



The Best States for E-Commerce

Progressive Policy Institute
Technology & New Economy Project

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"One person with a belief is a social power equal to ninety-nine who have only interests."
—John Stuart Mill

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The Best States for E-Commerce

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Introduction and Overview

State governments can make a big difference in how easy it is for their citizens to fully take advantage of the Internet to buy things, engage in legally binding transactions, and interact with government. This report measures how state laws, regulations, and administrative actions support or hinder Internet use by Americans. We hope our findings encourage states to examine carefully their laws, particularly those designed to protect incumbent bricks-and-mortar companies against e-commerce competitors, with an eye toward giving their citizens more choices and options as Internet users.

Like past major waves of technological innovation, today's information technology revolution is changing the landscape of virtually all economic activities. A driving force for productivity and wage growth in the New Economy will be the pervasive use of digital technologies to increase efficiency and productivity, particularly in the heretofore low-technology service sector. This "digitization" in the 21st century promises to bring the kinds of economic benefits that mechanization brought in the 20th. Fostering the growth of the digital economy must be one of the foundations of New Economy policy.

While in many areas, national and even international policy will affect the growth of the Internet, state government policies can have a significant positive or negative impact on the growth of the Internet in their states. Through their regulations on individuals, industry sectors, or professions, states regulate the ease, and in some cases, the ability of Internet users to buy certain goods and services online. States control tax rates on Internet access. Through their own actions to digitize state government, they control how much and how easy it is for Internet users to conduct online transactions with their government. And finally, they

determine if state residents can engage in legally binding online transactions by whether the state recognizes the legal validity of digital signatures. As a result of this widespread influence of states on Internet use, the ability, ease, and cost of being online and conducting online transactions differs significantly depending on where you live. Some states levy high taxes on Internet access, some prohibit or make it difficult for consumers to buy particular goods and services online, and some have provided limited opportunities for citizens to interact with government online. In contrast, other states go out of their way to be e-consumer friendly.

Some may argue that with the so-called dot-com bust the Internet revolution was a flash in the pan and that states don't need to worry about crafting policies that promote Internet use. We could not disagree more; the information technology and Internet revolution is only getting started. The online market continues to grow at a robust pace, with more and more of it done by traditional bricks-and-mortar companies. The Census Bureau reports that e-commerce retail sales were 13 percent higher in the fourth quarter of 2001 than the prior year, with e-commerce retail sales growing 2.5 times faster than all retail sales. E-commerce sales are expected to reach \$3.2 trillion by 2004. Advancing the Internet revolution is more than ever a key public policy goal.

As a result, in order to assess what are the easiest and most difficult states for Internet users, this report examines the 50 states and the District of Columbia, identifying the extent to which they impose industry-specific protectionist laws, tax Internet access, enable Internet users to transact electronically with state government, and recognize the legal validity of digital signatures. Each category directly affects the environment Internet users

encounter in their states, and each category is something that is under direct control of state government. Industry-specific protectionist laws and regulations limit selection and increase prices for online consumers. For example, we looked at whether consumers could buy wine, cars, insurance, contact lenses, and number of other goods and services online. The more they could, the higher the state's score. Taxes on Internet access make reaching the Web more expensive, and may, by raising cost of access, even keep a modest number of lower income individuals from getting online. E-government makes it easier for citizens to interact with government and obtain government services. States where the state government enables citizens to do a significant share of their governmental transactions online give people more online choices than states that do less. Digital signature laws make it possible for Internet users to "sign" documents electronically, expanding the range of transactions they can engage in. By combining these factors, we calculated a score for each state based on its friendliness toward Internet users.

Based on all these factors, Oregon emerges as the state most friendly to Internet users. The next three states are Utah, Indiana, and Louisiana—all scoring above 14. As the nation's best state for Internet users, Oregon does not require consumers to pay access taxes on Internet usage. Oregonian Internet users have the opportunity to purchase wine, mortgages, and prescription drugs with few restrictions. And the state is above average in providing opportunities for its residents to interact with their government online. This report does not intend to imply that Oregon, or any other high-scoring state, does not have room for improvement, but does suggest that relative to other states, consumers in these states have more choices, and in many cases pay lower costs to engage in e-commerce.

South Carolina and New Mexico score the

lowest of the 50 states. For example, South Carolina prohibits online wine sales. State laws there prohibit direct-to-customer interstate wine shipments via common carriers. The state also restricts online contact lens sales and has no laws giving citizens tools to address the issue of unsolicited commercial email.

While individual states differ in their Internet friendliness, so do regions of the nation. The Pacific region (Alaska, Hawaii, Washington, Oregon, and California) and West South Central states (Texas, Oklahoma, Arkansas, and Louisiana) are most friendly to e-consumers. The lowest ranking region is the South Atlantic (West Virginia, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, and Florida).

It should be understood that this rating system is very different than that used in the Progressive Policy Institute's (PPI) *State New Economy Index*. That report assessed how the structure of state economies was in line with the realities of the New Economy. This report assesses how state policies affect the choices and opportunities Internet users in states have. Perhaps this is why there are only weak overall patterns to the scores. For example, somewhat surprisingly, states that score higher on PPI's *State New Economy Index* receive only a slightly higher score than states that have been slower to make the transition to the New Economy. While there are some states that scored near the top on the *State New Economy Index* and on this report card, some do not. For example, California, New York, Texas, and Arizona, score relatively low for Internet friendliness. These are places that may be friendly to companies developing advanced technologies, but are not very friendly to the consumers going online. In contrast, some states like Iowa, Louisiana, and Indiana scored near the bottom on the *Index*, but have avoided passing many laws that make it difficult for their citizens to take advantage of these technologies.

How States Can Improve Their Scores

All states, including those ranking high, have it in their power to become more Internet friendly immediately. Because states hold many of the tax and regulatory powers over commerce (both e-commerce and regular commerce), they are well positioned to make it easier and cheaper for their citizens to engage in e-commerce and e-government. While states receiving low scores have much work to do, even the highest-ranking state can take steps to become more Internet friendly. There are five areas in which states can take action:

▶ Avoid Protectionist Regulation

Regulations designed to protect middlemen artificially inflate prices for consumers and limit their choices; and these regulations are not just minor annoyances or restrictions that raise prices for consumers. They can mean the difference between life and death for e-commerce competitors. For example, *wine.com* recently went out of business (selling its name and assets to *e-vineyard*). There may be legitimate business reasons for *wine.com*'s failure, but the fact that state laws made it off-limits to over one-third of American consumers, no doubt contributed to its failure. Likewise, the restrictive nature of automobile franchising laws has contributed to the failure of some Internet auto sales companies. Of course this is exactly what the incumbent bricks-and-mortar companies want when they lobby for passage of these laws—relief from competition.

There is a reason why incumbent middlemen have been so successful in getting states to protect them. Siding with the innovators against the status quo is often difficult politically, since the entrenched opponents often have more political power than new entrants to the market. For these reasons, policymakers need to act in the public interest and not give in to special interest pleadings and pressures. States should repeal laws

prohibiting, limiting, or hindering online sales by producers or e-commerce intermediaries in autos, wine, mortgages, contact lenses, prescription drugs, and any other industry with restrictive laws. As a class of regulation, protectionist measures should be eliminated—competition is the driving force for innovation and government should not act as a constraint. This is not to say that states should abolish legitimate consumer protection regulations. There is a public interest in industry regulation. For example, it is appropriate for state laws to require that online wine sellers collect and remit sales taxes and use shippers that check for identification. Likewise, it is appropriate that prescriptions are required before dispensing drugs or other medical devices. But these regulations can and should be designed in a way that protects consumers, not the bricks-and-mortar providers that e-commerce companies are competing with. Such measures should not be used to unfairly limit consumer choice.

▶ Promote Uniformity in Licensing Requirements Across State Borders

It's time to recognize that the old way of regulating commerce, which vested authority in states to design their own state-specific regulations, no longer works. When commerce consisted of consumers engaging in face-to-face transactions with sellers in the same political jurisdiction, it made sense for states to craft laws governing commerce. However, in an era where it's increasingly likely that the buyer and seller are in different states and interacting electronically, the old framework is a barrier to the growth of e-commerce. Licensing requirements for car dealers, insurance agents, mortgage brokers, doctors, pharmacies, and contact lens providers are increasingly being used by middlemen to protect themselves from competition. Even when the laws do not discriminate against online providers, the simple fact that a company choosing to sell to a consumer in another state must be licensed in that state is an added barrier to e-commerce

companies seeking to sell to all Americans. For example, mortgage companies seeking to do business with consumers in all states are required to file for licenses and post bonds with each state individually—there is no reciprocity among the states that require licensure.¹ This patchwork of often conflicting state laws and multi-state licensing schemes creates barriers to entry for new businesses and increases costs for established businesses—both of which restrain competition, limit consumer choice, and increase the cost of products and services to consumers.

While we do not believe, as libertarians do, that professional and industry licensing requirements should be abolished, there is an urgent need for uniformity or reciprocity. There are several models that could be considered. For example, the National Association of Insurance Commissioners' Producer Licensing Model Act (PLMA) provides for cross-border reciprocity between state insurance commissions and is a first step toward uniformity. In areas where states do not want or cannot achieve uniformity, they should consider reciprocity arrangements whereby companies or professionals licensed in one state can do business or provide services in another state. For example, given that all aspects of medical education, training, and certification in the United States are national in scope, and licensing requirements vary only slightly between states, reciprocity could be allowed without risks of inadequate care. A similar arrangement could be done for online pharmacies. The National Association of Boards of Pharmacy (NABP) has created the Verified Internet Pharmacy Practice Site (VIPPS) seal program to alert customers that the pharmacy from which they are purchasing has been certified by the NABP as complying with standardized rules regarding patient rights to privacy, authentication, and security of prescription orders, adherence to a recognized quality assurance policy, and provision of meaningful consultation between patients and pharmacists.² States could sign a multi-state compact agreeing that online pharmacies that

are approved for the VIPPS seal are automatically licensed in all 50 states.

