JOBJOJ Simson L. Garfinkel investigates how FJCSS JAIS government is using your driver's license THE DAY to play Big Brother.

riving is a privilege, not a right. But it's a privilege that has become a virtual necessity. For many Americans, a driver's license is a also license to earn a living, see friends, go shopping, and get away from it all on the weekends. Take away that card, and people will do almost anything to get it back. They'll even pay their parking lickets.

"Suspension of a driver's license is more effective than a court order" for getting money out of people, says David Lewis, Deputy Registrar of the Massachusetts Registry of Motor Vehicles. In Massachusetts, you can't renew your driver's license if you have outstanding parking tickets, unpaid moving violations, or if you owe excise tax on your automobile.

"It's the most effective thing that you can do without throwing them in jail," says Peter Nunnenkamp, manager of driver programs at Oregon's Driver and Motor Vehicle Services. "And it's fairly cost effective." In fact, it's so effective that Oregon has 109 different offenses that can result in the temporary suspension of a driver's license; 50 of them have nothing at all to do with driving.

"Most law abiding people take it very seriously. They pay their lines and pay their reinstatement fee," says Julie Clark, deputy director of Wisconsin's Bureau of Driver Services. In Wisconsin, you can lose your driver's license if you forget to pay your library fines, don't shovel the snow off your sidewalk, or don't trim a tree that overhangs a neighbor's property.

The driver's license has become something it was never intended to be: a badge of good citizenship. Pay your bills to city and state, pay your child support, don't get caught using drugs, and the state will let you keep on trucking. Screw up, and they'll clip your wings. And for those who don't get the message and stay on the roads? In most states, get-

Simson L. Garfinkel (simsong@nextworld.com) is a science writer, computer consultant, and senior editor at Nextworld magazine. ting caught driving without a license, or with one that's been suspended or revoked, means handcuffs, a trip down to the local jail. and having your car towed to the pound.

In other words, it's serious shit.

Most businesses and state agencies have a problem with outstanding debt. Bounced checks, IOUs, stolen credit cards – it all adds up. Some organizations write off anywhere from 5 to 20 percent of their debts as "uncollectable."

Most agencies, that is, except for the DMV. "We don't have debt," says Lewis, who oversees all of the Massachusetts Registry's computer and information systems. Last year, the Massachusetts Registry collected more than US\$660 million in fees and fines; less than \$600,000 came back as bounced checks – a whopping 0.1 percent. "How can you afford to stiff us?" Lewis asks rhetorically. "Whatever it is you have. we'll take it. We'll pull your driver's license. We'll take your title. We just don't have bad debt." Lewis pauses a moment to consider his words, then shrugs, his point made: At the Massachusetts Registry, "we walk a very fine line with incredible power over people."

Increasingly, lawmakers around the country are employing that power to enforce public policies that have nothing to do with driving or motor vehicles. Lewis and his counterparts in other states aren't happy with the change, but there's little they can do when legislatures hand down new rules.

"Every governmental agency is looking for every means possible to...enforce the regulations and policies in front of it," says Barry Goleman, President of AAMVANET, a computer network run by the American Association of Motor Vehicle Administrators that links together the computers of the United States's 51 motor vehicle agencies. And increasingly, says Goleman, those state agencies are turning towards the DMVs as a source of data about the state's citizens, a way of providing services, and ultimately, a means of enforcing policy.

The DMVs fit the bill perfectly. On one hand, the DMV database lists

virtually every man, woman, and teenager of each state more accurately than the state's own census or tax roles. (Even people who don't drive usually end up getting "identification" cards, issued by the state DMVs, so they can do simple things like write a check or buy an alcoholic drink.) On the other hand, the DMV has a unique means of foreing citizens to comply with state edicts. In short, the DMV is a onestop-shop for state agencies that want to reach out and affect our lives.

