ACLU | **THE MATRIX: Total Information Awareness Reloaded**
AMERICAN CIVIL LIBERTIES UNION |

DATA MINING MOVES INTO THE STATES
An ACLU Issue Brief

INTRODUCTION

Congress seemed to deliver a great victory for privacy in September 2003 when it passed a provision shutting down the Pentagon's infamous Total Information Awareness (TIA) system. Once the alarm was sounded about this Orwellian program, Americans from across the political spectrum reacted forcefully against it, and Congress took action, first enacting a provision banning its use against Americans, and later shutting it down altogether.

Now the same ideas that inspired TIA have reappeared in an alarming new program that has been dubbed The Matrix ("Multistate Anti-Terrorism Information Exchange"). Run by a private corporation on behalf of a cooperative network of state governments, The Matrix, which is already up and running, is a "data surveillance" program every bit as dangerous and Orwellian as Total Information Awareness.

When first introduced, TIA was the closest thing to a true "Big Brother" program that has ever been seriously contemplated in the United States. It was based on a vision of pulling together as much information as possible about as many people as possible into a large-scale database. Government officials would then sort through it in a search for patterns or information that might identify terrorists. It was a truly frightening idea – especially since the amount of information recorded about our lives is growing by leaps and bounds every day.

The program was the brainchild of Admiral John Poindexter, the former Reagan-era National Security Adviser known for his involvement in the Iran-Contra scandal, who famously said that it was his duty to withhold information from Congress. Poindexter resigned this summer after another of his initiatives – creating a futures market that would capitalize on predictions of terrorist acts – outraged Americans even further.

The demise of TIA proved that great victories are possible in the fight to preserve privacy, especially when such programs are exposed to the bright sunlight of public scrutiny. But the data mining concept – the notion that the way to stop terrorism is to collect information about individuals' lives on a massive scale – continues to exert an irresistible attraction to many people in law enforcement. And the technology is now available to turn that vision into reality. The only thing that can stop The Matrix is the power of the American people.

WHAT IS THE MATRIX?

Like TIA, The Matrix is a program that ties together government and commercial databases in order to allow the authorities to conduct detailed searches on particular individuals, and to

search for patterns in this data that can identify individuals possibly involved in terrorist or other criminal activity.

The program's creators have refused to describe the contents of their database, except to concede that it includes both government and commercial data. The *Atlanta Journal-Constitution* reports[1] that the system includes at least the following:

- Credit information
- Driver's license photographs
- Marriage and divorce records
- Past addresses and telephone numbers
- Names and addresses of family members
- Neighbors' addresses and telephone numbers
- Business associates
- The make, model and color of registered vehicles
- Speeding tickets
- Arrests
- Social security numbers and dates of birth

Given the information available in today's commercial databases, however, the range of detail accessible through the program could well be even greater, extending into such areas as purchasing habits, magazine subscriptions, demographic information, and lifestyle categorizations. Just because much of this information might seem to be of little use to law enforcement is no guarantee that they have not plugged it in to their system under a philosophy of "you never know what will prove useful in an investigation." And despite the richness and sweep of the information contained within this database, not even the easiest and most basic step toward protecting privacy – adopting a privacy policy – has yet been taken.[2]

The Matrix is operated by a private company, Seisint Inc. of Boca Raton, Florida. The company stores the system's data on its premises (in a room sealed by "biometric locks"), where it is maintained by employees of Seisint and "watched over" by Florida police.[3] Ironically, Hank Asher, the company's founder who first brought the idea for The Matrix to Florida officials two years ago, resigned from the company after information about his own past came to light: he had admitted to being a drug smuggler in 1982, and according to Florida police, had piloted multiple planeloads of cocaine from Colombia to the United States.

