

**REMARKS OF FCC COMMISSIONER AJIT PAI
ON THE NEED FOR A DIGITAL EMPOWERMENT AGENDA
AT THINK BIG PARTNERS**

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I still remember the day when my parents bought me a personal computer. The Apple IIE arrived and I was transfixed, playing games like “Oregon Trail” and coding simple programs in BASIC.

I also felt in awe of the place where this machine was invented. How magical this “Silicon Valley” must have been to give birth to this kind of innovation!

Back then and for some time after, it wouldn’t have occurred to me to think of the Midwest as a hub for *that* kind of innovation. But that’s what it is today. The Midwest is on the map when it comes to technological progress. Think Big Partners is a great example of that. Under this roof, startups are growing. Planning for smart cities is happening. People are thinking big and doing even bigger.

This is a remarkable transformation. Not long ago, entrepreneurship, especially entrepreneurship relying on technology, was thought to happen only in places like Silicon Valley. That’s changing—and fast. The idealized garage of 20th century California has made way for the State Line Roads of 21st century Middle America.

What’s putting Kansas City and cities like it at the leading edge of innovation? Part of it is initiative—of many individuals pairing talent with hard work. And part of it is a growing embrace everywhere in this country of the spirit of innovation. But I would argue that a critical yet sometimes understated factor is the Internet.

High-speed Internet access, or broadband, has enabled the democratization of entrepreneurship. Way back when, if you had a good idea, the odds were against you reaching success at scale unless you worked in a large organization, had personal connections, or otherwise hit the lottery. But today, with a powerful plan and a digital connection, you can raise capital, start a business, immediately reach a worldwide customer base, and disrupt an entire industry. Never before has there been such opportunity for entrepreneurs with drive and determination to transcend their individual circumstances and transform our country.

I’ve witnessed this amazing change for myself during the more than four years I’ve had the privilege of serving at the FCC. I’ve seen the old American can-do spirit channeled in new ways and in new places.

Take OneHQ. This insurance tech company offers insurance and finance companies software that manages their advisors, agents, and clients in one platform. OneHQ moved to Startup Village here in Kansas City a few years ago, partly because of the fast Internet connectivity provided by Google Fiber and partly because of what one co-founder called a “community of entrepreneurs that [can’t] be replicated.” The company has done well ever since, quickly increasing revenues, creating jobs, and innovating. Now based in Leawood, the company is a classic story from the Silicon Prairie.

Or consider Bloom. It’s a Kansas City company that’s helping people make better personal investment decisions. Handling one’s finances is one of the most stressful things most people confront. Bloom does an amazing job simplifying and optimizing 401(k) decisions for the typical investor. It’s literally putting more money in users’ pockets. Small wonder that Bloom was recognized by *Fast Company* as “one of the world’s top 10 most innovative companies in 2015 in personal finance.”

Stories like this inspire me as a citizen. Perhaps more importantly, though, they motivate me as a Commissioner. For there are still far too many parts of this country where broadband is unaffordable, inadequate, or nonexistent—where it’s harder to start a business, improve one’s life, build a community.

Sadly, there is a real and growing digital divide in this country. Although gigabit services and mobile broadband are becoming common features of wealthier, metropolitan areas, they aren’t universal. Almost 34 million Americans don’t have access to the broadband networks needed to fully participate in the digital economy. It’s no surprise that access tracks income: Americans living in the poorest counties are twice as likely to lack access as those living in the most well-to-do.

This isn’t how it should be. Every American who wants high-speed Internet access should be able to get it. Every consumer should have affordable choices in a competitive marketplace. Everyone should have online opportunity.

There’s virtually no limit to what Americans who are disconnected today could achieve tomorrow if they were participants in, rather than spectators of, the digital economy.

That’s why I’m here in Kansas City today. To borrow from our host, I want to think big about how to bring broadband to every part of the country. I want to discuss how government at all levels can help spur more entrepreneurship and innovation. In short, I want to share my vision of a Digital Empowerment Agenda that will allow all Americans—no matter what their race, religion, gender, or sexual orientation, no matter where they live, no matter what their personal background—to make their lives better.

I.

We have to begin by recognizing that building a high-speed digital network isn’t easy. The Internet is a physical network of networks that requires massive investment to deploy and constant adjustment to manage. Internet service providers (ISPs) must trench conduit, lay cable, install electronics, attach antennas, and stitch together a seamless communications network from aging copper and brand-new fiber, legacy switches and modern routers.

Given how hard and expensive it is to build a network, it isn’t surprising that ISPs have an incentive to focus on investing in communities where they think they’ll see the most business. Unfortunately, the result is that lower-income areas, communities of color, and those who were already less connected get left behind.

That means less economic development and fewer professional opportunities (imagine having to apply for a job that only takes online applications). That means fewer educational options for the students who live there. And that means it’s harder for people to stay connected with the wider world.

How do we solve this problem? I believe that we should embrace the spirit of the late Jack Kemp. Almost 40 years ago, Congressman Kemp, who would go on to be Housing and Urban Development Secretary, proposed something he called “enterprise zones.” In high-poverty areas, the federal and local governments would work together to encourage investment and job creation.

