AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Remarks in Knoxville, Tennessee

October 10, 1996

Thank you. Thank you very much. Thank you so much for that wonderful reception. It's nice for me to be in Knoxville, sort of riding along on Al Gore's coattails. I enjoy being here. [*Laughter*]

I want to thank everyone who has been a part of the program today. Dr. Parker, thank you. And Mildred Buffler, thank you. And I want to thank our great Secretary of Education, Dick Riley, my former colleague when we were Governors together. And I think unquestionably history will record him as the most effective Secretary of Education our country has had to this point.

I thank the students who are behind us. I thank Dr. Clinard for her fine remarks and her fine work; Dr. Al Trivelpiece from the Oak Ridge labs is here. I thank you for being here, sir. I want to say a special word of thanks to Sumner Redstone and to Lynn Forester. Thank you, Lynn, and to all the other business leaders who have agreed to help us on this truly monumental but terribly important project.

I'm very, very glad to be here. The Vice President, last night I called to congratulate him on his debate, and I said that Mr. Kemp found out something that I found out a long time ago: It's just as well not to be on the other side of an argument with Al Gore. Although I did think it was rather ungracious of him to mention our annual bet on the Arkansas-Tennessee football game here in the backyard of the University of Tennessee. [*Laughter*]

Actually, we have a lot to be grateful to the University of Tennessee for. One of the most important members of our administration, Nancy-Ann Min, I believe was the first female president of the student body here. The band came out to the airport to play for us, which was a wonderful thing; it woke us both up this morning, got us off to a good start. [*Laughter*]

Anyway, we always come back around to this football game, you know. And the last few years have been pretty good for Tennessee and not so good for Arkansas, and so I figured that Al's hubris would get the better of him, and since we were in Knoxville I could get more points on the game today. [*Laughter*] And I'm lobbying. So you're proud of your football team, aren't you? [*Applause*]

So what am I entitled to? Twenty-eight points on the spread? I mean, what do you think? [*Laughter*] We got to talking about Tennessee football players, and I pointed out that one of the greatest football players Tennessee ever produced still has ties here in Knoxville, is still playing very well, Reggie White of the Green Bay Packers. He's a good man. I visited Reggie and the Packers not very long ago, and they are truly impressive. But as good as Reggie is, last night it was Al Gore who sacked the quarterback. [*Laughter*]

Let me say to all of you that the Vice President and I have worked very closely together; we've been a good team. We've worked hard for 4 years to basically change not only the way the National Government works but the way our country is thinking about the future. We want everyone in America to have a vision of what America should be like in the 21st century.

And I ask all of you to think about it when you leave here and you go about your business today, just think about it: If you had to sit down in a paragraph, sort of say what you think your country ought to be like as we start a new century and a new millennium, in a time where we have radical, breathtaking changes in the nature of work and communications and how we relate to each other and the rest of the world, what would that vision be for you if you were writing it down? I encourage you to do it tonight when you get home. It would be a good exercise. Talk to your spouses, your kids, your parents about it. And think about what do you want for your country when we start this new century.

For me, it's this: I want us to take advantage of these changes so that the American dream will be alive and well for everyone who is willing to work for it. I want us to be a country that is coming together, respecting our diversity and clinging to our shared values instead of being torn apart by our differences, as so many countries all around the world are. Now, who would have thought 15 or 20 years ago at the height of the cold war

we could ever see the threat of communism fade from the world, that we would see the ugly rise of old racial and ethnic and religious hatreds consuming people all around the globe? We can beat that rap here, and we're determined to do it, and I think we will do it.

The third thing I want is for the United States to continue to be the world's strongest force for peace and freedom and progress and prosperity in the entire world. I think that is important for other people in the world who have their aspirations and who need to have the chance to grow up strong and free, the chance to develop the minds that God gave them and the spirits of their children.

To do that, we have followed a simple strategy. We have tried to create as much opportunity as possible. We have tried to demand responsibility from all of our citizens and do things that would encourage more of that. And we've tried to build this American community and stand against those forces that would undermine it. We tried to change the fundamental way the Government works, and Al Gore has been our leader in that regard. We have downsized the Government now by 240,000 people or so. It's the smallest it's been since President Kennedy was in office. But we have also tried to change the way it works, to make it less bureaucratic and more oriented toward working in partnerships with citizens to give people the tools they need to make the most of their own lives.

That is the context in which I ask you to see what I believe we should be doing with science and technology and basic research. It has to do with what I want America to look like when we start this new century, what I want it to look like when people like me, when our children are our age, and indeed when our grandchildren are our age.

