Chapter 7 Telecommunications

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10 Principles of Telecommunications Policy

- 1. Don't mandate net neutrality.
- 2. Eliminate rules left over from the monopoly era.
- 3. Avoid municipal broadband projects.
- 4. Reform carrier of last resort and build-out obligations.
- 5. Reform regulation of inter-carrier access charges and interconnection fees.
- 6. Repeal discriminatory taxes and fees on telecom services.
- 7. Prohibit the collection of sales taxes on online purchases that cross state lines.
- 8. Strengthen privacy and Fourth Amendment protections.
- 9. Prohibit government regulation of content.
- 10. Don't thwart expansion of Internet applications and e-commerce.

Introduction

Three decades of U.S. telecommunications policy was reversed on February 26, 2015, when the Federal Communications Commission (FCC), by a 3-2 vote, issued its Open Internet Order reclassifying broadband telecommunications as a public utility under Title II of the Communications Act of 1934. As this is written in 2017, a new FCC chairman says he will work to reverse that decision.

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At the time of reclassification, then-FCC Chairman Thomas Wheeler said the agency would "forbear"—that is, put off for the time being—exercising the full scope of regulatory powers it now had. But by the time he stepped down in January 2017, Wheeler had opened Title II-based inquiries into the operation of set-top cable TV boxes and internet service provider (ISP) pricing plans.

The new FCC chairman, Ajit Pai, has said "These utility-style regulations ... were and are like the proverbial sledgehammer being wielded against the flea—except that here, there was no flea" (Goodman 2017). Pai is stepping back from the aggressive regulation sought by his predecessor. His approach marks a return to policies toward telecommunications and the internet that supported deregulation of voice services, light regulation of ISPs, and almost no regulation of internet content and applications.

Issues such as network neutrality, excessive telecom taxes, and municipal broadband have been matters of controversy for more than a decade. In recent years, widespread adoption of broadband and the general disruption caused by the digital economy have raised new policy issues. Governments at all levels are now debating privacy, internet hate speech, and "sharing economy" services such as Uber and Airbnb.

This chapter sets out 10 important principles for broadband and telecommunications policymaking today; explains why they are important; identifies the dangers of ignoring them; and documents ways federal, state, and local agencies have constructively applied them.

1. Don't mandate net neutrality.

Reclassifying internet service providers (ISPs) as common carriers and imposing "network neutrality" mandates would hurt consumers.

"Network neutrality" (often referred to as "net neutrality") is the label given to four common-sense rules or guidelines followed by internet service providers (ISPs) since at least 2005. Proposals to give FCC authority to *mandate* that ISPs follow these rules plus a fifth rule, the so-called "nondiscrimination rule," are based on an anti-market ideology and ought to be opposed by patriots and policymakers (Lakely 2009). A much better and simpler policy guideline is for the government to "keep its hands off the internet."

FCC Tries to Regulate the Internet

The original four principles of network neutrality, as set forth by FCC in 2005, established that consumers are entitled to access the lawful internet content of their choice; run their preferred applications and services, subject to the needs of law enforcement; connect their choice of legal devices that do not harm the network; and see competition among network, content, application, and service providers. Violations were few. Since 2005, there have been only five neutrality violations, all by small service providers and all fairly contained. This argues for a reactive approach—penalizing violations when they occur—as opposed to acting preemptively against the entire industry.

Many net neutrality advocates want much more than the largely voluntary standards of 2005. Their proposals amount to regulating the internet like a utility, if not immediately then eventually, even though such regulation is sure to slow innovation and investment, empower government bureaucrats, and limit choices for consumers.

A principal reason FCC reclassified ISPs as Title II common carriers was to pursue the net neutrality agenda. Reclassification allows FCC to regulate ISPs the same way it regulates the dwindling number of U.S. landline telephone monopolies. The reclassification order specifically applied to ISPs Sections 201, 202, and 210 of the Telecommunications Act of 1996, all pertaining to pricing. In other areas, such as content, service bundling, and customer service, Wheeler said the commission would not regulate the internet, although reclassification gave it the authority to do so.

Even longtime network neutrality advocates such as the Electronic Frontier Foundation expressed concern reclassification went too far (McSherry 2015). As FCC was getting ready to vote on reclassification, an alliance of small ISPs and some 30 municipal broadband operators petitioned to be exempt from the new rules. The night before FCC voted, Google—a longtime net neutrality supporter now in the process of expanding its own facilities-based broadband operation, Google Fiber lobbied the commission to make changes in the final order.

Barring Bargains for Customers

Despite his pledge of forbearance, in late 2016 Wheeler's FCC notified AT&T that the company's DirecTV Now pricing plan violated net neutrality because it does not apply streamed DirecTV programming against customers' data caps—that is to say, it offered customers real bargains.

The pricing strategy, known as zero-rating, has become popular, especially among wireless carriers that, with limited spectrum, face more network management challenges in delivering bandwidth-intensive services. For example, zero rating is touted in a T-Mobile ad for its "Binge On" pricing plan, in which a young driver must choose between streaming Ariana Grande and using her navigation app. With Binge On, the driver gets her music *and* her app without paying more. Wheeler openly questioned whether such pricing plans were net neutrality violations, despite their making broadband internet access more affordable. Giving customers what they wanted was not "neutral," and FCC vowed to stop it.

Pai seems poised to drop the inquiries launched by Wheeler. Even if he does not, FCC does not have the final word. Reclassification can be viewed as rewriting the law, the exclusive purview of Congress under the U.S. Constitution. Congress may yet amend the Communications Act to prohibit network neutrality regulation. Until it does so, the principled position is to urge FCC to concentrate on network neutrality principles and forebear regulation in other areas.

The Nondiscrimination Rule

In the Open Internet Order, FCC added a fifth rule to the original four largely voluntary net neutrality principles: the "nondiscrimination" rule. It prohibits ISPs from prioritizing or optimizing any application, voice, or data as they cross the networks, although it allows for "just and reasonable" network management.

The nondiscrimination rule is increasingly controversial as video content providers such as Netflix, YouTube, and Hulu consume evergreater amounts of bandwidth. By late 2015, for example, Netflix and YouTube videos accounted for almost 55 percent of North American ISP traffic on any given evening. All together, streaming services account for more than 70 percent of peak traffic (Protalinski 2015).

ISPs such as Comcast, AT&T, and Verizon want to charge these video content providers for the network management and optimization required to deliver bandwidth-, time-, and error-sensitive programming. By contrast, content providers say ISPs should be obligated to provide the necessary "fast lanes" required for quality service and spread those costs over their entire user base. Content providers carried the day with FCC, and the nondiscrimination rule was adopted.

Mandating nondiscrimination raises four major problems. First, content providers already pay for specialized content delivery networks to prioritize and groom content until it reaches the last-mile provider. The anti-discrimination argument that all data be treated the same starts crumbling as soon as the latest episode of *Orange Is the New Black* leaves the server.