Ironically, this concentration of information, power, and responsibilities has received scant attention from traditional privacy and civil libertarian advocates. The American Civil Liberties Union, Ralph Nader's Public Citizen, and even Robert Smith, editor of the esteemed *The Privacy Journal*, performed an exercise in collective buck-passing when called to comment for this article. The only group that has made any statement on the issue at all is the American Automobile Association: "Problems or violations of the law not having anything to do with the operation of a motor vehicle should not result in the loss or suspension of a driver's license," says AAA spokesperson Geoff Sundstrom.

Instead, it has been motor vehicle administrators themselves who have been honking the horn, warning that their agencies are becoming Big Brother incarnate. The only problem is that nobody is listening.

avid Lewis is not your typical deputy administrator. At 45, with a medium build, slightly graying hairline, and salt-and-pepper beard, his personal goals are to solve agency problems and find better ways to deliver services to the citizenry – while generally eschewing publicity. Lewis has been one of the key elements in making the Massachusetts Registry one of the most advanced in the world, with visitors coming to observe the system from as far away as England, Australia, and Russia.

Lewis came to the Massachusetts Registry in 1984 after heading the state's Merit Rating Board, which provides records to insurance companies to determine each driver's insurance premiums. (In Massachusetts, premiums are set by the state; shopping around between insurance companies can get the consumer better service, but never better coverage or a lower price.) It was important that the Merit Board have access to up-to-date and accurate records. They didn't.

"We had noticed some problems with Registry records," says Lewis, making a characteristic understatement, then pausing a few seconds before elaborating. Back in 1984, when Lewis joined the Registry, Massachusetts motor vehicle records were a mess. Five months could pass before a newly registered vehicle appeared on the DMV's computer system. Some cars never appeared. The same was true of licensed drivers: More than a few people carried licenses that had no matching records in the state's computer system. It wasn't a total disaster, though, because the state's paper records were the ones that really mattered. Every driver and every car in the state had a matching piece of paper on file at the Registry, the final adjudicator of every record.

Things were not much better with the Registry's handling of money. Although most of the money the Registry collected was cash, not even the most basic cash accounting techniques were in place. The people who issued the licenses also collected payments and put the money into cash boxes. This led, not surprisingly, to many cases of petty theft.

Lewis was part of a sweeping project to bring the Registry's computers out of the 1960s and into the 1990s. The first part of the modernization program brought cash registers at each clerk's station. Theft declined immediately. A few years later, the Registry began installation of its new \$15 million computer system, a massive; unified database designed to track drivers, automobiles, liens, and the cash received for each transaction. The new system also maintained links between records - so it knew, for instance, that the Simson Garlinkel who had a particular driver's license was the same Simson Garlinkel who owned a yellow Jeep, and that person lived at a particular address in Cambridge. In the trade, this sort of computer is called a "client-based system," and it is still fairly uncommon among the DMVs. (In Oregon, for instance, vehicle registration and driver licensing are currently handled by two separate and incompatible computer systems, al'hough a client-based system is under development.) The new computer made it possible, for the first time, to block renewal of licenses or registrations of people who have outstanding parking tickets, who haven't paid their excise tax, or who owe money to the DMV.

Although a computer hacker might think that an electronic system is more susceptible to fraud and abuse than a paper one, administrators feel otherwise. With good computer security, proper access controls, and lots of log files, they say, an electronic system can make individual fraud or misuse of official position extremely easy to catch. For example, in June 1993 the *Boston Herald* reported that "two top Registry of Motor Vehicles officials" had gotten their driver's licenses free of charge. Not only did the computer records say that no money had been collected, they also indicated that "a secret law-enforcement computer terminal at Registry headquarters in Boston" had been used to perform the renewals. That sort of abuse might have been commonplace under the old paper-based system; there is simply no way to know. But with computer systems, it's a simple matter to go back through a person's record and see every penny that he or she ever forked over to the state for the privilege of driving, even years after the fact.