One danger of The Matrix is that because it is operated by individual states, it won't provoke the reaction stirred up by a national program like TIA, which was run not only by the federal government, but by the Pentagon. And yet The Matrix could become just as powerful a tracking system as TIA would have been. Although The Matrix was started in Florida and is being run by individual states, it remains a potentially awesome tool for the federal government. We don't know the full extent of federal involvement in the program, but we do know that it has received $4 million from the Justice Department and has been promised a further $8 million from the Department of Homeland Security.[4] In addition, Matrix officials have said they are considering giving access to the CIA.[5]

THE MATRIX IS AN UNPRECEDENTED SURVEILLANCE SYSTEM AIMED AT INNOCENT AMERICANS.

To hear Matrix supporters tell it, the program involves nothing more than computerizing and speeding up laborious but routine activities that police officers already perform. The Matrix is "a technological advancement that allows law enforcement to have all the information already available, available to them on the spot," as one defender put it.[6] Or as the president of Seisint declared, "It is exactly how law enforcement worked yesterday, except it's extraordinarily faster."[7]

This description glosses over the true novelty – and danger – of this kind of program. Creating a program to combine separate, independently available databases of information on innocent Americans is not merely a "technological advancement," but a body blow to the core American principle that the government will leave people alone unless it has good reason to suspect them of wrongdoing. As more and more of the activities in our daily lives involve computers and computer chips, the result is that increasingly, everything we do leaves behind a "data trail." By bringing all that information together, it will soon be possible to recreate an individual's activities with such detail that it becomes no different from being followed around all day by a video camera.

Each little piece of information about our lives – like one pixel or dot on a computer screen – is harmless, and can reasonably be shared with the people who need to know it. But when you assemble enough of these dots, they can come together to form a single, high-resolution picture of your life. That is what data mining programs like The Matrix do: what officials blandly describe as "database integration" is really the mass compilation of dossiers about citizens, criminal and innocent alike. And whether the data that makes up that mosaic sits on a single computer does not matter; communications technologies like the Internet now make it possible to build a system for searching multiple databases all over the world that is, from the user's perspective, completely indistinguishable from searching a single, local, centralized database.

Defenders of data mining point out that it has always been possible for a detective to shadow people as they go about their business, or assemble a great deal of information about them through a search of numerous public databases and archives. But those processes have usually been limited by law to individuals involved with a crime – and are expensive and time-consuming, which imposes an inherent limit on their use and helps keep police from abusing them. What The Matrix aims to do is to exploit the explosion of tracking technology and databases to do away with those limits.

"It's scary," Florida's candid intelligence chief Phil Ramer told the *Washington Post*. "It could be abused. I mean, I can call up everything about you, your pictures and pictures of your neighbors."[8]

There should be no doubt: The Matrix is not just a faster version of "how law enforcement worked yesterday," it is an entirely new beast. It should be identified for what it is: an advanced surveillance system.

THE MATRIX IS A DATA MINING PROGRAM, JUST LIKE TIA.

The Matrix program is intrusive in another way. It is designed not only to build dossiers on all of our lives so they will be a keystroke away for police and other government officials, but also to search through our dossiers and those of others in a hunt for patterns indicative of terrorist or other criminal activity.

Matrix officials have told journalists that the system is different from TIA because it does not include "data mining."[9] But that claim is contradicted by the program's own Web site, which lists as one of three program goals the use of "factual data analysis" to "improve the usefulness of information."[10] "Factual data analysis" is a euphemism or buzzword for data mining.[11] The same conclusion can be reached from an extensive description of how The Matrix works provided in Congressional testimony by a Florida lawmaker, Paula B. Dockery. She described a process that involves combining government records with information from "public search businesses" into a "data-warehouse" where these dossiers are combed by "specialized software to identify anomalies" using "mathematical analysis." If the details of your life should happen to contain "anomalies" (whatever that means), they will then be scrutinized by "analytical personnel and investigators" looking for evidence of terrorism or other crimes.[12] And both Dockery and the official Matrix Web site describe a project aim as "identifying" terrorist and other criminals. To "identify" criminal activity that the police are not already aware of, they will naturally need to comb through a vast amount of non-criminal activities – in other words, monitor the activities of innocent citizens.

What these descriptions depict is exactly the kind of data mining that was envisioned by TIA.

