NATIONAL GOVERNORS' ASSOCIATION

2000 WINTER MEETING

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PLENARY SESSION

J.W. Marriott Hotel
1331 Pennsylvania Avenue, N.W.
Ballroom
Washington, D. C.

Sunday, February 27, 2000
9:37 a.m.

PROCEDINGS

(9:37 a.m.)

CHAIRMAN LEAVITT: Good morning, Governors and distinguished guests, ladies and gentlemen:

Let me begin by recognizing that we have
among us a new member. I am very pleased to introduce and ask you to welcome with me Governor Ronnie Musgrove of the Great State of Mississippi. Congratulations to you. (Applause.)

CHAIRMAN LEAVITT: It is now my privilege to call to order this the 2000 Winter Meeting of the National Governors Association.

May I begin our meeting by receiving a motion on the adoption of the Rules of Procedure for this meeting?

GOVERNOR ENGLER: So moved.

CO-CHAIRMAN GLEN DENNING: Second.

CHAIRMAN LEAVITT: Any discussion? (No response.)

CHAIRMAN LEAVITT: All those in favor, say aye.

(Chorus of ayes.)

CHAIRMAN LEAVITT: Opposed? (No response.)

CHAIRMAN LEAVITT: The Rules have been adopted.

Now part of the Rules require that any Governor who wants to submit a new policy or a resolution for adoption at this meeting will need to achieve three-quarters, or three-fourths of those who are in attendance to suspend the Rules.

So I would ask that if you have such a
resolution or any matters of business, that you
submit such a proposal to NGA staff by five o'clock
tomorrow morning.

May I begin today by acknowledging that
this is the first meeting of the National Governors
Association in this new Century and a new Millennium.
I watched on New Year's Eve, as I think all of you
did, as a remarkable human event took place.

Celebrations unfolded across every time
zone, one after the other, and we all celebrated it
together. We saw fireworks in Beijing and Paris. We

saw prayers that were offered by entire island
populations in the South Pacific. We saw the
exuberance of America from Governor Pataki's Time
Square to Governor Davis' Golden Gate Bridge.

It was a sight that I don't believe
mankind has ever beheld before: The entire World,
the entire globe celebrating the same moment at the
same time, a single event in a similar way.

Now that corner has been turned. The new
Century is here and we are part of a world that is
transitioning in an unprecedented way. It is a world
with unprecedented reach and connectivity.

At the last Turn of the Century, things
were different. In 1900, most Americans still went
out into the fields to work. It was still a Nation
of dirt roads and kerosene lamps. The paperclip was
the invention of the time. The cable car was newly
patented, and the first transatlantic telegraph had been sent.

One day about 100 years ago, I was recently reading in my great grandfather's journal, he had left his home in Utah and had traveled to Europe where he was living, had left his family in Utah. He was waiting on the dock of a port in Europe for a ship, as he made this journal entry, hoping that the ship would contain a letter that his wife and four children had written to him.

When the ship arrived, it in fact did have the letter. It had taken over three months to travel first by horse, and then by wagon, and then by train, and they a long trip by boat.

Now you fastforward about a century. Like many of you, I travel the globe as my great grandfather did on trade missions. I was in Europe on a trade mission. Middle of the night. I can't sleep. I think to myself, if I get up right now I can get on the Internet and find out what happened in the Utah Jazz Playoff game.

So I--it was kind of a funny picture, actually. My wife isn't nearly as interested in that as I am.

(Laughter.)

CHAIRMAN LEAVITT: So I'm in the corner of the hotel room, kind of lifting the blanket over my
head so as to not wake her up. The Internet boots up, and I hear a familiar voice. "You've got mail!"

(Laughter.)

CHAIRMAN LEAVITT: Well I click on that little red flag and up comes an e-mail just arrived from my then-8-year-old son Weston. It was a very direct message:

"Dear Dad, I just stapled my thumb. Love, Weston."

(Laughter.)

CHAIRMAN LEAVITT: Now I could picture Weston home in my study. My guess is he had just finished drawing some pictures that he likes to staple together into a book, and some incident had occurred that caused him some injury.

I immediately e-mailed back to him my condolences and something about Neosporin and a bandaid, but that's the world we live in.

Here's a world where an 8-year-old can reach across the globe in seeking a father to give him some nurturing and some comfort at a time that he needed it and expect that he will receive a reply.

The message that my grandfather waited for on that dock took three months to arrive. A similar message took three seconds. That's the world we live
It is a world that is no longer defined by distance. No longer defined necessarily by time or by place. It's a world of connectivity. It's a world of bandwidth, of knowledge, of convergence, of computing. It eclipses any technology that we have seen advance in the past.

Now there are a number of other trends that we will talk about during the course of this meeting, all of which add up to unparalleled change. We will talk today about the integration of the globalization that we have all experienced and the continuation of the deregulating of various industries as we continue to move forward in that fashion.

This is an economy that is now being driven by ideas, and by knowledge, and by productivity. It is a time when small, nimble, new companies capture entire markets, and sometimes at the expense of mature companies who lose them.

It features enterprises who on the one hand partner, and on the other hand compete. We are in an era when mass production has been replaced by mass customization.

My daughter the other day was on the Internet ordering a pair of custom-fit jeans made to her specifications. We all know about the capacity to buy a computer online and have it delivered within a day or two. "Having it your way" now means more
than just hamburgers. It's computers. It's jeans. It's anything you want it to be.

I can get on the telephone, and if I have trouble I can get hooked up and they can help me through it.

Contrast that, if you will, if you're trying to get a Medicaid problem solved. You get a voice message that says "call between 8:00 and 5:00 Monday through Friday."

We've got some changes to make to be able to adapt to this not just in the way we develop trade and enterprise but the way we run government.

This is a world that is changing on Internet time. If there is one message that I hope will come from this conference, it is that we are now governing in a world that is changing on Internet time. It is our responsibility as Governors to have a new vision, to have new adaptability, to have new models of governance and to do it fast.

Yesterday we released a report entitled "State Strategies For The New Economy." Copies of that report will be found at all of your places where you sit. For those who watch us on television, they can find it at www.nga.org.

It is an umbrella report, a large series of ten reports that we will be developing on problems that we collectively face as Governors, and those matters that we talk about during this conference.
I would like to thank the Governors of the Technology Task Force for their participation in developing these reports. The Vice Chair of the Technology Task Force, Governor Carper of Delaware; Governor Siegelman, Governor Davis, Governor Ryan, Shaheen, Whitman, and Taft for their assistance and ongoing efforts.

May I suggest that this is an historic moment not because just the 21st Century, just because we're talking about globalization. It was pointed out to me that in 1789 the United States Senate met for the first time in New York and they've been meeting ever since.

In 1908 the Governors, collectively, met together for the first time with the President of the United States, Teddy Roosevelt, and we as a group have been meeting routinely with the President ever since.

But in the 224-year history of this Country, the Governors and the United States Senate, two bodies that have a Constitutional responsibility to look after the interests of States, have never gathered together.

That will change on Tuesday. We will go en mass to Capital Hill, and at the Capitol of the United States, the Governors of this Country and the United States Senate will convene for a discussion on how we can strengthen the American State in a new
It will be an historic meeting. I greet you all and welcome to you to this, the first meeting of the new Century of NGA.

Now it is my privilege today to open our meeting by introducing our first speaker. A couple of months, or it's been about six months ago, at the suggestion of a friend I picked up a book called THE LEXUS AND THE OLIVE TREE by Thomas Friedman, who is a columnist, a foreign policy columnist, interestingly enough, of The New York Times.

I have to say this book had a profound impact on me. In fact, a couple of months after I read the book I took my entire cabinet on a retreat. We go out for, as many of you do, what we call a Capitol for the Day. We loaded the entire government up on a bus and we headed out for parts away from the capitol with each member of my cabinet armed with that book, and a lengthy discussion about the global economy as defined by Thomas Friedman.

I today look forward to you becoming exposed, if you have not, to this great work and definition of the environment in which we operate.

One quote from the book I particularly like is that "Once technology has enabled change, but now it's
Mr. Friedman has worked for The Times since 1981. He served in Beirut and then as the Bureau Chief in Israel.

In both 1983 and 1988 he won the Pulitzer Prize for International Reporting In The Middle East. In 1989 he published FROM BEIRUT TO JERUSALEM, an international bestseller. And he has won several other very prestigious awards.

Since 1989 he has served in a number of capacities with The Times, including the newspaper's post as the Chief Diplomatic Correspondent, Chief White House Correspondent, International Economic Correspondent, and currently the Foreign Affairs Columnist.

I think you will find that he is a very interesting speaker. And when he has concluded, we will have some questions and answers. So I would invite you to begin collecting your thoughts as we proceed.

Mr. Friedman, thank you for joining us. We look forward to your remarks.

(Applause.)

CHAIRMAN LEAVITT: Could we have those of you who are just entering the room please find a place, and then we would like to close the doors, if possible, so as to give Mr. Friedman our fullest attention.
PRESENTATION OF
THOMAS L. FRIEDMAN

THOMAS FRIEDMAN: Thank you very much, Governor Leavitt. It is a treat and an honor to be here today.

I know some of you have read LEXUS AND THE OLIVE TREE. Those of you who haven't, I know who you are.

(Laughter.)

THOMAS FRIEDMAN: I know exactly who you are, and we're going to have a little talk later.

I'm going to take the next 25 minutes or so to talk about the general thesis of the book, and then I hope we can open it up for some questions.

I always begin my talk about THE LEXUS AND THE OLIVE TREE by talking about my job as the Foreign Affairs Columnist for The New York Times. I have the best job in the world. I mean, somebody has to have it. I've got it, and you don't.

(Laughter.)

THOMAS FRIEDMAN: I get to be a tourist with an attitude. I get to go wherever I want, write whatever I want about whatever I want. It is a great, great job.

There is only one downside with my job. I have to have attitudes twice a week. In fact, in my case they have to appear every Tuesday and every Friday in The New York Times.
Now I am actually the fifth Foreign Affairs Columnist in the history of The Times. The first was a woman named Anne O'Hare McCormick who began in the 1930s. As her highly politically incorrect obit in The New York Times says, she got her start accompanying her husband who was an engineer from Dayton, Ohio, on buying trips to Europe.