The computer, combined with liberal policies regarding the dissemination of public records, also brought to light a number of Registry practices that had been festering for years under the manual system. In one case, a computer search conducted by a local newspaper revealed that an appeals board was frequently overturning convictions of people whose licenses had been suspended for drunk driving. In another, it was discovered that license plates with low numbers were being handed out as favors to friends of prominent politicians. For some reason, such plates are a Massachusetts fetish. "This is the only state where if you have [plate number] 12555 and 12444 becomes available, you want it," says Lewis. Although people from other states might laugh, giving away the plates in exchange for political favors or loyalty was seen as a gross misuse of political privilege; catching the abuse was symbolic of stamping out more egregious misuses of power. Automation had nothing to do with that scandal, but without automation, the story never could have been uncovered.

Both cases in the late 1980s showed unanticipated benefits that could be reaped from computerized records. In addition to making it easier for the Registry to get its job done, computerized records made it a simple matter to use data for purposes completely unrelated to the reason they were originally collected. As such, the records were the ideological cousins to a movement that sought to improve government efficiency by looking for synergy between different government databases – a movement that traced its roots all the way back to the executive branch and then-President Reagan's original claims about "Welfare Queens" who were bilking the system at the expense of the taxpayer.

"The major White House initiative was called Operation Match," recalls *The Privacy Journal*'s Robert Smith. The goal of Match was to pair databases of people who owed money to the government with other databases of people who got money from the government. Match went after government employees who had defaulted on student logas and welfare recipients with large unearned and unreported incomes. States were encouraged to set up their own match programs: Califor nia , for example, started intercepting the lottery checks of people who owed back taxes.

Although they started with tax and employment records, matching programs are custom made for the state DMVs - by far the most accurate databases of state residents. No other state agency tracks the movement of people more accurately than Motor Vehicles. DMVs even have aliens and, in some cases, illegal aliens in their files. Even people who don't drive get identification cards from the state for cashing checks or getting into bars; in most states, ID cards are issued by the DMV and stored in DMV's computer alongside licenses.

ut lawmakers around the country were realizing that beyond just tracking people and forcing them to pay state debts, DMVs were good for *controlling* people as well. Initial programs to block people's driver's licenses and renewals were so effective that legislatures started looking for other ways to exercise this newfound power.

One of the primary targets is kids. Some lawmakers have always felt the need to step in and exercise control over children whose parents would not or could not fulfill their responsibilities. And ever since auto-

mobiles became intractably meshed with the high school mating ritual, they've had a perfect tool at their disposal.

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In the mid-1980s, some states began using that tool. In 1983, Oregon passed its "court denial law." Normally, in Oregon kids are eligible for their learners permit at 15, and can get full driving privileges the following year. Under the law, any child convicted of drinking or possession of illegal drugs loses the privilege to get a driver's license until age 17. Any 17-year-old caught and convicted loses the privilege until his or her 18th birth-

day. Although Oregon is not known for its inner-city gang problems, a law that went into effect last November imposes similar restrictions on kids who are caught in any public building with a firearm. That's right: Oregon is dealing with the problem of kids bringing guns to school by taking away their driver's licenses. Ironically, it just might help.

"A driver's license is the most important thing that (young people] strive to get," says Oregon's Peter Nunnenkamp, who says that evaluations conducted by the state show the court denial law to be an effective curb. "[We] use that carrot out there as a way to change behavior in other areas.... They will do whatever they need to do to get these privileges."

Not surprisingly, one of the things that Oregon's youth seem most interested in doing with their driver's licenses, aside from driving, is fraudulently altering the cards in order to purchase alcohol. That's why more than 27 of the 109 offenses that can result in suspension of the state's driver's license have to do with altering the document, making false statements to police officers about a driver's license, or using another person's license to commit fraud.

Another state experimenting with driver's-license-as-social-control is Kentucky. Under that state's "high school dropout law" of 1990, students who drop out of school, have nine or more unexcused absences, or become "academically deficient" (by failing to pass at least four of their classes) lose the right to drive unless they can prove family hardship. By the start of the 1995-1994 school year, 82 of Kentucky's 176 school districts were participating in the program, covering nearly 70 percent of the state's students.

The Driven's License has become something it was never intended to be: a badge of good citizenship, pay your bills to city and state, pay your child support, don't get caught using drugs, and the state will let you keep on trucking.

