized the perceived erosion of the Fourth Amendment caused by courts' deference to law enforcement regarding the use of new technologies that enhance the government's ability to search and intrude on otherwise private matters. See, e.g., Marc Jonathan Blitz, Video Surveillance and the Constitution of Public Space: Fitting the Fourth Amendment to a World that Tracks Image and Identity, 82 TEX. L. REV. 1349, 1363 (2004) (arguing Fourth Amendment doctrine "needs rethinking if constitutional privacy protections are to work well in twenty-first century conditions"); Melvin Gutterman, A Formulation of the Value and Means Models of the Fourth Amendment in the Age of Technologically Enhanced Surveillance, 39 SYRAcuse L. Rev. 647, 650 (1988) (noting that current jurisprudence "fails to protect privacy rights, and permits their gradual decay with each improved technological advance"); Raymond Shih Ray Ku, The Founders' Privacy: The Fourth Amendment and the Power of Technological Surveillance, 86 MINN. L. REV. 1325, 1328 (2001–2002) ("By leaving the decision to adopt new surveillance technologies largely to the discretion of law enforcement, the Supreme Court's current jurisprudence largely stands the amendment on its head."). Conversely, the technology in MacWade would be less invasive than the traditional visual searches the Court has upheld.

^{51.} This standard was developed in *Katz v. United States*. 389 U.S. 347, 351–52 (1967) ("What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. . . . But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.") (citations omitted).

^{52.} The content of the files is no different in either situation, nor is the general location (in the office), but the extra step of placing the files in the cabinet, out of public view, indicates the owner's desire for privacy.

and the greater intrusion required to view the protected object or area.⁵³

Technology muddles the reasonable expectation of privacy doctrine. The business owner might have her files in a cabinet, but if the police have developed x-ray goggles, they could view the contents of the cabinet without physically intruding. Courts are then left to determine if the technology used by the police, and the information they obtained thereby, was permissible under the Fourth Amendment because the police did not actually go where they were not allowed.

Courts have been inconsistent in their approaches. The analyses employed by courts range from whether the technology was in "general public use,"⁵⁴ to whether the owner took actions to express an expectation of privacy,⁵⁵ to whether the information could have been obtained without technology.⁵⁶ What constitutes technology in "general public use" has not been defined. Courts have also downplayed the relevance of technology in particular cases, basing their holdings on other grounds and ignoring the fact that without technology, law enforcement never would have obtained the relevant information.⁵⁷ If technology is crucial in practice, it should be crucial in a constitutional analysis.

An example of courts' inconsistency in dealing with new technology and Fourth Amendment considerations can be seen in the Second Circuit's treatment of two similar cases. In *United States v. Taborda*, Drug Enforcement Administration agents located in an apartment used a "high-powered telescope" to conduct surveillance on an apartment across the street and used the information they gathered in support of a search warrant.⁵⁸ The relevant inquiry was whether the use of the telescope violated the targets' reasonable expectation of privacy under the Fourth Amendment.⁵⁹ The court found that it did violate that expectation, particularly since the area being searched was a residence,

^{53.} Determining if a reasonable expectation of privacy exists is a two-part analysis: first, did the individual manifest a subjective expectation of privacy in the object or area to be searched, and second, is society willing to recognize that expectation as reasonable? United States v. Ciraolo, 476 U.S. 207, 211 (1986). In *Ciraolo*, a tenfoot-high fence around a backyard was a manifestation of a subjective expectation of privacy that was not reasonable. *Id.* at 211, 214.

^{54.} See Kyllo v. United States, 533 U.S. 27, 40 (2001).

^{55.} See Ciraolo, 476 U.S. at 211-12.

^{56.} United States v. Taborda, 635 F.2d 131, 139 (2d Cir. 1980).

^{57.} See, e.g., Dow Chem. Co. v. United States, 476 U.S. 227, 238–39 (1986); United States v. Lace, 669 F.2d 46, 50–51 (2d Cir. 1982).

^{58. 635} F.2d at 133–34.