Second, content providers have huge investments in their own server infrastructure. Speaking in 2013, Microsoft's Steve Ballmer said his company had more than one million internet servers. He estimated Google had at least 900,000 servers as of 2009 and had likely eclipsed Microsoft at the time of his speech (Anthony 2013). With this many servers, content providers can place their services and applications in multiple locations, cutting time and latency. This is another way companies with major capital resources can improve quality of service. But this also means the internet is not neutral, and forcing one group of companies in the internet ecosystem to operate as if it were will be counterproductive.

Third, mandating nondiscrimination reduces investment. By regulating the prices ISPs can charge for network transmission or disallowing these fees altogether, FCC will prevent ISPs from maximizing returns on their broadband investment. Bans on prioritization, whether paid or not, essentially are a "taking" of property. It is similar to FCC's Unbundled Network Elements Platform (UNE-P) regulation in the 1990s and early 2000s, which required telephone companies to share network capacity with competitors at rates below capital cost. The courts rejected UNE-P regulations twice before FCC abandoned the policy. By then, according to one research report, UNE-P rules had reduced telecom investment by \$5.4 billion to \$12.7 billion a year (Eisenach and Lenard 2003). Network neutrality regulation will have the same suppressive effect.

Fourth, network neutrality regulation will make broadband more expensive. Under Title II, internet access is now a telecommunications service subject to all the taxes and fees federal, state, and local governments levy on phone service: excise taxes, universal service fees, regulatory cost recovery fees, and more. The Progressive Policy Institute estimates the average annual increase in state and local fees levied on U.S. wired and wireless broadband subscribers will be \$67 and \$72, respectively. The annual increase in federal fees per household will be roughly \$17. In total, Title II reclassification may cost broadband consumers up to \$11 billion (Litan and Singer 2014). In order to keep broadband affordable, state and local governments should resist the urge to burden consumers with even more telecom taxes and fees.

Opposing Net Regulation

FCC's decision to regulate the internet as a utility was a mistake and should be walked back by the agency or overruled by Congress. We should return to the bipartisan telecom policy that encouraged deregulation of voice services and last-mile internet connections and discouraged regulation of internet content, applications, and information

services. Net neutrality, as it is being implemented via reclassification, places an unprecedented layer of regulation on ISPs that will hurt, not benefit, consumers.

Recommended Readings: Bob Zelnick and Eva Zelnick, The Illusion of Net Neutrality: Political Alarmism, Regulatory Creep and the Real Threat to Internet Freedom (Stanford, CA: Hoover Institution Press, 2013); Thomas W. Hazlett, The Fallacy of Net Neutrality (New York, NY: Encounter Books, 2011).

2. Eliminate rules left over from the monopoly era.

Cities and towns can reduce barriers to investment and signal they want the private sector to succeed by eliminating legacy utility regulations and fees.

Governments at all levels can encourage greater investment in telecom services by revising or eliminating regulations and fees that linger from the monopoly era. Effective reforms cut the time and cost involved in siting and building new facilities. Four areas where such reforms can occur are franchise fees, pole attachment rules, "dig once" rules, and tower-siting reviews.

Franchise Fees

Taxes and franchise fees should reflect the cost imposed on the common community infrastructure and not discriminate among market participants. Franchise fees have long been abused by local governments to extract funds from cable television providers. In exchange for an exclusive franchise, the cable company agrees to pay a portion of its revenues to the city, town, or village.

These arrangements could last only as long as cable companies held a monopoly. Satellite television providers, which did not pay franchise fees, turned these added costs into a competitive issue for cable providers. Franchise fees came under further pressure as telephone companies began to offer multichannel TV services. As municipalities were burdening telephone companies with a separate set of surcharges and fees, disparities were soon apparent in the fee structures city governments were charging to companies offering identical services.

Between 2005 and 2008, 19 states legislated franchise reform, essentially developing uniform franchise fee structures for cable and telephone companies to be used statewide. States that adopted reforms experienced higher investment, decreasing prices, and increasing internet use rates (Bagchi and Sivadasan 2015). An earlier study by Diane Katz showed a surge of deployment in California, Indiana, and Texas, which were among the first states to enact franchise reform (Katz 2006).

Pole Attachment Rules

Pole attachment rules are another holdover from the monopoly era. Traditionally, power companies built and maintained poles and leased space to telephone and cable companies. In some cases, pole attachment rates for telephone companies were four to five times higher than for cable companies. Critics have warned the disparity "could undermine the public's access to advanced services and broadband by distorting infrastructure investment decisions" (Huther and Magee 2013).

Several states have used different strategies to lower the cost and speed up the process of giving new internet providers access to poles. (St. John 2013; Hyman and Starr 2017). One strategy is to allow a process called "one-touch, make-ready," which allows new broadband competitors to hire utility-approved contractors to connect their lines to poles instead of relying on the staffs of legacy companies. FCC is planning to remove its own outdated regulations while also pushing cities and states to adopt one-touch, make-ready policies and take other steps to "make it easier, faster, and less costly" for attachers to access and use utility poles for the deployment of new broadband facilities and networks (FCC 2017). If states and cities continue to drag their feet, a federal solution might be necessary.

"Dig Once" Programs

Cities can better manage construction projects to allow conduit and cable to be placed inexpensively by using "dig once" programs that allow all service providers access to an open trench. Doing so lowers costs for service providers and provides incentives for new investment.

Independent studies have shown coordination of highway construction and broadband buildout can create immense savings and efficiencies (Lennett and Meinrath 2009). Construction costs for highways are generally at least \$3 million per lane per mile. Installing conduit pipe for fiber-optic cable at the same time adds only \$10,000 to \$30,000 per mile—as little as 1 percent on average—to the overall cost.

Some cities take a public-private partnership approach, using public works projects as an opportunity to lay fiber with an eye toward leasing

it to commercial service providers. In Arlington, Virginia, the Connect Arlington project included additional fiber-optic capacity when the city was laying fiber for traffic signals. When the City of Durango, Colorado adds fiber and conduit to connect government facilities during sidewalk replacement projects, waterline replacements, and upgrades to electric utility plants, it makes available additional capacity for leasing out to private providers (Hovis and Afflerbach 2014).

Timely Tower-Siting Reviews

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With wireless broadband now popular with consumers, additional towers and antennas are often necessary to ensure optimal coverage and service. Unfortunately, towers and antennas can be intrusive. When communities learn of plans to place a tower in a neighborhood, there is often organized, vocal opposition.

Residents deserve to be heard, and it's good business for service providers to take aesthetic issues into account when planning tower placement. But to be viable competitors, wireless companies must be able to deliver high-quality, reliable voice and high-speed data connections that require more investment in towers and antennas.