Has it worked? "Yes, I think it has," says Robin Chaney. a spokesperson for the Kentucky Transportation Cabinet. "I've spoken to several different superintendents throughout the state: the school districts which have implemented the taw have seen a decrease in their dropout rate. It gives the students an extra incentive to come to school and not to miss so many days of school, and to put extra effort into school work." Last year, according to the Kentucky state police. 2,676 students lost their driver's licenses under the law.

Of course, if license suspension works for kids, who presumably have their parents to chauffeur them around, just imagine how effective it is on adults who need their driver's licenses to earn a living.

During the Reagan Administration's war on drugs, license suspension was added nationwide as another penalty – and presumably deterrent – for the crime of possession or sale of illegal drugs. Unlike jail, license suspension is an easy and effective way to punish a person for a drug offense – and at virtually no cost to the state. Even first-time offenders who plead "no contest" and receive a suspended sentence lose their driving privileges.

Recently, the nationwide campaign against so-called "deadbeat dads" – people who refuse to pay court-ordered child support – has turned its eye to the power of the DMV. In March 1993, Senator Bill

> Bradley (D-New Jersey) introduced the Interstate Child Support Enforcement Act, which would force the states to pass laws suspending people's driver's licenses for non-payment of child support. Although a version of the bill died in a previous session, this time conditions seem more ripe for passage.

Wisconsin is the vanguard for new and creative uses of driving privileges. A 1989 law in that state allows any municipal court to suspend a driver's license for non-payment of any fine. The law

covers non-payment of traffic fines, "failure to pay library fines, failure to shovel your sidewalk, failure to trim your trees that might be hanging over somebody else's property," and any other municipal fine that a person refuses to pay, says Julie Clark, of Wisconsin's Bureau of Driver Services.

"It made a lot of work for us," says Clark. In 1992, for example, 90,000 of Wisconsin's 3 million drivers had their licenses suspended; of that figure, 18,396 were suspended for failure to pay non-traffic offenses. That's up from 15,354 in 1991 and 12,305 in 1990.

Each session, it seems, the legislature adds on more non-drivingrelated offenses that can result in suspension, Clark adds. Unfortunately, Wisconsin's DMV, like most others, doesn't have a choice: Part of the state's executive branch, it is constitutionally required to enforce the laws passed by the state's legislature, whether it thinks they are appropriate or not. To make things worse, Clark says, lawmakers rarely grant the DMV permission to hire additional workers to handle the extra workload. "What really hurts us is little pieces of legislation here and there. They add maybe half a position here, half a position there, and that all adds up to four or five positions that we don't get," she says.

Like most DMV administrators interviewed for this article, Clark is opposed to these non-driving-related suspensions. It goes beyond the fact that the new rules require more work. The main reason, she says, is that suspending a driver's license for a non-driving offense "cheapens" the value of the license. If people can have their driver's licenses suspended for offenses that have nothing to do with driving, they'll soon think less of driving with a suspended license. "Most people place a high value and esteem on their driving privilege. If every time you turn around you might lose it, it is not going to be held in such high regard."

ealing with the problems of a suspended license is an old game for one segment of the US population: longdistance truckers. Fact is, it's hard to move a 90-ton rig from New York to San Francisco in three days without breaking a few laws. Truckers have a long history of getting their licenses suspended for the old-fashioned reason: speeding.

They also have a way of getting around the **problem:** procuring multiple licenses from different states.

Although it wasn't legal to have a driver's license from more than one state, that didn't stop most truckers. And there wasn't much that the states could do about it, since they lacked a single nationwide computer system to keep track of everything.

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Then in 1986, Congress passed a law requiring all commercial operators to be licensed according to federal guidelines, and forcing all of the states to develop a computer system "to track drivers so they couldn't go state-to-state getting [additional] driver's licenses, or spreading a bad driving record across many states," says Barry Goleman, president of AAMVANET, the network spawned by the 1986 law.