^{59.} *Id.* at 136. The *Taborda* court relied on *Katz* when considering the issue. *Id.* at 137–38.

an area of special constitutional protection.⁶⁰ This was true even though the majority of activity was observable without the assistance of the telescope, as the apartment was well-lit and the window was open with the blinds up.⁶¹ The Second Circuit remanded the case to the district court to determine which, if any, evidence was observed without the assistance of the telescope and if it was enough to establish probable cause for the issuance of the search warrant.⁶²

Two years later, in *United States v. Lace*, the Second Circuit held that the use of vision-assisting devices did not violate the Fourth Amendment under the "open fields" doctrine since the subjects were outside the residence and visible from the public road.⁶³ The court found this was not a search even though the police were not on the public road, had entered onto the defendants' property, and could not have seen the illegal activity without the assistance of binoculars and a spotting scope.⁶⁴ Why did the Second Circuit find the use of binoculars permissible in *Lace* but the use of a telescope impermissible in *Taborda*? The distinction seems to be that one viewed targets inside the home and one outside, but this ignores the fact that the use of technology was critical in *Lace* and incidental in *Taborda*.

The Supreme Court weighed in on the problem of technology in *Dow Chemical Co. v. United States*, finding that there was no violation of the Fourth Amendment when the U.S. Environmental Protection Agency (EPA) used high-precision mapmaking cameras from an airplane to take pictures of a fenced-in, secure, chemical manufactur-

^{60.} *Id.* at 139. The home is accorded special Fourth Amendment protection, but many businesses take more precautions to protect the privacy of their premises than homeowners. This should be a relevant consideration but is not always considered. *See Dow Chem. Co.*, 476 U.S. at 236. The Fourth Amendment specifically protects the right of people to be secure in their *houses* against unreasonable searches and seizures. U.S. CONST. amend. IV.

^{61.} Taborda, 635 F.2d at 134.

^{62.} Id. at 141.

^{63. 669} F.2d 46, 49–51 (2d Cir. 1982). The "open fields" doctrine was developed in *Hester v. United States*, which held that open fields are not protected from police entry by the Fourth Amendment, unlike constitutionally protected areas such as the home. 265 U.S. 57, 59 (1924). Since Lace was outside his home and visible from the road, he was in an "open field." *Lace*, 669 F.2d at 50. Two years after *Lace*, in *Oliver v. United States*, the Supreme Court stated that "an individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home." 466 U.S. 170, 178 (1984). The area immediately surrounding the home, often referred to as "curtilage," warrants the same Fourth Amendment protection that attaches to the home. *Id.* at 180. The Court has further noted that "[a]n open field need be neither 'open' nor a 'field.'" *Id.* at 180 n.11.

^{64.} Lace, 669 F.2d at 50-51.

ing facility.⁶⁵ Dow claimed that it had taken "every possible step to bar access from ground level"66 and that its entire complex was protected by the "industrial curtilage" doctrine. Here, Dow was trying to create an analogy to the recognized "curtilage" doctrine that individuals have a reasonable expectation of privacy in the curtilage area immediately surrounding a private residence.⁶⁷ The Court found this case to lie somewhere between the curtilage and open fields doctrines; there was perhaps an expectation of privacy, but since this was a commercial property it was reduced.⁶⁸ While noting that the aerial use of "highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant," the Court found the devices used by the EPA were not constitutionally proscribed because they were commercially available and commonly used in mapmaking, even though simple magnification devices could be used on the resulting photographs that would permit the identification of objects as small as wires one half inch in diameter.69

Recently, in *Kyllo v. United States*, the Supreme Court again faced a question of new technology.⁷⁰ This time, the question was whether the use of thermal imaging devices aimed at a private residence from a public street constituted a Fourth Amendment search.⁷¹ Department of the Interior agents used the equipment to detect heat emanating from high-intensity lamps used to grow marijuana indoors.⁷² Despite the Ninth Circuit's ruling that Kyllo had shown no expectation of privacy in the heat because he had not attempted to conceal it,⁷³ Justice Scalia wrote for the Court: "Where, as here, the Government uses a device that is not in general public use, to explore details of the home that would previously have been unknowable without physical intrusion, the surveillance is a 'search' and presumptively unreasonable without a warrant."⁷⁴ The Court distinguished this case from *Dow Chemical* on the grounds that *Kyllo* involved a private home and not commercial premises.⁷⁵

65. 476 U.S. at 229, 239.
66. *Id.* at 236.
67. *Id.* at 236.
68. *Id.* at 236-39.
69. *Id.* at 238.
70. 533 U.S. 27 (2001).
71. *Id.* at 29.
72. *Id.*73. *Id.* at 31.
74. *Id.* at 40.
75. *Id.* at 37.