And she started stringing for The Times, writing for The Times. They liked her stuff and they gave her the first foreign affairs column in The New York Times, actually the first column, and it was called "In Europe." Because as far as The New York Times was concerned in 1937, in Europe was foreign affairs. Actually, the title of the column only changed to Foreign Affairs in 1954 with the start of the Cold War.

Now the super story, the framework for Ann O'Hare McCormick's attitudes was the crumbling of Versailles Europe and World War II. Her three successors had the Cold War as the framework and super story within which they shaped their attitudes. I began this job in January 1995 when it was not clear what is the new super story or framework out there. The Cold War had ended, and we kept speaking about the post-Cold War World.

Well basically THE LEXUS AND THE OLIVE TREE is my answer to what came after. It's an
argument that the statute of limitations on the cliché to what came after. It is an argument that the statute of limitations on the cliché "The Post-Cold War World" has expired.

We are no longer in some messy, incoherent, undefinable post-cold war world. We are in a new international system that has replaced the cold war system, and like the cold war system this new system has its own rules, and logic, and pressures, and incentives that will and do affect everyone's community, state, and business, and this new system is called Globalization.

That's right. Globalization isn't a trend. It's not a fad. It's not a Nintendo Game. It is an international system, and it is the system we are now living in.

Now the best way to sometimes understand the Globalization System is to compare it with the Cold War System. The Cold War System was characterized by one overarching feature: division. Division. The world was a divided place. And in that system, all your threats and opportunities as a country or a company tended to grow out of who you were divided from.
And it was symbolized by a single word: The Wall. The Berlin Wall. The Globalization System is also characterized by one overarching feature: integration.

In this system, all your threats and opportunities now flow from who you are connected to. And it is symbolized by a single word: The Web. The worldwide web.

So we have gone from a world of division and walls to a world of integration and webs.

In the Cold War we reached for the Hot Line, which was a symbol that we were all divided. But thank God at least two people were in charge: The United States and the Soviet Union.

In Globalization, we reach for the Internet, which is a symbol that we are all connected and nobody's in charge.

Oh, that's right.

What's really scary about this system is that we are all increasingly connected and nobody's quite in charge. It is just like a Internet.

Now had the Cold War been a sport, it would have without question been Sumo wrestling. Two big fat guys in a ring. Lots of grunting and ritual stomping around. Not a lot of contact, though, actually until the very end when one fat guy finally manages to push the other fat guy out of the ring.

If Globalization were a sport, it would be
the 100-meter dash over and over and over and over. If you lose by one-tenth of a second, it's like you lost by a week and the only thing that victory assures is that you get to race again the next morning.

The Globalization System was a system built around weight—sorry, the Cold War System was a system built around weight. The Globalization System is a system built around speed.

In the Cold War, the first question we asked is: How big is your missile?
In Globalization, the first question we ask is: How fast is your modem?

In the Cold War, the other thing we wanted to know was: Who are you divided from?
In Globalization, the other thing we want to know is: Who are you connected to?

The Cold War was built around $E = MC^2$.
Globalization is built around Moore's Law that the speed of microchips will double every 18 months and the price will halve.

Now the ideal economist for the Cold War were Marx and Keynes. They wanted to tame capitalism, each one in their own way.

The ideal economist for Globalization are Schumpeter and Andy Grove, the Chairman of Intel. Schumpeter because he believed that capitalism is about creative destruction, the ability and
willingness of your country, or state, or community, or business to shoot its wounded and quickly transfer their dead capital to more efficient producers.

And Andy Grove of Intel, who took his insight from Schumpeter for his book on life in Silicon Valley entitled ONLY THE PARANOID SURVIVE.

(Laughter.)

THOMAS FRIEDMAN: Two very different systems.

Now what truly distinguishes these two systems is how power is structured within them. The Cold War System was a state-based system. What that meant was that you acted on the world stage through your nation state. And the front page of The New York Times was a story of states balancing states, confronting states, and aligning with states. It was a state-based system.

What is unique and different about the globalization system is that it isn't just built on one balance between states and states; it's built on three balances:

The first is the balance between states and states. That still exists. America balancing Russia. Russia balancing China. Japan balancing Korea. The balance of power between states still matters.

But now we have two new balances to factor into our equation.
The first is the balance between states and what I call the "supermarkets." The supermarkets are the 25 largest global stock bond and currency markets in the world which today have become increasingly autonomous, geopolitical actors unmediated and in some ways superior to states.

Who ousted President Suharto in Indonesia? It was not another superpower. It was the supermarkets. The United States can destroy you today by dropping bombs. The supermarkets can destroy you by downgrading your bonds. Take your choice. So now we have states and states, states and supermarkets interacting with one another.

Thirdly, and most uniquely, we now have states and what I like to call "super empowered people."

See, what happens when you blow away all the walls and you start to wire the world into networks, it means that individuals can increasingly act on the world stage unmediated by a state.

Jody Williams won the Nobel Peace Prize two years ago for organizing a global ban on land mines against the wishes of the five permanent members of the U.N. Security Council.

She was asked afterwards, how did you do that? And she had a very brief answer: E-mail. She
basically used e-mail to build a coalition of more
than a thousand NGOs on six continents into a
movement powerful enough to at least trump the wishes
of the five permanent members of the U.N. Security
Council. Jody Williams was a super empowered good
guy, good gal.

Now we also saw last year another example
of this, two years ago. You remember
Time/Warner/CNN, the world's biggest media
conglomerate? Published a story, aired a story on
CNN that American troops used poison gas during the
Vietnam War.

Remarkable story! Stunning story. And as
that story worked its way up the chain at CNN, it hit
the desk of Gen. Perry Smith, a retired general
living off his pension who worked for CNN as a
military consultant.

The story hit his desk and he said, 'that
story is bogus. That story is bogus, and if you run
it, I quit.'

And Time/Warner/CNN, the world's biggest
media conglomerate, said: 'Bye-bye. Bye-bye. We
don't take threats from retired generals around
here.'

Perry Smith went home, got on his, what he
called his e-mail brain trust, 300 colonels, majors,
lieutenants, captains that he'd gotten to know during
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the military.

In the space of I believe roughly a week, through his e-mail brain trust, generals e-mailing colonels, colonels e-mailing majors, majors e-mailing lieutenants, he amassed a dossier so compelling, so convincing that Time/Warner/CNN, the world's biggest media conglomerate, recanted its story, disavowed the reporters, went on its own network, got on its knees, begged for forgiveness to five generals, to five retired generals with e-mail who got super empowered.

Now there aren't only super empowered nice people in this system. A year ago I was in the Middle East and I flew back directly to Chicago from Tel Aviv, got in early in the morning, and was so sort of buzzed out I decided to go for a swim in the hotel pool. I was staying in a big chain hotel.

I went down, put my key in my pocket of my bathing suit, went down swimming, lost my key in the pool. Went back to the front desk.

I said, "Hi, I'm Tom Friedman. I'm in room 1203. I lost my key."

The girl said, "Show me some ID."

(Laughter.)

THOMAS FRIEDMAN: I say I'm in my bathing suit. I'm dripping wet here. I don't have any ID.

She said, "No problem."

She went to her computer, pressed a few
buttons. She said, "What are the ages of your two
daughters?"
I had stayed in the hotel a year earlier.
Well, I gave her their ages. She gave me my key.
But I couldn't help but wonder what else did she have
in that little computer of hers?
(Laughter.)
THOMAS FRIEDMAN: This system super
empowers all kind of people, and the real threat in
the system is not Big Brother, it's Little Brother.
Because so many little brothers from this hotel
you're staying in, to Blockbuster Video, to your
favorite e-commerce web site, to Doubleclick, can
gather information on you in ways that Big Brother
would only have been jealous of ten years ago.
So Little Brother really gets super
empowered.
Now we also have super empowered angry men
and women in this system. Osama Bin Laden, the Saudi
millionaire who bankrolled the blowing up of two
American Embassies in East Africa last year, he was a
super empowered angry man. And he had his own global
network, a kind of jihad on line JOL, which he used
to take on the United States of America.
And you know what we did to Osama Bin
Laden? I have no regrets about this, but you know
what we did to him? We fired 75 cruise missiles at
him. Think about that for a second. We fired 75
cruise missiles at a million dollars apiece at a
person. That was a super power against a super
empowered angry man.

Ramzi Yousef, you remember him, he was the
gentleman who tried to blow up the two tallest
buildings in America five years ago, the World Trade
Center in New York City. I always wondered, what did
Ramzi Yousef want? Did he want a Palestinian State
in Brooklyn? Did he want an Islamic Republic in New
Jersey? What did he want?

So for my book I went back to the court
case and read what he wanted. And what he wanted was
to blow up the two tallest buildings in America.

(Laughter.)

THOMAS FRIEDMAN: Period. Paragraph.
End. Globalization as Americanization had gotten in
his face and it had empowered him as an individual to
do something about it.

And the only reason we got Ramzi Yousef,
the only reason, was because remarkably one of his
co-conspirators went back to the Ryder Rental Truck
Agency and asked for the $400 deposit back on the
truck they used to blow up the World Trade Center.
which itself is a wonderful story:

In the morning you blow up the World Trade
Center on the basis of your rage with America, and in
the afternoon you try to use American contract law to
get your deposit back.

(Laughter.)

THOMAS FRIEDMAN: Now that tipped off the FBI to Ramzi Yousef. They tracked him to an apartment in the Philippines. They broke in, and they found all of his plots exactly where he kept them, on the C drive of his Toshiba Laptop.

Ramzi Yousef was a super empowered angry man. And what makes this system so complex to both understand and to manage is the fact that today we have states and states, states and supermarkets, and states and super empowered individuals all interacting with one another.

Now if my girls were here, the next question they would ask is: Daddy, where did globalization come from?

Another way of asking that question is: what blew away all the walls? Where did they go?

Well the argument I make in LEXUS is that what blew away all the walls were three simultaneous, I call them democratizations that were born in the Cold War System, gathered strength in that system,

and finally converged at the end of the 1980s into a whirlwind that blew away all the walls.

Let me go through them quickly. The first
was the democratization of finance. I don't have to
tell the people around this table that there is
probably nothing more anti-democratic in America in
the 1950s than bank lending.

You wanted to get financed by bank lending
to start a business, you needed to know somebody.
You needed to have an in at the bank. Well thanks to
the creation of a home mortgage security market, a
commercial paper market, Michael Milken's junk bond
market, right up to last year David Bowie the rock
star issued $55 million in David Bowie Bonds.