If you have that vision, there is no better way to make it real than by continuing to preserve America's leadership in research and technology and science. Of course, as Al said, there could be a great digital divide. If we don't broadly share the knowledge and the technology that is developing, it could work to promote inequality, frictions, anxieties among people. But if we do it right, it can be a great force to help us meet our challenges and protect our values together.

Continuing to push back on the frontiers of knowledge has always been one of the measures of America's greatness. For the last half century, this State of Tennessee has been a living map of how those kinds of investments can produce growth and opportunity. Sixty years ago, the TVA lifted an entire region out of poverty. Today it is still shining its light, illuminating homes and communities. During the cold war, the Oak Ridge Laboratory harnessed the power of the atom in the service of our Nation's defense. Today it's nuclear science is yielding the isotopes that help doctors trace heart disease. Our interstate highway system, built with the leadership of Senator Al Gore, Sr., literally remade the landscape of America and connected us all more closely. And today it is still bringing Americans together.

Technology is clearly transforming our world, and it is creating a range of possibilities for the young people behind me and the young people in this audience that are literally unimaginable. Many of you people who are students at the University of Tennessee who are here and the younger students from high schools and the middle schools, the elementary schools, you will be doing work that has not been invented yet. Some of you will be doing things that have not even been imagined yet. And it is up to us to see that every one of you has the best possible chance to develop your talents and to live out your dreams.

This is what has been happening: change at a rapid rate. Again, even if you look back on it, it's almost unimaginable. Consider this: There is today more computer power in a Ford Taurus you drive to the supermarket than there was in *Apollo 11* when Neil Armstrong took it all the way to the Moon. Isn't that amazing? Cell phones, faxes, laptop computers, pagers: they were the stuff of science fiction a few years ago. They're now everywhere, and if you don't have one, don't know how to work one, you're sort of out of step. These days you can take notes on a computer pad which converts it into a typed text and sends it to the Internet and transmits it to a computer all across the world.

The young people today will live out their lives, in short, in a century that will change like this constantly. And that's why I say they will do work that not only has not been invented yet but some of it has not been imagined yet.

Our cutting edge industries like microchips, biotechnology, and aerospace once again lead the world. I'm proud of that, and that's good news for Americans. When it comes to these new technologies, our Nation is on the right track, and that's one of the reasons we're the world's leading exporting country again, one of the reasons we have as many jobs as we do, one of the reasons that more than half of our new jobs are in higher wage categories, because we are on the cutting edge of positive change.

So let me say again, we must stay on the cutting edge of positive change. I am determined that we will continue to invest in science and technology. More research in America—most research is conducted by businesses and universities, but we all know that Government has an important role to play.

Of the 12 Americans who won the Nobel Prize last year, all 12 had received Government support for their research. This year, the Nobel Prize winners have just been announced in physics and chemistry. Of the three who won this year in physics and two who won in chemistry, all five received Federal funding from the National Science Foundation. Cutting back on research at the dawn of a new century where research is more important than it has been even for the last 50 years would be like cutting our defense budget at the height of the cold war. We must not do it, and we will not do it. We must protect the future of the young people here in the audience.

One of the marvelous things we have learned about research is that it's not necessarily going to benefit just a particular category in which it was undertaken, that ideas don't stay in boxes anymore, that they all become more interrelated, the more you know and the more you learn. For example, the Department of Defense has a dual applications program that makes military research available for commercial use. The Commerce Department has a advanced technology program that works with hundreds of high-tech firms to create jobs and new technologies, and let me just give you one example of this.

The research we've done in defense and intelligence and in our space program on imaging, which is very, very important, knowing exactly where you are and what you're seeing, is playing enormous benefits in the medical research area, and it may help us to identify incipient cancers before they develop to a problem stage in a way that may drastically improve the cure rate for cancer and almost get the identification down to the point where cure and prevention become merely indistinguishable in the moment. This is the sort of thing we have to be thinking about all of the time.

I tell this story all the time, but I think it's important. We just formed a partnership with IBM to produce a supercomputer over the next couple of years that will do more calculations in one second than you can do at home on your hand-held calculator in 30,000 years. Now, that should give you some indication of how quickly things are changing and how we will be rewarded if we stay on the cutting edge and how we can be punished if we don't.

I just talked a little bit about health care, but technology is really making enormous strides there and research is. During the time the Vice President and I have been in office, we've increased research on breast cancer at the National Institutes of Health by almost 80 percent. And just last year, an NIH scientist discovered two of the genes that cause breast cancer, giving hope for treating and preventing the second leading cause of cancer deaths among women.

