

# Hot on the Horizon

Here's a look at 10 emerging policy issues sure to heat up in the year ahead.

---

COMPILED BY JULIE LAYS

---

**T**he legislative landscape was markedly different when *State Legislatures* magazine first began forecasting the top issues lawmakers were likely to tackle back in 1999. But the topics were amazingly similar.

Several state legislatures pondered whether to use their historically large budget surpluses on tax refunds or to bolster rainy-day funds. Talk about the good old days. But the focus for most everyone that year centered on one cataclysmic event: Would we survive Y2K?

The rest of the 1999 list, however, resonated with many of the same tough issues that comprise legislative agendas today: education, health care costs, taxes, Medicaid, welfare, technology. Indeed, every issue on our 1999 list maintains at least a measure of traction today. Well, maybe not the surpluses, but we can hope, can't we?

If we were to list the top state policy issues of 2014, they would be tax reform, transportation funding, gun laws, the high cost of higher education, voter registration, distracted driving, teacher quality, hydraulic fracturing, juvenile justice realignment, Common Core educational standards, as well as Medicaid expansion, health insurance exchanges and other elements of federal health reform. But we're not going to do that.

For this edition, we decided it would be more interesting to

---

*Julie Lays is the managing editor of State Legislatures magazine. Several NCSL staff contributed to this article: Glen Andersen, Jane Andrade, Jo Anne Bourquard, Megan Comlossy, Pam Greenberg, Karmen Hanson, Cassandra Kirsch, Doug Shinkle, Anne Teigen, Wendy Underhill, Mary Winter, Mark Wolf.*

examine emerging issues—new ideas sure to gain more legislative attention in the year ahead. Some of them you may not have even heard about, but are sure to soon.

Americans love their privacy, and privacy concerns are woven throughout many of these emerging trends. New technology—from social networking to online shopping to drone surveillance—is threatening the cherished right like never before. Policymakers are being asked to balance security concerns with personal safety, and to decide where to draw the line at what's enough. And although a majority of state legislatures considered some type of privacy law in 2013, the concerns are far from gone. What's settled today is not necessarily so for tomorrow, as researchers continue to create technology capable of doing things most of us have not yet even imagined.

Debate over privacy rights will continue as lawmakers ask: What's the best way to protect personal information collected by mobile apps and websites? Should limits be placed on biometric identifiers (measurable biological characteristics or traits used to identify individuals) collected by government? Should we give up some public safety security to limit the use of drones and surveillance cameras?

As many of the following emerging issues heat up, lawmakers will continue to look for the best ways to promote their benefits, guard against any possible downsides, and still protect individuals' privacy and the public's safety. No small task by any measure.

## 1. DRONES

When the discussion centers on privacy, the topic of drones inevitably comes up. Unmanned aerial vehicles, as they're also called, are good at an impressive number of tasks, including a



very controversial one—spying on people. At least 13 states have passed drone-related laws, many aimed at protecting residents from illegal snooping and unwarranted police surveillance.

Drones—pilotless aircraft that typically carry cameras and fire weapons—are used by the military to fight terrorists and by police to photograph crime scenes and look for suspects. They’re also being developed to film movies, spot wildfires, watch oil pipelines, monitor avalanches, survey crops and even herd sheep. Dominoes Pizza is testing a drone to deliver its pies, and the Bill and Melinda Gates Foundation uses drones to deliver vaccines to remote African villages.

But drones raise complex privacy, safety and regulatory concerns. Simple drones are easy to build and available in mail-order kits for a few hundred dollars. Many lawmakers worry they’ll fall into a number of undesirable hands—from inconsiderate neighbors to international terrorists. Others fear drones are ripe for abuse by police and Big Brother governments.

Lawmakers in at least 43 states have grappled with such issues, introducing some 118 drone-related bills and resolutions in 2013 alone.

