The Need for Closed Circuit Television in Mass Transit Systems Michael Greenberger, J.D. University of Maryland Center for Health and Homeland Security

Abstract

Closed circuit television video (CCTV) surveillance systems need to be introduced or enhanced in the public areas within United States' mass transit systems. London's extensive system was used very successfully in the investigation of the July 2005 terrorist attacks on its subway and bus systems. That effective investigatory use of CCTV is very likely to be a significant deterrence to future terrorist activities on London mass transit. The United States must be prepared in the event of similar attacks on its soil. As roughly twenty times more people travel by mass transit than by air, it is time for this nation's transportation security focus to shift to mass transit, and to use CCTV widely in public mass transit systems.

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The Need for Closed Circuit Television in Mass Transit Systems

In the wake of 9/11, not surprisingly, transportation security has focused on air transportation. It is imperative, however, that we now redirect our attention not only to the recent London bombings of its underground and bus systems, but also to the transportation bombings of Madrid in March 2004; Moscow in February and August 2004; Paris in July and August 1995; and the Sarin gas attack in Tokyo's subway in March 1995. We can no longer turn a blind eye to the possibility of a devastating terrorist attack on our mass transit systems. Improved security on these systems must be on an equal footing with concerns about aviation.

Closed circuit television (CCTV) video surveillance is a vital tool to combat terrorism in our mass transit systems. Cameras can be placed anywhere within the public areas of these systems, conspicuously or covertly. Basic, modern cameras have the ability to zoom, pivot, and rotate, and focus on objects and people up to 300 feet away ("Ready," 2005). Their video output may be passively monitored and recorded for review at a later time, or actively monitored in real time (Reis, 2001). Although there is some debate over privacy issues surrounding CCTV, these arguments have little merit if CCTV is used in public and open places within mass transit systems where passengers do not have a reasonable expectation of privacy (Iraola, 2003).

Buses, subways, and trains carry about 32 million people a workday in the United States (Lipton, 2005). Clearly, systems this diverse could not function using the passenger and baggage security systems now used in our airports. Indeed, in 2004, when Amtrak attempted to screen passengers at a suburban Maryland rail station, the experiment was abandoned because of the complaints of many passengers who missed their trains or had their trains delayed (Thomas & McGuire, 2005). CCTV is exactly the kind of security measure that can be implemented in our

mass transit systems without compromising the efficient function of these high throughput operations.

London has the most extensive surveillance system in the world. With about 500,000 closed circuit cameras in the city, including 6,000 in the London underground, the average Londoner is caught on camera about 300 times a day (Rodriguez, 2005; "Ready," 2005). Since the July terrorist attacks, London plans to double the number of cameras in the underground, and install cameras on all 8,000 city buses ("Ready," 2005). This increase in CCTV was driven by the fact that CCTV surveillance was essential in identifying the July 7 and 21 London bombers (Segell, 2005).

Immediately after the first bombings on July 7, the United Kingdom's secret services – the MI5, and the Metropolitan Police at Scotland Yard – began scouring the city's surveillance videos for clues as to the identities of the attackers. Working with prior intelligence, pictures of the assailants were found within 4 days of the attacks. CCTV cameras caught the four men about to board the 7:40AM train to King's Cross, and again at 8:26AM as the train pulled into King's Cross (Leppard & Calvert, 2005). Based on those pictures, the bombers' identities and backgrounds were discovered. When bombings were attempted 2 weeks later – this time the terrorists were unable to detonate their bombs – CCTV footage of the terrorists was located within a day, chronicling their actions throughout that day. With the aid of these images, four suspects were arrested within a week (Macintyre, 2005; Rodriguez, 2005).

The United States needs to use the London CCTV model. Although CCTV is common on U.S. university campuses, in ATM vestibules, and on highways, for example, it is not used extensively in U.S. mass transit systems (Chace, 2001). Those U.S. cities using CCTV surveillance report decreased crime in surveyed areas (Chapman, 2005; DiPasquale & Kleinberg,

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2005). Doubtless, terrorists would also be deterred by cameras in our mass transit systems. Leaving deterrence aside, experience shows CCTV makes identification of terrorists and criminals possible, which, in and of itself, can deter future attacks.