However, if states demonstrate that they are unwilling or unable to rationalize expeditiously their business and professional regulatory frameworks, Congress should consider passing legislation requiring uniform state laws. This would follow the models Congress adopted when it passed the national legislation laying out the legal framework governing the acceptance of digital signatures, or the Financial Services Modernization Act. The Act gives states four years to develop a uniform licensing requirement or reciprocity for insurance, and if they don't act, a federal system of insurance regulation will be imposed.

In other cases, Congress could create a national license that companies selling products or services nationally (e.g., banking, cars) could apply for, while companies selling in just one state could continue to be governed by a single state's law. In some cases, the federal government can act unilaterally. For example, with regard to contact lenses, the Federal Trade Commission should do what it did in 1979 for eyeglasses: simply say that prescriptions for contact lenses must be given to consumers, who can then choose where they want the prescriptions filled.

► Use Information Technologies to Create Digital Government

All states, including those at the leading edge of the digital government transition, have much more work to do to use information technology to transform bureaucratic government into customer-centered government. As we have proposed in a recent report on digital government, states need to design Websites to reflect citizen needs, not internal bureaucratic imperatives; empower e-government advocates (e.g., Chief Information Officers or CIOs) to cut through bureaucratic barriers; and invest adequate funds up-front for e-government, particularly for cross-agency (and cross-governmental) innovative, customer-focused e-government projects.³

► **Adopt the Uniform Electronic Transactions Act to Enable the Use of Digital Signatures**

Congress passed the “E-Sign” bill in 2000, which among other things, threatened to preempt state laws unless they all passed the Uniform Electronic Transactions Act (UETA), which was the product of several years of work by the National Conference of Commissioners on Uniform State Laws. All states need to pass UETA, which gives full legal recognition to digital signatures.

► **Eliminate Taxes on Internet Access**

Access taxes are nuisance taxes that raise little revenue, but do serve to make it more expensive for people to get online. This is a disincentive for some people, particularly low-income people, to get Internet access. It is in the public interest to try to get as many Americans using the Internet as possible. Higher taxes on Internet access will only slow overall adoption rates.

Methodology

Scores for the states were calculated as follows: The raw numerical score for each factor was first either calculated (e.g., Internet access tax rate) or assigned (e.g., laws). Assigned scores were based on our subjective numerical valuations of state laws in each category (see Methodology Appendix). Each state received between zero (for consumer unfriendly laws) and 10 points (for consumer friendly laws) in each category.

The final score is based on the sum of the standard deviations for each category. The mean score for each state on each indicator was calculated, as was each score’s deviation from the mean. Standard deviations account not just for the rank, but for the relative difference between scores, giving more weight, for example, to a state that scored significantly above others, as compared to one that is only marginally above others. The overall scores are then calculated by adding the scores in each indicator. So that no score was negative, ten points was added to each score.

Overall Scores

Overall Scores by Rank

Oregon	16.6	Arkansas	10.3
Utah	14.7	Rhode Island	9.8
Indiana	14.3	West Virginia	9.6
Louisiana	14.2	New Jersey	9.6
Iowa	13.9	Texas	9.4
Alaska	13.4	Nebraska	9.4
Hawaii	12.8	Vermont	9.3
Idaho	12.8	Montana	9.2
Michigan	12.6	North Dakota	8.7
Colorado	12.4	Wisconsin	8.5
Kentucky	12.0	Arizona	8.4
Kansas	11.8	South Dakota	8.3
Maryland	11.7	Florida	8.2
Wyoming	11.6	Georgia	8.0
Washington	11.4	Illinois	7.8
Pennsylvania	11.4	New Hampshire	7.8
District of Columbia	11.3	Tennessee	7.3
Massachusetts	11.1	New York	7.0
Oklahoma	11.1	Delaware	6.9
Maine	10.9	Ohio	6.4
Nevada	10.9	North Carolina	6.2
Mississippi	10.9	California	5.8
Connecticut	10.6	Alabama	5.4
Minnesota	10.5	New Mexico	3.7
Missouri	10.5	South Carolina	3.1
Virginia	10.4		

Overall Scores in Alphabetical Order

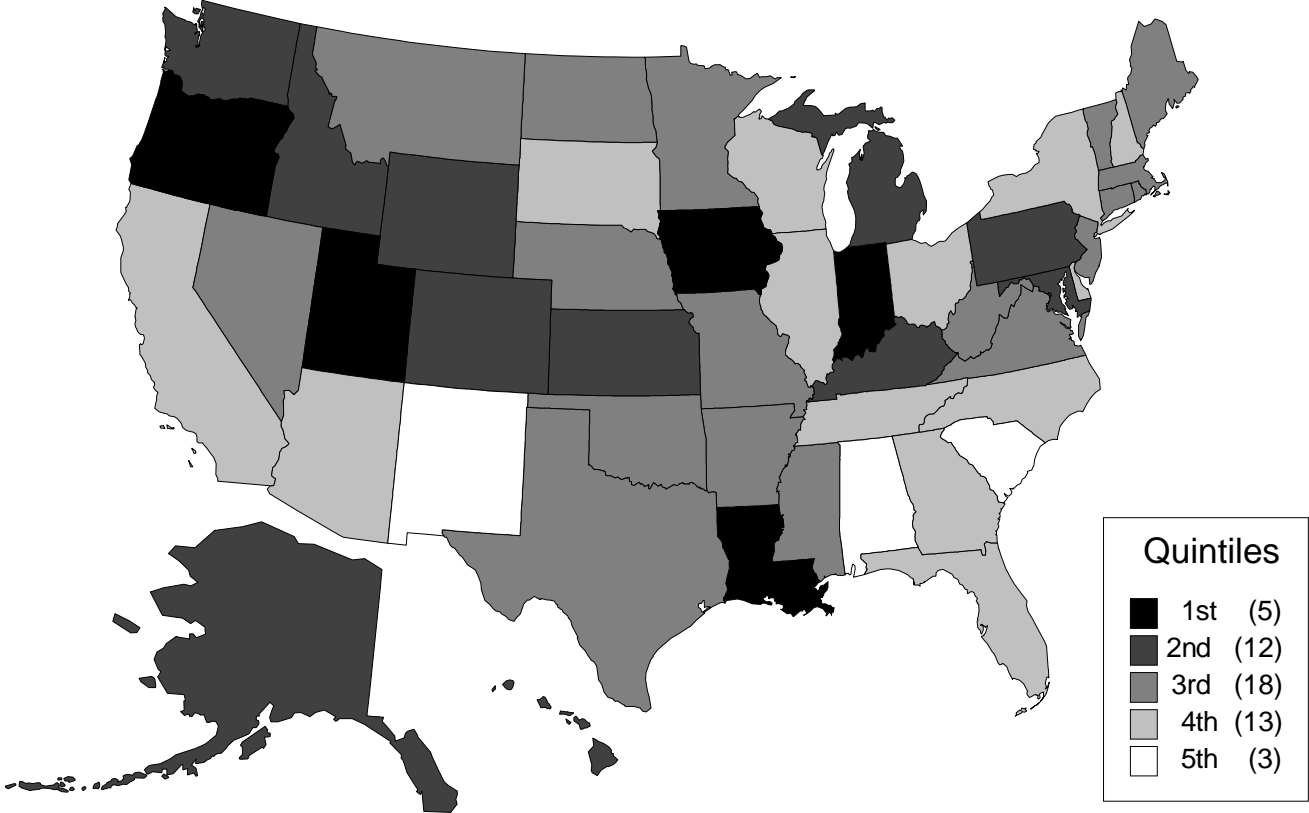
Alabama	5.4	Montana	9.2
Alaska	13.4	Nebraska	9.4
Arizona	8.4	Nevada	10.9
Arkansas	10.3	New Hampshire	7.8
California	5.8	New Jersey	9.6
Colorado	12.4	New Mexico	3.7
Connecticut	10.6	New York	7.0
District of Columbia	11.3	North Carolina	6.2
Delaware	6.9	North Dakota	8.7
Florida	8.2	Ohio	6.4
Georgia	8.0	Oklahoma	11.1
Hawaii	12.8	Oregon	16.6
Idaho	12.8	Pennsylvania	11.4
Illinois	7.8	Rhode Island	9.8
Indiana	14.3	South Carolina	3.1
Iowa	13.9	South Dakota	8.3
Kansas	11.8	Tennessee	7.3
Kentucky	12.0	Texas	9.4
Louisiana	14.2	Utah	14.7
Maine	10.9	Vermont	9.3
Maryland	11.7	Virginia	10.4
Massachusetts	11.1	Washington	11.4
Michigan	12.6	West Virginia	9.6
Minnesota	10.5	Wisconsin	8.5
Mississippi	10.9	Wyoming	11.6
Missouri	10.5		