AAMVANET operates an index of every commercial driver in the United States. When an operator applies for a license in one state, the computer determines whether that driver has a license from any other. If a match is found, the duplicate is brought to the attention of the registry clerk, Goleman says. If the applicant still wants a commercial license, AAMVANET moves the driver's electronic record from the original state to the new one using a system called Electronic Data Interchange, or EDI.

AAMVANET went online in January 1989, and encompassed all 50 states and the District of Columbia by March 51, 1992. There are more than 6 million drivers in the database, says Goleman.

Now that the states have built their network, they're looking for new ways to leverage the technology. Top on the list is the electronic transmission of vehicle titles from one state to another.

Today, litles are paper and, as such, are occasionally forged by people who haven't paid off car loans. Tracking down forgeries is all the more complicated when people try to sell cars across state lines. "If I take a 127 b



There's something not quite right about the tiny Amsterdam field neavan Lamsweerde shares with neaboyfriend of two years and boll apperator of ten. Is this some sort of

Spacedake flashback, or what? "Our friends all feel seasion here – it's the floor," she laughs. "We don't notice it because we live here." Ah – the warped

Inez van Lamsweerde:

floor: Its wonkiness beats up the optic nerves and leaves the consciousness demanding a re-count. Rather Irke her photographic work, in fact.

"I don't see fashion as most people do - as something separate, reduced to seasonal hemlines," she says. "It's always with me inside, like a language. But it was not until she left school to study fashion that she first grasped how she wanted to use this language, in photography.

Animate or inanimate, van Lamsweerde's models tend to be highly eroticized, her compositions filled with tension and friction. For the last two years she has worked with Quantel Paintbox operator Karin Spijkers to get the desired look. "Slight manipulations are really the most interesting," she says.

A strength of her work is its deliberate crossing of boundaries. *Thank You Thighmaster* (left), a series of life-sized doll-women, was produced by digitally grafting the face of a doll over the face of a mode then stretching the real skin back over. The rest of the body and hair is "real," except skin was redraw over the hopples and the genitals were removed.

Final Factory is a challenging series of photographs inspired by the hype surrounding skinny supermodel Kate Moss. "When Corrin Day photographed her in underwear for English Vogue, everyone was going 'child pornography blah blah." I decided to go a stage further and use professional agency models, age 2 %."

These terror tots (one of which is shown at right hint at how we are becoming isolated by our technology as games and VR encroach further on our "real" reality - hence the series' title, from a Nintendo game. The artist's only digital manipulation was to give the girl the mouth of a man.

Final Fantasy questions our stereotypical views of children, and asks whether "they are somehow sacred or sacrosanct, as if the child were a symbol of innocence, says van Lamsweerde. "I wanted to ask whether we can still say kids are born innocent. In New York it was the 12- and 13-year-olds that scared me most." – Jules Marshall

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DMV

488 California title to Texas, they may not know what a California title looks like for a vehicle purchased in 1988, because California has changed the title document three times since then," says Goleman.

Although the states are working on a standardized title form, in a few years it will be obsolete when AAMVANET expands its horizon and begins tracking automobiles as well. The electronic system will make fraud more difficult to commit and easier to track down.

As integration between state DMVs gets better, expect to find more and more people getting their driver's licenses suspended or simply not renewed for incidents that happened outof-state. Massachusetts, for example, won't renew a person's driver's license if any other state has revoked that person's operating privileges. After all, says Lewis, it wouldn't be in the interest of public safety for Massachusetts to renew the driver's license of a person who had been fined for speeding in Pennsylvania and had then refused to pay. But Massachusetts won't get into the nitty gritty of what is a suspendible offense and what isn't: Any revocation in any state is grounds for non-renewal. Bay State drivers had better be careful about returning Wisconsin library books on time.

New technology and public policy pressures will only increase the power we are now ceding to the DMV. Soon, for example, the nation's DMVs will be the primary place for citizens to register to vote, thanks to the so-called "motor voter" bill signed last spring by President Clinton. Even though the bill applies equally to welfare and other state agencies, its name betrays the fact that most of its sponsors, and detractors as well, expect DMVs to be the primary place where it is implemented.