The primary obstacle to wireless tower siting is not the permitting or public hearing process itself but, rather, the power that can be wielded by a small group of intransigent opponents or a recalcitrant neighborhood governing board to delay indefinitely any decision or resolution. One tactic opponents use is to file petition after petition for site review, environmental impact studies, and extended comment or review periods. Town boards and homeowners' associations have been known to sit on applications for months, only to return them as "incomplete" just prior to a hearing. In such cases, the hearing is likely to be postponed while the service provider is forced to resubmit the application and start the process over again.

Most reform efforts are aimed at eliminating these tactical bureaucratic delays. Georgia and Missouri provide models for states looking to balance community concerns with timely action. Georgia House Bill 176, enacted in July 2014, holds local governments to a 150day deadline to approve or deny an application. The measure also requires local governments to return incomplete applications within 30 days and end the practice of imposing excessive permit-processing fees (Hill 2014). It also hastens approval of site modifications and does not require a rehearing if a proposed change would make no difference to the appearance, height, or design of a facility.

Missouri's bill, the Uniform Wireless Communications Infrastructure Deployment Act, which passed in July 2013, places even more limits on local government, requiring authorities to make decisions within 120 days for new wireless applications, 90 days for a "substantial"

modification, and 45 days for a colocation application. The act also prohibits authorities from issuing moratoria of more than six months on the construction or approval of wireless facilities unless good cause is shown.

Recommended Readings: David C. St. John, "State and Local Government Role in Facilitating Access to Poles, Ducts, and Conduits in Public Rights-of-Way," Fiber to the Home Council, 2013; Steven Titch, "Alternatives to Government Broadband," *Policy Study* No. 27, R Street Institute, 2014.

3. Avoid municipal broadband projects.

Municipal broadband projects across the country are not providing high-quality service with cheaper rates, but they are generally losing money and face looming debt.

As part of its second-term agenda, the Obama administration promoted municipal-owned and -operated networks for broadband expansion and competition. For example, on February 26, 2015, the same day FCC approved Title II reclassification, the commission voted to preempt state laws preventing municipalities from funding, building, and operating competitive broadband networks.

Advocates of municipal broadband claim internet service providers are entrenched duopolies that overcharge, invest only in wealthy neighborhoods, and have dragged their feet on investing in new fiber-tothe-home broadband networks. But this wasn't true a decade ago, when the municipal broadband movement was especially popular (see Bast 2004), and it definitely isn't true today, when competition among ISPs using a variety of technologies is far greater. Government-financed, owned, and operated broadband networks are unnecessary, historically have produced low-quality services, and expose taxpayers to substantial financial risks.

Patriot's Toolbox

Why Municipal Broadband Systems Fail

Municipal systems in operation, such as in Lafayette, Louisiana and Chattanooga, Tennessee, have not achieved their goals of providing ubiquitous fiber-to-the-home, higher-quality service with cheaper rates than incumbents. And although they may boast positive cash flow, they are still losing money, facing looming debt, and falling short of their revenue plans.

A recent study of 10 large municipal broadband projects by researchers with the New York Law School (Davidson and Santorelli 2014) found the following:

- Overly optimistic assumptions about costs and consumer demand ("take-rates") often doom networks before they are launched.
- Moderately successful municipal networks generally were developed under unique circumstances that would be difficult to replicate.
- Municipal networks, especially those deployed by municipal utilities, raise fundamental concerns regarding sustainability, fair competition, and consumer welfare.
- The substantial costs of building, maintaining, and operating municipal networks outweigh any real benefits.
- Their economic impact, especially in job creation, can be difficult to measure. Instead, the report notes, investments in municipal networks typically divert scarce public resources from more pressing local infrastructure priorities.
- Governments are not well-equipped to compete in dynamic markets. In general, municipal governments do not have a good record of keeping pace with technological advances.

An earlier report by The Heartland Institute (Bast 2004) identified four reasons why municipal broadband schemes usually fail:

- The cost of construction exceeds initial projections and burdens the utility with high debt retirement costs.
- Legal restrictions prevent cities from subsidizing their municipal broadband networks directly with tax dollars or by raising rates for other utilities.

- Optimistic projections of the number of customers delivered by contract-seeking consultants have misled many city officials.
- The failure to find content consumers will pay for limits the appeal of municipal networks.

If FCC's reclassification of internet service as a Title II utility holds up, municipal broadband companies, like their private-sector counterparts, may come under rate regulation or be required to collect FCC-mandated funds, such as a universal service fee. This is why some 43 municipal broadband operations, including the Cedar Falls operation touted by Obama, cosigned an American Cable Association letter to FCC asking to be exempted from the Title II rulemaking.

Meanwhile in the marketplace, the rise of streaming video networks—an area first staked out by Netflix and Hulu and since joined by Showtime, CBS, Amazon, ESPN, and others—that bypass cable TV systems stand to make cable "cord-cutting" even more attractive than it is. Nearly 25 million U.S. households—20.4 percent of all U.S. households—were cable-free at the end of 2015. That figure was projected to rise to 26.7 million households, or 21.9 percent of all U.S. households, by the end of 2016 (Pressman 2016).

Nearly one-fifth of U.S. residents who have Netflix or Hulu Plus accounts don't subscribe to a cable or satellite TV service, according to research from Experian Marketing Services (Experian 2014). These consumers may be using internet service only, or fourth-generation wireless service. To municipal broadband operations that banked on bundled cable TV subscriptions for the bulk of their revenues, these numbers present a bleak outlook.

UTOPIA, a fiber-based broadband network financed by a group of 11 Utah cities, provides a grim preview. After failing to reach the threshold of customers needed to pay the debt on construction, the project was turned over to Australia-based Macquarie Capital. As part of the agreement for Macquarie funding completion of the network, the UTOPIA cities proposed assessing all residents a monthly \$20 utility surcharge for the next 30 years (Dunn 2014). Five of the UTOPIA cities rejected the plan, but six approved it. In those towns, residents will still be paying for 2010-era technology in the 2040s.

Something similar is playing out in Cedar Falls, Iowa, home of another celebrated municipal broadband system. The economic benefits of the system have been vastly oversold (see Bast 2005). In January 2015, while touting the 10 GBs fiber-to-the-home service provided by the city, Obama neglected to mention the service costs \$275 a month

(Bauters 2013). That is hardly the economical alternative municipal broadband promised.

Recommended Readings: Charles M. Davidson and Michael J. Santorelli, Understanding the Debate over Government-Owned Broadband Networks: Context, Lessons Learned, and a Way Forward for Policy Makers (New York, NY: Advanced Communication Law & Policy Institute at New York Law School, 2014); Steven Titch, "Lessons in Municipal Broadband from Lafayette, Louisiana," Policy Study No. 424, Reason Foundation, 2013.

4. Reform carrier of last resort and buildout obligations.

Incumbent telephone companies and cable companies should not be burdened by regulatory obligations that make it difficult for them to innovate.