Overall Scores by Subject

	Final	Contact Lenses	Rx Drugs	Tele-medicine	Mortgages	Insurance
Alabama	5.4	0.0	7.0	0	0	10
Alaska	13.4	5.6	7.0	7	5	8
Arizona	8.4	4.0	10.0	2	0	8
Arkansas	10.3	0.0	7.0	5	10	10
California	5.8	5.5	7.0	0	0	3
Colorado	12.4	5.5	7.0	5	10	10
Connecticut	10.6	5.0	7.0	5	10	8
DC	11.3	5.0	3.0	7	10	7
Delaware	6.9	0.0	0.0	7	10	8
Florida	8.2	6.5	7.0	2	10	3
Georgia	8.0	0.0	3.0	5	7	8
Hawaii	12.8	5.5	3.5	10	0	8
Idaho	12.8	5.5	0.0	2	10	8
Illinois	7.8	3.5	7.0	5	10	8
Indiana	14.3	4.5	7.0	5	10	10
Iowa	13.9	7.2	7.0	2	10	10
Kansas	11.8	5.0	7.0	0	10	10
Kentucky	12.0	5.0	7.0	7	10	8
Louisiana	14.2	6.2	7.0	7	10	10
Maine	10.9	8.5	0.0	2	10	10
Maryland	11.7	6.5	0.0	7	10	10
Massachusetts	11.1	5.0	10.0	7	10	5
Michigan	12.6	5.0	7.0	7	10	8
Minnesota	10.5	0.0	7.0	7	3	8
Mississippi	10.9	0.0	7.0	0	10	8
Missouri	10.5	5.0	7.0	7	0	10
Montana	9.2	0.0	7.0	5	10	8
Nebraska	9.4	6.3	0.0	0	10	10
Nevada	10.9	5.0	7.0	6	0	10
New Hampshire	7.8	6.2	10.0	5	10	8
New Jersey	9.6	6.2	3.0	7	0	8
New Mexico	3.7	0.0	0.0	7	3	3
New York	7.0	5.0	7.0	2	10	5
North Carolina	6.2	0.0	7.0	5	10	10
North Dakota	8.7	0.0	7.0	10	10	10
Ohio	6.4	7.5	7.0	2	0	7
Oklahoma	11.1	5.0	7.0	5	10	10
Oregon	16.6	5.4	7.0	10	10	10
Pennsylvania	11.4	5.0	10.0	7	3	7
Rhode Island	9.8	0.0	7.0	7	10	8
South Carolina	3.1	0.0	7.0	7	0	3
South Dakota	8.3	5.0	0.0	5	10	10
Tennessee	7.3	5.0	7.0	5	0	3
Texas	9.4	5.4	7.0	5	0	8
Utah	14.7	9.5	7.0	5	10	10
Vermont	9.3	6.5	10.0	7	10	3
Virginia	10.4	5.5	7.0	2	10	8
Washington	11.4	0.0	7.0	7	7	8
West Virginia	9.6	0.0	7.0	6	10	3
Wisconsin	8.5	0.0	6.5	7	5	8
Wyoming	11.6	5.5	0.0	5	10	10
US Average	10.0	4.0	5.9	5.1	7.1	7.9

	Autos	Wine	Auctions	Access Taxes	Digital Govt.	UETA
Alabama	4	0	10	10	3.5	8
Alaska	2	8	10	10	8.4	0
Arizona	0	0	10	10	6.8	8
Arkansas	0	0	10	10	6.0	10
California	4	8	10	10	5.0	0
Colorado	0	8	10	10	6.5	0
Connecticut	4	0	10	10	6.2	0
DC	0	5	10	10	6.3	8
Delaware	0	0	10	10	5.5	8
Florida	0	0	10	10	6.3	8
Georgia	4	0	10	10	7.9	0
Hawaii	8	8	10	4	5.0	8
Idaho	4	8	10	10	7.0	10
Illinois	0	8	0	10	8.2	0
Indiana	4	3	10	10	6.3	8
Iowa	0	8	10	10	6.6	8
Kansas	0	0	10	10	8.9	8
Kentucky	0	0	10	10	6.1	10
Louisiana	0	3	10	10	6.8	8
Maine	4	0	10	10	5.7	8
Maryland	0	0	10	10	7.7	8
Massachusetts	4	0	10	10	6.2	0
Michigan	0	0	10	10	7.6	8
Minnesota	0	8	10	10	5.6	10
Mississippi	8	0	10	10	5.6	10
Missouri	0	8	10	10	6.4	0
Montana	0	0	10	10	5.7	10
Nebraska	0	3	10	10	7.0	8
Nevada	0	3	10	10	6.6	8
New Hampshire	0	3	0	9	5.1	8
New Jersey	0	0	10	10	7.9	8
New Mexico	0	8	10	6	4.0	10
New York	2	0	10	10	5.8	0
North Carolina	0	3	0	10	5.7	8
North Dakota	0	3	10	1	4.1	8
Ohio	0	0	10	5	6.1	8
Oklahoma	0	0	10	10	4.7	10
Oregon	0	8	10	10	6.3	10
Pennsylvania	0	0	10	10	7.3	8
Rhode Island	4	0	10	10	3.1	10
South Carolina	0	0	10	10	6.0	0
South Dakota	0	0	10	2	7.0	10
Tennessee	4	0	10	8	5.1	10
Texas	0	0	10	9	7.6	8
Utah	0	0	10	10	8.0	8
Vermont	4	0	10	10	4.2	0
Virginia	0	0	10	10	6.9	8
Washington	0	8	10	9	9.3	0
West Virginia	0	8	10	10	6.3	8
Wisconsin	0	8	10	5	7.7	0
Wyoming	4	3	10	10	4.7	10
US Average	1.3	2.8	9.4	9.2	6.3	6.5

Overall Scores (State-to-State Comparison)



Indicators

The most important phenomenon that is captured here is protectionism—the laws and regulations states have passed that intentionally or unintentionally make it more difficult, if not completely illegal, for e-commerce competitors to compete against in-state bricks-and-mortar companies. As a result, most of the indicators focus on these laws and regulations. However, the report also examines a number of other factors that can make it easier or more difficult for Internet users to surf the Web and conduct the business they want to conduct.

Protectionism

A central aspect of the e-commerce revolution is economic “disintermediation.” Disintermediation can be defined as the reduction or elimination of the role of retailers, distributors, brokers, and other middlemen in transactions between the producer and the customer. Notwithstanding the current shakeout, e-commerce is expected to continue to grow as more and more Americans get online and show a greater propensity to conduct commerce over the Internet.⁴ As a result, disintermediation of middle men is occurring in a wide range of industries and professions, including distributors and retailers of physical goods (e.g., wine and beer wholesalers, auto dealers, music stores); providers of transactional services (e.g., travel agents, stocks and bonds salesmen and traders, banks, real estate agents, and auctioneers); and even providers of professional services (e.g., lawyers, radiologists, college professors).

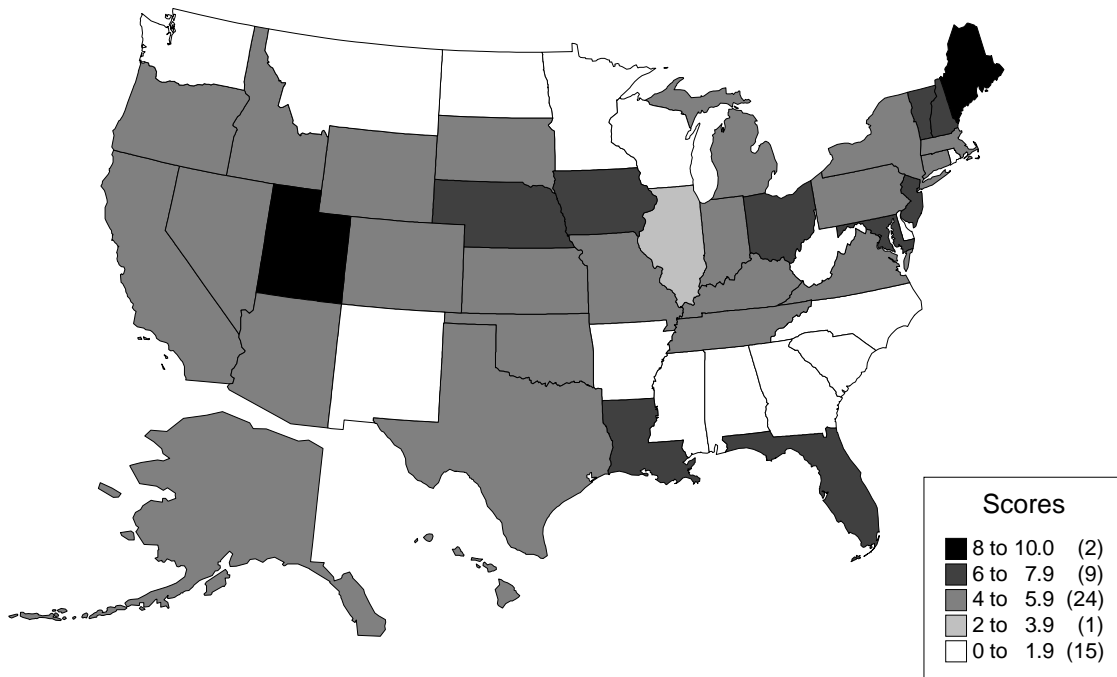
In these cases, those threatened with

disintermediation are not sitting by idly. They are using all the judicial, regulatory, and legislative means at their disposal to thwart competitors who would like to use the Net to sell a product or service. And they have been particularly active in working to pass state laws making it harder for consumers to bypass them and purchase goods and services directly online. Such efforts appear to be increasing as competition heats up. For example, in 1970 only two states had restrictive automobile franchising laws. By this year, car dealers had succeeded in obtaining the passage of laws in all 50 states to prevent auto manufacturers from selling cars online.

PPI estimates that American consumers pay a minimum of \$15 billion annually more for goods and services as a result of such e-commerce protectionism by middlemen.⁵ But it’s important to note that anti-consumer protectionism is not confined to the off-line vs. online world. It also occurs between off-line producers. For example, in order to protect gas station owners from competition, 15 states have passed laws preventing stores like Wal-Mart from selling gas below a certain price. Similarly, a host of states have passed laws restricting the power of wine and spirits producers to choose the wholesaler they want, or even to sell direct to retail establishments.

In order to assess how much choice consumers have to conduct business online, this report examines laws and regulations governing eight industries. The bottom line is that it matters what state consumers live in. Some states allow consumers considerably more choice than others.

