REMARKS OF FCC CHAIRMAN AJIT PAI
AT THE UNIVERSITY OF MISSISSIPPI TECH SUMMIT

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It's great to be in Mississippi! I was going to say it's great to get out of Washington, but I see an awful lot of familiar faces from DC, proving the old adage: when you work on communications in the nation's capital, and you get an invitation from the Chairman of the Senate Commerce Committee, you RSVP "Yes."

To be fair, Ole Miss is an easy sell. Former U.S. Poet Laureate Billy Collins once visited Oxford and told a local dinner companion, "I know why you live here. Because eventually everybody comes to Oxford. You don't have to go anywhere." Having explored the town and spent time with the people, I understand the attraction. This is truly a special place. My only complaint is that you didn't schedule this event nine days later so I could tailgate in the Grove.

Thanks to everyone at Ole Miss who has worked to put this conference together. Special thanks to Chancellor Sparks and his team for their efforts, and also for hosting me last night. Thanks to the local innovators and entrepreneurs who have come to share your stories, which I will carry with me back to the FCC.

And of course, thanks to Chairman Wicker. I've had the good fortune to work closely with him for several years now, but it's been great to see him on this trip in his natural element. Having sat across the dais from Chairman Wicker at hearings, you can tell he *likes* running the powerful Commerce Committee. Watching him interact with his constituents at a groundbreaking in Fulton yesterday, you can tell that he *loves* serving the people of Mississippi. Senator, I appreciate your support and your public service.

This tech summit is focusing on an important topic: improving the lives of Mississippians through communications technologies. Already today, you've heard discussions about the next generation of wireless connectivity and the new applications and services that they'll enable.

I see in the program that I am officially the "Guest Government Speaker." So my job is to talk about what the federal government can do not only to encourage innovation and infrastructure deployment, but also to make sure that these new technologies will be accessible to all Americans, especially those in rural communities.

Now, I can't talk about that topic, in this state, on this campus, without mentioning another U.S. Senator—Thad Cochran.

In the early 2000s, I had the honor of serving as a U.S. Senate staffer for about four years. Senator Cochran wasn't on the Judiciary Committee, where I worked, so I didn't have the opportunity to work directly with him. But there are two things that I remember standing out about him. The first was that he was universally liked and admired. If you were to poll the Senate, he might have had the highest personal approval rating of all. Put simply, everybody loved him. The second thing I remember most about Senator Cochran is that nobody had a stronger reputation for getting things done for his constituents. Indeed, the research center here at Ole Miss that bears his name is just one example of that.

He also fought to bring opportunity to those at risk of being left behind until the close of his career. Notably for today's event, he was focused on promoting digital opportunity. The very last bill he managed as Chairman of the Appropriations Committee established a $600 million pilot program at the U.S. Department of Agriculture to spur rural broadband deployment. He also secured a $2.5 million

funding increase for the nation's two Telehealth Centers of Excellence, one of which is at this University's Medical Center in Jackson.

In my work at the FCC, I'm trying to build on the foundation laid by Senators Cochran and Wicker. And I'm proud to say that the FCC has made significant progress. We're promoting U.S. leadership in next-generation technologies and closing the digital divide.

On 5G, you've already heard during the first panel about the potential for these high-speed, high-capacity, low-latency networks to unleash new breakthroughs that will create jobs and improve our quality of life.

To realize that potential, the FCC is pursuing what we call our 5G FAST plan. It has three parts: freeing up airwaves for the commercial marketplace, promoting wireless infrastructure deployment, and modernizing our regulations to promote more fiber deployment.

On spectrum, 5G networks are going to move a lot more data. That means they're going to require a lot more bandwidth. So we're taking an aggressive, all-of-the-above approach: we're freeing up high-, mid-, and low-band spectrum for 5G. Looking high, we've completed auctions this year in both the 28 GHz and 24 GHz bands, which have made available to the private sector a combined 1,550 megahertz of spectrum. This December 10, we'll launch an auction of the upper 37 GHz, 39 GHz, and 47 GHz bands. This third auction of 2019 will be the largest in American history, releasing 3,400 megahertz of spectrum into the commercial marketplace.

Moving to the middle, the Commission adopted flexible new rules this summer for the 2.5 GHz band, which is our nation's single largest band of contiguous spectrum below 3 GHz and is well-suited for 5G deployment. We intend to auction the unused portions of the band next year. We'll also auction 70 MHz of spectrum in the 3.5 GHz band next year. And we're working to free up additional airwaves for 5G in the 3.7-4.2 GHz band, commonly called the C-band.

On low-band spectrum, we're repurposing spectrum for mobile broadband in the 600 MHz band, which was long used for broadcast television. This so-called re-pack is on schedule, and carriers are already deploying wireless service in the band, including right here in Mississippi.

Turning to our work on wireless infrastructure, the second part of the 5G FAST plan, we need to install hundreds of thousands of small cells for 5G—a huge increase in the number of antenna locations for our current networks. Unfortunately, it's routinely taken more than two years to get the regulatory approval for small-cell installations, which can only take about two hours to actually complete. We've also seen excessive siting fees imposed by local governments. Some cities charge $5,000 for the same approval that might cost $50 elsewhere.

That's why the FCC set a reasonable shot clock for cities to rule on small-cell siting applications and reasonable limits on the siting fees cities can charge. There's growing evidence that these reforms are working. In 2018, the number of wireless small cells deployed in the United States more than quadrupled, from 13,000 to more than 60,000.