U.S. cities are beginning to recognize the importance of CCTV presence on public mass transit systems. Shortly after the London attacks, in August 2005, the Los Angeles County Metropolitan Transportation Authority (MTA) voted to spend almost \$7 million to equip each of the county's 225 subway and light-rail trains with high-resolution digital cameras whose images can be recorded and stored (Liu, 2005). Similarly, New York City also announced in August that its MTA had agreed to a \$212 million contract to update the security technology in the city's subways. The planned updates to the New York subway system include the addition of 1,000 video cameras, and 3,000 motion sensors, in addition to enabling cell phone service in 277 underground stations. There are currently no plans, however, for similar advances on regular passenger trains or buses in New York (Chan, 2005). Washington, D.C. metro officials plan to equip 125 of their 1,300 cameraless buses with CCTV (only 100 buses are currently equipped) (WMATA, 2005). Yet, requests from the D.C. Metro Board for money for D.C. subway security improvements over the next 6 years have fallen short by \$143 million (Greenfield, 2005). Boston and Chicago are discussing plans to increase their surveillance systems (Chapman, 2005; Luczak, 2004).

Many other U.S. cities use CCTV, but not for their mass transit systems. Baltimore, MD, for example, has a network of 178 cameras dispersed in high crime areas throughout the city, but none that monitor the city's mass transit (Janis, 2005).

Much of the funding needed for these initiatives has been provided by the federal government, but substantially more funding is needed. In an April 2004 survey, the American

Public Transportation Association found that two of the top five transit agency priorities for security capital needs were security cameras onboard vehicles and security cameras in stations. In pursuance of these and other priorities, the survey estimated that U.S. transit agencies' security related investment needs were \$6 billion - \$5.2 billion in capital investments and \$800 million a year for personnel and expenses (APTA, 2004).

The federal government is contributing only a fraction of these sums. Recently, the Department of Homeland Security announced that it will award \$150 million in transportation grants this year, \$130 million of which is earmarked for public transit, and most of which will go to large metropolitan areas (Luczak, 2005). The Federal Transit Administration also contributes about \$38 million a year for transit security (Lipowicz, 2005). Given the estimates for security funding generally, these sums do not come close to meeting CCTV mass transit security needs. This shortfall is particularly frustrating in light of the fact that in the FY 2006 budget for homeland security spending, 65% of transportation security funds will go to aviation, while surface transportation will receive only 1.4% (Johnstone, 2005). The discrepancy becomes even more disparate when one considers that 32 million people ride some form of mass transit each weekday, but only 1.7 million people fly every day (Lipton, 2005).

Finally, CCTV surveillance in mass transit systems should pose no constitutional issues about privacy under the Fourth Amendment's search and seizure provisions. Since the U.S. Supreme Court decision in *Katz v. United States* in 1967, it is settled legal doctrine that one has a right to be free of government surveillance only where there is a reasonable expectation of privacy. Specifically, "[w]hat a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection" (Stewart, 1967). A passenger in the public areas within a mass transit system does not have a reasonable expectation of privacy: his or her actions are "knowingly expose[d] to the public."

Again, the recent train and subway bombings in London, Madrid, Moscow, and elsewhere demonstrate the vulnerability of mass transit systems to terrorist attacks. The foremost method of deterring and responding to those kinds of attacks is the use of CCTV. The price tag is high, but worth it. As we have seen from the recent London experience, a few well placed bombs on an urban transit system can bring a major metropolitan region to its knees for days. CCTV surveillance systems are a necessary first step in securing our mass transit systems against the threat of terrorism. Although many cities are making headway with initiatives in this direction, more needs to be done. In particular, the federal government needs to turn its attention, and its money, toward enabling the development of these programs.