(Laughter.)

THOMAS FRIEDMAN: Yes, you too now can be
rated AAA.

Finance and pension investing has
increasingly been democratized in this country. I
dare say my dad probably had no idea where his
pension resided.

We, so many of us now, can move ours
around from Magellan Small Cap to Fidelity Large Cap
to Janus Overseas three times a week on the basis of
who is performing the best.

If you want to see a great example of the
democratization of finance, notice the E-Trade
commercial that they've been running recently. It's
a great commercial.

It shows this guy driving in his
convertible with his golf clubs sticking out the
backseat, and a motorcycle cop pulls him over and says:

    Let's see your ID.
    The guy shows him his ID.
    He says, Jerry Jones? You're the manager of my Midcap Mutual Fund.
    The guy says, as a matter of fact I am.
    He says, you were in the Top Ten Mutual Fund Managers last year.
    The guy says, as a matter of fact, I was.
    The copy says, but you weren't in the top five.
    (Laughter.)

THOMAS FRIEDMAN: So let's get back to work.

And the last scene in the commercial is the cop carrying away his golf clubs.

(Laughter.)

THOMAS FRIEDMAN: And what that commercial is telling you, though, is that even the cop on the beat today is invested in the market and is tracking the performance of his money manager: democratization of finance.

The second democratization is the democratization of technology. Thanks to home computers, the computer chip, and the phenomenon known as digitization, the alchemy by which we take words, and music, and data and turn them into 1s and
Os and transmit them over modems and they come out the other end as perfect copies of those words, music, and data.

Thanks to digitization and the PC, technology has increasingly been democratized.

The third democratization is the democratization of information. Thanks to satellites, cellphones, and fiber optics, we all increasingly know how each other lives.

The days when the Soviet Newspaper Pravda could run a picture of Americans waiting outside of Zabar's Delicatessen at 7:00 a.m. on a Saturday morning for the deli to open under the headline, "Look, bread lines in America, too!"

(Laughter.)

THOMAS FRIEDMAN: Those days are over, folks. Don't try that trick at home, kids. Not in this system.

I had a fascinating illustration of this a couple of months ago. I was in Sri Lanka for an AID Conference, and on the panel with me was the former President of Costa Rica, Jos Maria Figueres, and he gave the most incredible Power Point presentation to a group of 500 Indian, Pakistani, Bangladeshi, Bhutanese, and Nepalese business people in Southeast Asia.

It was just incredibly impressive about how he had gotten Intel to come to Costa Rica, and
Well afterwards, three out of I think the first four questioners got up and said: Would you run for president in my country?

One guy stood up and said: I will pay your salary if you will run for president in my country.

What that is about, what that is about is about the most under-estimated fact in international relations today: What happens when we all start to know how each other lives. Because when we all start to know how each other lives, we all start to demand the same things.

Ask the Iranian Mullahs this morning about what the democratization of information means for their recent election.

Now these three democratizations of information, technology, and finance basically converged at the end of the 1980s into what we now call the Information Revolution and blew away all the walls, or increasingly blew away the walls.

When they did, several things happened. They created a whole new place to do business called Cyberspace, and they created a whole new set of efficiencies in the marketplace and economies of
scale.

If your company, your country, your state government, your local government, your university understood these three democratizations of information, finance, and technology, absorbed them and applied them to your way of life or business, you thrived in the new era without walls.

If you didn't, the Berlin Wall fell on you.

Oh, that's right. The fall of the Berlin Wall was not a European event, not even close. It was a global event. Any fat, bloated, sclerotic, overweight country or company, or state government or local government, that didn't absorb these three democratizations had the Berlin Wall fall on it, which is why it is no accident that the Soviet Union, General Motors, East Germany, and IBM all basically tanked at the same time.

They all basically got hit with the same historical forces. Some like IBM and GM adjusted.

Others like East Germany and the Soviet Union couldn't, and the Berlin Wall fell on them.

Now when the walls fell, the guts of this new system we are in today got created. There are four key parts, and I will go through them quickly.

The first is what happens when the walls fall and the barriers to entry around everyone's state, or everyone's company start to shrink, be
reduced, or in some cases collapse.

Now when the walls fall, what that means in simple economic terms is that the speed at which you start to move from innovation to commoditization, the speed at which you move from having a high value-added product or service protected by high barriers to entry, to having that turned into a commodity that anyone can make and the only differentiation is price, the speed at which you move from innovation to commoditization goes from 10 miles an hour in a world of walls to 110 miles an hour in a world without walls.

And fasten your seatbelts and put your seatbacks and tray tables into a fixed upright position because with the Internet that's going to go to 210 miles an hour very quickly, and all you have to watch is how companies are created and destroyed on the Internet with that speed to understand where we're going.

Do you all know how Compaq Computer really, really took off? It was back in the mid-1980s. Intel came out with something called the 386 Chip which was faster than the 286 Chip.

They came to their biggest customer, IBM, Big Blue, lived in a world of walls. Nobody can threaten us.

They said, "We've got the 386 Chip. Run with it."
IBM said, "You know, we just came out with the AT."

Remember the IBM AT? It stood for Advanced Technology. They thought you buy an AT you won't have to get a new computer for five years. We were saving the 386 for our new system, the PS/2, so we'll take a pass on the 386 right now.

A little company down in Houston called Compaq, spelled their name funny, had a "q" on the end, said, "We'll take that 386 chip."

And in 24 months they ate IBM's lunch in the PC business. They caught IBM with its walls down. The walls were down and the paradigm had shifted.

Now the best way I can illustrate this phenomena to you, what happens when the walls fall and we all start to enter each other's business, is an ad I came across in an airline magazine a couple of years ago for the Sony Mavica Camera. I love this ad. It has three pictures in it.

The first is of the Sony Mavica Camera. I saw that and I saw that and I said "Sony Mavica Camera?" I didn't know Sony made cameras. I thought they made stereos and walkmen and CDs.

Well it's an interesting ad. As I said, it has three pictures. The first is of the Sony Mavica Camera. Under it, it says "This is your camera."
Next to it is a 3.5 floppy disk. Under it it says, "This is your film."

Next to that is a computer with a baby picture. Under it it says, "This is your post office."

Now what is that ad telling us? The first thing it's telling us is someone back at Sony Headquarters in Tokyo woke up one morning and said: What are we? I mean, what are we? We're just a big factory for digitizing stuff. But the truth is, although we've been digitizing music all these years, we can actually digitize anything. We can digitize your baby pictures. We can be Kodak.

So Sony woke up one morning and decided to be Sony and to be Kodak.

Then somebody down in shipping and receiving said: You know, while we're being Sony and Kodak, why don't we also transmit those pictures around the world from your kids in Auckland to Alabama, why don't we also be Federal Express?

That ad says: We are now Sony, we are now Kodak, and by the way we'll also be a little Federal Express.

I saw that ad and I thought, wow, what do
the people at Kodak think about this? So I'm driving
in my car one day, I'm listening to my radio and I
hear this ad for Kodak. They're advertising all
their computer Internet online services. They're
talking like a PC company.

So for the book I go down to Houston to
interview the people at Compaq Computer and I'm
wondering while I'm down there, you know, how did
they fell about Kodak becoming like a PC company?

Well at Compaq they're not worried about
Kodak, they say we're like a big consulting company
now at Compaq. We do business solutions. Yeah, look
at our ads. We barely show pictures of the computers
anymore. They just say: Compaq. Better answers.

Oh, you do business solutions.

So a couple of weeks later I'm out with a
friend of mine who works for Price-Waterhouse-
Coopers, the business solutions people. I ask him
how he feels about Compaq going into the business
solutions business. He says: We're not worried
about Compaq, but we're terrified of Goldman Sachs
because they're now offering tax solutions in
derivatives.

He suggests I read a book about it. I go
home, tell my wife I'm going to Borders Books. She
says: Don't go to Borders. Go to Borderless Books
at Amazon.com.

So I go downstairs, I call up Amazon.com.
What's the first thing I see but they're now selling CDs. I say: Wait a minute. Wasn't that Sony's business?

(Laughter.)

THOMAS FRIEDMAN: When the walls fall, we are all in each other's business.

I told this story actually to the booksellers Farrar, Strauss & Giroux, my publisher.

A guy raised his hand, Mark Gates, Chief Farrar, Strauss bookseller in the Midwest. He says: Mr. Friedman, I've got to tell you a story.

I was just in Brooks Brothers Department Store looking to buy a men's suit in the Men's Suit Department. What did I see? They're selling copies of Michael Jordan's new book on a stack of men's suits for 30 percent off.

I go up to the head of the Men's Suit Department. I say: How would you like it if I sold men's suits in my book stores?

(Laughter.)

THOMAS FRIEDMAN: He said: Have you looked at your Con Edison Electric Bill lately? Con Edison is offering the Jordan book for 40 percent off for Christmas and you can now charge it on your electric bill.

(Laughter.)

THOMAS FRIEDMAN: When the walls fall, we are all in each other's business.
There is a wonderful headline in The New York Times business section a couple of weeks ago about AT&T. It said: AT&T, Ma Everything.

(Laughter.)

THOMAS FRIEDMAN: Ma Everything. And everyone today is becoming Ma Everything, and that really drives that move from innovation to commodatization.

I was at the Davless World Economic Forum a couple of years ago and there was a press breakfast with Bill Gates, and all the reporters there were asking him:

Mr. Gates, these Internet stocks, they're a bubble, aren't they? I mean, come on. They're a bubble, right? I mean surely they're a bubble.

Finally he said: Look, you bozos, of course they're a bubble. Anyone who knows anything about technology knows that you can't predict the present value of future earnings ten years out in the technology business. I don't know if Microsoft is going to be here in four years. You're telling me Amazon.com does?

But, says Mr. Gates, you're all missing the point. Because this bubble is going to drive innovation faster and faster.

Ooooh. Same day, by coincidence in the afternoon I went to interview Hosni Mubarak of Egypt. Afterwards I was sitting around with some Egyptian
businessmen friends talking about what their President had to say, and one of them was my friend Emad. He runs kind of the Egyptian Businessweek.

He said: Mr. Tom, we understand now.

We've got to get on this globalization train. But could you slow it down a little bit for us?