A now-obsolete way to provide high-quality, affordable telecommunication services to all consumers in a monopoly environment was to award an exclusive franchise to one service provider and require it to extend service to all consumers at similar prices. The monopoly made it easy for the service provider to subsidize high-cost customers through rate averaging.

The 1996 Telecommunications Act prohibited exclusive franchises, but the obligation remains on incumbent telephone companies to be carriers of last resort (COLR), providing service throughout the existing service territory at similar rates with their losses covered by distributions from federal and state universal service funds. Similarly, even though cable markets are now competitive in all places, many cities still impose buildout requirements on new entrants, requiring them to submit plans to serve the entire community by some deadline.

Forced Subsidies

The problem with both COLR and buildout requirements is that without a monopoly, customers who can be served at low cost no longer can be forced to subsidize customers whose connections require a much higher investment by the service provider. Low-cost customers can sign up with

a competing service provider that serves only low-cost customers and therefore can offer lower rates.

The incumbent, meanwhile, is still required to serve everyone else. But because of competition, there are fewer low-cost customers to generate a subsidy for the high-cost customers, so the incumbent has to be able to recover its costs from the remaining customers through rate increases, or policymakers have to find ways to distribute equitably among competing providers the cost of providing subsidized service to high-cost customers.

One element of the solution is to eliminate the telephone rate averaging requirement. It can be replaced with a competitively neutral subsidy mechanism in which all providers participate, with retail prices in rural areas set no higher or lower than prices in urban areas.

Incumbent phone companies should not be required to act as a COLR where the market is competitive and consumers can choose among multiple providers. In a competitive market, rivals sometimes sign exclusive deals with property developers or landlords. If the incumbent has a COLR obligation, it may be required to build costly facilities to serve a single customer in an office park, shopping mall, or housing development. The revenue may be inadequate to cover the cost without rate averaging. Regulation that imposes costs on some carriers but not others is anti-competitive.

Telephone Service

Indiana addressed the COLR problem facing phone companies in part by protecting an incumbent from having to provide communications service to occupants of multitenant nonresidential real estate if the owner, operator, or developer of the property does any of the following to benefit another provider: (1) permits only one provider to install communications facilities or equipment on the premises, (2) accepts incentives from a provider in exchange for allowing the provider the exclusive right to provide service to the premises, (3) collects charges from occupants for communications service, or (4) enters into a prohibited agreement with a provider.

Florida ended all COLR obligations on phone companies as of January 1, 2009. Previously, it automatically relieved a carrier of last resort of its obligation to provide basic local telecommunications service to any customer in a multitenant business or residential property when an owner or developer permitted only one communications service provider to install its facilities or equipment and under other circumstances.

Cable and Internet Access

The situation for cable service is similar to that of phone service. Incumbent cable companies often operate under mandates in their franchise agreements to provide universal service to the community. A "level playing field" could require competitors be subject to the same requirement—that they "build out" their network to cover the entire community by some deadline. But there is no social purpose served by requiring every customer be served before a single customer is given a second, third, or even fourth choice of cable provider.

The level playing field goal can better be met by relieving both the incumbent and new competitors from buildout requirements (Skorburg *et al.* 2007). In high-cost areas where a carrier of last resort is necessary to deliver basic service, the provider should be allowed to choose the most efficient technology, such as voice over internet protocol (VoIP) or a wireless technology. Indiana takes this approach to telephone service, relieving the carrier of having to offer costly service using outmoded network facilities and then find a way to subsidize it.

Finally, competitors should be given the opportunity to become carriers of last resort. Any provider ought to be allowed to bid for contracts to provide essential service in high-cost areas and receive adequate and equitable support from an explicit funding mechanism if it wins the contract. Incumbent providers that currently provide subsidized service should not be under any legal obligation to continue to serve areas where other providers have won the contracts.

Recommended Reading: John Skorburg, James Speta, and Steven Titch, "The Consumer Benefits of Video Franchise Reform in Illinois," *Policy Study* No. 112, The Heartland Institute, April 4, 2007.

5. Reform inter-carrier access charges and interconnection fees.

The current system of high intrastate access charges and low interstate charges ought to be replaced with parity and technology neutrality.

Inter-carrier access charges and interconnection fees-the payments service providers pay each other for the connection and completion of

calls that originate on their networks—form another subsidy mechanism that supports service in high-cost areas. Such cross-subsidies cannot be maintained in a competitive market if competitors can choose to serve profitable customers and ignore everyone else.

Since competitors are free to choose their customers, cross-subsidies discourage competitive entry in high-cost areas when the incumbent is charging a lower price than a competitor would need to charge to cover its costs plus earn a reasonable profit. In the low-cost areas, competitive entry is extremely profitable when the incumbent's services are priced high enough to subsidize other customers. Competitors can profitably underprice the incumbent in low-cost areas while the incumbent is helpless to match the price decreases.

Consumers suffer the consequences. High-cost consumers are deprived of competitive choices and ultimately of the heavily subsidized service they need. Low-cost consumers are harmed, even if they have a choice of providers, because the inflated price charged by the incumbent acts as an umbrella guaranteeing competitors also can maintain a high price without fear the incumbent will cut its prices below theirs.

Indiana Reforms Show the Way

Reforming voice call termination rates and removing the remaining implicit subsidies from intrastate access charges would spread the benefits of competition in both urban and rural areas.

In Indiana, the cost of intrastate access does not exceed the cost of interstate access. This policy of "parity" makes sense because interstate access charges are fully compensatory and a telephone company does not incur a separate set of costs when it provides intrastate versus interstate access. Reducing intrastate access charges does not necessarily mean forcing rural and residential consumers to pay higher prices for basic service. Indirect subsidization through intrastate access charges can be replaced with an explicit funding mechanism into which all competitors must contribute equitably and out of which any competitor who wishes to serve a high-cost area may receive adequate funding.

In some cases, reducing access charges would spur the deployment of broadband in rural areas without sacrificing consumer choice. Access charges were originally set to reflect the cost of analog phone service, which is more expensive to deliver than wireless or VoIP phone services. Smaller rural providers are still under "rate of return" or "cost-plus" regulation entitling them to recover their costs plus a reasonable return of approximately 10 percent to 15 percent. Since the return is defined as a percentage of the costs they incur, profits rise as costs rise.

Moreover, since VoIP often deprives smaller rural providers and new entrants of access charges, current policies discourage rural phone

companies from marketing VoIP services. States should consider reducing intrastate access charges for smaller rural providers and new entrants to remove a disincentive to market less-expensive phone services, such as wireless and VoIP.

Parity and Technology Neutrality

It is not possible to preserve the status quo, nor is it desirable to postpone reform. If wired and wireless phone companies are forced to charge or pay inflated call termination rates, they will lose customers to lowerpriced VoIP offerings. If they are required to reduce intrastate access charges at least to the same level as interstate access charges, they can provide a more competitive offering.

