REMARKS OF COMMISSIONER JESSICA ROSENWORCEL "CLOSING THE HOMEWORK GAP" CUE16 PALM SPRINGS, CALIFORNIA MARCH 17, 2016

Good afternoon. Thank you for having me join you today here at CUE16. Thank you because it is an honor to be a part of the largest and oldest gathering devoted to education technology. It is also a privilege to share the stage with luminaries like Hadi Partovi, the Founder of Code.org, and Tom Torlakson, the California State Superintendent of Public Instruction. Plus, it is a treat to get out of Washington—and it is a definite bonus to be in beautiful Palm Springs.

I want to start today by asking you to imagine that you are no longer in Palm Springs. I want to take you somewhere else where the sun is hot, the soil is warm, and the roads are dusty. I want to take you to McAllen, Texas. McAllen is one of the southernmost cities in the United States. It lies in the storied Rio Grande Valley, right on the river itself. In the last century, McAllen was a community devoted to agriculture. Its fields produced cotton, alfalfa, grapes, and figs. In later years, the economy grew with oil exploration. Still later, it became a foreign trade zone, with cross-border commercial traffic making it one of the fastest growing metropolitan areas in the country.

But like in so many other places, this transition to a new economy has been uneven. Jobs are harder to come by. Health care is a challenge and diabetes has hit the community hard. So not every household or every neighborhood has found opportunity in what is new—nor advantage in what comes next. This is painfully clear when you look at the students in this community.

Take Isabella and Tony Ruiz. Isabella is 11 and her brother Tony is 12. Every weeknight they stand on a crumbling patch of sidewalk across from the elementary school near their home. They take up residence here as night falls in order to pick up the wireless signal they need to do their homework. Over the cracked screen of their family smartphone they download math materials and review research for class.

Credit to Isabella and Tony for their tenacity. Their mother is out of work and their father brings in what income he can from washing dishes. Their family has cut back on everything. So these students, like so many others in their community, cobble together whatever connectivity they can for schoolwork. They may not know it, but standing on that cracked sidewalk in the South Texas heat, they are on the front lines of a new digital divide.

This divide did not exist when I was growing up. All I needed for homework was a pencil, a paper, and my brother leaving me alone.

But gone are the days. Today, as many as seven in ten teachers assign homework that requires access to broadband. But data from where I work—the Federal Communications

Commission—shows that as many as one in three households do not subscribe to broadband service, due to lack of affordability and lack of interest.

Think about those numbers. Where they overlap is what I call the Homework Gap—and according to the Pew Research Center the Homework Gap is real. Five million households out of the 29 million with school-aged children nationwide are falling into this gap.

That means if you are a student in a household without broadband today, just getting homework done is hard. Applying for a scholarship is challenging. While low-income families are adopting smartphones with Internet access at high rates, let me submit to you that a phone is just not how you want to research and type a paper, apply for jobs, or further your education.

A recent study by the Pew Research Center found that more than half of teachers in low-income communities say that their students' lack of access to online resources at home presents a major challenge to integrating technology into their teaching. So not only are students who lack access at home struggling to keep up, their lack of access is holding our education system back. It means too many young people will go through school without developing the skills that give them a fair chance in the digital age.

That's a problem because the data shows very clearly that half of all jobs now require some level of digital skills. By the end of the decade, that number will be 77 percent. Schoolaged kids without broadband access at home are not only unable to complete their homework, they enter the job market with a serious handicap. And that loss is more than individual. It's a loss to our collective human capital and shared economic future that we need to address.

We need to address it in McAllen, Texas, where Isabella and Tony and so many other students have to stake out space on the sidewalk just to do their schoolwork. But we can't stop there.

We need to address it in Detroit, Michigan, where seven in ten students have no way to get online at home—where students forgo eating lunch in order to borrow laptops and rush through their nightly homework at school—the one place they have Internet access.

We need to address it in Charlotte, North Carolina where one in five students have no broadband access at home and where teachers are wrestling with a curriculum that effectively punishes students without online resources.

We need to address it in Cutler Bay, Florida, where night after night parents line up for their children to get time online at the library. The wait times are rough, but the need is real—because there are high schools in the county that use digital history textbooks and elementary schools that use a math program that requires Internet access.

We need to address it in Citronelle, Alabama, where after school students pile into the local fast-food restaurant. They head there because it is one of the few places in town with Wi-Fi. So students without broadband at home hunker down in the booths to do their homework. They research and write their papers with fizzy drinks and a side of fries.