We've increased NIH research on AIDS by 39 percent. And I'm convinced we're in the process of helping to turn a relentlessly fatal disease into a chronic, manageable illness. The life expectancy of those with HIV and AIDS has nearly doubled since I took office because of medical advances in research.

We've come up with the first-ever treatment for strokes, the third biggest killer in America, something no one ever thought we would ever be able to do very much on. And just the other day—well, a lot of you were moved, I know, by Christopher Reeve's

speech at the Democratic National Convention. And he called for a recommitment to research. At almost the same time, either a couple of days before or a couple of days after Christopher Reeve gave that speech, for the first time ever, laboratory animals whose spine had been severed had movement in their lower limbs because of nerve transplants to the spine from other parts of the body. We can do things that we have never imagined if we continue to work and go forward.

Last week I signed budget legislation, increasing the NIH budget $2.4 billion over what it was on the day I took office. These investments will make possible further advances. They will lead to sophisticated computer imaging systems to help us treat cancer, to help us deal with Alzheimer's. They will enable us to continue certain extraordinary initiatives going on there. One of my favorites is the human genome project, which is literally on the verge on mapping out a genetic code of life. I think it won't be too many years before parents will be able to go home from the hospital with their newborn babies with a genetic map in their hands that will tell them: Here's what you child's future will likely be like. Therefore, if you want your child to live as long and as well as possible, here is the diet you should follow, here is the exercise program you should follow, here is the medical treatment you should follow. It will be an incredible thing.

I know that all of you believe in this, but I think it's important that we have—that ordinary citizens have at their fingertips three or four examples that people can identify with of why these investments of your money—because, after all, this is all your money, these are just things that we do together as a people because we couldn't do them individually—and I think it's important that you have these at your fingertips so that you can talk to your friends and neighbors about why this matters. I know you can make a good speech about it here because you've got Oak Ridge up the road, and it's a lot of good jobs. But it's important to understand why it matters to everyone wherever they live and how it can change our common future for the better.

We all know that changes in technology are transforming the way we work, too. For a long time people were worried about that; we all were. Everybody wondered: Well, there's so much computer technology, all of the big organizations, the big bureaucracies can downsize, will there be more people dislocated than we can create new jobs; even if we create new jobs, will the new jobs not be as good a job as the ones we're losing?

These are legitimate worries that have plagued people in the past, and that still trouble individuals in our country, but we now know that we are creating jobs that on average are in the higher wage categories. We know we can do it right.

But there is another thing that we ought to look at, which is how we can use technology to help people who have children at home succeed at home and at work. When I became President—and I think it's still true, we don't have any updated figures—but when I became President, there was a study that came out that said that people were working harder in 1994, the second year I was in office, than they had been 25 years earlier in 1969. The average working person was actually spending more hours a week at work.

And yet, there were a higher percentage of parents in the workforce in 1994 than there were in 1969. That means that nearly every family, whether it's a family working for a very modest wage, a family with a solid, middle class existence, even a lot of upper middle class, better-off families are dealing with these competing pressures of trying to do a good job raising their children, which is our most important job, and trying to succeed in the workplace.

That's why the Vice President and I worked so hard for the Family and Medical Leave Act, why we believe it ought to be expanded, and why we think there ought to be more flextime in the workplace. But again, I think technology, if we keep working on it, will bring it back around to us, and a lot of people will be able to benefit from it. The number of Americans who are now working from their home at least part of the week and telecommuting has doubled over the last 5 years to 12.1 million.

The Small Business Job Protection Act that I signed this summer included an increase in the minimum wage for 10 million working Americans. But it also did something else: It completed a job the Vice President and I started in 1993. We have, since 1993, increased the amount of capital a small business can expense from $10,000 a year now to $25,000 a year. And I believe more and more companies should use this expense to buy computers and other equipment for their employees to use at home, especially if the employees have young children. We have to work harder to make our businesses work well, our employees succeed, and people be able to be good parents.

Finally, let me say the explosion of information has changed everyone's life, nowhere more than on the Internet. Now, think about the Internet, how rapidly it's become part of our lives. In 1969 the Government invested in a small computer network that eventually became the Internet. When I took office, only high energy physicists had ever heard of what is called the World Wide Web—when I took office, January of '93, only high energy physicists had heard of it. Now even my cat has his own Web page. [*Laughter*]

The number of people on the Web has been doubling every 8 months. Think about that. The number of people on the Web has been doubling every 8 months. Today there are at least 25 million people on the Internet. By 1998 that number will reach 100 million. The day is coming when every home will be connected to it, and it will be just as normal a part of our life as a telephone and a television. It is becoming our new town square, changing the way we relate to one another, the way we send mail, the way we hear news, the way we play.