(Laughter.)

THOMAS FRIEDMAN: I said: Emad, I'd love to slow it down but there's nobody driving.

(Laughter.)

THOMAS FRIEDMAN: You find me the person driving, and I will slow it down. 90 percent of this is about technology. And everyone is always looking for somebody to call, somebody to slow it down. 911 slow down globalization. 1-800-give-me-a-break.

I always like to tell people--and don't let this out of this room--

(Laughter.)

THOMAS FRIEDMAN: --I was in Secretary of the Treasury Robert Rubin once and he doesn't have a phone on his desk because he knew better than anybody there's nobody to call.

(Laughter.)

THOMAS FRIEDMAN: There's nobody to call.

Oh, you can waste a lot of time in this system looking for somebody to call.
THOMAS FRIEDMAN: We had a receptionist at 
the Washington Bureau of The New York Times a few 
years ago. She lost her job one day all of a sudden. 
She didn't lose it to a Mexican. She lost it to a 
microchip.

We got voice mail. She lost her job. 
Now we can get her her job back. It's 
very simple. We just break apart that phone and take 
the microchip out. But the real truth is, she was 
going to lose her job if we had zero trade with 
Mexico.

She was going to love her job if we had a 
50-foot high wall from San Diego to the Florida Keys. 
This is 90 percent about technology. 
So that is the first part of this system: 
what happens when the walls fall. Let me go quickly 
through the other three parts. 
The second part is a new political garment 
that everyone has to put on, every country who joins 
the Globalization System, and I dare say every 
Governor.

I call this new garment of the 
Globalization Era the Golden Straitjacket. The 
Golden Straitjacket. And I think I see 51 versions 
of it right around this table. 
The Golden Straitjacket embodies all the
rules of the Golden Straitjacket System, rules about
deficit to GDP ratios, inflation, deregulation,
privatization. When your country puts on the Golden
Straitjacket to join the Golden Straitjacket System,
two things happen:

One is your economy tends to grow from
more privatization, deregulation, foreign trade, and
investment, your economy grows and your politics
shrink. Your economy grows, and your political
choices narrow to Pepsi or Coke. To mere nuances of
taste that are tolerated in the Golden Straitjacket.
All one has to do is look at the national campaigns
in this country and in so many others to see what's
happened on economic issues to the differences
between ruling and opposition parties.

Margaret Thatcher was the original
seamstress of the Golden Straitjacket with buttons
and tailoring provided by Ronald Reagan. Before this
is over, this period is over, Margaret Thatcher will
go down I believe as one of the, for better or for
worse, truly revolutionary figures of the last
Century for having put in place this Golden
Straitjacket.

The third part of this new system is a new
energy source. I call that energy source the
Electronic Herd. The Electronic Herd are all those
investors out there from John and Joan at Home
Trading Online to the big multinational banks and
Oh, this Herd existed in the Cold War, but that world was so chopped up and divided that Herd could never gather and graze and grow and gain strength. But today with the walls blown away, that Herd, the Electronic Herd of investors, is the energy source of this new system with governments increasingly running balanced budgets in the Golden Straitjacket.

If you want to build a dam, you want to attract a new factory, you have got to attract the Electronic Herd. And I dare say that must be something a lot of you spend time doing, saying to the Electronic Herd, come hither. Come hither.

Governors today, to me, are really the rulers of the hour on the world stage. Because really what the job involves as a Governor is so much what it means to be a leader. Yeah, the Governor gets to call up the National Guard every once in awhile, and the President gets to send troops somewhere every once in awhile, but most of the time today is spent managing the relationship between my state and the Herd.

The Herd is like a high-voltage wire. Plug into it right, it'll light up your state. Plug into it wrong and it'll burn a hole through your environment and your financial system faster than anything we've ever seen in the history of the world.
And that leads to the fourth part of this system:
How do I manage my relationship between my State and the Herd? That is really what politics is about now in so many ways.

Now I like to compare countries to computers. It is as though for the first time in the history of the world we all have the same basic computer. We all have the same basic piece of hardware. The same box. Free markets.
China's got 'em and Russia's got 'em. Now Brazil's got 'em and Mexico's got 'em. We've got 'em and Thailand's got 'em.

We all have the same basic computer. The question is, in my opinion, who will get the operating system and the software to go with that computer so when you plug your economy into the Herd you get the most out of it and you cushion the worst.
"Operating system" in my lexicon is all the economic rules of Globalization, of the Golden Straitjacket, and "software" is the rule of law, courts, oversight, regulatory institutions, and ultimately democracy.
Now Russia to me was like a computer at the end of the Cold war that plugged into the Electronic Herd with no operating system and no software inside. Someone just came along and said,
Hey, this looks easy. They plugged in, and when the Herd surged as it inevitably does it melted down whatever mess of wires was in that Russian computer. Thailand, Malaysia, Korea, Indonesia, they plugged into the Herd but with a very slow operating system, one that I call Dos Capetal 1.0.

(Laughter.)

THOMAS FRIEDMAN: Now Dos Capetal 1.0 is great for getting your country from $500 per capita income to $5000, but when the Herd moves from a 286 Chip to a Pentium III and you're still running Dos Capetal 1.0, a/k/a crony capitalism, what happens to you is what happens if you go home and run Windows 2000 on your kid's old 286 computer. A little sign pops up and says you have misallocated all your resources, cannot move capital, please download new operating system and software.

And that is what these countries are trying to do today to upgrade from Dos Capetal 1.0 to 6.0.

Let me conclude with two points.

One is, do not confuse my enthusiasm for describing a system as I see it and trying to understand its logic for any approval or disapproval, for that matter, of it. It is here. I didn't start
it. I can't stop it, in my view, except at a huge
cost to all of us.

The question of the day is: How do I get
the most out of it and cushion the worst?

Secondly, it is reversible, this system.

There are things that can blow all of this up. The
penultimate chapter in my book is about that. It is
called "If You'd Like To Speak To A Human Being,
Press 1."

(Laughter.)

THOMAS FRIEDMAN: It is really about what
are the threats to this system.

Let me quickly share two of them with you.
The first is what I call "just too darn hard." It
may be that this system is just too darn hard for too
many people, that we are not up for running the 100
meter dash every morning.

Now what we've seen in the Globalization
System is that the first ten years, '89 to '99 from
the fall of the Berlin Wall to last year, was the
story of what happens if it's too hard basically for
small countries, for Liberia, Algeria, Yugoslavia,
that implode under the pressures of this system,
among other reasons.

What happens is that the system builds an
iron curtain around them and drives around them like
they were a bad neighborhood.

We are now entering the second decade of
the Globalization System. It is going to be about what happens if it is too hard for big countries called China, Russia, and Japan.

I grew up in an age where the biggest threats to America were the military strength of Russia and China and the economic strength of Japan. My girls, age 11 and 14, will grow up in a world for the next 10 years I believe where the biggest threats to us are going to be the weakness of China, the weakness of Russia, and the weakness of Japan as they go through the wrenching adjustment to getting up to speed and the institutions for this new system.

In case you haven't noticed, what the Clinton foreign policy has really been about for the last eight years has actually been managing the weakness of Russia, the weakness of China, and the weakness of Japan, not their strength. The whole dilemma, the whole issue has been inverted.

I think another threat to this system is what I call the real Y2K virus. That is the virus of overconnectedness.

That is the real Y2K virus.

Now this is a developing country issue right now, but it will spread. Because what comes after the Internet, the age we are just about to enter, is the age of the Evernet.

The Evernet is you will be online or
connected if you want to be, and maybe if you don't want to be, all the time everywhere you go. Through your watch. Through your toaster. Anything with electronics in it today is being given software and wired. There will be 100 million toasters online in the year 2010.

(Laughter.)

THOMAS FRIEDMAN: Now I greet this with great ambivalence. You know there was a story I came across on the wires a few weeks ago, a few months ago, I'm sorry, from Israel. It was about an Israeli man driving through Natanya, north of Tel Aviv. He was arrested because he was driving with a cellphone in both ears steering his car with his elbows.

(Laughter.)

THOMAS FRIEDMAN: Oh, he's my poster boy.

(Laughter.)

THOMAS FRIEDMAN: He is my poster boy for overconnectedness. I don't know about you all. I can imagine it must be doubly true with you, but somebody calls my office.

They say, is Mr. Friedman there?

My secretary says, no, he's out.

They say, well connect me to his cellphone or his pager.

You're never out anymore. Out is over.

(Laughter.)

THOMAS FRIEDMAN: Okay? Out is over. All
right? You are always in. And when you're always in, you're always on. And when you're always on, what are you like? What is the only other thing I know of that's always on? A computer server.

Well, no, thank you. And how we manage overconnectedness I think is going to be a real issue in our personal lives.

Let me just close by saying the following: we are just at the beginning of this System. If this were the Cold War System, we are now in 1946. Churchill just gave his Iron Curtain speech.

We understand as much about how this System is actually going to play out as we understood about how the Cold War was going to play out in 1946. Think of the period of rapid change we have just gone through when Bill Clinton was elected, sworn in President, there were 50 pages on the Worldwide Web. Today there are over 1 billion.

In 1992, most people had never heard of the either the Internet or e-mail. Today, they are considered almost an entitlement.

We are going to enter a period of change that I believe is going to be more radical than any period in American history since 1776-1789. And the trick is going to be how you keep your Lexus and your...
Olive Tree in balance.

How do we keep the issues and the demands of development, streamlining, downsizing, plugging in in balance with the needs of community, family, neighborhood, society?

And the game is going to be: How do we get the best out of this system and cushion the worst? Which is why I end that chapter with a cartoon from The New Yorker.

It's two Hells Angels on motorcycles.

One says to the other: Say, how was your day?

And the other says: Well, advancing issues led declines.

(Laughter.)

THOMAS FRIEDMAN: That's sort of how I feel about this system. If we can just keep advancing issues leading declines for more people in more communities, in more countries, on more days, we will be doing God's work. And is America's mission.

Thank you, very much.

(Applause.)

CHAIRMAN LEAVITT: We now have a moment that we can direct questions to Mr. Friedman. I will, while you gather your thoughts, offer one: Last spring I found myself visiting three South American countries, Argentina, Chile, and Brazil.
I was met with fascinating economic conditions as I saw political leaders devaluing currencies, raising interest rates in the face of high unemployment, and they were all running for election.