Policymakers could reduce intrastate long-distance charges for most consumers and promote the availability of flat-rate long-distance plans by reducing intrastate access charges. Ideally, the current system of high intrastate access charges and low interstate charges ought to be replaced with parity and technology neutrality in call-termination fees generally.

Recommended Reading: Mark Jamison, *Methods for Increasing Competition in Telecommunications Markets* (Gainesville, FL: Public Utility Research Center University of Florida, 2012).

6. Repeal discriminatory taxes and fees on telecom services.

Policymakers should repeal discriminatory taxes and fees to encourage investment in telecom services.

A standard policy rule is: If you want less of something, tax it, and if you want more of something, don't tax it. If elected officials want to encourage investment in telecom services, the first step they should take is to repeal discriminatory taxes and fees on these services.

Telecom Taxes Are Too High

According to a 2014 report, Americans pay an average of 17 percent in combined federal, state, and local taxes and fees on wireless service (Mackey and Henchman 2014). The average rates of taxes and fees on wireless telephone services are more than two times higher than the

average sales tax rates that apply to most other taxable goods and services.

Cable television services, which support internet and VoIP phone service, continue to be subject to state and local sales taxes, franchise fees, and state and federal universal service fees. A 2007 study found taxes and fees on cable TV and telephone subscribers averaged 13.4 percent, twice as high as the national average retail sales tax of 6.6 percent (Tuerck *et al.* 2007).

Taxes also vary from one communication service to another and according to the technology used to deliver otherwise-similar services. A typical pay-per-view movie ordered through a cable TV box is often taxed as part of the overall consumer cable bill, so the download could carry a levy of as much as 10 percent to 12 percent, depending on jurisdiction. The same movie downloaded over the internet using a service such as iTunes may be subject only to sales tax.

Communications taxes and fees are regressive with respect to income. Cell phones are increasingly the sole means of communication and connectivity for many low-income Americans. At the end of 2013, according to surveys by the Centers for Disease Control, more than 56 percent of all poor adults had only wireless service, and nearly 40 percent of all adults were wireless-only (Mackey and Henchman 2014). Public officials seeking to close the so-called digital divide can lower the price of communication services by repealing discriminatory taxes and fees.

High and discriminatory taxes and fees are legacies of an era when cable and telephone companies had near-monopolies and could pass the cost of taxes and fees along to their then-captive ratepayers. Today, competition allows consumers to choose less-taxed alternatives, causing taxes and fees to distort buying and investment decisions. Policymakers should bring public policy up-to-date with the following changes.

Policy Agenda

Local governments can:

- Reduce cable franchise fees, making sure they do not exceed the true economic cost of using public rights-of-way;
- Repeal or avoid regulations that impose costs on cable companies and their new competitors from the phone and wireless sectors.

State governments can:

- Lower and streamline communication taxes as Ohio and Virginia have done;
- Preempt local franchise laws that impose excessive fees or restrict new entry by competitors, following the example of such states as Indiana, Ohio, and Wisconsin;
- Allow cable companies to operate under the same franchise agreements as their competitors.

The national government, having phased out a 3 percent national excise tax on all wireless and wired long-distance calls (a positive and long-overdue step), can improve on that by prohibiting states and cities from adopting discriminatory sales, use, or business taxes on communication services.

Recommended Readings: Scott Mackey and Joseph Henchman, "Wireless Taxation in the United States 2014," *Fiscal Fact* No. 441, Tax Foundation, 2014; Scott Mackey and Joseph Henchman, "Record High Taxes and Fees on Wireless Consumers in 2015," *Fiscal Fact* No. 490, Tax Foundation, 2015.

7. Prohibit the collection of sales taxes on online purchases that cross state lines.

States should see e-commerce as an opportunity to boost their economies by welcoming internet enterprises instead of treating them, and their customers, as just another cash cow.

As many states struggle to balance their budgets, their elected officials look ever more covetously at the \$385 billion in online sales in 2016 that largely escaped taxation (BI Intelligence 2016). Sometimes they are aided and abetted by local business owners who feel it is unfair they must collect sales taxes at their bricks-and-mortar stores while online sellers do not.

That is why many states have thrown their support behind congressional efforts to force "remote sellers," meaning internet and catalog merchants, to calculate and collect sales taxes from out-of-state consumers. Thankfully, the principal legislation toward this end, the Marketplace Fairness Act (MFA), introduced in 2013 and reintroduced in 2015, 2016, and 2017, has failed to gain traction.

Taxing Internet Sales Is Unconstitutional

MFA would undo two U.S. Supreme Court decisions that predate the internet yet undergird its sales-tax-free character: *Quill Corp.* v. *North Dakota* (504 U.S. 298 (1992)) and *National Bellas Hess* v. [Illinois] *Department of Revenue* (386 U.S. 753 (1967)).

Quill Corporation and National Bellas Hess were mail-order catalog merchants. Both Court decisions held that a business had to have a "nexus," or specific physical presence within a state, before it could be forced to collect sales taxes in that state. Both decisions said forcing a remote seller to collect sales taxes from customers in tax jurisdictions across the country—there are some 9,600 taxing jurisdictions in the United States today—constitutes an undue burden on interstate commerce, the regulation of which is constitutionally assigned to Congress. The *Quill* decision left the door open for a congressional override of the Court's decision.

Supporters of MFA say the bill will close a "loophole" that allows internet purchases to escape taxation (Editorial Board 2012). That is inaccurate. *Quill* and *Bellas Hess* sharpened and affirmed the U.S. Constitution's Commerce Clause, which prevents one state from taxing residents of another. Hardly a loophole, the Commerce Clause was included by the Founders to prevent states from plundering each other's residents and enterprises with taxes.

MFA ignores the constitutional underpinnings of the *Quill* and *Bellas Hess* decisions and treats the internet sales tax issue as a procedural issue, when in fact the constitutional bar is set much higher. MFA puts great stock in the idea that software and technology can relieve the burden state and local tax compliance places on out-of-state business. But sales tax complexity cannot be solved with the click of a mouse. More than the 9,600 sales tax jurisdictions that need to be considered, tax rules differ from state to state, city to city, and town to town. Sometimes a candy bar is taxed, sometimes it's not. Every August, some states declare a "sales tax holiday weekend" in hopes of boosting back-to-school business. Dates can vary.

Bottom line: There is no reliable plug-and-play software for this. Overstock.com's CEO Patrick Byrne told Congress the company spent

\$300,000 and months of man-hours writing compliant sales tax software (U.S. House Hearing 2011).

Better Alternatives

MFA is the wrong response to the rise of internet sales. Bricks-andmortar store owners are free to also sell their goods online, and the market is plainly telling them many consumers prefer that avenue. These "main street" merchants also are free to not collect sales taxes from people who can show they live outside their state. States such as Texas and Virginia have reached compromises with online retailers, designating distribution hubs as nexuses under *Quill*.

Consumers and businesses would be much better off if states looked at e-commerce as an opportunity to boost their economies by welcoming internet enterprises instead of treating them, and their customers, as just another cash cow.