Contact Lenses

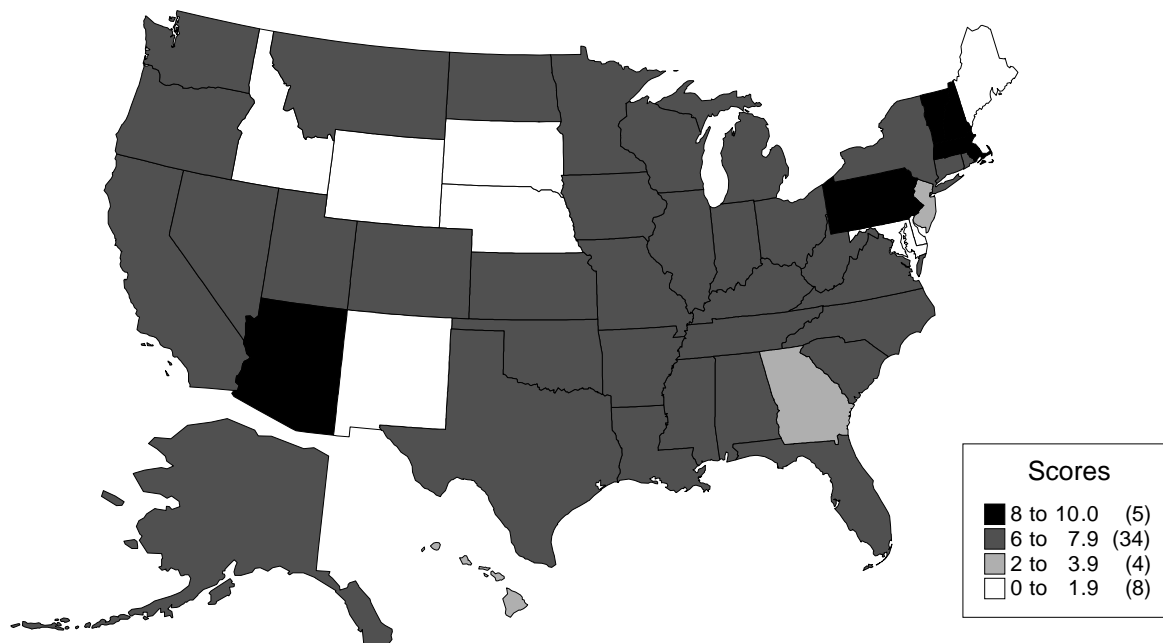


Buying contact lenses online can provide consumers with substantial savings.⁶ In addition, purchasing lenses online appears to pose no health risks, and in fact in some cases, may improve health since patients may replace older lenses more often.⁷ However, depending on the state in which they live, consumers may find it very easy or virtually impossible to buy contact lenses online.

Under the guise of patient protection, optometrists and other contact lens providers have successfully lobbied in many states for laws that limit online competition. Fifteen states effectively prohibit competition from online lens providers.⁸ For example, Georgia requires contact lenses to be dispensed through a face-to-face transaction.⁹ Texas' law essentially prohibits purchasing contact lenses over the phone or through the Internet.¹⁰

Similarly, New Mexico requires that only a New Mexico licensed physician or optometrist can sell and dispense contact lenses.¹¹ Other states have less overtly protectionist laws that still effectively hinder consumer choice. Illinois, for example, requires eye care providers to release the prescription upon patient request, but requires the patient to request the release in writing.¹² Other states have laws that limit the number of lenses that may be dispensed during the duration of a prescription. Such regulations put a prospective Internet seller in a precarious legal position because it would be virtually impossible for them to know upon receipt of a prescription how many lenses have been dispensed during the prescription's lifetime. In contrast, seven states have laws explicitly recognizing the legality of purchasing lenses online.

Prescription Drugs



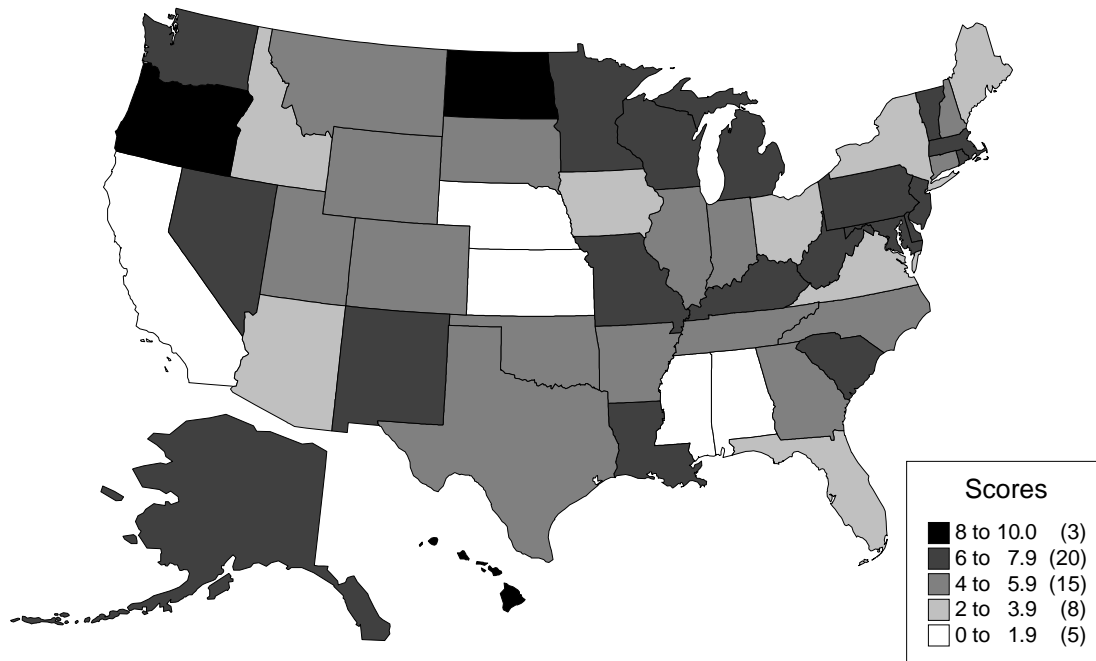
Online prescription drug purchases could bring lower prices to patients (and health insurers) in the same way that online and mail-order contact lenses have brought lower prices to contact lens wearers. Moreover, because U.S.-based online pharmacies are regulated and licensed and prescribe drugs only after receiving a valid prescription, concerns about increased patient risk are not valid. In fact, e-prescriptions have the potential to improve the quality of the prescription drug system. Because doctor-filed e-prescriptions could be instantly checked for possible adverse drug interactions, and could be transferred without error to the patient's pharmacy of choice (online or off-line), prescription errors would likely go down.¹³

However, claiming they better protect patient health, bricks-and-mortar pharmacies have fought back and sought to pass state laws either prohibiting online pharmaceutical purchases or limiting any price advantage they might have. Since buying online is often

cheaper, health insurers often give consumers incentives to buy online by passing some of the savings back to them in the form of lower co-pay amounts. But when health insurers in Colorado proposed to do this, bricks-and-mortar pharmacies, recognizing that they would lose business, fought unsuccessfully for legislation to limit the ability of prescription drug benefit packages to give members a lower co-pay if they purchased drugs online.¹⁴

Pharmacies, however, have been more successful in other states. Thirteen states have laws or regulations that specifically prohibit electronic prescription transmission.¹⁵ Even when there is not an outright ban, the lack of reciprocity between state pharmaceutical licensing boards makes it more difficult for online pharmacies. National online pharmacies must maintain licenses in multiple states, as only nine states do not require non-resident pharmacies licensed in another state to maintain a license with the home state.¹⁶

Telemedicine

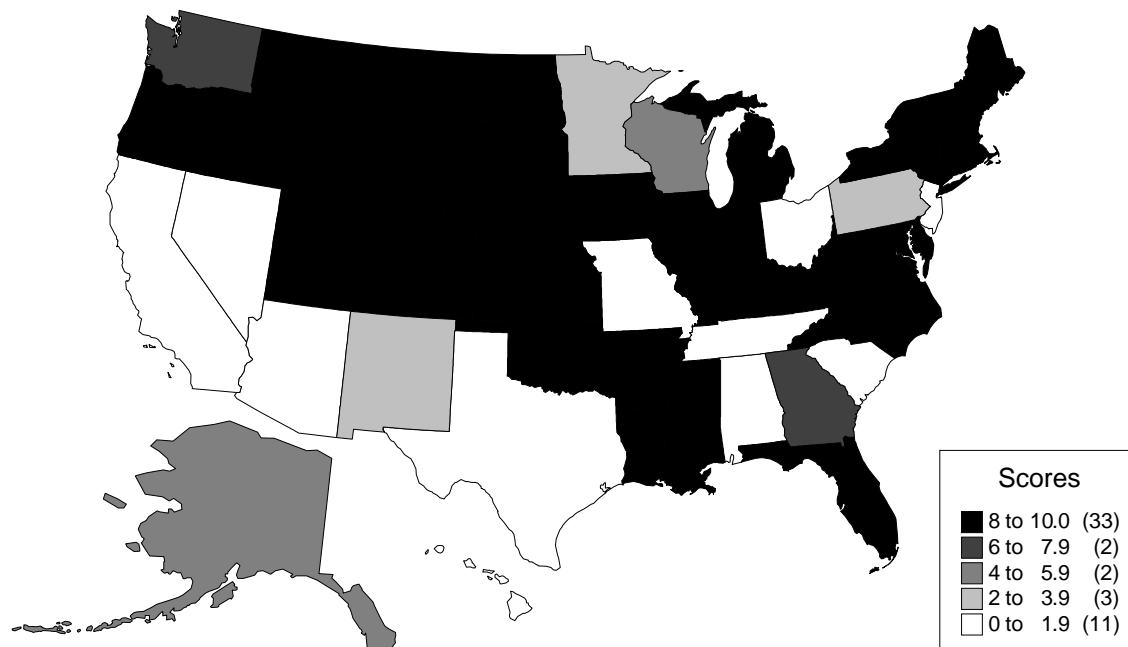


Telemedicine holds significant promise for Americans. Telemedicine could bring portable medical equipment and digital imaging technology to patients either too elderly or infirm to easily visit a hospital, or to those patients in rural areas hours from a full-service hospital. In addition, new digital technology allows X-rays and other types of medical imaging to be transmitted and read at a distance by specialists around the nation.

However, no state expressly allows telemedicine practitioners to treat or diagnosis patients across state borders without being licensed in the patient's state. Such laws reduce telemedicine's benefits. For example, should a patient wish to consult a physician in a different state who is trying a new form of treatment or who is an expert in a particular field, current law would prevent that physician from using digital imagery (as well as email delivery of

records) to consult with the patient. Some states, however, have even more restrictive legislation specifically limiting telemedicine,¹⁷ requiring physicians who treat patients to be licensed by the state in which the patient lives.¹⁸ Additionally, 13 states have enacted or are considering legislation that requires physicians to conduct a physical examination before prescribing medication.¹⁹ While well-intentioned, legislation requiring a physical examination may obviate many of the benefits of telemedicine technology because doctors examining a patient at a distance through digital imagery would be precluded from writing a prescription. However, Hawaii, North Dakota, and Oregon have enacted rules that allow an out-of-state telemedicine practitioner to consult with a physician who is the primary caregiver for an in-state patient without obtaining a license.²⁰

Mortgages



Because online mortgage companies do not have to pay for expensive bricks-and-mortar infrastructure and because they have lower transaction costs, they have the potential to offer lower rates and/or fees to consumers. However, existing bricks-and-mortar mortgage brokers have sought to limit competition by successfully lobbying state legislatures for restrictive licensing laws. This has led, in most cases, to online mortgage companies having a physical presence in states.