I'm thinking to myself, these are the most courageous politicians in the world. It occurs to me finally that that's not courage. They're putting on the Golden Straitjacket.

I would be interested to have you enumerate what you believe our version of the Golden Straitjacket is with respect to our states. What will the newest model be? And what will we be required to do in order to make it fit?

CARLY FIORINA: Is that all?

THOMAS FRIEDMAN: Somebody here said, Is that all?

(Laughter.)

THOMAS FRIEDMAN: Well let me try to frame Governor Leavitt's question in a framework I try to use in the book.

I believe that the labels Democrat and Republican are utterly irrelevant in this new era because they simply don't capture any more the political issues of the day. So let me begin by trying to give you a new way of thinking about what labels we should have.

I like to begin, if I had a graph here I
would draw a line first of all from East to West, just a straight line across. This is the globalization line. It is going to be at the center of our lives.

The first thing you have to do is locate yourself on this line from East to West. At this far end over here are the Integrationists. They believe in globalization, free trade, deregulation, a web site in every pot. Beam me up Scotty. We want globalization now. So at this far extreme are the Integrationists.

At the other end of the line are the separatists. They believe globalization is a fundamental threat and they want to cut it off and kill it now. A threat to culture, or environment, or finance, or their jobs.

Now once you've located yourself on that line between Integrationist and Separatist, then draw a line North-South right through it. That line is the Distribution axis. That's what you think should go with globalization.

At the southern end of that line are the Social Safety Netters. They think the more you globalize the more you actually have to improve, upgrade, and perform your social safety nets to bring the havenots, knownots, and leftbehinds into the system.

At the northern end are the Let-Them-Eat-
Cakers. They think the more you globalization the more it is winner-take-all/loser take care of yourself.

Now you can locate--and I don't mean to offend anyone here--everyone in American politics in my grid here. Bill Clinton was an Integrationist/Social Safety Netter.

Newt Gingrich was an Integrationist/Let-Them-Eat-Caker. Which is why Clinton and Gingrich were on the same side supporting NAFTA but on opposite sides of the Social Security debate.

Ross Perot was a Separatist/Let-Them-Eat-Caker and Dick Gephardt was a Separatist/Social Safety Netter, which is why is why Gephardt and Perot were in the same trench opposing NAFTA but on opposite sides of the Social Security/Welfare debate.

So I invite you all to put yourself in this grid and find out who your friends and enemies are in what is truly going to be the next debate.

Now what is the point of that grid? The real point, in my view, is that people talk about the third way, you know, the third way, which is sort of--I am an Integrationist/Social
Safety Netter. I believe you dare not be a
globalizer in this system, an Integrationist, an
advocate of free trade without also being a Safety
Netter. Without being a social democrat. Without
being ready to do what it takes to bring the
have-nots/know-nots/left-behinds into this system.

But you dare not be a Social Safety Netter
today without also being a globalizer, because
without that you will not have the income, the
knowledge that you need to drive revenues to have
something to redistribute.

And what American politics is about today
in my view is where the equilibrium point should be
between Integrationism and Social Safety Nettism.

The Welfare Reform Act of a couple of
years ago was the first salvo in moving that
equilibrium point, adjusting it from left to right.
Health care, all these other issues to me are all
going to be part of finding that balance.

And that to me is, however one defines it
in your local idiom, really what I think the
challenge is.

Now it's interesting. I was talking to
Governor Engler before we started and I was telling
him about the book tour for LEXUS AND THE OLIVE TREE
and I told him, it was very interesting to me. I got
to travel around America, which I don't get to do a
lot.
The two most oft-asked questions I got on the book from Americans were the following:

The first was: What do I do with my kids?

Holy mackerel. If we're moving from the slow world to the fast world, what do I do with my kids?

And the other question came from a man, a venture capitalist in Silicon Valley called me one day saying I want to get a bunch of your books to give away here. I'm sending a driver around to different book stores in Washington. He's going to come to your house with a pile of books. I want you to sign them. He's going to take them to the airport.

Only a venture capitalist in Silicon Valley could do this.

And so this man came to my door with boxes of books. I invited him into the kitchen--a big African American guy, put his books all over the kitchen. He sat down, and I invited him, he picked up a book and he started leafing through it.

And he said, "The Lexus? That's like computers and technology, right?"

And I said, "Yeah, you've got it."

He said, "The olive tree, that's like family and community, right?"

I said, "You've got it."

He said, "I just have one question. Where does God fit in? I've been in the presence of our
I just want to know, where does God fit in?"

I've gotten that question "Is God in Cyberspace?" more times on my book tour than you would ever imagine. It's really a values question.

My short answer to him, and on that question is: God is not in Cyberspace. He is not in Cyberspace. But He wants to be there. He wants to be there, and He will only be there by how we behave there.

Oh, it's such a wonderful place for God because you know you're totally free in Cyberspace. And you will only bring Him there by how you behave there.

But on the first question, what do I do with my kids? We face this in my own house. I have two daughters, 11 and 14. My wife teaches 5th grade in the Montgomery County Public School System. So we think about this a lot.

My short answer is the following: We are moving into a world where the Internet is going to be at the center of how we do business, of how we educate, and how we communicate.

Anyone who thinks the Internet is overrated is exactly wrong. It is still underrated. It is going to be at the center of our lives. But there is one thing about the Internet that is very different from The New York Times. It is a naked
technology. There is no editor there. There is no
publisher. There is no censor.
You interact with it totally naked. That
means at the center of our kids' lives is going to be

a technology that they are going to interact with, as
well as all other citizens, totally naked.

THOMAS FRIEDMAN: It took me at least an
hour to find trouble from where I grew up in
Minnesota.

Now I grew up in a small town, a small
suburb outside of Minneapolis. I think I am safe in
saying it took me at least an hour to find trouble
from my house.

On the Internet, it is all one click away.
You are all just one click away from a Neonatzi
Beerhall, a pedophiles living room, the Sorbonne
Library, or the State of Vermont's Web Site. They
are all the same distance.

What that means is that if we aren't
building the internal software into your kids so they
can interact with this technology on their own in a
responsible way, we've got a problem.

We saw that with the hacker business last
week. And that is why, in my view, the paradox of
the Internet is the more whiz bang the technology
gets, the faster the modems become, the more we need
to emphasize fundamentals: reading, writing,
arithmetic, church, synagogue, temple, and mosque.
It is all about fundamentals.
Because if you don't build those
fundamentals into the internal software, your kids,
ain't nobody else going to do it. And those
fundamentals you cannot download. You can only
upload the old fashioned way, under the olive tree.
If I had one fervent wish, it would be
that the Attorney General would have to affix a
label, a warning on every modem sold in this country,
and it would say:
Judgment Not Included.
Judgment Not Included.
Oh, computers will make you maybe smarter,
but they won't make you smart. They can enable you
to reach out, but they won't tell you what to say at
a PTA meeting. That, you only get the old-fashioned
way: Under the olive tree.
CHAIRMAN LEAVITT: Mr. Friedman, thank
you.

(Appause.)

CHAIRMAN LEAVITT: I feel a sense of
confidence that there are many who would like to ask
questions, however we have a need for us to keep our
time on schedule so I am going to reorganize this a
Can you stay with us for a few minutes?

THOMAS FRIEDMAN: Sure. Absolutely.

CHAIRMAN LEAVITT: We are going to move now to our next speaker.

Governor Davis is going to offer an introduction. As he comes forward, may I say that one of the things that occurs to me as I listen to Mr. Friedman speak is, I would like to give all of you as a gift from me a copy of Mr. Friedman's book.

So tonight I am going to go to the Internet and I am going to have delivered to each of you, without his signature--

(Laughter.)

CHAIRMAN LEAVITT: --because only a Silicon Valley executive can get off with that (Laughter.)

CHAIRMAN LEAVITT: --a copy of this book, and it will be delivered to your office or home.

Now I know what all of you are worried about, and that's the sales tax. Don't worry, I'll take care of it.

(Laughter and applause.)

GOVERNOR DAVIS: Thank you, Governor.

It is my pleasure to precede two very prominent Californians. They may not be as entertaining or as illuminating as Mr. Friedman--very few of us can aspire to that--but they are
reinventing your future every day.

Specifically, Carly Fiorina is the CEO of Hewlett Packard. She has had that job since July of 1999. Eric Schmidt is the CEO of Novell. He will be introduced by the Chairman.

We are all very proud in California to be the home of the dot com economy and the birthplace of the Internet and we are proud that at present we are home to more high-tech, biotech, multimedia, and e-commerce industries than any place on the planet.

But we know this is a race for good ideas, and the obligation I have, that every Governor at this table has, is to give every child in K-12, and every student at college and university, the skills to reach his or her potential. Because their challenge is to develop new ideas, provide breakthrough research to keep this country productive, and to provide opportunities and growth for everyone.

In that regard, I am pleased that in my budget I propose $300 million over the next four years for three centers of science and innovation at our nine UC campuses.

All nine campuses will compete for that. They will select the technology they want chosen for the three. That, I am convinced, will help new medical breakthroughs and advance new commercial applications.
Carly Fiorina became the CEO of Hewlett Packard in July of 1999. Before that she spent 20 years at AT, AT, AT&T--I don't know why I can't say that--AT&T and Lucent. Before that she was educated at Stanford where she got her Bachelor's Degree. She got her Masters in Business Administration at Maryland, and her Masters in Science at MIT.

She is an extraordinary distinguished CEO and I am very proud to say that we both graduated from Stanford, as did two of her illustrious predecessors, Bill Hewlett and David Packard, however that was not enough to help the Stanford Cardinal against the Wisconsin Badger, and so I've had to deliver 86 pounds of what we consider the finest cheese in America to Governor Thompson, and he is going to present me with some of Wisconsin's very fine cheese.

(Laughter.)

GOVERNOR DAVIS: With that, I am honored to bring to the microphone Carly Fiorina.

(Applause.)

CARLY FIORINA: Good morning. It is a great pleasure to be here with you this morning. I will start by saying that I agree with Mr. Friedman that we are just at the beginning. The analogy I guess I would use is: We are at the
beginning of an era now where the term 'Cyberspace' has the opportunity to disappear.

Cyberspace to me is a term that implies distance, something that's alien, something that's cold, something that's threatening, something that is hard to adapt to.