Like TIA, The Matrix not only drives us straight toward a full-fledged surveillance society, but is unlikely to be effective at stopping terrorism or crime. The core notion behind data mining is that an automated process like a computer algorithm can sift through trillions of pieces of information about millions of people and accurately direct the attention of screeners toward the relative handful who harbor terrorist or other criminal intentions. Judgments about reasonable suspicion of criminal activity are fundamentally human judgments that cannot now be made accurately by computers. As it was put by the Association for Computing Machinery, a professional association for computer scientists, data mining approaches to stopping terrorism "suffer from fundamental flaws that are based in exceedingly complex and intractable issues of human nature, economics and law."[13]

RESISTANCE IS NOT FUTILE.

All has not been smooth sailing for The Matrix; a number of states have dropped out of the program or declined to participate because of privacy and fiscal concerns. In June 2003, 13 states signed an agreement to share data under the program, but six – Alabama, Georgia, Kentucky, Louisiana, Oregon, and South Carolina – have dropped out. Texas and California showed early interest but dropped out before signing the agreement. Of the seven states that are still participating, reportedly only four have actually agreed to contribute restricted data to the program.[14]

The resistance by so many states to joining this program despite the salesmanship of proponents makes it clear that Americans are increasingly realizing that their privacy cannot be taken for granted as it once could, and are demanding that their governments refuse to participate in data-surveillance schemes.

Still, The Matrix is an alarming reality: it is up and running, and it is being pushed by powerful institutions – not only state police, but the federal national security and law enforcement establishments. "Our analysts live by it," Florida intelligence chief Ramer told a reporter. "If you took it away from them today, they would beat you over the head with an ax. It's that powerful."[15] Although the system currently has only seven participating states, they are together home to more than a quarter (26 percent) of Americans.[16] Unless Americans – and their members of Congress who helped defund TIA – vigorously oppose its expansion, state law enforcement and their federal backers will push hard to expand The Matrix into more and more states. The Big Brother we defeated will live again as a band of "Little Brothers."

NOTES

[1] Duane D. Stanford and Joey Ledford, "State to Link Up Private Data," *Atlanta Journal-Constitution*, October 10, 2003.

[2] Jim Krane, "States Join in Building Terror Database," Associated Press, September 23, 2003.

[3] John Murawski, "States Bow Out of Anti-Crime Database," *Palm Beach Post*, October 4, 2003; AP, September 23, 2003.

[4] Robert O'Harrow Jr., "U.S. Backs Florida's New Counterterrorism Database," *Washington Post*, August 6, 2003.

[5] AP, September 23, 2003.

[6] Georgia Bureau of Investigation Director Vernon Keenan, quoted in Bill Rankin and Rhonda Cook, "Database Would Put Privacy at Risk, Some Warn," *Atlanta Journal-Constitution*, October 11, 2003.

[7] WP, August 6, 2003.

[8] WP, August 6, 2003.

[9] Tim Lockette, "MATRIX is Raising Privacy Concerns," *Gainesville Sun*, August 10, 2003.

[10] See http://www.iir.com/matrix/objectives.htm. The main Web page is at http://www.iir.com/matrix/.

[11] Congressional hearings on TIA, for example, were entitled "Can the use of Factual Data Analysis Strengthen National Security?" House Subcommittee on Technology, Information Policy, Intergovernmental Relations and the Census, Committee on Government Reform, May 6 and May 20, 2003.

[12] Statement of Paula B. Dockery, Florida State Senator, before the House Government Reform Committee Subcommittee on Technology, Information Policy, Intergovernmental Relations, and Census, March 25, 2003. Dockery is Chair of a Florida Senate committee on "Home Defense."

[13] Association for Computing Machinery, letter to the Senate Armed Services Committee, January 23, 2003.

[14] Still in the program are Florida, Connecticut, Michigan, New York, Ohio, Pennsylvania, and Utah. "Ohio Not Rushing To Join Antiterrorism Database," Associated Press, October 26, 2003; AJC, October 10, 2003.; *Palm Beach Post*, October 4, 2003.

[15] *Palm Beach Post*, October 4, 2003.

[16] Calculation based on July 2002 state population data.