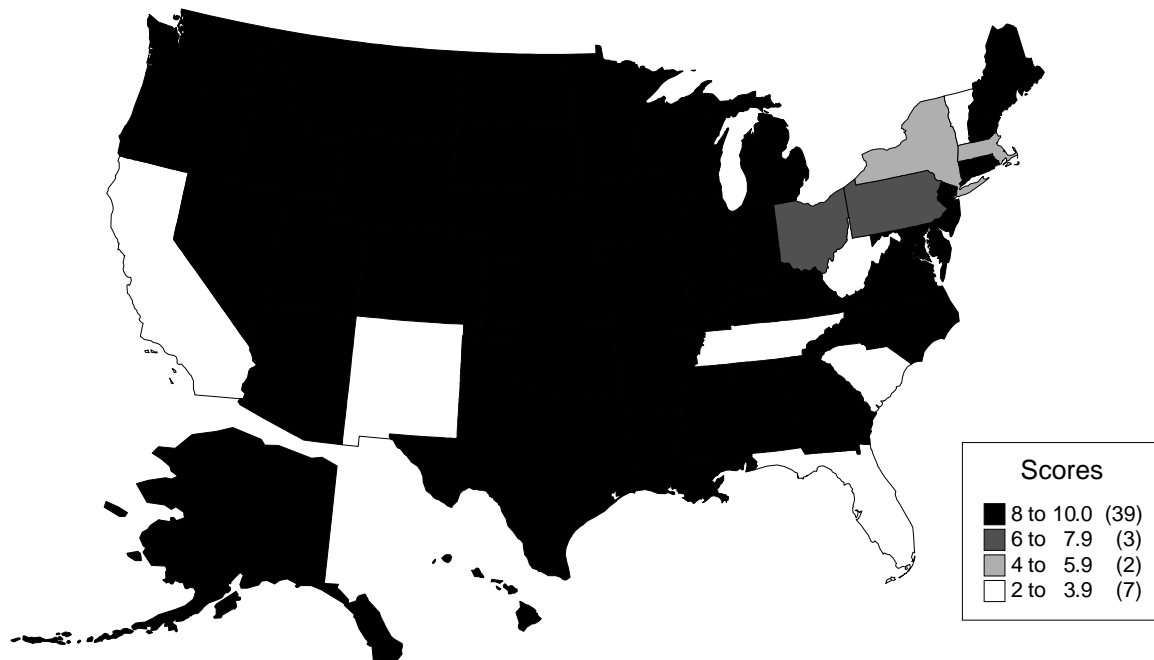
Forty-five states and the District of Columbia license or otherwise regulate mortgage brokers and brokerages, requiring online mortgage brokers and bankers to get licenses in their state. Only Alabama, Alaska, Colorado, Montana, and Wyoming do not regulate mortgage brokers. More onerous, however, are the brick-and-mortar requirements imposed by 17 states. These force firms wishing to broker a mortgage to hire residents of the state and to have a physical office there. For example, a mortgage broker doing business with a South Carolina resident must:

...maintain a sufficient physical presence in this State and his records must be

maintained at the licensed location in this State. At a minimum, the brokers shall maintain an official place of business open during regular business hours, staffed by one or more employees who have the authority to contract on behalf of the broker and to accept service on behalf of the broker. If the official place of business is not open for business within the hours of 8:30 a.m. until 5:00 p.m., Monday through Friday, the broker shall notify the department in writing...²¹

However well-intentioned these laws sometimes are, the multi-state licensing system and brick-and-mortar requirements mean that only national mortgage firms which already have physical offices in all states can sell online in all states. As a result, many online mortgage services are no more than either referral services or affiliates of locally licensed mortgage broker houses and national lending companies already licensed in the states. While this "clicks-and-mortar" model increases convenience for consumers, it limits competition from cyber-only mortgage brokers that could charge lower rates by taking advantage of new efficiencies.

Insurance



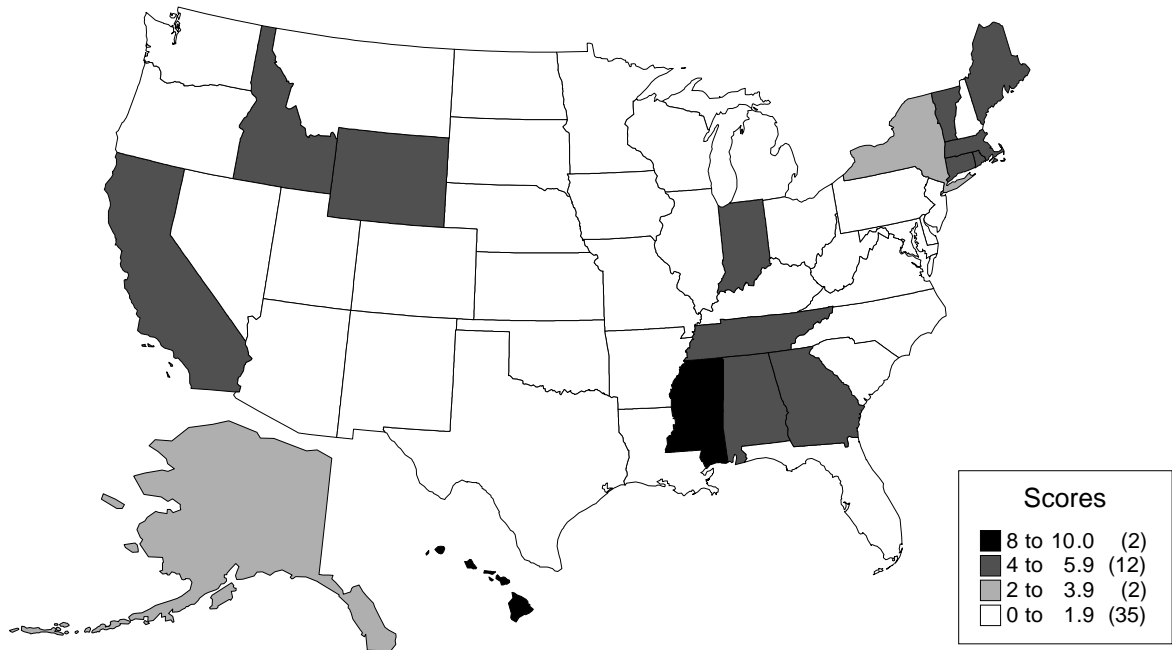
Like mortgages, purchasing insurance online can save consumers money. Unfortunately, the burdensome and paper-intensive process to obtain a required license in every state makes it more expensive to sell insurance online. However, the National Association of Insurance Commissioners (NAIC) is taking the lead to create uniform insurance producer licensing.²² The passage of the Gramm-Leach-Bliley Financial Services Modernization Act (GLB) by Congress in 1999 added incentives to pursue either reciprocal or uniform licensing.²³

To make the changes to non-resident insurance producer licensing required by GLB, the NAIC has drafted a model act that provides for cross-border reciprocity between state insurance commissions. Additionally, the NAIC's Uniform Regulation Through

Technology (URTT) initiative pledges to use technology and automation to "reduce multi-state licensing and approval barriers; increase the uniformity and consistency of processing and regulation across state boundaries."²⁴

To date, 38 states have enacted the NAIC's Model Act; the Act awaits gubernatorial signature in one state.²⁵ As of December 19, 2001, four states and the District of Columbia were considering it in their legislative sessions (Wisconsin plans to introduce the Act through regulation), but three states have yet to take that preliminary step.²⁶ In addition, legislative sessions in five states ended in 2001 without passage of the PLMA.²⁷ Only 21 states and the District of Columbia are fully compliant with URTT, while 15 states are partially compliant.²⁸ Nineteen states are PLMA and URTT compliant.

Autos



If consumers could use the Net to choose the car and the components they want (as consumers can do now when buying a personal computer) and purchase the car directly from the manufacturer, the industry could significantly cut costs related to inventory and sales and the consumer could save thousands of dollars.²⁹ But even when customers buy from intermediary online car dealers, they can save substantial sums. One study found that the average customer using an online service to buy an auto pays approximately two percent less than someone buying in person from a dealer.³⁰

Not surprisingly, car dealers and their trade associations have tried to limit such competition, successfully lobbying state legislatures to pass laws protecting their franchises. Perhaps more than any other industry, automobile dealers have succeeded in using public policy to limit competition. From relevant market area laws, to restrictions on warranty repair work, to prohibitions on