I think we now have the opportunity with where technology is going for the Internet, for the information utility, to become something that is personal, that is warm, that is friendly, that is intimate, that works for you instead of you working for it.

Now there are of course many threats to a technology that is that pervasive, that is that ubiquitous, but there are also great promises in that technology. I would like to talk about what I think 'convergence' now means and the promise of this warm, friendly, personal, intimate personalizable information utility.

Today I believe there are three vectors of technology that are coming together, and to understand the full promise of technology you really
services. What we mean by an e-service is we are now entering a time where any asset, any process, can be turned into a service that is available via the Net. Any asset. Any process.

And these services, these assets, these processes that can be made available over the World Wide Web can be dynamically created, dynamically brokered, dynamically located to create a community that works for you.

Imagine e-traffic services. I mean let's pick a really mundane example but the one that's on our mind in California a lot. Let's imagine an e-traffic service that is tuned to your personal commute each and every day. It is technologically possible now, and in fact many of these services are beginning to emerge, or an e-travel service.

So the first vector of technology that we believe is converging now are these e-services. Any asset, any process can be turned into a service over the Web and those services can be dynamically brokered, dynamically created, dynamically located.

The second vector of technology is around appliances. And of course the PC is the most obvious information appliance but it is certainly not the only information appliance.

The cellphone has become an information appliance, not just a communication device. The huge convergence that's going on now is between wireless
capability and Internet capability, and cellphones are becoming Internet-enabled devices.
And, yes, fortunately or unfortunately, depending upon your point of view, it is true that toasters will become connected to the Web. Why? Because technology now is so small that intelligence, both computing and storage capability, can be embedded in anything and everything.

We happen to have a lab in HP. We happen to have an environment in that lab called Cool Town. What we are doing in that environment is connecting absolutely everything with its own web page to absolutely everything else: every person, every place, every context, every device.

To give you an example of what is possible here, we are—we're not the only ones, but we believe we are ahead in this regard—we at HP labs are now working on molecular computing and atomic storage. That is, computing and storage that is literally atoms wide and molecules thick.

So you could have, for example, computing or storage capability in your medicine, perhaps a more uplifting analogy than a microchip in your toaster.

(Laughter.)

CARLY FIORINA: So e-services combined with appliances, information appliances that can be almost anything.
And then finally the third vector of technology that's coming together is an infrastructure that can support billions of these appliances and trillions and trillions of transactions. That is why we now call it, along with many others, an 'information utility.'

The term 'utility' suggests something that is as ubiquitous as electricity or water, and frankly as invisible as electricity or water.

Today, let's face it, the World Wide Web is everywhere, but it doesn't work well everywhere. And electricity and water, at least in this country, are so reliable, so secure that we don't think about them until we turn them on and use them. We pay for what we need, and then we turn them off. That is the way we believe this information utility, the infrastructure that supports these services and these appliances is going.

So you have to think about the intersection of those three things we believe to truly understand the potential of this technology.

So going back to the beginning, my statement and Mr. Friedman's statement that this is just the beginning, what we are talking about now is a generation of technology that will not simply replace old technology with incremental advances in productivity as we've seen in the last 20 years, but
really this information utility can change in very dramatic ways the way we communicate, the way we learn, with particular emphasis from our point of view and I believe from yours as well on our work force and how we prepare our work forces.

It is almost a clich to say that one of the most pressing issues facing business leaders today--and I believe it is one of your most pressing issues as Governors as well--is how to empower employees to compete in this digital age.

Every corporation, whether it is a dot com or a brick-and-mortar, or as we now begin to say as these two kinds of companies come together, they are either clicks-and-mortars or bits-and-mortars, you pick your analogy, but every company is now dealing with the fact that technology is fundamental to how a company interacts with every constituent it has, whether that constituency are its shareowners, its employees, its suppliers, or its customers.

Again, it is almost a clich now, but technology has become every CEO's job. It is fundamental to how a company works and competes.

It is absolutely true that as the world becomes more networked, as everything, every place,
every person, every context becomes networked, that
does and should empower the individual. And so
access and skills are the key to success.
They are the keys to success for people.
They are the keys to success for companies. They are
the keys to success, I believe, for states and
governments and countries.
And you of course as Governors are facing
the same challenge that we as CEOs are. That is, how
to empower your constituents to participate in this
new digital economy.
And you know of course that the stakes are
very high for your economies and the quality of life
in your states and for this country, just as the
stakes are critically high for those of us as CEOs.
It is about whether we prosper and survive or whether
we fail.
A skilled workforce is how you as
Governors attract and retain businesses and keep your
economies vibrant. And the most skilled workers will

drive location decisions and quality of life is of
course a key factor for them.
And you are, as we corporations are, you
are competing every day with other locations the
quality and the skill of your workforce and the
quality of life in your state.
Fundamental to all of this of course is
education. People will follow where education reform
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achieves successful economic participation we believe.

Now let me come back to a comment that Mr. Friedman made. Education is critical, and it is how to compete in this new age. Teachers as well as students need electronic tools. They need services. They need Internet access, and they need skills.

E-learning can help extend the abilities of teachers to help students. E-learning can be a developed ecosystem of partners that can rapidly expand to include additional partners, worldwide partners.

Remember I said at the outset that any asset, any process can be turned into a service that is available via the Net. That is as true of education as it is of anything else.

Last month, as an example, I gave a community address at the Bay Area Council where I shared with an audience a glimpse of one of the first, we believe, handheld learning appliance. It was a prototype of an Internet-ready device that could take children on a worldwide trip if they became bored in a particular class. It could take children on a worldwide field trip from a device about the size of a calculator that was priced at several tens of dollars.

It is an example of turning education into...
an e-service.

At the same time that education is critical, we must acknowledge Digital Divide concerns and use education as a means of eliminating them.

I believe we should shift the debate, frankly, from talking about the Digital Divide to beginning to talk about what I would call e-

inclusion: How to make sure that everyone is included.

At HP we are committed to help make this change, as HP has been committed to education for decades and decades.

E-inclusion is our obligation, but frankly it is also very good business. We are playing on a worldwide field and we need everybody to make this work, to succeed, to grow.

It is why HP started an initiative called "Diversity In Education" about four years ago, and this initiative is focused on improving math and science education of minority kids. We have recently granted $4 million to work with four K-16 teams of schools and a university.

Technology has the power to erase the boundaries of time, of space, yes perhaps of politics as well, but it certainly has the power to erase the boundaries of prejudice and bias.

Anybody can play in this new age as long
as they have the skills and the access. For us to remain successful as corporations and I believe as well as states and as a country, we need the creativity that springs from diversity and we need everyone to be able to play. I believe we have a great challenge in this country because we are in danger of leaving a generation of kids behind. That is bad business for us. I believe it is bad politics for you.
The basic infrastructure for commerce and communication have essentially been built in this country, and now we are starting to see the promise of all this technology kicking in.
It means that the price of entry is dropping to zero. Anyone can play. Everyone can participate in this emerging economy. Technology does level the playing field. It levels the playing field in business. It levels the playing field in education.
Teachers and students will have new tools to master and to use. I believe one of your great obligations, one of our great obligations as well, candidly, in corporate America, is to help them. Help them use these new tools and master
them.

So here is what I would humbly suggest might be three strategic priorities for each of you as Governors looking to remain competitive in this new age.

And as I mention these three, I think it is very important to keep something in mind again that Mr. Friedman said earlier. Time means something different now. We simply do not have the time we think we have, whether we are CEOs or whether we are Governors.

My belief is that in this new economy faster is always better than slower, and sooner is always better than later. Always. Always. Always. Because technology has changed what time means in very dramatic ways.

So the three priorities that I would suggest again:

First and most importantly from my point of view, continue to make education central to your agenda. Education is at the heart of everything I believe. You must, we must together continue to

reinvent and re-engineer our education systems to achieve higher standards of competence and skill. We must reinvent and re-engineer to develop digital competency because lacking digital competency is a severe disadvantage. In fact, it is an insurmountable obstacle going forward. Help your
teachers be competent to use the digital tools that exist. More are coming to the e-learning space, but teachers must be able to use these tools if they are to help children gain the skills and the access they need.

Second, set an example. Make technology central to how you communicate with your own constituents. Any service, any process can become an e-service over the Net. Deliver state services over the Net. Think global. Think borderless. Think interdependent. Think interconnected. But use the technology to transform your own government as an example to your constituents and to your students and to your teachers.

In this environment I believe we will only be able to protect constituents on the Net by collaborating with other governments. And in this digital environment borderless open-trade policies will be critical to plug your states and our Nation into the new economy.

And third, foster a climate where the Internet is allowed to flourish. That means a couple things.

First, it means of course enabling your communities with access and with infrastructure for everyone.

It means collaborating with industry to apply today's rules thoughtfully across
jurisdictions.

We happen to believe that industry's self-regulation and credible third-party enforcement is the best model for developing the necessary trust that private data will be protected and the consumers will be protected.

Opening international global markets is essential. A flourishing Internet promotes social and political freedoms, and yes I believe this is true including in China.

And I also believe on that note that the U.S. must approve Permanent Normal Trade Relations with China.

So I believe it is incumbent on us as corporations, as CEOs, and on you as Governors to promote e-inclusion actively and aggressively to assure that all of your residents find success in a Century that is now rolling rapidly towards total connection.

I think the technology offers great promise. I think we can in fact move from a world where Cyberspace is an opportunity to make millions for some but remains tremendously threatening and intimidating for many, to a place where technology does help all of us participate more actively and more democratically.

But it will take I believe a focus on the things that we have just talked about: education,
using the Net to transform your own governments, and making sure that your state is one in which the Internet can flourish and e-inclusion is at the foundation of your politics.

Thank you, very much.

(Applause.)

CHAIRMAN LEAVITT: We will defer questions on that extraordinarily helpful presentation until after our next presentation.

It is my privilege to introduce Dr. Eric Schmidt who is the Chairman and Chief Executive Officer of Novell. I have the privilege of being not just the Governor of the domiciled State of Novell but also to having occasion to get acquainted with Eric in a personal way. On two different occasions one year apart we have met at a similar dinner where two questions were asked. The first dinner was:

Let us all express the thing we would like to be, or the subject in which we would like to be most or more literate.

