>> SUSAN HILDRETH: So I am being joined by Reed Hundt who is the former Chairman of the Federal Communications Commission. And as we heard today, really the – I won't say grandfather, maybe godfather of the E-Rate, Reed? He is currently the CEO of the Coalition for Green Capital, a nonprofit group that promotes the development of national and state green banks. He was the Chairman of the FCC from 1993 to 1997 and he was on President Obama's 2008 presidential transition team. He sits on the Board of Directors of Intel Corporation, ASSIA, a communications software firm, SmartSky Networks, a wireless firm, and Level Money, a financial services firm. He is a vocal proponent of libraries.

It is appropriate that we end with his remarks given a lifelong commitment to improve broadband connectivity as one of the original architects of the E-Rate program. And also we are just so pleased to open this up with our Chairman Wheeler and end this with Chairman Reed Hundt. We are very honored to have those two chairmen acknowledging the importance of libraries. Reed.

Applause

>> REED HUNDT: Thank you very, very much to this Susan for hosting everybody here today and also to Susan Benton who is my friend and client because I represent her as a pro bono lawyer at the FCC. You all know that Susan is the CEO of the Urban Libraries Council.

First, a personal note. My sister is the head librarian in Rockville, Maryland, my nephew is a librarian, my mother was a public school teacher, my brother is a public school teacher, my sister-in-law is a public school teacher, and I once was a public school teacher. In Washington, they would be called takers, but we regard ourselves as a family that has had a long,

long commitment to public service. I am very proud to - if I can
be so bold - to say that I'm part of the library community.

   And now I would like to express some of the realities of the
situation, and not everything I say is going to be good news.
The library community, folks, we need to step up our game. We
are in the playoffs. We need to aim higher, we need to pull
together, we need to fight more fiercely, and we need to
understand that this game is definitely worth the candle. It is
critical that everyone understand the political realities that
face Chairman Wheeler and that face the FCC.

   Before I go into any more detail, I want to make sure that
you understand that I was not, in fact, the creator of the E-
Rate. Leadership is critical in every walk of life, but
particularly in politics. I want to acknowledge the two
principal people who were the leaders that created the E-Rate.

   First, Al Gore. It was in the winter of 1992-1993. Al called
me into his office. He was a senator who had just been elected
Vice President of the United States. So the office was right
over there. He said if I can persuade President Elect Bill
Clinton to make you the Chairman of the FCC, I'll do it if you
promise to find a way to have the following occur. I want every
schoolgirl in Carthage, Tennessee to be able to go to the
Library of Congress without buying a bus ticket. I want all that
information digital and I want the most remote school child in
the poorest community in the United States to have access to it.
From the beginning, the vision was schools and libraries, all
information, we're all in it together. And then he said my
father was the principal author of the Interstate Highway Act
and this is going to be the digital equivalent.

   A lot of that has happened, but that wouldn't have happened
but for the fact that about three years later Senator Olympia
Snowe - I note, a Republican - said to me, you're the FCC
Chairman, how would you like to pay a visit to Bangor, Maine. I
can't pronounce Bangor correctly. Close enough? Somehow it
doesn't sound the same when Linda says it, does it? So I flew up
there with Senator Snowe and we went to a school and she gave a
wonderful talk to the students. And then she took me to the
library in the school and she said, look, there are hardly any
books. She said, in the future - this is almost 20 years ago -
she said, in the future, there won't be that many more books
here. It'll all be digital. I want to make sure that all the
digital information of the world is available to every single

child who goes to this school or any other school in the country.

So it came down to a critical vote in a divided Congress. All the Democrats wanted Al Gore's vision to come true. And for a whole bunch of reasons that are characteristic of partisanship and not bipartisanship, the Republican Party didn't want anything Al Gore advocated to come true. Olympia Snowe stood up in front of everybody else in the Senate Congress Committee and she said I'm voting with the Democrats. Ten to eight. That's how it passed into law. When it got to the FCC, there were three Republicans – two Republicans and one Independent who wanted to vote against it so that we would have lost at the FCC and not been able to pass the rule. I told Linda this story the other day. Olympia Snowe stayed up to 3:00 in the morning working the phones, calling the Republicans and getting them to vote yes. And then at 7:30 in the morning, she called me and she said I got you your votes. She said I really don't understand why a mere commissioner at the FCC should not just say yes when a senator asks.