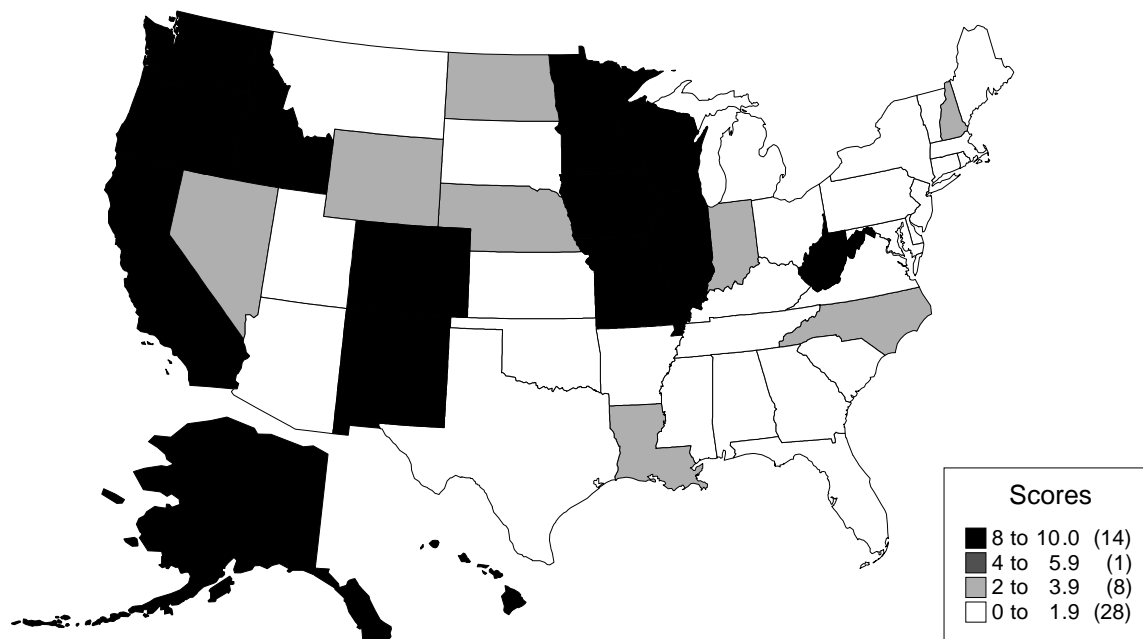
automobile manufacturers selling cars themselves, car dealers epitomize anti-consumer protectionism. Dealers use a number of spurious arguments to defend their protectionist claims, principally that they protect consumers from manufacturers. Yet there is no evidence of this, particularly with existing federal regulations regarding warranties and recalls. There is, however, ample evidence that such laws raise prices for consumers.³¹ Direct sales of automobiles by both manufacturers and online car dealers without a franchise presence are prohibited in every state.³² Manufacturers are prohibited from owning auto dealerships in 34 states, and in 14 of these manufacturers are prohibited from selling cars in the same relevant market area as an existing dealer carrying the same brand. But car dealers in several states, including Texas, have sought successfully to toughen state franchise laws even more, to make it virtually impossible for manufacturers to sell cars

The Best States for E-Commerce

directly—over the Internet—rather than through locally franchised dealers. However, Arizona may take the prize for having the most protectionist auto franchise laws. After active lobbying by the state's auto dealers, Arizona passed restrictive franchise laws that prohibit manufacturers from offering other auto-related services to consumers, including financing,

insurance, and parts. Some states have actually enforced laws with the perverse effect of raising prices of cars for consumers. For example, in the guise of fairness, California ruled that [Forddirect.com](http://forddirect.com) must make any price available on its Web site available to all customers. The result is that customers must send an email to the dealer requesting a lower price.

Wine



Purchasing wine over the Internet can let customers expand their selection from the choices offered by local retail wine outlets to hundreds, if not thousands, of vineyards. Because consumers can buy direct, avoiding the markups charged by wholesalers and retailers, direct shipments can also be cheaper.

However, in response to pressure by wine distributors, many states prohibit direct sales of wine from vineyards to consumers. Distributors make two claims to defend the laws: that direct shipments unfairly bypass tax collection and that they contribute to underage drinking. Both have been addressed by state laws permitting direct shipments, where sellers must register and remit taxes to the state in which the consumer is located, and must use shipping companies that verify the recipient is above the legal drinking age.

Notwithstanding the fact that laws can be crafted to address these legitimate concerns, many states prohibit or limit direct shipments. Georgia's permit law is a particularly good example of an overt wholesaler-industry

protection scheme. Georgia allows direct shipment only from wineries that are not represented by a wholesaler in the state. Other than protecting the wholesaler from competition, it's not clear why some kinds of wine are allowed and others are not.³³ In a number of states, including Florida, Georgia, Kentucky, Maryland, and Tennessee, direct-to-customer wine shipments are not only prohibited, but are a felony. Twenty-one states have laws that effectively preclude direct shipments but do not impose felony penalties.³⁴ Fourteen states allow limited direct shipment but only from other states that allow it.³⁵ Four states allow consumers to receive direct wine shipments from any state, but cap the amount that can be received at lower amounts than do reciprocity states.³⁶ However, two of these states (Rhode Island and Connecticut) impose restrictions that preclude nearly all Internet or telephone sales. Eight states require wineries to obtain permits to ship limited amounts, and six of these require the winery to charge and remit applicable state taxes.³⁷

Auctioneering

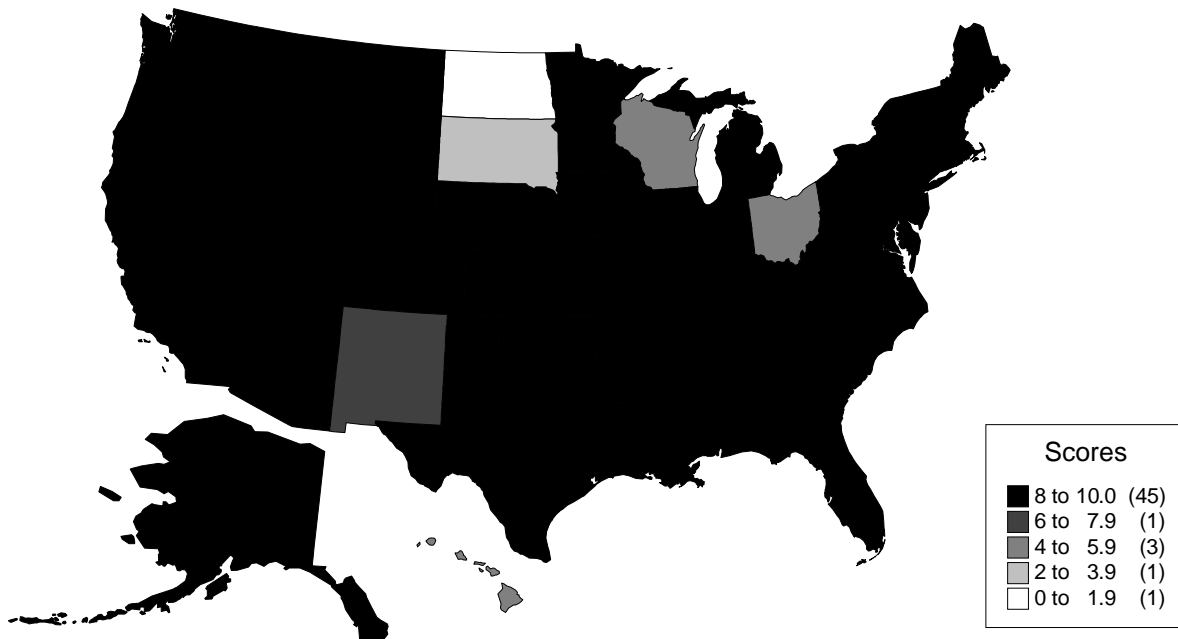


The Internet has modernized the ever-popular garage sale by allowing people all over the world to participate in online auctions of everything from baseball cards to furniture to concert tickets. Millions of Americans use sites such as *Ebay* and *Yahoo!Auctions* to buy and sell goods in auction-like format.

Professional auctioneers, however, have begun to lobby for laws to prevent everyday citizens and small-time merchants from selling online. The North Carolina Auctioneer

Licensing Board was the first regulatory authority to act. The Board considers people who sell goods other than their own personal property on online sites to be auctioneers, and is seeking to require them to be licensed by the state or face misdemeanor charges and a \$2,000 fine. Fortunately, a wave of adverse publicity convinced the Board not to enforce the ruling and the matter is still under review. New Hampshire and Illinois, however, have passed similar laws.

Internet Access Taxes

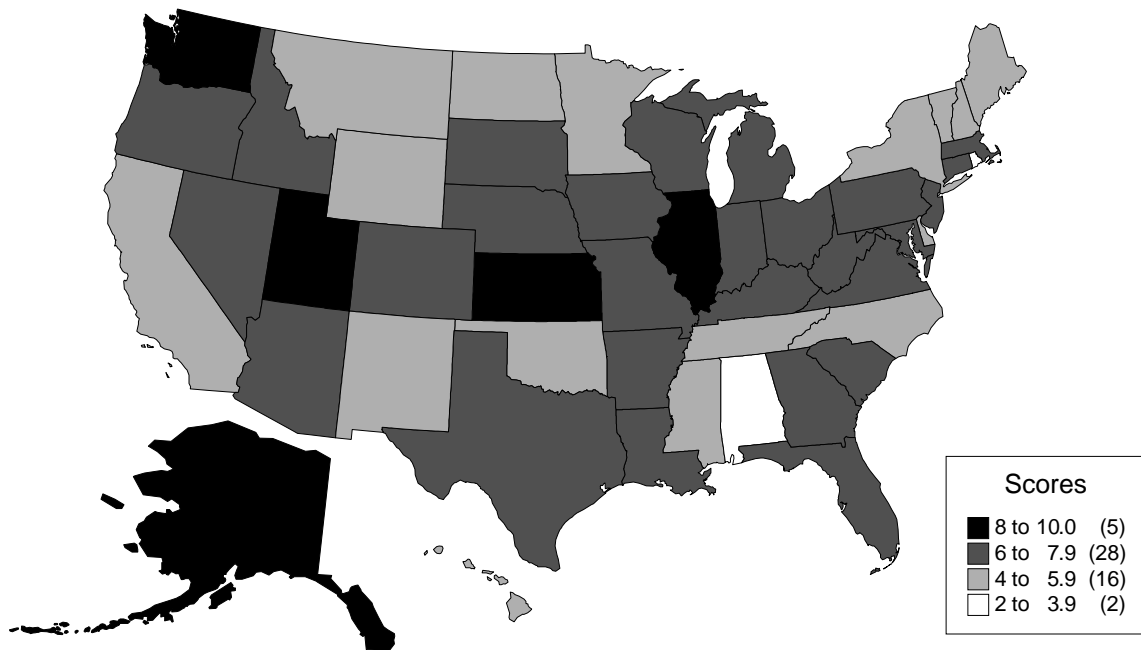


Access charges add a tax to the fees consumers pay to their Internet service providers, such as AOL, for Web access. While access taxes were specifically outlawed in the 1996 Internet Tax Freedom Act, a grandfather clause allows states that had previously enacted Internet access taxes to retain their laws.