But 5G isn't just about wireless. We also need strong fiber networks to carry traffic once it comes off the airwaves—which takes me to the third part of the 5G FAST plan. We've streamlined our rules to make it easier for carriers to transition from the copper networks of yesterday to the fiber networks of tomorrow. We've also instituted a new policy called one-touch-make-ready to make it faster and cheaper for competitive providers to attach fiber to utility poles. And yes, we ended utility-style broadband regulation inspired by rules from the 1930s.

Here, too, our policies are working. In 2018, fiber was deployed to more new homes in the United States than any year ever. Average fixed broadband speeds are up substantially. And investment in U.S. broadband networks was up about $3 billion in 2018, the second consecutive annual increase.

Beyond promoting the development and deployment of 5G and other next-generation technologies, the FCC is committed to making sure that the benefits of the Internet revolution extend to all Americans.

From day one of my chairmanship, I've said that my top priority was closing the digital divide, and we've taken a number of steps to make it cheaper and easier for broadband providers to construct and expand next-generation networks. But we also realize that there are some places, largely rural areas, where no provider can build a business plan to do this alone.

The FCC's primary tool for connecting these hardest-to-serve areas has been our universal service programs. And during the past few years, we've made big reforms to improve make these programs more effective.

For example, last year, we allocated about $1.5 billion to connect over 713,000 unserved rural homes and businesses nationwide, including nearly 14,000 in Adams County, Mississippi. We did this through a reverse auction, which helped us distribute funding much more efficiently. In fact, we saved $3.5 billion from the $5 billion price we initially thought would be required to connect these unserved areas.

We've also modernized our program for supporting smaller, rural carriers to make sure we get more bang for our buck. Yesterday, for example, Chairman Wicker and I visited Fail Telecommunications Corporation in Fulton for the launch of its gigabit fiber network. Because of reforms put in my place under my leadership, that company is now receiving over $400,000 more a year in financial support from the FCC in exchange for agreeing to provide affordable broadband to an additional one thousand homes and businesses in rural Mississippi. Moreover, just last week, the FCC awarded over $4.9 billion in federal support over the next decade to provide affordable broadband to 455,334 homes and businesses in 39 states. And Decatur Telephone Company in Newton County, Mississippi will receive $7.1 million to serve over 1,600 rural homes and businesses.

And earlier this month, the FCC began taking its single biggest step yet to close the rural digital divide when we proposed to create the Rural Digital Opportunity Fund. This program would provide $20.4 billion over the next decade to support high-speed broadband networks in rural America. It builds on the successful reforms of last year's reverse auction I just mentioned. The Rural Digital Opportunity Fund would create incentives for the deployment of faster services with lower latency, like gigabit Internet access. And based on our initial estimates, up to 280,000 locations in Mississippi could benefit (including some Mississippi State fans—sorry, folks).

To connect every American, of course, we need a clear understanding where broadband is available and where it isn't. As Chairman Wicker has repeatedly noted, our current tools for mapping broadband availability aren't as sharp as they need to be. That's why, four weeks ago, the FCC adopted the Digital Opportunity Data Collection. This is an all-new approach to mapping that will collect more precise, granular broadband information from service providers. And we won't just be taking their word for it. We'll also verify that information through feedback directly from the public as well as state, local, and Tribal governments. If a company can't provide the service shown on its map, you'll be able to tell us directly. This new data collection will help ensure that all Americans are connected.

Beyond these efforts to make high-speed connectivity available to all Americans, the FCC is also taking more targeted actions to harness the power of digital technologies to improve health care and help America's farmers and ranchers.

Earlier, I mentioned how Senator Cochran boosted funding for the telehealth center at the Medical Center in Jackson. Well, Chairman Wicker and my colleague Commissioner Brendan Carr actually visited that facility together not long ago. During the visit, they learned about a pilot program that remotely monitors patients in the Mississippi Delta living with Type II diabetes. Participants saw

notable reductions in their blood-sugar levels, and the trial resulted in nearly $700,000 in annual savings by reducing hospital readmissions.

This visit inspired the FCC's proposal to establish a Connected Care Pilot Program. Commissioner Carr and Chairman Wicker explored this idea in July 2018, and this July, the agency formally proposed a three-year, $100 million pilot program. If adopted, the Connected Care Pilot Program could boost health care providers' connected care efforts and provide us valuable data as we consider future policy initiatives.

Just as digital technologies create new possibilities to improve health care, they're unlocking new opportunities for agriculture. As I've traveled the country, I've seen the amazing efficiencies, innovations, and improvements that high-speed Internet bring to today's farms and ranches. I've met the operator of a Kansas feedlot using fiber and wireless connectivity to monitor every cow's individual intake. I've met an Idaho farmer using everything from an LTE-based soil analysis app to drones to improve productivity and reduce costs on his potato farm. And I've seen other farms and ranches from Virginia to California that are using technology to put more and better food on our tables. This is the present and the future of American agriculture. And that's why, motivated by recent legislation sponsored by Chairman Wicker, I recently announced the formation of a new task force dedicated to enhancing precision agriculture. I look forward to partnering with the Department of Agriculture and collaborating with public and private sector experts to make precision agriculture the norm.

Whew—that's a lot of words in the weeds. I may have been a little too heavy on policy and specifics. So I'd like to close with some uplifting words. Obviously, with Mississippi's rich literary tradition, I had many options to choose from. I'll sign off with one passage I came across that really inspired me. I'm pretty sure it's Faulkner. Are you ready?

Hell yeah.

Damn right.

Hotty Toddy. Gosh almighty.

Who the hell are we?

Hey!

Flim flam.

Bim bam.

Ole Miss, by damn!