- American Public Transportation Association (APTA). (2004, April). *Survey of United States Transit System security needs and funding priorities*. Retrieved September 15, 2005, from http://www.apta.com/services/security/documents/security_survey.pdf
- Chace, R. (2001). An overview on the guidelines for closed circuit television (CCTV) for public safety and community policing. Retrieved September 23, 2005, from http://www.securitygateway.com/data/siapress/privacy_guidelines_overview.pdf
- Chan, S. (2005, August 24). M.T.A. to keep electronic eye on the subway. *New York Times*, p. A1
- Chapman, S. (2005, August 1). Saved lives outweigh surveillance camera concerns. *Baltimore Sun*, p. 9A
- DiPasquale, C. & Kleinberg, S. (Eds.) (2005, August 15). Security cams please police, disturb others. *Chicago Tribune*, p. 7
- Greenfield, H. (2005, July 21). *DC metro officials admit subway is vulnerable*. Retrieved September 15, 2005, from http://www.officer.com/article/article.jsp?siteSection=8&id=24883
- Iraola, R. (2003, Winter). Lights, camera, action! Surveillance cameras, facial recognition systems and the constitution. *Loyola Law Review*, 49, 773-808.
- Janis, S. (2005, August 17). Life in a city under surveillance. *Baltimore City Paper*. Retrieved September 15, 2005, from http://www.citypaper.com/news/story.asp?id=10405
- Johnstone, B. (2005). New strategies to protect America: Terrorism and mass transit after London and Madrid. Retrieved September 15, 2005, from http://www.americanprogress.org/atf/cf/%7BE9245FE4-9A2B-43C7-A521-5D6FF2E06E03%7D/TRANSIT_SECURITY.PDF
- Leppard, D. & Calvert, J. (2005, July 17). The web of terror. London Times, p. 11.
- Lipton, E. (2005, July 25). Can an urban fortress keep city-dwellers safe? Experts question allocation of resources. *International Herald Tribune*, p. 3.
- Lipowicz, A. (2005, August 11). Report: Mass transit needs more surveillance. *Washington Technology*. Retrieved September 15, 2005 from http://www.washingtontechnology.com/news/1_1/industry/26740-1.html
- Liu, C. (2005, August 26). Subway, light-rail cameras approved. Los Angeles Times, p. B6.
- Luczak, M. (2004, December 1). As MBTA's FY 2005-2010 Capital Program takes shape, state-of-good repair projects top expansions. *Railway Age, 205, 30.*

Luczak, M. (2005, May 1). How technology mitigates risk. Railway Age, 206, 36.

- Macintyre, B. (2005, July 23). 25,000 tapes, 1,000 officers and four grainy images technology closes in. *London Times*, p. 7.
- Reis, K. (2001, June). The eavesdropping society: Electronic surveillance and information brokering. *Practising Law Institute: Patents, Copyrights, Trademarks, and Literary Property, 632A, 627-686.*
- Rodriguez, K. (2005, July 31). We're caught in camera's eye more often than you realize. *San Antonio Express-News*, p. 3A.
- Ready for your closeup. (2005, August 25). *Pittsburgh Post-Gazette*, p. B7. Scripps Howard News Service (Scripps).
- Segell, G.M. (2005, August). Terrorism: London public transport July 7, 2005. Strategic Insights, IV. Retrieved September 15, 2005, from http://www.ccc.nps.navy.mil/si/2005/Aug/segellAug05.asp
- Stewart, P. (1967, December 18). Katz v. United States. United States Reports, 389, 347-374.
- Thomas, E. & McGuire, S. (2005, July 18). Terror at rush hour. Newsweek, p. 24.
- Washington Metropolitan Area Transit Authority (WMATA). (2005, March 17). Metro's Board of Directors Approves the Purchase of Video Cameras for Placement on 125 Metrobuses. Retrieved September 15, 2005, from http://www.wmata.com/about/met_news/PressReleaseDetail.cfm?ReleaseID=719