State DMVs are also exploring a new kind of driver's license that will make it all the more attractive to merge databanks between various state agencies. The driver's license of the near future will look a lot more like a credit card than the laminated Polaroid snapshots used by most states today. But unlike a Visa or Mastercard, the driver's name, numher, and date of birth won't be embossed in raised letters: Instead, they will be fused into the card's plastic with a thermal printing process, making them nearly impossible to alter. A digitized copy of the driver's photograph and signature will be similarly imprinted, in addition to being stored inside the state's databank.

Another advantage of storing a person's digitized photograph online, says Lewis, is

that the image can be electronically compared with other people's pictures. Software is now under development that will scan through the entire DMV database, once it is online, and search for two driver's licenses that have pictures of the same person. Such software, Lewis says, should be operational in Massachusetts within two years.

On the back of the new driver's license is a barcode and a magnetic strip. The states are now establishing standards, so that every state will store its computer-readable information in a compatible format. The barcode will likely contain an identifier that will key into AAMVANET's computer. The magstrip will additionally hold the driver's name, driver's license number, address, and demographic information such as age, height, and sex.

The beauty of using a standard credit-card license, Lewis says, is that "the third track can be read by an ATM." Eventually, states might join the cash teller networks, allowing people to pay their parking tickets, or view their dri-

Lawmakers around the country were realizing that DMVs were good for *controlling* people as well. Programs to block driver's licenses were so effective that legislatures started looking for other ways to exercise this newfound power.

ving records using the same machines that they now use to get cash. Such a system would use the ability of the ATM to read the magnetic strip on the back of the driver's license, use the network to verify eligibility in the benefit program, and use the ATM again to dispense cash. The state wouldn't use the ATM network to access a person's bank account – at least, not at first. On the other hand, if a person owes the state money, and that same person has a savings account in a bank that's chartered by the state...well, who knows what some lawmaker might dream up?

The image and signature won't be stored digitally on the card – there's not enough room – but they will be JPEG compressed and stored on the state's mainframes. Indeed, not storing the picture on the card dramatically reduces the chances that the digital picture can be compromised. When a driver goes in to renew a license, the Registry official will swipe the driver's license through a magnetic strip reader and a picture of the person – pulled from the DMV's databank - will pop up on the screen.

Bot it won't stop there. "The Department of Welfare could use this as an 1D card," says Lewis. The card could also be used to issue unemployment benefits or food stamps. Increasingly, the card won't be a driver's license: It will be a state identification card that will also give some people permission to drive. The card might even become the National Health Care card as well – unless legislation is added to Clinton's health care act that would specifically prohibit the new National Health Care Card from having a "dual-use" – such as allowing you to drive.

Eventually, financially strapped states will probably develop ways to resell their databases back to their citizens. One idea is a low-cost "consumer identification verification station" that shopkeepers and restaurateurs could purchase to verify the identities of people trying to cash checks or pass credit cards. A shopkeeper would borrow a person's driver's license, swipe it through a magnetic strip reader, and a photo of the person would appear on a little screen. The few states that have faws against the dissemination of such records will probably pass new ones, especially in light of the cash potential.

And if you don't pay your fibrary fines? The state could always void your ability to write checks or pass credit cards, in addition to pulling your driving privileges.

Our Founding Fathers never could have envisioned today's driver's license. It would have been inconceivable to likes of Washington, Adams, and Jefferson that one day travel between a person's home and work, or between nearby cities, in a carriage owned by that person, would be transformed from a right into a privilege to be granted and revoked at the pleasure of the state.

After all, the right to travel between states is guaranteed by Article 1, Section 9 of the United States Constitution. And while taking away a person's driver's license does not take away that right, it can make it essentially impossible to exercise.

In building a country largely dependent upon the automobile and devoid of public transportation, we have inadvertently created a lever that gives state governments a heretofore unimaginable power to affect people's lives by simple administrative action. In the coming years, more and more states will seize upon that power as a way of enforcing social policy, balancing their budgets, and cutting costs. Indeed, in a few years, states that don't exercise this kind of control over their citizens will seem foolish. Or will they?