The distinctions the courts draw in these cases are almost without logic. In the Second Circuit, the illegal activity in *Taborda* was plainly visible from the apartment legally used by the police, with or without the telescope, yet use of the telescope was found to be unconstitutional. In *Lace*, however, the police were trespassing on private property and still needed the assistance of binoculars to make out the illegal activity, yet such use was held acceptable. In the Supreme Court cases, the difference between the relative expectations of privacy of Kyllo and Dow Chemical seems at best miniscule. Dow Chemical had clearly established an expectation of privacy through its implementation of the security measures around its plant and its reliance on trade secret laws that would have made exactly this activity by one of its competitors illegal.⁷⁶ To say that Dow's expectation of privacy was so different from Kyllo's as to merit a constitutional distinction between the two is dubious.

The courts rely on distinctions between the locations being searched and the commercial availability of the technology being used. If the thermal imaging technology in *Kyllo* becomes commercially available, however, is the only factor differentiating *Kyllo* from *Dow Chemical* the commercial/residential distinction? Would the devices be permissible for viewing commercial properties? Or would the erection of buildings to contain sensitive materials still create an expectation of privacy for the business sector? If your neighbor can buy and use a device to see the heat from your home, why should police be kept from doing the same?

IV.

WHERE MACWADE LEAVES US

By categorizing the swabbing technology as experimental, the court in *MacWade* effectively exempted swabbing from constitutional analysis.⁷⁷ While the ultimate determination that the swabs are experimental is correct, the court's failure to articulate the standard it used in evaluating the technology is highly problematic. As shown above, the lack of clear guidelines for assessing the proper role of technology in the Fourth Amendment context only produces confusion. Law enforcement and courts need objective, predictable criteria by which to judge if a technology is experimental and if it is being used in a constitutional way.

^{76.} Dow Chem. Co. v. United States, 476 U.S. 227, 232 (1986).

^{77.} See MacWade v. Kelly, No. 05CIV6921RMBFM, 2005 WL 3338573, at *8 (S.D.N.Y. Dec. 7, 2005), *aff*^{*}d, No. 05-6754 CV, 2006 WL 2328723 (2d Cir. Aug. 11, 2006).

The *MacWade* court appears to have relied on witness testimony in its analysis, implying that expert testimony may be considered and is perhaps even dispositive.⁷⁸ If the court is allowed to rely on "nonstatistical evidence such as expert testimony in assessing effectiveness,"⁷⁹ then using expert testimony to determine if a technology is still experimental seems reasonable. Had the plaintiffs offered testimony that the swabs were effective and reliable, and therefore should not be considered experimental, the court would have had to make a credibility determination.

Similar technology was used in a subway passenger search program in Boston during the 2004 Democratic National Convention.⁸⁰ The Boston program used swabs as the primary method to search, with bomb-sniffing dogs second, and manual inspections used only as a last resort.⁸¹ A federal district court in Massachusetts denied a motion for a preliminary injunction to stop the program,⁸² although only the portion of the program using visual inspections, not swabbing, was challenged.⁸³ The program was upheld only for the limited time frame of the Democratic National Convention and only for the subway lines immediately surrounding the Fleet Center, where the Convention took place.⁸⁴ Because the entire program was suspended after the Convention ended, neither a full-scale challenge of the program nor any serious judicial consideration of the swabbing technology occurred.⁸⁵

^{78.} Id. at *7-8.

^{79.} *Id.* at *18 (citing United States v. Davis, 270 F.3d 977, 983 (D.C. Cir. 2001)). Truly useful statistical evidence in a case such as *MacWade* would be difficult to obtain. There have been no successful attacks on New York City's subway system, so even if there continue to be no attacks on the system, the data cannot be said to be improving. The container inspection program's goal is to maintain the status quo, in that sense. When the status quo is zero, numbers are not particularly helpful.

^{80.} Anthony Flint, *T Police Begin Screening of Riders' Bags*, BOSTON GLOBE, July 23, 2004, at B2.

^{81.} *Id.* While some locations have a two-tiered search system, others use visual inspections across the board. *Id.*

^{82.} American-Arab Anti-Discrimination Comm. v. Mass. Bay Transp. Auth., No. 04-11652-GAO, 2004 WL 1682859, at *1, *4 (D.Mass. July 28, 2004) (denying preliminary injunction).

^{83.} The challenge was related only to on-board, visual searches of all passenger bags on one specific train line near the convention site. *Id. at *1*. The *MacWade* court did not mention Boston's program in its opinion, nor did it discuss why the NYPD should be allowed to classify the swabs as "experimental" when Boston law enforcement found them acceptable for regular use. *See generally id. See also* Anthony Flint, *Judge Upholds T's Search of Bags Near Convention*, BOSTON GLOBE, July 29, 2004, at B1.