Among the 13 states with drone laws already on the books, Florida’s allows police to forgo a warrant in emergencies such as terrorist attacks or “when swift action is needed to prevent imminent danger to life or serious damage to property.” Illinois’ drone law is similar to Florida’s, but it stipulates that police must destroy all drone-gathered information within 30 days. Texas’ law enumerates 19 lawful uses for unmanned aircraft and creates two new crimes: the illegal use of an unmanned aircraft to capture images and the offense of possessing or distributing the image, both class C misdemeanors.

Meanwhile, the drone industry is taking off. The global market reached nearly \$90 billion in 2013, according to the Teal Group, analysts of the aerospace and defense industry. And, the FAA is setting up drone test sites in six states. For lawmakers, it means eyes on the skies for years to come.

## 2. BIG DATA

The amount of personal information collected in this day and age is massive. Use a credit card? Have a Facebook account? Talk on a cell phone? Attend school? Shop online? If the answer is “yes” to any of these, you’ve contributed to the explosion of “big data” being used by both the public and private sectors in a process called “data mining.”

Data miners search computerized information to uncover patterns and relationships that can guide decision making and save businesses money. Companies use big data to tailor services, like the book recommendations on Amazon. The possible applications are numerous and include government uses. For example, Maine and New Jersey were the first to analyze Medicaid and insurance claims data to zero in on where the most costly patients live in order to target care more efficiently. It’s called “hotspotting,” and lawmakers hope it will help in coordinating care, keeping chronic conditions in check, controlling costs and improving the quality of health care.

Issues of protection, security and the overall stewardship of personal data are at the heart of the big data debate. Consumers

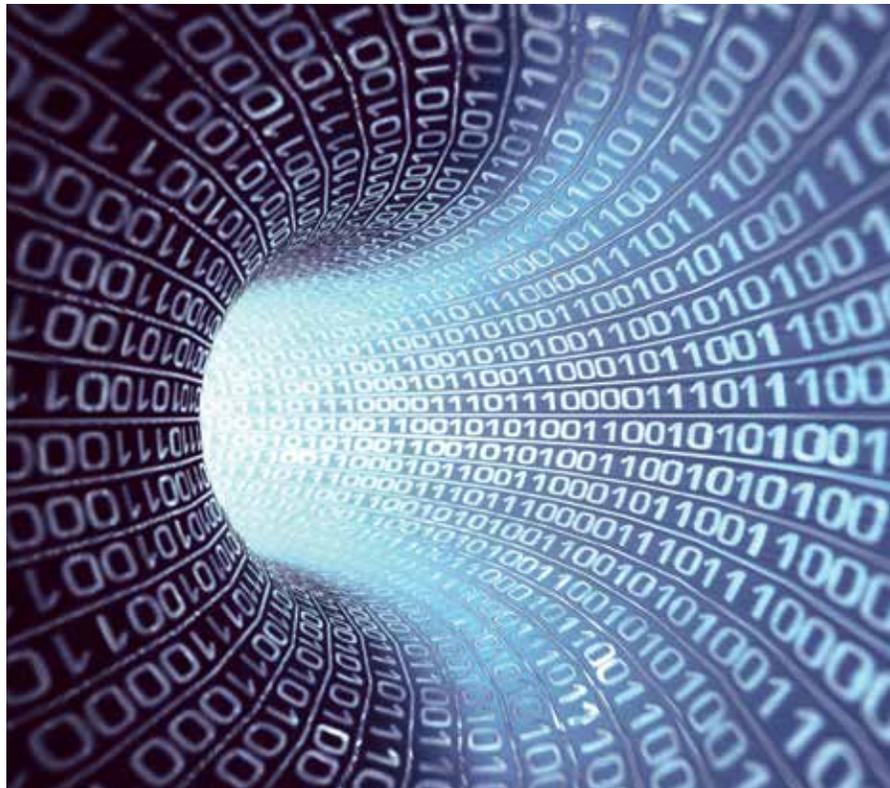
## State-Federal Issues

Here are the top federal issues on state lawmakers’ minds that will direct NCSL’s efforts in the nation’s capital in 2014.