Now those are stories about leadership. They are not meant to be stories about partisanship. They are meant to be stories about leadership. But it is critical that we all understand that this is a country of private wealth and public poverty. This is a country where to stand for the proposition that there should be public access to anything is to take a stand in a long-running battle of ideas. You can take your stand on either side. There are a lot of things to be said about a private life and the values of private investment and the values of capitalism and there are a lot of things to be said about limited government and small government and government waste. There are a lot of things to be said on that side. But if you're talking about wanting libraries to be the number one free public Internet access point in the community, then what you're saying is, on this topic, I'm taking another stand. I'm saying that we need communities to have free public access and that that free public access should not be inferior to the broadband available in suburbs in the United States today.

So, thanks to Susan Benton. In the last two weeks, the Urban Libraries Council did a survey of 33 major libraries in the United States, more than 100 different buildings. And that survey demonstrated in these libraries that not one single one has one gigabit a second connectivity to the buildings. And when you pull out a handheld device and you measure the Wi-Fi at 4:00 p.m. in every single one of the major libraries, these are the

biggest libraries in the United States, in every single one the
Wi-Fi connectivity is inferior to what it is in the suburbs of
the United States in homes. In homes.

So how can anyone think that the hundreds of people in this
building now are getting anything like, anything like adequate
access to the Internet? What is the meaning of adequate access?
It's the things you all heard over the last several hours. Being
able to download a job application and fill it out. Being able
to go online and take a course. Being able to enrol at Code.org
and spend one hour learning to code. These are not the things
that Al Gore and Olympia Snowe knew would be the demand case
years later, but they knew that something like them would be the
demand case.

Thirty million Americans every single year go to a public
library for free access in order to improve their careers.
That's one-tenth of the population. And it's not the same people
every year. Over the course of just three or four years, the
majority of adult Americans go to a library to try to get a job
or to improve the job they have. This is the importance of
public access. You all have studied. You all have shown that
there is popular opinion behind this vision.

Now let's talk about some of the statistics. I want to go
right to the core of an issue that has plagued this debate since
it started two years ago. First, schools or libraries. Which is
more important? Schools or libraries. Which is more important? I
think it's a false choice. We should talk about an L rate. And
the L rate should be our vision of what libraries need and that
should be some amount of money and schools need some amount of
money. When you add the two together, you know the total need.
That doesn't mean a different tax base, it doesn't mean that you
need to think about them differently because they serve
overlapping populations, but it's a way to figure out what you
really need.

Nevertheless, I do want to compare the two because we need to
talk about needs in statistically useful terms. Libraries
constitute about 20% of the number of buildings of schools.
Libraries, on a visits per year basis, are about 20% of the
visits to schools every single year. If we talk about potential
users, there are four times as many potential users of libraries
as there are of schools. If we talk about the number of
registered users in libraries, there are more than two times as
many registered users of libraries as there are children and
teachers in schools. If we talk about the actual Internet

access, which John was just talking about, more than two times the number of Internet access users in public libraries as in schools. So whichever way you want to measure, you actually have metrics.

So whether you look at it as buildings, 20%, or whether you look at it as users in terms of two times and four times, then you have to compare against the following. E-Rate money, how much is going to schools? Well, Larra Clark was talking to us earlier about the shortfalls in data gathering. But as best as anyone has been able to guess, and it is not to the credit of the FCC that they have not made the data transparent, but they are making it transparent because Larra and Susan have been pushing them on this, and they're willing to be pushed. They're willing to be pushed. This FCC is willing to be pushed. But we still don't even know how much money the E-Rate has paid out to schools. Best guess, it's about 3%. Three percent isn't that 20% proportion of buildings and it isn't anything like the relative proportion to the number of users in libraries.

All we can say about 3% is it hasn't produced the desired result. Because when Susan's group did the measurement in these libraries in less than ten days because modern measurement tools work just like that, just like that, when we did this measurement, what did we discover? What I've already told you. Woeful state of connectivity. Woeful. And if we had a statistically valid survey - I think it was you, Chris, who told me you're guessing that it's about 400 libraries you would need. I think I'm remembering right. Out of the 17,000 buildings, we need to survey about 400 in order to have a statistically valid survey. It's going to prove that the status quo is really, really deficient.

Let's now talk about the size of the E-Rate. It's roughly $2.4 billion. It was set at $2.25 billion in 1997. One of the things that I regret is that we did not put in a CPI inflator at the time that we set the number. I have some excuses; they don't stand up to scrutiny. It was a mistake. Let's adjust for inflation. If we adjusted for inflation, the E-Rate would now be about $3.5 billion. If we adjusted for the relative size of the economy now as opposed to what it was then, the E-Rate should be about $3.75 billion. If we look back over the last ten years and do those adjustments and say what should have been the E-Rate spending over the last ten years, we come up with the following conclusion: we have a shortfall of about $10 billion. That's how much the country owed to itself and didn't pay.