^{84.} American-Arab Anti-Discrimination Comm., 2004 WL 1682859, at *3.

^{85.} See Anthony Flint, *MBTA Halts Baggage Screening*, BOSTON GLOBE, Aug. 13, 2004, at B1.

Massachusetts transportation officials in 2004 retained the option of resuming the program at any time.⁸⁶ If the identical program were to be reinstated, subway riders searched in Boston would only have the outside of their bags swabbed and would not have to expose the private inner contents of their packages to the police, because Boston reserves manual inspections purely as a back-up method.⁸⁷ The same riders in New York would be subjected to the more intrusive visual searches currently in use. Could a New Yorker sue the city for using a more intrusive search method than is necessary? In such a case, unlike in *MacWade*, the NYPD would have to actually demonstrate that the swabs are experimental and unsuited for general use. The NYPD could be forced to distinguish Boston's approach in using the swabs as a primary search method as erroneous, or show that Boston actually considers the swabbing experimental. Should the court hearing the case be deferential to the NYPD's decision, granting broad discretion to law enforcement agencies to choose their own search techniques? Or should the court subject the NYPD to a heightened standard of review because the swabs are more protective of individual privacy and another law enforcement agency found them acceptable for general use?

Beneath this tangled jurisprudence, warrantless searches are still presumptively unreasonable under the Fourth Amendment.⁸⁸ The burden of overcoming a constitutional presumption should be heavy, but the institutional capacity of courts does not lie in establishing counterterrorism schemes. As a result, the standard of review under the special needs doctrine is highly deferential to the state. Programs such as the NYPD subway inspection program do not have to be the most effective or least intrusive way of protecting the compelling governmental interest, merely a reasonable way of doing so.

The real question becomes how much deference should we give to law enforcement officials in special needs situations? What if the technology is extremely effective in detecting all explosives, but the false positive rate is one in five? The program will be minimally intrusive for most passengers, but will be quite intrusive for those who are innocent but trigger the technology anyway. Who determines our tolerance for mistakes, either with false positives or missed explosives?

^{86.} Id.

^{87.} See Flint, supra note 80. The on-board, visual searches challenged in American-Arab Anti-Discrimination Comm. are unlikely to resume because they were limited to the transit lines closest to the Democratic National Convention.

^{88.} Katz v. United States, 389 U.S. 347, 357 (1967).

The challenge to courts is to create a coherent jurisprudence that allows for effective law enforcement without setting the constitutional barrier unacceptably low. The jurisprudence must also be prospective—allowing for both new special needs and new law enforcement techniques to meet the constitutional barrier. As seen in other warrantless search cases, courts are not always well-equipped to handle new devices that essentially change the way law enforcement officers do their jobs. What one court considers technology in "general use" another can find experimental.

When technology enters the picture in a special needs case, a court should have clear guidelines to determine if the technology is experimental and to evaluate the impact the technology has not just on the special needs analysis, but also on other compelling state interests at stake. Most importantly, courts should not ignore the practical impact of technology on the ability of law enforcement to conduct searches and the increased intrusion this creates. If the technology does not have an impact on other compelling state interests, a court should conduct a more searching examination of effectiveness than described in *Sitz*, particularly if the difference in the level of intrusion is great. If the technology does have an impact on other compelling state interests, a court should grant deferential review to legitimate policy determinations made by other branches of government. A court should take into account the relative levels of intrusion faced by individuals subjected to the special needs programs. If the use of technology greatly reduces the level of intrusion, a court should take that into consideration in its determination of which interest is more compelling.

V.

WHERE DO WE GO FROM HERE?

As of September 8, 2006, the NYCLU has not announced if it will petition the Supreme Court for certiorari in *MacWade*. Given the course of the litigation thus far, it is unlikely the Court will consider the swabbing technology in any meaningful way in its analysis, if it hears the case at all. The only precedent regarding evaluating emerging technology in the context of the Fourth Amendment will be a district court opinion that does little to clarify the inquiry.

The framers of the Constitution did not anticipate subways, let alone chemical swabs that can detect explosives on the handle of a purse. Ignoring the role technology has in pushing the law forward will create a confusing, tangled jurisprudence, further complicating an already muddled warrantless search law. A Fourth Amendment jurisprudence that cannot change and adapt to our evolving technological society will quickly lose meaning. The Fourth Amendment anticipates both the need for the government to protect its citizens and for citizens to need protection from the government. The vitality of our society depends on both those protections, and courts have an obligation to help the Fourth Amendment grow in such a way as to stay relevant and useful in a modern world.