Every citizen can now read the *Congressional Record*. If you have insomnia, I recommend it. [*Laughter*] Every citizen can get the text of what's in a new law the very day it passes. Art lovers can go to the Louvre. Baseball fans can pay an on-line visit to Cooperstown. Everyone can find a passage in the Bible or in Shakespeare with the click of a mouse. Most of all the Internet will be the most profoundly revolutionary tool for educating our children in generations.

I want to see the day when computers are as much a part of a classroom as blackboards and we put the future at the fingertips of every American child. That sounds great, but think about the implications for our American democracy. If you want to go into the 21st century with the American dream alive and well for everyone, everybody has a chance to live up to the fullest of their abilities and, I might add, to be less shackled by whatever disabilities they have, if you believe we can create a community where everybody has a role to play, think about the implications for this.

What does this mean, hooking up every classroom? It means if you have the right computers and the right education equipment, software, the right educational software and properly trained teachers, and then all of these connections are made to the Internet and the World Wide Web and all of the other networks that will be exploding out there, think what this means. This means for the first time ever in history, children in the most rural schools, children in the poorest inner-city school districts, children in standard, middle class communities, children in the wealthiest schools, public or private, up and down the line, will have access in real time to the same unlimited store of information. It will revolutionize and democratize education in a way that nothing ever has in the history of this country. Think about what it means.

In the State of the Union Address, I challenged the American people to make sure that all of the libraries and classrooms in the country were hooked up to the information superhighway by the year 2000. I am very, very grateful for the work that has already been done. Businesses, communities, governments, schools have worked all across this country, thousands of schools have been hooked up on NetDays from California to Florida, and today we are taking three more steps to make sure we achieve that critical goal.

First, the announcement that has been made by Mr. Redstone. The business community is committed to taking the lead in putting educational technology into our classrooms. CEO's from our top telecommunications firms are joining together to help us

achieve that vision. Sumner Redstone, Lynn Forester, also Robert Allen of AT&T, Larry Ellison of Oracle, Gerry Levin of Time-Warner, Brian Roberts of Comcast, Steven Case of America OnLine, and there will be many more—they're going to make sure that we have the computers in the classrooms, that the teachers are properly trained, that the educational software is the best available, and that all these connections are made to democratize education. They will help to raise private sector contributions to match the technology literacy challenge fund that we have created.

And let me say again to Sumner, to Lynn, to all the others: We owe them our thanks, and we need more to follow their lead. This is the only way we can get this done in a short time. Thank you.

The second thing we have to do is to make sure that all of the schools and the libraries in the country can afford to connect to the Internet. Today, the cost of using the Internet can price some schools out of cyberspace. Fees can be inconsistent with the highest rates, often hitting places with the fewest resources.

Soon, all this will change. Under the new telecommunications law I signed a few months ago, the Federal Communications Commission will require that telecommunications service providers give to schools and libraries affordable rates for Internet access. The FCC will vote on how to do this on November the 8th—how to provide what we call an E-rate, an education rate.

Today, I call on the FCC, when it votes, to give every elementary, middle, and high school and every library in the country the lowest possible E-rate—free basic service to the Internet. For more sophisticated services like teleconferencing, the FCC should require discounted rates with the deepest discounts going to the poorest schools and areas. I urge the FCC and the State regulators who have a say in this to make the E-rate a reality for our schools. And again, I want to thank the Vice President and Secretary Riley, Assistant Secretary of Commerce Larry Irving, who's worked with us on this and there are a number of Members of Congress. The Senators that I would like to mention are Dorgan, Exon, Kerry, Rockefeller, and Senator Snow, and Congressman Markey. They have all helped us on this.

This is a big deal. Wouldn't it be a shame if we did all this work and there were schools that literally could not access the Internet, if there were libraries in little rural communities that couldn't do it? It is not necessary. This will pay for itself over and over again by increasing the users, the knowledge, it will explode, and we have to do this.

Finally, let me say, to keep going we have to keep the Internet itself up to speed. I know it's hard to imagine that the Internet could be getting too old. I find that about myself from time to time. [*Laughter*] But believe it or not, everything ages, and the Internet is straining under its growing popularity. Like any other piece of critical infrastructure, it has to be repaired and upgraded to meet all our education, medical, and national security needs. It is now time to invest in the next generation of Internet. Today I am pleased to announce our commitment to a new $100 million initiative in fiscal year 1998 to improve and expand the Internet, paid for under our balanced budget plan line by line, dime by dime.