Recommended Reading: Joseph Henchman, "The Marketplace Fairness Act," *Background Paper* No. 69, Tax Foundation, 2014.

8. Strengthen privacy and Fourth Amendment protections.

Legislators should not overlook constitutionally protected civil liberties in an attempt to stop domestic terrorism.

The nation was stunned in June 2013 when the news media began reporting on the National Security Agency (NSA) PRISM program, which allows for the interception and collection of data from wireless phones to track contact between U.S. citizens and foreign nationals. NSA's infiltration into the electronic communications and transactions of American and foreign users extended into demanding U.S. ISPs turn over customer data and forcing U.S. infrastructure manufacturers to build software "back doors" into the servers built for private companies, to facilitate NSA spying.

Other NSA programs, such as MUSCULAR and "Tailored Access Operations," were aimed at defeating the encryption protocols and firewalls internet companies use to safeguard user data. NSA justified these programs as necessary to fight the "war on terror," yet at least one study has shown these sweeping surveillance initiatives resulted in little or no intelligence or prevention of terrorism (Bergen *et al.* 2014).

The Costs of Spying

NSA spying extracted a great cost from the U.S. economy. The Information Technology and Innovation Foundation, a research institute promoting public policies that advance technological innovation and productivity, in 2013 estimated international concern and mistrust of U.S. tech companies could cost the industry between \$21.5 billion and \$35 billion through 2016 (Castro 2013). The author of that study has since said economic fallout will "likely far exceed" that figure (Groden 2015). Forrester Research, which provides analysis for financial firms and investors, estimates the potential global industry cost could be much more: \$180 billion worldwide over the same period (Staten 2013).

More recently, the Court of Justice of the European Union invalidated the Safe Harbor Arrangement that has existed between the European Commission and the U.S. Department of Commerce since 2000, concerning the protection and use of data about consumers in European Union countries. Essentially, the Safe Harbor Agreement sets data protection principles U.S. companies agree to follow, with enforcement handled by the U.S. Department of Commerce. If the companies are compliant with these principles, they are deemed compliant with EU privacy directives. The court's primary reason for invalidating the Safe Harbor Agreement was its concern about NSA's nearly unrestricted power to demand information from the private sector.

Protecting Privacy

Faced with a national consensus concerning NSA's activities as a largescale violation of citizen privacy and a court ruling declaring PRISM unconstitutional, bipartisan efforts in Congress to scale back these efforts have gained ground. In November 2015, the USA Protection Act ended NSA's collection of cell phone calling data.

Earlier in 2015, U.S. Sens. Patrick Leahy (D–VT) and Mike Lee (R–UT) reintroduced a bill they had cosponsored previously offering revisions of the Electronic Communications Privacy Act (ECPA) to extend Fourth Amendment protections to private data stored on servers on the internet or in the "cloud." Among the legal weaknesses NSA had been able to exploit was ECPA's silence on internet-related communications. ECPA, which sets rules for law enforcement agencies that want to tap phone conversations, became law 30 years ago when there was no concept of e-commerce, cloud storage, web searching, or other routine internet-based applications people now use daily.

The House took a major step toward reform in February 2017, passing the Email Privacy Act (H.R. 387). The baseline bill updates ECPA and requires the government to obtain a warrant before it may access emails, social media posts, and other online content stored in the cloud. The bill also eliminates the provision in ECPA that allowed warrantless seizures of stored communications after 180 days. As of July 2017, H.R. 387 was awaiting action in the Senate.

Some states also are taking action. In July 2015, Montana became the first state to enact a comprehensive law requiring police to obtain a search warrant before obtaining location information generated by personal electronic devices, such as cell phones. In October 2015, California Gov. Jerry Brown signed CalECPA, a bipartisan bill requiring police to get a warrant before searching online accounts or personal communications devices.

These actions come none too soon. In addition to NSA's surveillance activities, state and local police are using devices called Stingrays, which mimic cell phone reception towers to trick phones into revealing identifying information and location data. The American Civil Liberties Union and other groups have called for more transparency on their use (ACLU n.d.). Congress, along with legislatures in states such as New York, South Carolina, and Utah, has introduced bills that would require search warrants for Stingray use. In September 2015, the Department of Justice made it policy that federal law enforcement agencies obtain a search warrant before using Stingrays.

The lack of specific Fourth Amendment protection is partly responsible for the massive scope of the government's use of the internet to violate citizens' privacy. NSA hid behind judicial interpretations suggesting cloud data have no explicit legal protection, but this is use of a technicality to evade the principle of the law. The intent of ECPA was to prevent the very sort of fishing expeditions NSA has been conducting.

Had there been appropriate judicial and legislative oversight, it is difficult to imagine these surveillance programs would have grown as large and intrusive as they became. After the December 2015 attack in San Bernardino, California by two Islamic terrorists, some, including presidential candidate Sen. Marco Rubio (R-FL), questioned the wisdom of curtailing warrantless NSA surveillance—even though the program failed to alert the government to those attackers or their plan.

Policy Agenda

Legislators should avoid a rush to overlook constitutionally protected civil liberties in an attempt to police domestic terrorism. Any future surveillance programs should be subject to strict oversight from lawmakers and an independent judiciary. Those safeguards should recognize:

- the right of internet companies to be notified when their infrastructure is being used for surveillance;
- the right of internet companies to disclose instances when they have been asked to assist with surveillance and turn over information;
- the necessity of due process;
- domestic civilian surveillance is within the purview of conventional courts, not Foreign Intelligence Surveillance Court or secret military courts; and
- requests for data should be held to the same standard as other search warrants: The requester must identify the suspect, the probable cause, the data to be searched, and the specific information being sought.

In a free society, individuals are not automatically assumed to be suspects requiring or justifying constant surveillance. Citizens have the right to go about their business without answering to the state for every thought, act, purchase, or social media comment.

Recommended Readings: Steven Titch, "Has the NSA Poisoned the Cloud?," *Policy Study* No. 17, R Street Institute, 2014; Daniel Solove, "Sunken Safe Harbor: 5 Implications of Schrems and US-EU Data Transfer," *LinkedIn Pulse*, October 6, 2015.

9. Prohibit government regulation of content.

Content freedom must be protected. Censorship of speech we don't like may be counterproductive, keeping ideas underground and hence free from direct rebuttal.

Calls for censorship, often in the name of "civil discourse" or "safe spaces," have become increasingly common in recent years, at least in

part because the internet, with its global reach, can amplify the most repulsive of statements as easily as it can the most attractive.

"Fairness" as Censorship

Most people do not seek to intentionally and gratuitously offend others. However, offensive speech, even hate speech, is a by-product of a society that has agreed to tolerate all forms of expression. As tempting as it might be to place limits on speech we don't like, such bans may actually foster the very ideas they are intended to suppress by keeping them underground and hence free from direct rebuttal.