Across the country the math might be different, but the Homework Gap stories are the same. There was a time when broadband access was a luxury. No more. And nowhere is that more clear than in education.

This is a problem we need to address. We need to address it because these are the skills every student needs for the new economy. And we need to address it because with digitizing education comes a wave of new opportunities for learning—opportunities every student should know, no matter who they are, or where they live.

So what can we do? Like any challenging school problem, there is no one single solution or quick fix. It is going to take a lot of cooperative effort and a bunch of creative ideas. Here are mine.

First, though many of you know the FCC for its E-Rate program that helps connect schools and libraries, we also have a program that helps connect homes. It's called Lifeline. It got its start more than three decades ago—in 1985. You remember 1985. It was when most communications involved a cord and President Reagan was in the White House. Today, the Lifeline program supports access in 13 million low-income households across the country, including right here in California. But it needs a reboot. We need to modernize it. With your help we can make it happen—because the FCC is poised to vote on updating this program later this month. When we do, we need to make sure that the program is updated to support broadband—and allow participants to choose between applying support to either voice or broadband service. This simple change would both update the program and help bring more broadband to low-income households with school-aged children. But if we care about narrowing the Homework Gap, we can't stop there. Our Lifeline modernization must make sure that the devices used for Lifeline services are able to access Wi-Fi signals and that those devices can even be turned into Wi-Fi hotspots. Moreover, as we update Lifeline, we should make sure that we are doing everything that we can to make eligible families with school-aged children aware of the program. It's important for parents to know about the tools available to help their kids complete their homework and give them a fair shot at success.

Second, we need more Wi-Fi. Wi-Fi is an essential onramp to Internet connectivity. More than half of us online have relied on public Wi-Fi. But for many low-income households it is their only means of getting online. So our spectrum policy should make it possible to have more Wi-Fi in more places—which will provide more ways for more students to get their schoolwork done. We have opportunities coming up to do just that—in guard bands in the 600 MHz band, in the upper portion of the 5 GHz band, and in millimeter wave spectrum. We need to seize them.

Third, we need to keep tabs on innovative broadband access programs all across the country and—no shame, educators—copy them. In New York City, for instance, the public library has a pilot program that lends out wireless hotspots. Last I checked, they had been loaned out thousands of times. Think about what that hotspot can mean for a student who needs online access to complete schoolwork. It's the difference. Similar programs are cropping up in cities and towns as diverse as Kansas City, Missouri and Cherryfield, Maine.

Now for a moment, back to Palm Springs. Or more accurately, the broader Coachella Valley. So many people know this corner of California for a fabled music festival. But in fact, it's a community built on agriculture. More than half of the students are not fluent in English they come from Spanish-speaking homes and their parents are migrant farm workers. But when the school superintendent came up with a program to give every child—every child—a tablet for use at school and home, he found he had a problem. Students sat by his office every day as late as 6 PM with devices in hand, because it was one of the only places they had to get a reliable signal to do basic homework. His students were falling into the Homework Gap. But the school came up with an innovative way to get them out. They installed Wi-Fi routers on district school buses. After all, in this rural area, students often ride buses an hour to get to school—and an hour to get home at night. With Wi-Fi on board, they can make this ride time connected time for homework. Even better, the school system parks buses next to some of the most remote trailer parks in the district, leaving the routers on so students least likely to have broadband at home have yet another way to connect. This is creative—and it is right down the road. Even better, connected school buses are hitting the road in Huntsville, Alabama, Marengo, Illinois and many more places in between.

So here is where I get optimistic. We have given this problem—the Homework Gap—a name. We are getting innovative and we are coming up with solutions. We are recognizing that there are communities caught in the transition from the analog era to the digital age and as we navigate this change in our civic and commercial life, we are taking steps to help every student have a fair shot in the 21st century.

But my optimism has another source—this problem is finally getting the attention it deserves. Last month, Isabella and Tony from McAllen, Texas were the subject of a front page story on the Homework Gap in *The New York Times*. Last week, President Obama shared their story with millions of followers on his Facebook and Twitter accounts.

This attention comes not a moment too soon. Because this is about the future. The future of our economy, our country, and our success is built on digital and diverse workforce. We all know science, technology, engineering and math are the fastest growing fields in the new economy. We also know the diversity of our STEM workforce does not mirror the diversity of our population. It's time to fix this and make our kids—all of our kids—not just digital consumers, but digital creators. And there are a lot of things we can do to make this happen. But a small step, and one we can take right now—is to make it possible for all students to do their homework. Because the Homework Gap is the cruelest part of our new digital divide—but it is within our power to bridge it.

Thank you.