He surprised me by explaining that he had recently taken up photograph. The reason was he believed that it was so much information in the world coming so rapidly that he was using photography to refine his intuitions. A very interesting idea, I
The next year the question was: what is the thing you have learned in the last year that has helped you the most? He responded by telling about becoming a pilot. The values he had learned were from the discipline of checklists and routine. I thought those were a fascinating combination.

He is the former Chief Technology Officer of Sun Microsystems, and he is best known to investors like me as the guy who brought Novell from $8 to $38.

(Laughter.)

CHAIRMAN LEAVITT: Eric?

(Applause.)

ERIC SCHMIDT: Thank you very much. It is a privilege to be here and it is a privilege to follow Tom and Carly.

It is interesting. I was in Botswana yesterday. It is the first country I have been in in 20 years where CNN didn't work and my GSM phone did.

(Laughter.)

ERIC SCHMIDT: It rings. Sorry, honey, got to go. There's a lion behind us.

(Laughter.)

ERIC SCHMIDT: I think we are very much at the beginning of some extraordinary changes. I've
been trying to look at what is the analogy. You hear
lots of analogy in these sorts of speeches.
The analogy that I actually like the best
is the building of a transcontinental railroad. As
you know, this was done around 1860 about 150 years
ago, and the government of course had a major role.
For example, Congress set the width of the rails.
There was a big debate over that issue.
The Governors were incredibly important in
this. The Governor in Utah was involved. Brigham
Young made sure that his businesses benefitted a
great deal as this was done, and of course the
Governor of California just owned the railroad, which
was much more straightforward.

(Laughter.)

ERIC SCHMIDT: Geography and politics
favored some states over others, which I think is an

interesting point for where we are today.
As part of this, the ethnic Chinese came
in and we were amazed to discover at the time the
country was fairly prejudiced against folks, how much
better the country was by bringing in a new form of
ethnicity.
Of course we also managed to use the
trains to hasten the demise of the Indians, which is
not a good thing.

It opened the West.

It standardized pricing.
It created the UCC and all the various trading and standardization around transport that we now take for granted. It cost and lost lots of money for a long time, then it made a great deal of money. It was not a single railroad. It in fact was a set of railroads that were all interconnected. I think it is a very good example of the globalization, Tom, that you talked about, 150 years earlier.

Today we have what we call in the technical world an Internet illusion. It is not one Internet. It is in fact a set of interconnected networks. These networks are changing our notions of space and time in some very, very interesting ways.

All of the things that we do now are defined or pursued with the presumption of infinite storage and unlimited bandwidth.

It is clear that if you look at any of the trends that for the foreseeable future, we don't need to worry about those kinds of constraints, and there are many, many many examples.

People talk about, well, will my computer be smaller? Will my handheld cellphone be smaller? The problem is that the cellphone could be the size of a pin, but your fingers haven't changed in about 20,000 years.
(Laughter.)
ERIC SCHMIDT: Right?
Along with that, the current estimates--and as you know this is all driven by something called Moore's Law--current estimates are that we can get to about 100,000 times smaller.
There are some people who believe we can get to a million times smaller.

It is hard to comprehend. This will be during our lifetime. It is hard to comprehend how big a change that is. How much faster is a jet plane than the speed with which you walk? A thousand times. The gap is startling. This will occur during our lifetimes.

There are also changes in telecommunications. We have ultra wideband computing, spread spectrum technologies which now allow us to re-use frequencies in ways we couldn't before.

Moore's Law is roughly doubling every 18 months for the same price performance. Fiber optics is improving about--roughly doubling every 12 months. Wireless technology is roughly doubling every 9 months. There are very few things that are growing so quickly in our society. I would say none.

And this of course sort of drives this whole notion. A lot of people are now using the term
'ubiquitous computing,' 'spontaneous computing,' what I like to think of it as is always being connected, always on, and lots of different devices that are part of little networks. Now there are some interesting examples of this. I for example in my new building I couldn't get this radio station that I like to listen to, so I went down to the store and I paid the $80 for the little powered antenna that you plug into the wall and I listen to the radio. It didn't do any better. So then I got on the Web and I listened to it on the Web. Because the error I made was that I was listening to a radio station when I was really listening to an audio station which happened to have radio waves as one of its transmission media. If I make that mistake, and I do this every day, imagine how many people are going to be confused when they discover that radio reception really is better when it is on the Internet. We are well to the point now where the traditional assumptions that we've had about transmission technology, the way you view things, the way you store information, are going to be changed by the digitization that Carly and Tom talked
One of the biggest problems on the Internet is that there is this technology called MP3, which is a particularly well-engineered form of audio, and people are now flooding the Internet with their own private radio stations typically involving pirated copies of other people's music, and it consumes lots of bandwidth and people keep trying to figure out what to do.

You can't turn it off. You have to find some other way to modify all that benefit.

So this is a situation where this growth rate is going to continue. The current growth rate of the Internet is roughly doubling every 100 days. Let's do some math. We go if today is 1, next year is 8. The following year is 64. The following year is 512. The following year is 4096. Four years, five years, 4000 times more?

What are they doing?

(Laughter.)

ERIC SCHMIDT: Who knows? But they're doing it, and they're going to be doing a lot more.

So what is the fastest growing part of the Internet? Something called Instant Messaging where you can send me a message RIGHT NOW. It's not even e-mail. It happens right in front of me and I have to respond that quickly. Another way to 'always be connected' and always be out of control.
This is really the largest experiment in anarchy we've ever had.

(Laughter.)

ERIC SCHMIDT: And I say that with some caution, but also some great optimism, because what we're really doing is building a set of virtual worlds. And those virtual worlds I think are where a lot of the new action is going to be.

Because as excited as I am about the devices and the interconnection and the networking and the so forth and so on which I'm involved with, what people will do is not worry so much about the transmission media of the television but rather the content and who will be the Lucille Ball of this new generation.

What do these new virtual worlds look like? They clearly will look very different from what we have today.

If you think about Amazon E-Bay, and Yahoo, and all those, those are virtual worlds of today, but with this new multimedia format they will be very, very different.

If we go back to the principle that Carly talked about, about moving quickly, disintermediation which is how these markets work, is defined by a very simple rule which I believe applies to you all as well.

The fastest learner always wins.
network market.

So what we are faced with now in a
globalized network situation where everybody is
persistent, everybody is on, everybody is connected,
and there's these legions of teenagers being produced
at a constant rate every year, all of a sudden this
forces an efficiency of markets that we've never

It is interesting. When you talk to the
dot bams--you know, those are the brick-and-mortar
companies--these are the guys who spent 30 years
building a brand, and there's the dot coms that have
come in and all of a sudden established a new brand
in one year, they're mad and they're going to get
even.

That competition is going to drive a lot
of new behavior. And as business to business
collapse of the value chain and a restructuring will
define a lot of how these businesses work.

There are many, many examples of the very
efficient markets that are coming out of this. There
appears to be a new constraint in the way economics
works involving price elasticity that you cannot in
fact changes prices very well when you have so many
new auction places.

You cannot in fact use local pricing to
improve your profits. And that may be at the root of
some of the economic choices that we've seen and some
of the tremendous performance we've had in the last 10 years.

So the shift from central planning that Tom talked about to distributed computing, distributed processing, the sort of empowerment of individuals and small groups is really the characteristic of how this is going to play out.

What's another metaphor here is imagine that you have all these different lakes that in a biological world have emerged with different creatures, and now all of a sudden they all mix together, and now you have global competition at every level. And the natural segregation that they grew up with, and the various competitive advantages no longer apply.

How do we sort that out when we're online and on network worlds? We sort it out with brands. So the real question for many of these businesses will be what brands win.

You will see in a sec that I also believe that applies to the political sphere.

So anyway, at the moment we are engaged in what I would call a great capitalist charity. Goods and services and revenue for the next between now and the Year 2003 are expected to be $1.3 trillion, and
it is expected to cost $1.4 trillion. So we are investing to win, or at least to lose money. The political dynamic, and the leadership, and the strategic issues here are very significant and much broader than I believe have been discussed in most of the political forums I have had the opportunity to participate in.

Now if you take a look, for example, at Senator McCain's recent surge in terms of fund raising, it appears to have been heavily aided by use of the Internet in clever ways. That is an example where all of a sudden something new changes, something we didn't expect.

Again, there are many, many examples of what can be done there. I like to think of governments, first and foremost, on a day-to-day basis, most citizens view them as a service organization. Most of you have immense information technology structures.

Carly talked about this a little bit. You have these immense structures and you are spending billions of dollars for all these complicated systems which basically try to deliver health, human services, licensing systems, and so forth.

Wouldn't it be nice if you had a single place where you could know who that person was and, by the way, track what they do, and do that much more efficiently?
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With these global networks you can do that because your citizens are online.

Some of the more enterprising Governors here have teams that are looking at how you use the net to draw people to your state. Remember that people will choose to come as tourists. Businesses will choose to come to your state to work with you and to invest in your state because of what they see on the Net. And your ability to reach out, all of a sudden building relationships, remember that ultimately the most important special interest group is me, right? And with this new technology you can figure out who I am and then you can narrowcast exactly to me.

This is a profound change in the political dynamic, in my view.

So to me the question here at the sort of strategic and national level is:

What will be the political dynamic of the Internet?

How will fame and power evolve?

Where will the TV camera be in Cyberspace?

And how will we take advantage of that metaphor?

Because all of us have grown up with television as the primary way in which political congress was certainly conducted in the last few years here in America.
Use the Net to reach out to the Herd. I think we all agree.
We are also going to have to deal with some truly new issues. A lot of you are involved in this Internet taxation issue on one side or the other, 35,000 taxing authorities.
We could tolerate the fact that taxes were not fundamentally logical or rational and they were not fully, fully accurate across borders, but now that there are no borders we have to face those issues.

There are some situations, for example, where when you purchase something on the net that is a softgood, where there is no deliver-to, where we may actually not even know where you are to know which tax rate to apply, these are problems we didn't have before because we didn't have this mechanism and we have to sort them out.

The biggest issues will all ultimately involve privacy and identity. Remember, these are devices and radio networks involving the Internet that will have the ability to know where you are and what you're up to.

You can drive into a new town and the networks can sense that here you are, and they call call up your best friend, and they say by the way Eric is in town.

All of a sudden, is that a good thing? Is
that a bad thing?

We can certainly technically do it, but a lot of citizens are going to have a lot of opinions about how that plays out.