A recent Anti-Defamation League study found in France, where Holocaust denial has been illegal for more than 20 years, the percentage of Holocaust deniers plus skeptics increased 21 percent during that period, whereas in other European countries and the United States, which place no limits on such statements, the relatively low level of skeptics and deniers has remained constant (Shulman 2015).

Although the repression of political speech first comes to mind when the word "censorship" is invoked, the right to free speech is rarely attacked so directly. Instead, there are demands that content providers allow for expression of all points of view. This was the thinking behind FCC's Fairness Doctrine, which required broadcasters to furnish an alternative point of view to any editorial statement they made. As with hate speech, the effect was the opposite of what was intended. Instead of stimulating debate, stations backed away from any editorial discourse whatsoever, choosing not to be liable to give airtime to all comers. It wasn't until the Reagan administration scrapped the Fairness Doctrine that politically oriented programming, as seen in Fox on the right and CNN, MSNBC, and PBS on the left, became common in the broadcast media.

The failure of the Fairness Doctrine in broadcast media has not stopped calls from some circles for an internet fairness doctrine, although how such a thing would be enforced is almost impossible to imagine. Would conservative blogger Michelle Malkin be required to publish postings from liberal blogger Markos Moulitsas Zúniga's *Daily Kos* site (without sardonic rebuttal) and vice versa? And these are high-profile writers. Is it really a good use of resources for the federal government to micromanage the tens of thousands of tiny WordPress blogs on the internet to determine whether they are adequately providing equal time to opposing points of view?

The potential for political abuse of a new Fairness Doctrine is considerable. During the Obama administration, the Internal Revenue Service (IRS) was "weaponized" and used against conservative groups seeking nonprofit status (Washington Times 2016). What would keep future administrations from weaponizing FCC?

FCC as "Ministry of Truth"

In an October 2014 blog entry, FCC Chairman Thomas Wheeler floated the idea of regulating internet video content, a step any future FCC chairman could take now that the internet has been classified a Title II regulated utility (Wheeler 2014). Wheeler was vague about how such regulation would take shape, but there was immediate speculation this could mean applying network must-carry rules, franchise fees, subsidies, and even content ratings to internet video.

Again, how this could be enforced fairly and without a huge layer of bureaucracy and costs is difficult to imagine. When we think of internet video, services such as Netflix come to mind, but YouTube hosts thousands of content providers with their own "channels" that have anywhere from a handful of regular viewers to millions. Will FCC claim to have the authority to determine the truthfulness of statements on all these sites?

One area of explosive growth in online opinion-sharing is user reviews and comment fields, which have become an integral part of most websites. Most retailing, travel, and dining sites allow consumers to provide feedback on specific products and properties. To date, website owners, not federal or state regulators, have decided whether negative reviews or critical comments can be posted on a website. If FCC becomes a "Ministry of Truth," it could inject itself into these decisions. How could that possibly be a good idea?

Gag Clauses and Right to Yelp

Negative online reviews on a website such as Yelp can hurt a business, and if the review is posted anonymously the business may have little or no recourse, even if the review is inaccurate or malicious. To discourage such reviews, some businesses are including negative internet reviews in "non-disparagement" clauses in purchase agreements, specifying penalties or litigation may result if consumers publish negative comments in online reviews (Nadolenco 2014).

Some consumer advocates oppose non-disparagement clauses, calling them "gag clauses" and saying they attempt to silence legitimate criticism and stifle free speech. Businesses can usually respond online to anonymous negative reviews, or use libel laws to prosecute especially malicious reviews. Small business advocates, however, point out that many small businesses can't afford to hire lawyers and may not survive the months or years a libel case requires to go through the courts, all the while the malicious review is still available to be viewed online (Bergal 2016).

Yelp has led a coalition of businesses and trade associations to press for "Right to Yelp" laws at the state and national level. The effort bore fruit in January 2017 when Obama signed the Consumer Review Fairness Act of 2016. The act ...

[M]akes a provision of a form contract void from the inception if it: (1) prohibits or restricts an individual who is a party to such a contract from engaging in written, oral, or pictorial reviews, or other similar performance assessments or analyses of, including by electronic means, the goods, services, or conduct of a person that is also a party to the contract; (2) imposes penalties or fees against individuals who engage in such communications; or (3) transfers or requires the individual to transfer intellectual property rights in review or feedback content (with the exception of a nonexclusive license to use the content) in any otherwise lawful communications about such person or the goods or services provided by such person (Congress.gov 2017).

Only California and Maryland had passed legislation aimed at barring gag clauses before the federal action, and the federal law appears to supersede or duplicate their bans. Prohibiting one kind of freedom—in this case the freedom to put a negative-review gag provision in a contract—in order to protect another—the freedom to write and post online a negative review of something you purchased—is rarely a good idea. Despite the federal law, businesses will find ways to combat negative reviews and Yelp will defend its right to post negative reviews and protect the anonymity of its reviewers. We ultimately see no value in passage of "Right to Yelp" laws.

Recommended Readings: Milton Mueller, "Internet Content Regulation and the Limits of Sovereignty," *World Politics Review,* September 1, 2009; Rikke Frank Jørgensen, *Internet and Freedom of Expression* (Netherlands: International Federation of Library Associations and Institutions, 2001).

10. Don't thwart expansion of internet applications and e-commerce.

Lawmakers should avoid regulating innovative applications of the digital economy that consumers want but may compete with established businesses.

The same lawmakers who routinely promote technology policies in hopes of stimulating the local digital economy often are the first to create obstacles when entrepreneurs make those policies bear fruit. This is especially true when new applications threaten entrenched businesses and attitudes.

The Sharing Economy

When talk turns to stimulating local technology jobs, state and local legislators often envision incubating the next Google or Facebook, businesses that employ engineers and software coders. To be sure, these are attractive and high-paying twenty-first century jobs. But in their quest to land the next large tech employer, local lawmakers should not overlook innovators who are using the internet to fashion new ways to deliver everyday services. This is the real digital economy.

The best example is ridesharing services, or transportation network services (TNCs), as they are more recently described. Companies such as Lyft, Sidecar, and Uber sign up drivers willing to use their own vehicles as taxis and work their own hours in return for paying a share of their fares to the TNC. Another is homesharing services, such as Airbnb. (The name Airbnb is a playful combination of "airbed" and "bed and breakfast." It is pronounced "Air bee and bee.") Airbnb connects travelers seeking a short-term stay to people with a vacant home or bedroom. Other sharing services on the rise include DogVacay (petsitting), GetAround (peer-to-peer car renting), and TaskRabbit (household chores and office help).

Such sharing opportunities are revolutionizing their respective industries, dramatically reducing costs and expanding access to widely used services. They also pose significant competition for established businesses. Ridesharing threatens taxicab companies, which operate under heavy regulations in return for what once was a monopoly or duopoly in the short-distance car rental market. Many cities cap the size

of taxi fleets, creating an artificial market scarcity that protects incumbent companies and keeps fares high. TNC drivers, often working part-time, cannot afford the insurance, special inspections, and licensing fees and background checks the large, politically protected firms can afford to bear.