Access taxes are not applied uniformly from state to state and do not conform to easy interpretation. For example, Texas exempts the

first \$25 of service while Ohio taxes Internet access for businesses as it would an electronic information service.³⁸ Because of this, scores are determined by dividing the number of households online in a state by the total dollars collected from a state's Internet access tax in 1998 to obtain a per-Internet household figure. Using this method, the Dakotas and Texas have the highest Internet access taxes, while 42 states do not levy taxes.

Digital Government



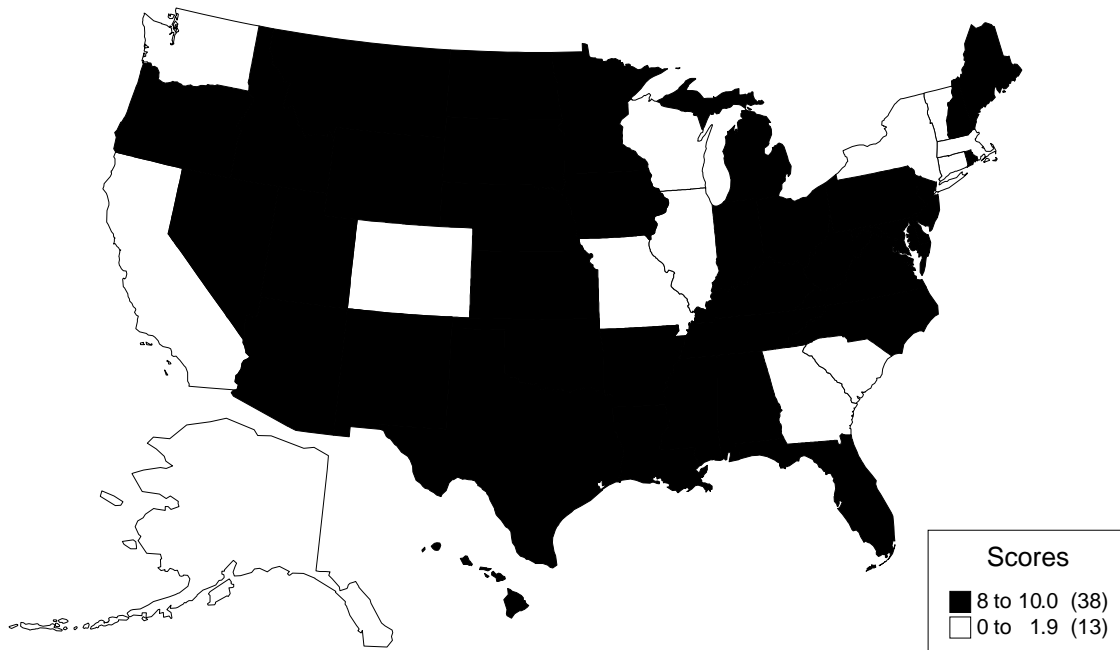
E-government lets citizens interact with their government more directly in many ways, from getting information on basic government services to transacting online applications (e.g., filling out electronic forms). Once a large share of citizens are using the Web for self-service interactions with government, more expensive paper, voice, and face-to-face transactions are likely to shrink, lowering the cost of providing services, as has already started to occur in the private sector.

While reducing costs, e-government also makes interacting with government more convenient. Tasks that previously required a visit to a government office or a telephone call during office hours could be performed by users whenever and wherever they please. E-

government is likely to be a particular benefit to those who work long hours or shift work, the elderly, and those with mobility problems. Yet the really significant benefits of e-government come from re-engineering government to take advantage of the Web—creating a fundamentally different sort of government that provides much more value to citizens.³⁹

According to data collected by the Progress and Freedom Foundation,⁴⁰ states differ considerably in the extent to which they have embraced e-government. States like Washington and Kansas have made considerable strides in letting citizens interact with government electronically. However, many states have moved considerably less far.

Uniform Electronic Transactions Act



For e-commerce to fully realize its potential, consumers must be able to submit and “sign” electronic documents. Without this ability, and without laws that recognize digital signatures as legally binding, consumers will be prevented from engaging in a host of e-commerce applications that require the submission of legally binding documents (e.g., applying for insurance online).

However, prior to 2000, only a few states had passed digital signature laws, and conflicting laws made it difficult for consumers in one state to electronically sign documents with companies in another. As a result, Congress passed the “E-Sign” bill in 2000 that, among other things, threatened to preempt state laws unless they all passed the Uniform Electronic Transactions Act (UETA), which was the product of several years of work by the National Conference of Commissioners on Uniform State Laws. The Act’s goal was that a record, signature, or contract will not be denied

legal effect or enforceability solely because it is in or incorporates an electronic form. The UETA also states that if existing law requires a written record or signature, an electronic signature is satisfactory.⁴¹

To date, 38 states have enacted either UETA or substantially similar legislation. Of these, 13 have enacted in it in a “pure” form fully consistent with the model legislation developed by NCCUSL.⁴² There is some question as to whether state e-sign laws that differ from the model legislation would be preempted under the federal E-Sign Act, and if they are not, whether the company that complies with the federal E-Sign Act would be in compliance if they accepted a signature from a person in such a state.⁴³ Finally, the Act has been introduced but not enacted in several others. Currently, Alaska, Georgia, New York, South Carolina, and Washington have neither enacted nor introduced UETA or UETA-compliant legislation.

Appendix A: Methodology

Assigning numerical valuations to state laws is complex and inherently subjective. This section discusses how the final scores for each category were developed. For all indicators except telecommunications taxes and access taxes (which used the tax rate or amount), the total possible score was 10 points.

Contact Lenses

Contact lens scores are based on five categories of laws and regulations: prescription release, prescription duration, prescription requirements, authorization of mail order/Internet sales, and prescription verification procedures. Each state's applicable laws in the five categories received a score based upon their effect on a potential Internet contact lens dispenser's ability to operate.

Scores were totaled along the five categories and divided by five, so that final scores were on a zero to 10 scale. However, states with laws in any category that effectively prohibit the Internet sale of contact lenses received zero points. (Laws that prohibit the Internet sale of contact lenses need not specifically prohibit such sales; other requirements, such as the face-to-face transaction regulation referenced in the text, can have the same prohibitive effects.)

Prescription Drugs

Scores were determined according to two factors: electronic prescription transmission laws and licensing laws. States with laws that prohibit electronic prescription transmission received zero points. States without such laws received 3.5 points for laws that allow transmission from an out-of-state prescriber computer to an in-state pharmacy, and additional 3.5 points for transmission from an in-state prescriber computer to an in-state pharmacy. To reflect the relative importance of electronic prescription transmission, states that do not require pharmacies licensed out-of-state

to re-license in the home state received three points. States that do require re-licensure received zero points. For more information, see the National Association of Boards of Pharmacy, *1999-2000 Survey of Pharmacy Law* or the NABP's "NABPLaw" CD-Rom (<http://www.nabp.org>).

Telemedicine

The telemedicine scores are based on two factors: telemedicine-specific laws and laws requiring a physician to physically examine a patient before treating. First, states that have passed laws that specifically require licensure—or an equivalent such as special-purpose licensure or registration—for out-of-state telemedicine practitioners received zero points. States that have made specific allowances for telemedicine practice by a physician licensed out-of-state after referral from a physician licensed in state received five points. States whose laws do not speak to the issue, but rather apply regulatory provisions that require physicians to be licensed in state to treat an in-state patient received two points. (Nevada and West Virginia each received one point for laws that specifically outlaw general telemedicine practice but allow for limited referral telemedicine practice). Such states received two points only because states that have not passed any specific anti-telemedicine laws should receive more points than those that have specifically called for licensure of out-of-state telemedicine practitioners. Additionally, enforcement of these regulations is uneven.

Second, this factor considers laws and regulations that require a doctor to physically examine a patient before writing a prescription. States with physical examination requirements received no points. States without such requirements received five points.

For further information, see the U.S. Department of Health and Human Services Office for the Advancement of Telehealth and

the Office's 2001 Report to Congress on Telemedicine (<http://telehealth.hrsa.gov/pubs/report2001/main.htm>) or the Center for Telemedicine Law's State Regulations Affecting Telehealth Licensure Update (<http://www.cfl.org>).

Mortgages

States with widely applicable physical presence licensure requirements (those that apply to persons or companies that conduct mortgage broker activities of any size or scale) received zero points. States without such laws received 10 points. Several states have laws that apply only to mortgage brokering activities of a particular size or scope. Depending upon the scope of the law in question, states with such laws received valuations between three and seven points. For example, Alaska requires lenders that make loans of \$25,000 or less to make the loan at the location specified in the license (Alaska received five points). Georgia only imposes a physical place of business requirement if the broker's home state imposes such a requirement. (Georgia received seven points.) For more information, contact the Electronic Financial Services Council (<http://www.efscouncil.org>).

Wine

Reciprocity states (a reciprocity state allows wine shipments only from states that allow shipments without permits or similar hindrances from wineries in its state) received eight points. States that allow limited interstate shipments without permits received five points. However, because in two of these four states (Rhode Island and Connecticut), regulatory schemes effectively preclude direct shipments resulting from Internet orders, both states received zero points. Additionally, Alaska allows individuals to receive a "reasonable amount" via direct shipment. Such a vague limit, in effect, makes direct shipment de facto legal in Alaska; Alaska received an eight-point valuation. Therefore, only Washington, D.C. received a five-point valuation. States that require shippers to obtain permits received three points. States that prohibit direct-to-customer interstate wine shipments via

common carriers (Federal Express and UPS, for example) were awarded zero points. States that impose felony penalties on wineries for violations of direct shipping prohibitions or licensure requirements did not receive any further negative consideration. No consideration was given to states that allow intrastate wine shipments, because the value of such a law varies considerably depending upon the state in which a consumer resides. For example, a law that prohibited interstate shipment but allowed intrastate shipment would have much more value to a consumer in California (where there are numerous wineries) than would a similar law to a consumer in Nebraska or Alabama (where there are few, if any, wineries). For more information see the Wine Institute's "Direct Shipment Laws by State for Wineries" at http://www.wineinstitute.org/shipwine/analysis/map_us.htm.