This is exactly the same infrastructure story that you see with respect to roads or dams or any other feature in the public landscape. That's the reason why the connectivity is so woeful in the library buildings and in the classrooms today, because we weren't spending that money for the last ten years. And if you say, oh, we just forgot, that's not the reality of the story. The reality of the story is that libraries and schools, as always, are right in the middle of culture wars in our country. That's the reality of the story.

It's all well and good for me to tell you that we've somehow managed to pull off the E-Rate. From the minute the E-Rate was passed, there has been political opposition to the E-Rate here in Washington D.C. From that very minute. It was called the Gore Tax. There were ads that were run against it. There were attacks on the people who ran the original administrative structure. The person I originally appointed to run that program was personally attacked and vilified and accused of waste, fraud, and abuse, which he didn't commit, and finally they drove him from office. That's why it ended up at USAC. There were challenges to the constitutionality of the spending. I could go on and on and on.

But I am saying to you all there is not a broad-based consensus in Washington D.C. about what to do. In this room there might be. But when I say we need to step up our game, it's because it is not fair to take the greatest visionary and leader at the FCC in this century, Tom Wheeler, and say thanks a lot, here's what we need, you're on your own. We need to be behind him, we need to be supporting him, and our time is short.

What you have heard today – I'm going to translate what Tom said because it's really, really important – first of all, the model is the marginal Wi-Fi user at peak hours. It is not just broadband to the building but broadband to the building plus high speed Wi-Fi in the building. That's what we have to talk to him about in every one of our buildings. If somebody is going to write the checks, you don't go in and say, yeah, I don't really like what you want to buy. Besides, he's not even wrong. You all know that this is the use case you want to build for. So that's the data that we have to give him. Second, he told you that he's not going to be funding POTS, as you were saying. We have to have a transition plan either fast, or just a little bit less fast, but it has to happen because that's what he told you.

Next, it's not just more money. By not later than June, the FCC intends to insist that libraries figure out how to have consortium bidding. I'm just quoting here. We have to have

longer time periods for these contracts. We have to have reference pricing so that nobody pays too much and everybody pays the lowest reasonable price. We have to figure out how to provide IT experts for libraries that don't have IT experts. We can't have it be that the non-experts are either left out or told to fend for themselves or they pay too much. And we have to have limited pilot projects that run right away, starting with the June order at the FCC and that actually generate data, so that by not later than the end of the year, a more permanent program can be put in place.

The reply comments on this topic are due on Monday. And we all should remember that if we don't hang together, we're going to hang separately. So we need to do a better job, starting with me, meeting and talking and figuring out what to say together. And then when you all go to the Hill in May and talk to all the members, this has to be at the top of the list. Of all the institutions in the civic landscape, libraries get the smallest amount of money from the federal government. Of all of them. Smaller than schools, smaller than healthcare, smaller than any other institution that you can think of in the social landscape. The total amount of money that I saw in your budget that you are empowered to transfer to state libraries - $155 million. That isn't even noticeable in the Department of Education budget. And your agency didn't exist until 1997.

>> SUSAN HILDRETH: Well it was buried in the Department of Education and we wanted out.

>> REED HUNDT: Exactly. This doesn't mean - I have all these teachers in my family. I'm not saying anything against schools. Those needs have to be met, too. But this group needs to say what are our needs and we have to stand up and we have to do the math.

We've got the reply briefs due next Monday. The first week in May, under the leadership of John Chambers over here at the FCC who knows more about libraries than anyone who ever was employed at the FCC, we have a working group where we have to actually get to conclusions about the administrative process reforms. We've got to do that so that he can start writing his order in May, so that the order can come out in June that establishes the new administrative processes, and that also talks about how the FCC is going to be spending its money in the next cycle. In terms of general big picture, for many, many years the entire community that's benefited from the E-Rate has, understandably because of the constant culture wars, has said year after year

let's just hold on to what we've got. That's what we've had to do just because of the constant pressure.

But that's not what this FCC is telling us. This FCC is saying instead of looking at it as X dollars every single year, why don't you come in and tell us - we'll bunch a whole bunch of money right up front, it'll be a capital expenditure the way John Windhausen and the Shelby Group have been talking about it, more money up front, we'll for once and for all put fiber to all these buildings, we'll provide caching technology, we'll have one single model for every single building, and then your maintenance costs in the years later will be less than the up-front costs. This, by the way, is the way every single network in the United States is built. It's only in this sector that we haven't yet embraced that model. And we're being told by the FCC, bring us the plan and we'll pay for it. We have to get the plan out and it has to be technical.