I believe it’s time to update Jack Kemp’s vision for the digital age. And that’s why I’ve called on Congress to create Gigabit Opportunity Zones.

The concept is simple. Provide financial incentives for Internet service providers to deploy gigabit broadband services in low-income neighborhoods. Incentivize local governments to make it easy for ISPs to deploy these networks. And offer tax incentives for startups of all kinds in order to take advantage of these networks and create jobs in these areas.

Here’s how the program would work in practice.

First, zones could be of any size—from a single neighborhood block up to an entire town or county—so long as the average household income for residents of the zone was at or below 75% of the national median. Based on the most recent American Community Survey estimates, areas with average incomes below \$40,243 would qualify.

Second, to qualify as a Gigabit Opportunity Zone, state and local governments must adopt deployment-friendly policies (more on that later). Once they do, they would submit an application to the U.S. Department of Commerce for review. The Commerce Department in turn would maintain a publicly accessible list of all Gigabit Opportunity Zones in the country. A central location would allow ISPs and businesses interested in gigabit deployment to know where to go and what to do. And it would incentivize cities to qualify so that they could publicize the fact that their communities are open for jobs, opportunities, and economic growth.

Third, the federal government would provide meaningful tax incentives for ISPs to build out gigabit services in these zones. Accounting measures like immediate expensing of capital spending would encourage deployment.

Fourth, the federal government would offer tax credits for qualified startups in Gigabit Opportunity Zones. In particular, the government would establish a tax credit to offset the employer-side payroll taxes for any startup employee who works in a Gigabit Opportunity Zone. These reduced payroll taxes would encourage small companies to set up shop in low-income communities and seek out the untapped talent within those communities. And these incentives would make it easier for aspiring entrepreneurs living in these zones to start their own companies without needing to relocate.

Gigabit Opportunity Zones would be a powerful tool for closing the digital divide that too often separates the haves from the have-nots. They would promote the spirit of entrepreneurship where it is needed the most. And they would be a major step towards empowering every American community to take control of its own destiny in the digital age.

II.

More broadly, there are some problems with broadband deployment throughout our nation. In particular, government at all levels too often makes the task harder than it has to be.

Let me give you an example. Last fall, I visited Southern Light, which is a competitive fiber builder all along the Gulf Coast. It has plant stretching from Jacksonville, Florida to the bayous of Louisiana. They use boring rigs to burrow through hundreds of feet of mud to install conduit. They push high-pressure air to snake fiber optic cables through that conduit. It's a tough job that Southern Light does well, as I saw for myself in the muck of a bayou outside Hammond, Louisiana. But in many cities, the job is made even harder by municipalities that take months to grant a local franchise. Others have imposed moratoriums on the construction of new small cells. Regulatory hurdles like these slow down deployment and sometimes deter Southern Light altogether.

Roadblocks like these aren't unusual. But they need to be. We have to make it easier for companies like Southern Light to build, maintain, and upgrade their networks. We have to promote more competition. And ultimately, we have to make broadband more affordable and accessible to all Americans. Here are five ideas on how to make this happen.

First, the FCC must aggressively use its power to ensure that local governments don't stand in the way of broadband deployment. Several laws give the Commission the express authority to preempt any state or local regulation that impedes the buildout of wired or wireless service. We should use it.

Second, the FCC needs to reform its rules governing pole attachments. Remember, before ISPs can offer service to customers, they must string fiber optics, coaxial cables, and/or other wires on utility poles and through underground conduit. The FCC has the power to regulate the rates charged for these

attachments, as well as the process for gaining access to the poles. If we want more affordable broadband and more competition, we need to take a fresh look at those rates.

Third, the FCC should develop a model code for cities and towns that want to encourage broadband deployment and competitive entry. This code should be forward-looking and fair, balancing the legitimate interests of municipalities with consumers' demands for better, faster, and cheaper broadband. A model code would ensure that no city has to start from scratch, so to speak.

Fourth, we need to speed up the deployment of broadband on federal lands. Right now, it takes twice as long on average to deploy on federal lands as it does privately-held land. That has to change. The federal agencies most often involved in broadband buildout should adopt shot clocks for processing applications and other measures to give providers the certainty needed to deploy on federal lands.

Fifth, we must make "dig once" a central part of our nation's transportation policy. The concept is simple: every road and highway construction project should include the installation of the conduit that can carry fiber optic cables. Installation is the most expensive part of any new broadband deployment, so why not leverage construction that will take place anyway to put it in place? Dig-once has been successful on the local level, and I hope it soon becomes the law of the land.

With these five steps, companies would have greater incentives to build out their own broadband networks, upgrade their equipment, and focus on serving their customers. For workers, this additional deployment would mean more jobs: Studies estimate that every \$1 billion the private sector spends on fiber deployment will create between 15,000 and 20,000 new jobs. And for consumers, competitive entry and next-generation networks would mean better, faster, and cheaper broadband and a brighter future.