Auctioneering

States that have either passed laws or interpreted existing law negatively received zero points. States that have not done so received 10 points. That a state has or has not enforced a negative law was not considered; the existence of the negative law or a previous negative ruling (indicating a future desire or propensity toward regulation of online auction sites) resulted in a zero-point valuation.

Insurance

The score is based on state progress in passing the Producer Licensing Model Act (PLMA) and becoming Uniform Regulation Through Technology (URTT) compliant. States that have enacted the PLMA received five points. States that have passed the PLMA, but whose governors are yet to sign the bill, received four points. States slated to consider the legislation this term received two points. States in which the Act is not slated for introduction, or in which the legislative session ended without passing the Act, received zero points. States that are URTT compliant received five points. States that are partially compliant received three points. (Information on passage of the PLMA is current to January 8, 2002, and

that information on URTT compliance is current to October 10, 2001.) For more information, see the National Association of Insurance Commissioners, *Producer Licensing Model Act Implementation*, last updated January 8, 2002; and *100% URTT Compliant States*, last updated October 10, 2001, at (<http://www.naic.org>).

Automobiles

All states have laws that prevent the direct Internet sale of automobiles. Nonetheless, states do differ on how strictly they regulate manufacturers selling cars and how much they protect auto dealers. States that do not prohibit manufacturer-owned dealers received eight points. States that prohibit competition by dealers in the same relevant market area received only four points. States that prohibit competition by dealers in the entire state received no points. States with laws pending covering the entire state received two points.

Access Taxes

Access taxes do not easily lend themselves to comparison based on tax rate. Therefore, we divided each state's total access tax dollars collected (as estimated by the states and reported to the Federation of Tax Administrators) by the number of households

online. For more information see the Internet Tax Freedom Act; compiled by the Federation of Tax Administrators.

E-Government

Scores in this category are taken directly from the Progress and Freedom Foundation's report, *The Digital State 2000: How State Governments Are Using Digital Technology*. States received scores according to performance in eight categories: electronic commerce, taxation/revenue, social services, law enforcement/courts, digital democracy, management/administration, higher education and K-12 education. The valuations reflect scores from the Progress and Freedom Foundation's report standardized to a 10-point scale. See "e-commerce" heading at http://www.pff.org/pff_publications.htm.

Uniform Electronic Transactions Act

States that have enacted the Uniform Electronic Transactions Act (UETA) or substantially similar legislation received 10 points. States that are yet to enact UETA received zero points. For more information, see Baker & McKenzie LLP, "Uniform Electronic Transactions Act, State-by-State Comparison Table" at <http://www.bmck.com/legis-t.htm>.

Endnotes

¹ John P. Kromer, Goodwin, Procter & Hoar LLP, *State Licensing Issues for Internet Mortgage Originators*, Presented to Online Mortgage Forum, April 14, 2001. Forty-five states and the District of Columbia license or otherwise regulate mortgage brokers and brokerages; only Alabama, Alaska, Colorado, Montana, and Wyoming do not require the regulation of mortgage brokers.

² National Association of Boards of Pharmacy, "VIPPS," at <http://www.nabp.org>.

³ Rob Atkinson and Andrew Leigh, *Breaking Down Bureaucratic Barriers: The Next Phase of Digital Government*, Washington, DC: Progressive Policy Institute, October 2001.

⁴ It should come as no surprise that a large number of dot.com companies are in trouble. Much of their investment made in the last few years was focused on attempts to become the market leader, beating out all their competitors. There are compelling historical parallels. The 1930s saw the bankruptcy of scores of automobile companies, but it was the takeoff point for the explosive growth of the auto industry. There is no reason to suspect that the current situation in e-commerce is any different. Moreover, the winners in e-commerce may not be the pure-play dot.coms, but instead might be the "clicks and mortar" companies that use the Net to sell directly to consumers. In this case, pure-play dot.coms might not grow significantly, but e-commerce will.

⁵ Robert D. Atkinson, *Revenge of the Disintermediated*, Washington, DC: Progressive Policy Institute, January 2001, at <http://www.ppionline.org>.

⁶ Optometrists and other eye care providers, working with contact lens manufacturers, have been able to limit consumer choice as to where they may purchase replacement contact lenses due the fact that contact lens prescriptions written by eye care providers are brand-specific (unlike prescription drugs). Internet (and mail order) companies are effectively squeezed out of the market when an optometrist and a lens manufacturer conspire to control supply and demand. This is accomplished when manufacturers agree not to sell to mail-order companies in exchange for eye care provider's loyally prescribing the manufacturer's brand. Indeed, a lawsuit brought by 32 state attorneys general addressing collusion and anti-competitive practices is still to be finally resolved. However, settlement agreements entered into by contact lens makers show that the manufacturers tacitly acknowledged that their business practices are unfairly hindering consumer choice. (In re Disposable Contact Lens Antitrust Litigation, United States District Court Middle District of Florida, Jacksonville Division, Preliminary Settlement Agreement, 2001).

⁷ In the suit described in note 6, the Attorneys General clearly state that there are no health risks to online lens purchasing.

⁸ Eye care professionals have not been content just to make it difficult for consumers to buy contact lens online, they have sought to use regulations so people have to get more eye exams. For example, in Virginia, ophthalmologists lobbied against a bill that would let people renew their driver's licenses online, claiming it would lead to more accidents since people wouldn't have to get an eye exam each time.

⁹ Georgia Ann. Code § 31-12-12.

¹⁰ Laws of Texas Relating to Optometrists and the Practice of Optometry, Article 1, et seq.

¹¹ New Mexico Stat. Ann. § 61-2-2.

¹² 225 Illinois Compiled Statutes 80/24.

¹³ A new company called RxHub is going to be the first large-scale entrant into the e-prescription business.

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¹⁴ See Colorado Legislature, 2001 session, HB01-1320.

¹⁵ National Association of Boards of Pharmacy, 1999-2000 *Survey of Pharmacy Law Chicago, IL*: National Association of Boards of Pharmacy, 2000.

¹⁶ Ibid.

¹⁷ Ibid. Additionally, Montana's "certificate" and California's "registration" programs are substantially similar to licensure requirements in other states.

¹⁸ Carolyn Hutcherson, Center for Telemedicine Law, personal interview, July, 2001. Laws in 22 of these states specifically require telemedicine practitioners to apply for either a full medical license or a "special purpose" license (practically, the difference is negligible) to treat a resident patient.

¹⁹ United States Department of Health and Human Services, *2001 Report to Congress on Telemedicine*.

²⁰ Ibid.

²¹ South Carolina Code Ann. § 40-58-10 et seq.

²² Unlike several other industries, however, the regulators themselves—individual state insurance commissions and commissioners—recognize the changes that their industry is undergoing, particularly with the advent of Internet commerce. In the National Association of Insurance Commissioners' *Statement of Intent: The Future of Insurance Regulation*, the organization pledges to "work cooperatively with . . . governors, state legislators, federal officials, consumers, companies, agents and other interested parties . . . to facilitate and enhance this new and evolving marketplace as we begin the 21st Century." NAIC goes on to state that "The insurance-buying public and industry must be allowed to benefit from the broad range of opportunities that e-commerce offers." National Association of Insurance Commissioners, "Statement of Intent: The Future of Insurance Regulation," at http://www.naic.org/GLBA/Final_Statement_of_Intent.pdf.

²³ GLB requires state-level insurance regulators to establish uniform or reciprocal licensure laws. The bill went so far as to threaten to create a new body (the National Association of Registered Agents and Brokers) to impose such regulations should the NAIC fail to accomplish reciprocal or uniform licensure throughout all 50 states and the District of Columbia by November 2002.

²⁴ National Association of Insurance Commissioners, Uniform Regulation Through Technology Initiative, at <http://www.naic.org>.

²⁵ National Association of Insurance Commissioners, NARAB Working Group, *Producer Licensing Model Act Implementation*, at <http://www.naic.org>.

²⁶ Ibid.

²⁷ Ibid.

²⁸ National Association of Insurance Commissioners, Uniform Regulation Through Technology Initiative, *100% URTT Compliant States*, last updated July 19, 2001.

²⁹ In fact, at least one car maker, General Motors, is developing a vehicle configuration that will allow customers to "build" the car or light truck they desire, selecting options, paint color, etc.

³⁰ Fiona Scott Morton, Florian Zettelmeyer, and Jorge Silva Risso, *Internet Car Retailing*, working paper, School of Management, Yale University, New Haven, CT, September 2000.

³¹ *Review of the Automobile Manufacturing Licensing Program*, Office of Program Policy Analysis and Government Accountability, Florida Legislature, February 29, 1996. Mark Cooper, *A Roadblock on the Information*

Superhighway: Anticompetitive Restrictions on Automotive Markets, Washington, DC: Consumer Federation of America, 2001.

³² No state received a score of 10 because no state allows online sales of autos from the manufacturer.

³³ The Wine Institute, "Direct Shipment Laws by State for Wineries," last updated July 2001, at http://www.wineinstitute.org/shipwine/analysis/map_us.htm.

³⁴ Even reciprocity states, however, impose limits on how much wine consumers can receive via direct shipment.

³⁵ Ibid.

³⁶ The Wine Institute, "Analysis of State Laws," at http://www.wineinstitute.org/shipwine/analysis/state_analysis.htm.

³⁷ Ibid.

³⁸ Ohio Rev. Code Ann. §§5739.01 (B) (e).

³⁹ Rob Atkinson and Andrew Leigh, *Breaking Down Bureaucratic Barriers: The Next Phase of Digital Government*, Washington, DC: Progressive Policy Institute, October 2001.

⁴⁰ Jeffrey A. Eisenach and Thomas M. Lenard, *The Digital State 2000*, September 2000; http://www.pff.org/pff_publications.htm

⁴¹ Uniform Electronic Transactions Act, 1999; at <http://www.law.upenn.edu/bll/ulc/fnact99/1990s/ueta99.htm>.

⁴² http://www.alston.com/docs/Advisories/199709/UETA_July_Update.DOC.

⁴³ Thomas E. Crocker, "The E-Sign Act: One Year Later", *Electronic Banking Law and Commerce Report*, Vol. 6, No. 4, September 2001. pp. 11-14.

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