America must have an Internet that keeps pace with our future. So let's give America Internet II, the next generation Internet. We have to keep it big enough and fast enough to connect all of our people. Now, this initiative will help universities and research institutions expand the amount of information that Internets can carry through ultra-fast fiber-optic networks. It will develop software to eliminate bottlenecks. It will expand the number of addresses on the Internet. It will create powerful new switching computers to create power—to enable universities to communicate with each other 100 to 1,000 times faster than they can today.

It will develop the software to carry sound and video from one end of the world to another in real time. It will be capable of transmitting the entire Encyclopedia Britannica in less than a second.

These improvements will make the Internet a more important and remarkable part of our own lives. They will enable our Defense Department to send intelligence instantly to our troops on the ground anywhere in the world. They will let doctors in rural

areas scan their patients for cancer by tapping into supercomputers at university hospitals a long way away. They will allow Americans to take any class anytime, anywhere, in any subject. They will expand the reach of education programs right here, like the Oak Ridge Education Network and Adventures in Supercomputing.

So let us reach for a goal in the 21st century of every home connected to the Internet, and let us be brought closer together as a community through that connection.

Let me close with a word of caution that I know I don't need for anybody in this audience in east Tennessee. We cannot idealize technology. Technology is only and always the reflection of our own imagination, and its uses must be conditioned by our own values. Technology can help cure diseases, but we can prevent a lot of diseases by old-fashioned changes in behavior. And we know that as well.

Technology can give us a lot of information about why we should act rationally in certain cases. But continuing to hate our friends and neighbors because of their differences—religious, racial, tribal, or ethnic differences—that is an affair of the human heart. And we know that as well.

So today let us resolve to keep faith with our future by passing on to our children an information superhighway that will help them to live out their dreams. But let us also resolve to make sure that their dreams are the right dreams so that when we get to this great, grand new century and this remarkable age of possibility, the vision we all share for our future can become real.

Thank you, and God bless you all.

NOTE: The President spoke at approximately 12 noon at the Knoxville Auditorium Coliseum. In his remarks, he referred to Eugene Parker, who gave the invocation; Mildred Buffler, who led the Pledge of Allegiance; Lillian A. Clinard, deputy director, data systems research and development, Lockheed Martin Corp.; Alvin Trivelpiece, director, Oak Ridge National Laboratory; Sumner M. Redstone, chief executive officer, Viacom, Inc.; and Lynn Forester, chief executive officer, Netwave, Inc.

Remarks in Dayton, Ohio

October 10, 1996

Thank you. Can you hear me way back there in the back? Thank you. Hello, Dayton, it's good to be back in Ohio. Thank you for being here in such large numbers.

Ladies and gentlemen, I am delighted to be here today. I want to thank Dennis Lieberman for his enthusiastic welcome and for his leadership of the Democratic Party here in our county. I want to thank the officials and the candidates who are here with me: State Representatives Tom Roberts and Lloyd Lewis; Mariana Brown Bettman; my good friend, Peter Sikora. I want to thank my long-time friend Bruce Hornsby for being here and entertaining you today. Let's give him another hand, he's great. [*Applause*]

I want to thank the musicians from the Omega Baptist Church who sang for us. Thank you. I want to thank those who are on the pre-program, the Ohio Democratic Party chairman, David Leland; Craig Zimmers, Hugh Quill, Judy Dodge, A.J. Wagner, Senator Rhine McLin. And thank you, Tony Capizzi, for your proclamation of today and your memory of the work that was done for peace here in Dayton.

And most of all, I want to say a special word of thanks to your Congressman Tony Hall. I know that all of you know what a good job he's done to represent you, but there may be no one in the Congress who is as admired as Tony Hall, a man who lives his faith every day, a man who takes care of his constituents in Dayton and still has enough left in his mind, in his heart, to care for the children who are hungry and homeless and dispossessed all across the world, and especially those in Bosnia who needed his help when he came to me and no one else would help them. Thank you, Tony Hall, for being a model citizen and a great Member of the United States Congress.

Again, let me say, I appreciate October 10th being Dayton Peace Accord Appreciation Day. When the world thinks of Dayton now, it thinks of peace. Here, a little more than a year ago, the leaders of Bosnia, Serbia, and Croatia came together through American leadership to end the worst bloodshed in Europe since World War II. What was accom-