- ◆ Help Congress figure it out!
- ◆ Protect state and territorial sovereignty from preemption.
- ◆ Guard against unfunded mandates resulting from federal deficit reduction and tax reform.
- ◆ Maintain state flexibility in the implementation of federal health care reform.
- ◆ Support strengthening our nation’s transportation, water and wastewater infrastructure.
- ◆ Advocate for a national energy plan that includes domestic energy production.
- ◆ Support passage of the Marketplace Fairness Act.
- ◆ Maintain state flexibility in the reauthorization of the Elementary and Secondary Education Act.
- ◆ Preserve state-based insurance regulation.
- ◆ Support comprehensive immigration reform.

often cannot “opt out” of data collection on websites. Some big data critics worry about the risk of drawing flawed conclusions based on personal data and whether there should be more transparency over what is collected, how it is collected, where it is stored and to whom it is sold. Finally, many are concerned about cyber security since there are few state laws and no federal law that establishes minimum security standards for protecting the vast amount of personally identifiable information already collected.

Nonetheless, data mining is transforming all sectors of society, from helping combat cyber crime and fraud with predictive analytics to saving consumers from a bombardment of unwanted advertisements. As the volume of big data shows no signs of shrinking anytime soon, legislators most likely will be reexamining traditional approaches to regulating and protecting personal data in the year ahead, trying to balance its benefits against the concerns about security and personal privacy.



### 3. CLOUD COMPUTING

Where does all this big data live? In the cloud, of course. “The cloud” isn’t some ethereal entity up there somewhere—it’s a worldwide network of remote servers with a wide array of hardware, software and services that allow businesses and individuals to store and manage their data through the Internet. We are in and out of the cloud all day through our computers, tablets and smart phones. Small businesses to large corporations are shifting to cloud-based computing to cut costs and improve efficiency. In fact, roughly half of the nation’s businesses are now using one or



more cloud-based services, according to Forbes magazine.

With a recent report by Forrester Research predicting the global market for cloud-based services will reach \$240 billion by 2020, states are faced once again with the fact that most of their sales tax codes don’t address 21st century realities like the cloud. Sales and use taxes are most state governments’ second most important source of tax revenue, exceeded only by personal income taxes, but it has entered a period of slowly declining importance as a growing share of personal consumption is for untaxed services and goods via the Internet.

In the last 10 years, more than half the states have imposed sales taxes on certain digital transactions, but only half of them have expanded their definition of taxable digital products to include cloud-based services. For a thorough look at the issue, turn to the article on page 27.

### 4. THE SHARING ECONOMY

Whether it’s a vacationer renting a home on the beach or a bride renting a “gently worn” dress for her wedding, the “economy of sharing” is increasing. Time magazine describes this proliferation of people renting their personal possessions and services—such as cars, houses and skills—as one of the “10 Ideas That Will Change the World.”

Greater choice, convenience and savings are fueling this new collaboration, made possible by the Internet and its ability to connect people directly and immediately. Forbes estimates this sector is growing by more than 25 percent, earning participants more than \$3.5 billion in 2013.

For example, Avis recently purchased the car-sharing service Zipcar for \$500 million. Google funded Uber to the tune of \$258 million. Airbnb was valued at \$1.3 billion in July 2012 and claims more than 2 million total online housing bookings. And new companies like Task Rabbit, Getaround and RelayRides have been created within the last five years to produce web platforms to sort and vet individuals’ goods and services.

State lawmakers already are trying to balance protecting consumers with cultivating a competitive business environment in this peer-to-peer marketplace. Lawmakers from California, Colorado, Illinois, Massachusetts, Oregon and Washington have enacted legislation to regulate or encourage car-sharing services. California, Oregon and Washington’s laws require a vehicle owner who is renting out his personal car to be a member of a vehicle-sharing program to ensure that insurance, safety and financial reporting requirements are met. Legislation supporting car sharing has attracted bipartisan support for the same reasons it’s become so popular: It’s affordable, flexible and eco-friendly in both urban and rural settings.