Now Susan demonstrated to me that there is plenty of competence, not in every library, but in a bunch of libraries to deliver the IT planning. Susan Hildreth could do it. You could talk about POTS. This can all be done. This can all be done. There are a lot of libraries where the IT competence doesn't exist, isn't funded by the local and municipal governments, and doesn't need to be funded. It doesn't have to be that you have a Cisco trained IT professional in every one of 9,000 systems. It ought to be that 50 or 100 could serve the entire country. Meaning, everything needs to be transparent. That's why we want to be online. All library deals ought to be public for all other library deals. All library usage measurements ought to be public. In fact, every library ought to be goading themselves and others on every quarter by reporting to the FCC every single quarter now, forever, how it's going, which is so incredibly easy. It wasn't easy back in the old days. Those old days don't exist now. It's really easy to do these measurements. We just have to say, you know, the data is going to make us free.

Now to what level are we going to upgrade? When we're talking about this surge spending, if you forgive the phrase, what level are we going to upgrade to? There is no doubt whatsoever because all the comments that were written on April 7th all support this. The fundamental idea has to be fiber to the building that is capable with today's electronics of delivering one gigabit a second. But that is not the future. The future is the one gigabit will become ten and will become 100. But the way fiber works - and this is a lawyer explaining it - once you get the glass in the ground, adding the electronics later to upgrade the

bits per wavelength, that is a comparatively lower expenditure. So we have to be focusing on first getting what John Windhausen and his group call the capital expenditure in place.

Second, as to the wireless local area networks, the comments – and I was up late last night reading a lot of them. I haven't quite finished yet. But they make it really, really clear. There are several basic categories of funding that are necessary: the maintenance, the caching, the routers, the internal networks, which in some cases have to have wire components. It's not that complicated. We should be presenting to the FCC one or two basic models and saying these are the models with variations that all libraries should be utilizing.

There are some comments that say, you know, libraries really shouldn't do consortium bidding. All those comments were from the people currently supplying the libraries. God bless them. They've actually done a wonderful job, but they're not looking out for the biggest bang for the buck. This is a buy-sell transaction. You were talking about haggling. We've got to be doing some haggling. Now why should libraries be able to opt out of consortiums? Only if they can get a better deal by opting out. Nobody should be saying I want the federal government to give me money so that I can opt out so that I can pay for a worse deal. We ought to be willing to agree to that and we ought to be willing to say to the FCC that we will hang together because we don't want to get bad deals separately.

We need to allocate by priority. All the comments make it clear that there has to be some sense of equity in the prioritization that the FCC does. There are variations on what equity consists of. But for sure it is an adjustment by income, is an adjustment by the number of users for sure. The ULC presented a formula. There could be other formulas. But we all have to agree on a sensible allocation formula. If we were on the Titanic, it would be women and children first. This is a post gender discrimination era that we're in. We need to have a formula that reflects some sense of needs because the FCC isn't going to fund 100% on day one.

Number two, it is absolutely going to be necessary that we understand the FCC needs to come out with an order in June. And that will not be the final order because it is also going to be the case that these pilot projects have to be done and data has to come back and then we need to revise and change our thinking. But by the end of the year, we should have fulfilled Tom Wheeler's dream. He wants to reimagine the E-Rate. He told us

that he wants us to be collectively the Andrew Carnegies of this century, maybe with a little help from Bill Gates. Maybe with a lot of help from Bill Gates.

But this is an incredible opportunity. We have to take it. Actually, I know that we can take it. Because when I look back at that conversation with Olympia Snowe and I look at the results, the reality of Internet access in the United States from the year that Olympia took me to that library in Maine, that school in Maine, the reality is this: Internet access in the United States was led, was led by access to schools and libraries. In its first ten years, it was led by access to schools and libraries. The United States led the world in having a generation come onto the Internet. We have, in fact, in that generation, the highest percentage of Internet-savvy people of any country in the world, and we did it on a narrow band, not on a broadband platform. And what Tom Wheeler came and told you today is now you're going to reimagine the whole thing on a broadband platform and your vision is going to be realized. Lift up your head, look a long way out. Thank you.

Applause

>> SUSAN HILDRETH: Well I knew he would be a great closer. He's always got the good vision. We're very lucky to have