Airbnb threatens conventional hotels and motels, which must comply with zoning, parking, and noise ordinances that don't apply in many residential areas. Hotels and motels also often pay extra taxes to finance sports stadiums, arenas, airports, and convention facilities intended to draw tourism. The chief complaint against Airbnb in New York, for example, was not over safety or cleanliness of the rooms being offered, but the tax revenues being lost. The state attorney general declared the service illegal and warned residents anyone sharing an apartment through Airbnb could be fined for operating an illegal hostel. In contrast to the resistance in New York State, San Francisco legalized Airbnb fairly quickly after it entered the market there (Streitfeld 2014).

Road Navigation Apps

A road navigation app named "Waze" has come under fire from law enforcement agencies because it pinpoints the location of speed traps and police checkpoints. Waze allows multiple users to input information about traffic conditions, accidents, detours, road closures—and police presence—in real time. Police departments have begun pushing Google, which purchased Waze in 2013, to drop the feature that lets drivers alert others to police locations, arguing criminals could use this feature to target police for killings.

Although lawmakers should be sympathetic to concerns for police officers' safety, forcing Waze to prohibit postings about police presence would be a violation of free speech. In addition, when drivers are aware of a police presence on the highway, they are more likely to comply with speed limits. In this way, applications like Waze support the safety goals behind these laws, even if fewer speeding tickets ensue.

Seasoned travelers might point out Waze makes it more difficult for towns to accumulate traffic fines from questionable traps—short stretches of a major highway through a small town that has lowered speed limits by 15 to 20 mph in hopes of netting speeding fines from drivers who fail to observe the change. Such tactics earn the ire of lawabiding motorists who feel more like victims of a shakedown, and apps that make such activities less viable could be seen as a public good.

Online Sales of Beer, Wine, and Liquor

In many states it is legal for residents to drive to a winery within their own state, purchase a case of their favorite varietal, and drive back home to serve it at dinner. It is illegal, however, for the same consumer to order

a case of that same varietal over the internet and have it shipped to his home.

Online sales of beer, wine, and liquor are caught in a legal web dating back nearly 100 years to Prohibition. Today, many states still regulate the sale, transportation, and distribution of alcoholic beverages so online sales are murky. Reports suggest that since the Eighteenth Amendment was repealed, no American has been prosecuted for illegally receiving wine for personal consumption (Taylor 2014). Many wine lovers have violated their state's wine-shipping laws without realizing it.

Online sales of alcoholic beverages are far from the only internet commerce lawmakers have tried to prevent. When automaker Tesla launched a sales campaign allowing buyers to purchase its cars online directly from the factory, the North Carolina state legislature, in what was seen as a bid to protect car dealerships, introduced a bill to make such orders illegal. The effort failed, but it did not stop lawmakers in Minnesota, New Hampshire, New Jersey, and Texas from mounting similar efforts.

Online Gambling and Fantasy Sports

The popularity of daily fantasy sports (DFS) has reignited the debate over online gambling, pitting a specialized carve-out in federal legislation against the traditional right of states to regulate gambling within their borders. This is another area where the simple rule of "hands off the internet" ought to prevail.

According to the Fantasy Sports Trade Association, 57.4 million people in the United States and Canada played some sort of fantasy sports game for money in 2015 (Gouker 2016). Although there are legal semantics to consider, it is difficult to dispute that DFS is gambling. Players pay a pooled entry fee. Winning players are paid cash prizes from the pool in much the same way as a poker tournament or lottery.

DFS companies have capitalized on two aspects of the law. The first is a carve-out for fantasy sports wagering in the Unlawful Internet Gambling Enforcement Act (UIGEA), which otherwise prohibits U.S. banks from conducting transactions with foreign online gambling sites. Second is that law in most U.S. jurisdictions is written so the gambling definition applies largely to games of chance, such as dice and slot machines. DFS operators claim, with a certain legitimacy, that fantasy sports is a game of skill.

Despite the UIGEA carve-out, several states have begun to view DFS as online gambling and have attempted to regulate it. The debate offers a chance for the federal government and states to revisit prohibitions on online gambling. The federal government has never been involved in gambling regulation save for enforcing the Wire Act, which

the Department of Justice has stated does not apply to intrastate online gambling, and it should not be involved in DFS. States should consider the popularity of the game and whether prohibitions or regulations truly reflect the will of the constituents they represent (Titch 2012).

Let Innovation Flourish

These are just a few examples of the forms the digital economy is taking. Disruption is to be expected but not feared. Lawmakers should be wary of pursuing any e-commerce bans, including those that seek to protect current businesses or outlaw immoral or morally ambiguous behavior such as drinking and gambling. Instead, state and local governments should work in tandem with those adding value to the internet, resulting in more and better goods and services at lower costs. That benefits everyone.

Recommended Readings: Logan Albright, "Regulating the Mobile App Market," *Regulation*, Fall 2014, p. 13; Seth Stevenson, "Think of the Children!," *Slate*, September 29, 2015.

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Additional Resources

Additional information about telecommunications and information technology policy is available from The Heartland Institute:

- PolicyBot, The Heartland Institute's free online clearinghouse for the work of other free-market think tanks, contains more than 2,000 documents on telecommunications issues. It is on Heartland's website at https://www.heartland.org/policybot/.
- https://www.heartland.org/topics/infotech-telecom/ is a website devoted to the latest research, news, and commentary about info tech and telecom policy. Read headlines, watch videos, or browse the thousands of documents available from PolicyBot.
- Budget & Tax News is The Heartland Institute's monthly newspaper devoted to government regulation, spending, and tax issues. It regularly covers the sharing economy, discriminatory taxation of wireless services, and internet sales tax proposals, among other infotech and telecom topics. Subscriptions with digital delivery are free, print subscriptions are \$36/year for 10 issues.

Directory

The following national organizations offer valuable resources about information technology and telecommunications issues:

- American Civil Liberties Union, https://www.aclu.org/issues/nationalsecurity/privacy-and-surveillance
- Cato Institute, https://www.cato.org/research/telecom-internetinformation-policy
- Discovery Institute, http://www.discovery.org/

Electronic Frontier Foundation, https://www.eff.org/

Heartland Institute, https://www.heartland.org/

Institute for Policy Innovation, http://www.ipi.org/ipi issues/cf/detail/technology--communications

Less Government, http://lessgovernment.org/

Precursor LLC, http://www.precursor.com/

Reason Foundation, http://reason.org/areas/topic/telecommunications

R Street Institute, http://www.rstreet.org/

Tax Foundation, https://taxfoundation.org/

U.S. Telecom: The Broadband Association, https://www.ustelecom.org/