III.

So far, I've talked about making the Internet more accessible and more affordable for all Americans. But let's remember why this matters: It's the Internet-based services that are transforming our lives.

These services are developing at a mind-bending pace. And government often struggles to keep up. Laws and regulations can quickly become outdated and inadvertently stand in the way of innovation that would benefit consumers and entrepreneurs alike. And problems that we haven't conceived can spring upon us without an easy solution.

How do we make sure that our policies promote Internet-based entrepreneurship? This topic could be a dissertation by itself, but I'll briefly touch on what I think are a few key areas. I don't pretend to have all the answers. And many of them lie beyond the scope of the FCC's authority. But I do think it's important to talk about these issues.

One of the biggest flashpoints in today's digital economy is how old rules should apply to new ways of doing business. Internet entrepreneurs are constantly coming up with new ways to benefit consumers. The most successful ones disrupt incumbent businesses. But often they don't face the same regulatory landscape that incumbent businesses do. When that happens, the government's instinct is to apply legacy regulations to these newer companies. Sometimes, startups are slowed down by those regulations. Sometimes, they're stopped. That's bad for consumers.

We shouldn't be trying to shoehorn new services into old regulatory frameworks no matter how poor the fit. Instead, the government should ask whether consumers are benefiting from these new services, products, and modes of distribution. If they are, and there's no systematic evidence of fraud or misrepresentation against consumers, the government shouldn't erect artificial roadblocks to competition—and certainly not for the purpose of benefiting entrenched interests.

So should Uber, Lyft, and other ride-sharing companies be regulated like taxicabs? No. Should Airbnb be saddled with the longstanding rules of the hotel industry? No. Should Tesla have to pay

middlemen (car dealers) instead of selling directly to consumers? Of course not. If municipalities are going to serve their citizens, they should embrace innovation as a consumer good, not as a threat.

Cities aren't the only ones trying to apply old rules to new problems. So is the federal government. Consider the problem of raising funds for startups. For decades, the Securities and Exchange Commission has applied detailed rules that are intended to protect investors. But the Internet has already shown us its power to connect informed individuals with financing to good ideas. Kickstarter is a great example of this phenomenon of "crowdfunding," or using the Internet to raise capital among individuals. Anyone can go on www.kickstarter.com, find an appealing idea, and contribute support. (In fact, the belt I'm wearing right now was a reward for my Kickstarter support of an innovative company called Kore Essentials.)

We need a kickstarter for all entrepreneurs. Congress started down that path with the Jumpstart Our Business Startups Act in 2012. But the bang for the buck has been disappointing. The SEC, for example, has imposed artificial limits on the amount of crowdfunding that startups can raise. And by requiring startups to jump through new regulatory hoops before pitching the public on an idea, the SEC has made it harder for startups to test the waters for their ideas and see whether the public is likely to sponsor a full-out fundraising drive. As former SEC Commissioner Dan Gallagher has put it, this part of the JOBS Act has proven to be "an over-engineered regulatory approach. The wisdom of the crowd has been displaced by the all-knowing Washington book club." If these decisions on crowdfunding rules can't be changed, I hope Congress will right the ship.

A few small changes to the tax code could also help startups in a big way. For example, a key part of the bipartisan Startup Act, introduced in 2015, involves helping new companies raise capital. One proposal in that bill would create a limited research and development tax credit for startups that are less than five years old and have less than \$5 million in annual revenues. Another would make permanent a 100% exemption on capital gains taxes for investments held for at least five years in qualified small businesses—a step that the Kauffman Foundation estimates would generate \$7.5 billion in new investment in startups. These proposals deserve serious consideration.

There are still other steps the federal government can and should take. Consider the Food and Drug Administration. It serves an important public interest function, but in at least one case it limited competition and consumer choice in the market for genetic testing.

That case involves the company 23andMe. 23andMe is a decade-old California company that does genetic testing. Consumers order saliva collection kits over the Internet. 23andMe then analyzes the results, giving consumers health and ancestry information. But in 2013, the FDA blocked it from sending the kits, saying the company could not prove its test results weren't misleading or inaccurate. It took almost two more years for the FDA to finally grant limited approval to 23andMe to restart sending kits and giving customers limited health information.

The results have been notable. For example, 23andMe in collaboration with Pfizer and Massachusetts General Hospital recently found 15 new DNA regions associated with mutations that could predispose individuals to major depression. What enabled this breakthrough was massive amounts of data from 23andMe customers who consented to this research—research that wouldn't have been possible had 23andMe been prohibited at the outset.

Innovations like those I've discussed make people's lives better. If the United States is going to lead the world in innovation, we need to embrace new services, not restrict them. We need to adopt a more consumer-centric approach to startups, rather than reflexively imposing legacy rules.

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I know I've covered a lot of ground today. But I hope my Digital Empowerment Agenda helps start a public conversation about 21st century opportunity. With the right policies, we can make sure

every American can better his or her life and become a participant in, rather than a spectator of, the digital economy.