Sharing comes with a couple of concerns, however. The New York attorney general is battling with Airbnb over whether its services violate state law that prohibits unregulated hotels. And a recent fatal car crash involving a driver of a “peer-rented” car is raising questions about insurance liability. Policymakers will continue to refine the oversight of these businesses as they spread to more sectors.

### 5. MOOCS

“Massive open online courses” have caught the attention of policymakers concerned about repeated funding cuts and skyrocketing tuition increases at colleges and universities. MOOCS offer an available and affordable higher education option to many people who believe college is not within their reach. The idea is to make classes with the best professors in the world available to students worldwide. Professors from Harvard to Stanford have joined the effort and their web-based lectures and interactive courses are gaining in popularity, attracting millions of students. Along the way, they are spurring development of for-credit online courses as well.

Everyone is talking about them, but it is too early to know how effective they are. Concerns are the same as those for online classes in general: the lack of personal contact and isolating

effect online courses can produce and the higher “drop out” rate they have compared to regular college classes.

Whether MOOCs have the power to change the higher education landscape significantly is unknown, but certainly something lawmakers may want to keep an eye on. Meanwhile, grab some popcorn and a notebook and watch a MOOC. “Was Alexander Great? The Life, Leadership & Legacies of History’s Greatest Warrior” sounds interesting.

## 6. ELECTRONIC CIGARETTES



Electronic cigarettes, or vapor cigarettes, are a relatively new “alternative nicotine delivery device.” They look like extra large plastic or metal cigarettes, but they don’t burn tobacco or nicotine in the traditional way. Instead, they use liquid cartridges that contain various ingredients, including tobacco-derived nicotine, synthetic nicotine, and other flavorings and chemicals. A battery heats the cartridge in an atomizing chamber, which produces an inhalable vapor.

Very little research has been conducted in the United States on the health effects of both the inhaled vapor and “second-hand vapor” produced. Some public health advocates believe that inhaling these chemicals may be harmful, while others believe they are less risky than traditionally combustible tobacco because they lack the tar and other chemicals used to process tobacco.

Makers of e-cigarettes argue that, since the devices emit vapors, not smoke, they should not fall under smoke-free laws and should be allowed everywhere except schools and child-care facilities.

The federal Food and Drug Administration has the authority to regulate the sale and production of traditional tobacco products, but has not yet ruled on e-cigarettes. The Department of Transportation is expected to prohibit their use on airlines soon, although several airlines already have banned them.

Some state legislators are concerned that a few companies have named the liquid cartridges after flavors appealing to young people (gummy bears and cotton candy, for example) and have approved legislation to include vapor products in their existing definition of tobacco. Others have created new laws to ban targeting sales or the use of vapor products to children specifically. Some states have clarified how vapor products relate to clean indoor air restrictions. Still other concerns center on the use of the devices to vaporize illegal drugs.

## 7. HIGH-TECH VOTING

Technology in the elections world has lagged behind in the commercial world for many reasons, but it may catch up soon. New voting equipment and new uses of the Internet, tablets and social media are emerging that will influence the voting experience.

Technology can make it easier to vote—especially for people

with disabilities, the elderly and people overseas. As for younger people, some of the “new” technologies are very appealing and easy to use.

The biggest concern whenever the Internet is involved can be summed up in one word: security. Voting is unlike many transactions, such as banking and buying online, and more difficult to protect than one would think. Another serious concern is who’s going to pay for new voting technology? Can counties afford such an expense? How much are state legislatures willing to help?

Adopting new technologies often requires legislative action. Eight states passed 10 laws on the electronic transmission of ballots in 2013, and seven states passed 11 laws last year on online voter registration. Expect to see more.

## 8. AFFORDABLE SOLAR ENERGY

A major challenge for solar energy has always been its high price tag. But costs have been dropping quickly, transforming affordable solar from an oxymoron into a real possibility. In the past 18 months, the price has declined by 60 percent. Improved technology, mass production and global competition have helped curb costs. These factors, along with a renewed concern over the reliability of the grid, have helped U.S. solar energy to nearly double in production in the last year.

Solar power now produces approximately 0.2 percent of the nation’s electricity. And although the electricity from most large, utility-scaled solar installations still costs about 35 percent more than electricity from natural gas plants, in some sunny regions of the West and Southwest, the price of solar is starting to become competitive with that of natural gas or coal.

States have encouraged solar energy use through net metering and renewable portfolio standards. Net metering, available in most states, allows utility companies to pay owners of small solar systems for electricity they contribute to the grid, often at the same rate they are charged for the electricity they buy from the utility.

Renewable portfolio standards in 16 states require that a



specified percentage of electricity sold by utilities comes from renewable sources by a certain date. Percentages and deadlines vary by state. For example, Minnesota requires investor-owned utilities to obtain 1.5 percent of their electricity from solar by 2020. New Jersey requires 3.47 percent by 2021 and 4.1 percent by 2028. New Mexico requires 4 percent by 2020.

If this trend continues and solar energy becomes as financially competitive as other energy sources, the nation—from the energy exploration giant to the local utility company to the average home owner—is in for some serious changes.

## 9. SELF-DRIVING CARS

Most of us chuckled as late-night TV comedians joked about the first self-driving car developed by Google just a couple of years ago. Yet several emerging transportation technologies—like autonomous, or self-driving, vehicles—could soon change how we get to school and work.

With the development of this new driving technology comes safety concerns and policy challenges.

In 2011, Nevada became the first state to allow autonomous vehicles on its roadways. Nevada’s law defines an autonomous vehicle as one that “uses artificial intelligence, sensors and global positioning system coordinates to drive itself without the active intervention of a human operator.” Lawmakers in California and Florida followed and passed similar legislation in 2012.

Proponents of this new technology note that around 35,000 people die each year in highway crashes, with at least 95 percent of the accidents caused, at least in part, by driver error. Self-driving cars are designed to remove those human errors by recognizing objects, other cars and hazards, and choosing the best route.

There are a number of legal, policy and social challenges that need to be addressed before autonomous vehicles are seen on every street corner. Current laws—from operating a vehicle to having car insurance—in every state make one big presumption: A human is behind the wheel, operating the vehicle. Lawmakers will be debating still-unanswered questions such as: How do these cars interact with standard, driver-operated vehicles? Do you need a driver’s license to “ride” in one? How might computer viruses affect these vehicles?

Michigan could become the next state to allow these cars to be



tested on public roads if the House approves legislation already passed by the Senate. More states will likely follow, since 13 states considered, but did not pass, legislation last year. It will be difficult to steer clear of this emerging issue in 2014.

## 10. BRAIN RESEARCH

The brain is an extremely complex organ that scientists are just beginning to understand. Research is teaching us how our brains develop, differ, decide, differentiate and deteriorate. What’s emerging is not only helping the medical community, but also has lawmakers reconsidering some policies, especially in the areas of early childhood development and juvenile justice.



Research has discovered that, if nurtured, especially in the first three years of life, the brain develops all-important “executive function skills” essential to several areas of life. These include the ability to focus, plan ahead, adjust to changes, control impulsivity and organize information.

Washington was one of the first states to apply some of this brain science to early childhood development policy and teacher training programs. Other states are beginning to follow Washington’s lead. Read more about the research and the policies on page 24.

In the area of juvenile justice, brain research has differentiated how teenage brains think and reason (or don’t) compared with adults, moving some states to adjust policies that harshly punish without rehabilitating young offenders.

Many states are looking at policies that divert young offenders from expensive, secure correctional facilities into local community programs. Some evidence suggests youth are more successful when supervised and treated closer to their homes and families.

### The Horizon is Here

As 2014 begins, being aware of emerging technologies, policies and products is important. Learning their hoped-for benefits, yet being informed of their possible downsides, will help in discerning what role they should play in the future.

Welcome 2014—we’re ready.