Every time you go to a web site, remember, the web site is really visiting you. You give it your credit card number, your Social Security number, maybe your shoe size. It could ask you manual or automatic? It can ask you about prescription medicines. There are a whole bunch of issues about that information, where is it being kept and who is doing it.

To me this is a great, great leadership opportunity. If you go back to my earlier premise that the fastest learner always wins, all of us now have an opportunity to seize the moment, take this technology, take this tremendous growth engine that we have pioneered and which I am very proud to have been a part of, and use it to have a really enormous impact.

So with that, thank you very much.

(Applause.)

CHAIRMAN LEAVITT: Much to all of our regret, there is limited time for questions.
However, we do have time for at least one question. Is there such a question I could direct to our panelists? Tommy?

GOVERNOR THOMPSON: Thank you, Mr. Chairman. It's a tremendously informative and delightful program this morning.

My question is fairly broad. That is, listening to all three speakers I kept coming back to our arena of politics. It seems with the tremendous speed that you're talking about, all three of you, the political parties in the future are going to be less and less relevant, that the walls will be crashing down more than likely on political parties in the future.

Also in regards to the big issue facing Congress right now, the speed with which Congress reacts is still slow and laborious compared to what's going on in the business sector.

All our legislative sessions throughout all of our states are so slow compared to how fast Governors have to respond regarding what function the legislative arena is going to play in the future, and that leads to the question:

What is the future of parties and legislators that cannot move faster, and with the kind of polarization we see in our state legislature and Congress, and especially how does this deal with
the China question and what will happen if Congress
does not address the China question properly for the
Internet access that we need?

I would direct that to anyone that wants
to respond.

CHAIRMAN LEAVITT: Thank you, Governor
Thompson. Perhaps I could ask all three of our
panelists to comment briefly on that question. We
will start with Mr. Friedman.

THOMAS FRIEDMAN: Let me just make a
couple of brief remarks I think that Governor
Thompson and the other speakers have touched on.

One is that everywhere I go now in this
country in talking to business executives I've
been finding that within the last 12 to 15 months
there isn't a business executive who hasn't

woken up one morning and said: Oh, my God. This
Internet thing is real. Somebody call the Internet
doctor.

What that means is, basically, not where
do I just plug this switch in in the wall or talk to
Sue or Bill down the hall, he or she is my CTO, this
is a revolution.

It means understanding that every way you
do business is going to be affected Net as a state or
as a company, and your CEO has to be your Internet
evangelist. It can't just be something to kind of
plug in down the hall.
How long will people wait in line at your state license bureau to get their license renewed when they can now buy the whole bloody car on line?

So if the United States of America does not become as efficient as America Online in some very fundamental ways government will become irrelevant for a lot of people.

So that would be one thing.

Let me quickly say on China, because I believe this is a very important issue, we need to keep our eye on the prize.

China now is saying some very bellicose and troubling things about Taiwan. Some of the candidates are saying some very troubling to me and bellicose things about the WTO deal.

But I think we need to keep our eye on the prize. And if you were to ask me, Governor Thompson, what I thought is the single most important foreign policy issue for the next Administration, of the next decade, is going to be whether and how we bring China--and I like to never use the word "China," I prefer to use one-fifth of humanity--how you bring one-fifth of humanity stably, gradually, smoothly from an authoritarian society, okay, into a more open, pluralistic state.

Now we have people, the debate around China is: Do we deter them or do we engage them?
Well the fact is we have to do both. And we have to do both all the time.

We are deterring China on Taiwan, I believe, but we have to do it in a subtle way so we don't encourage the Taiwanese to behave in reckless ways.

So then the question is: How do we reinforce that deterrence? And to me this WTO deal, nothing is a better reinforcer. It is not a sure thing. It is not a foolproof thing. It is not the only thing. But nothing is a better tool, a tool that allows American Internet companies to own 50 percent of Internet companies in China for the first time, a tool that will allow Chinese to interact with the world much more directly than ever before, rather than going through their government, and a tool that will impose rule systems on what have been arbitrary bureaucrats before. Not foolproof. Not the only. But certainly the best.

And, yes, the Chamber of Commerce is for it. Well, as a friend of mine, Michael Mandelbaum says: You know, some things are true even though the Chamber of Commerce is for it.

(Laughter.)

THOMAS FRIEDMAN: And some things are in our national interest even though the Chamber of
Commerce is for it.

(Laughter.)

THOMAS FRIEDMAN: So it seems to me we've got to keep our eye on the prize. Okay? That means, you know, looking past some of the things going on now in the political sphere here, looking past some of the things going on in the political sphere in China, and keeping our eye on the prize, which is to bring China stably, smoothly into this system.

Thank you.

CHAIRMAN LEAVITT: Thank you.

CARLY FIORINA: I would comment on both parts of your question.

First, I think technology and the Internet in particular absolutely changes the role of leadership. Now I am a business leader not a politician, so I can't comment on how it changes the role of politicians, but I can say that the role of a CEO absolutely changes because what all of this technology and interconnection means is that knowledge is no longer power, because everyone has access to knowledge, and the presentation of an issue can no longer be controlled.

And so for a CEO the rule becomes more one of creating an environment, instilling values, making sure that the position on an issue is winning because
of its logic, because of its inspiration, because it is compelling, as opposed to being able to control the positioning of that issue.

But I do think that the role of a CEO is fundamentally different in this new age with this new technology than the role of a CEO even ten years ago.

On the subject of China, I agree with Tom absolutely. China's entry into the WTO, the granting of permanent MFN status of China I think is vital, and having travelled to China for, every often, for the last decade, my firm belief based on experience is the very technology that many fear the Chinese having access to, that same technology is the tool I believe that will bring about the changes that we seek in China in terms of the gradual, stable democratization of both the social systems and the political systems.

And the Chinese deep in their hearts know that because they see the power of the technology every day in their societies. I think it is critical to our interests.

CHAIRMAN LEAVITT: Eric?

ERIC SCHMIDT: I agree with Tom and Carly very much.

With respect to your question about the relevance of political parties, there has been a great deal written about the decline of community
senses of self, and who am I, and so forth and so on. My view of that is it is a very pessimistic view. People may not be in the traditional parties and affiliations, but they are in new ones. And they are in different ones. I have been impressed by the ability of people to join all sorts of special interests this or that in this new medium. If you follow this notion of the world that we are going to spend time on, and the number of hours that people are spending on line in strange new places, it is going to be very important for the political establishments in the traditional structures to reach out to those and to learn which ones make sense. And I haven't seen up until now anybody really exploit any of those new communities, maybe because they're too new, but I think it is a very real issue for the next few years.

CHAIRMAN LEAVITT: Tom has one--

THOMAS FRIEDMAN: I just wanted to add one thing for Governor Thompson, to pick up on something Carly said, which is that in the Cold War the little sign on your desks of your predecessors said "The Buck Stops Here," because there was a world of walls and it was a slow system and you could wait for all information to come up to you, and the system could wait for it to come down.
Now the sign says: The Buck Starts Here.

Your job basically is to lay down the broad strategy, it seems to me, whether you are a corporate chieftain or a state chieftain, but basically to empower people down the line, because you don't have time for the buck to get to you for this to work.

So we've gone from The Buck Stops Here to The Buck Starts Here.

GOVERNOR ENGLER: Mr. Chairman?

CHAIRMAN LEAVITT: Governor Engler.

GOVERNOR ENGLER: Just one question. The central responsibility of Governors deals with education, and we all struggle with that.

I am just curious--this has been a stimulating discussion this morning--if the panelists think that there is any looming breakthrough in terms of the speed at which we can bring education reform online.

It does seem to me that as an institution where we spend $350 billion annually as a Nation, that in education most of us are confronted with the response that it's going to take time.

But you've just talked about faster is always better, and the speed with which we bring education reform up it seems to me will be critical to our ability to compete globally. Because if we
open the door as this is doing to knowledge on a
global basis, if we are lagging in education and
we're being told that it will take a generation to
turn an intercity school around, it will take a
long time to bring new content, higher standards, we
are going to leave a lot of people behind in the
dust.

CHAIRMAN LEAVITT: Governor Engler, a very
good comment. I regret deeply that we are going to
have to bring this discussion to a close.

As Tom Friedman said, no one is driving
the train. I want to make darn certain that that is
not the case today.

I would like to thank Tom, and Carly, and
Eric.

Eric made an extraordinary trip literally
across the world to get here just in time, and we
appreciate so much your willingness to be here, all
three of you.

This will bring to a conclusion this
plenary session. However, we are going to move
directly into an executive committee session, which I

aspire to make the most efficient executive committee
session in the history of this organization. It will
be very short.
Before we move to that, however, there are just a couple of announcements I would like to make of interest to all.

First--

(Pause.)

Governor Glendenning has made a very good suggestion. That is, that we are all ready to give a very spontaneous and heartfelt round of appreciation to our speakers. This is a very good moment for that to happen.

(Applause.)

CHAIRMAN LEAVITT: I would like as well for us to recognize the presence of the White House staff members, Micky Ibara, who serves as Assistant to the President for Intergovernmental Relations, and Ray Martinez, who is the Deputy Director of Intergovernmental Affairs. They are both here. They work hard on our behalf. Could you please stand and let us recognize you and thank you for your presence.

(Applause.)

CHAIRMAN LEAVITT: Now, a couple of brief announcements before anyone leaves. May I just say I would like to remind the Governors that the Governors only luncheon and work session will begin at 12:00 o'clock in Salon I on this level.

Secondly, the committee sessions will follow at 12:30 and they will begin in the rooms that are assigned, again on this level.
Governors will have to provide their own transportation to the White House this evening. Buses for the White House meeting tomorrow will depart the hotel at 9:00 o'clock sharp from the Pennsylvania Avenue entrance.

And again a reminder that the deadline for the submission of written policy changes under suspension of the Rules is Monday at 5:00 o'clock.

This will be the adjournment of our plenary session.

(Whereupon, at 11:35 a.m., Sunday, February 29, 2000, the plenary session was adjourned.)
NATIONAL GOVERNORS' ASSOCIATION
2000 WINTER MEETING

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PLENARY SESSION

J.W. Marriott Hotel
1331 Pennsylvania Avenue, N.W.
Grand Ballroom
Washington, D. C.

Monday, February 28, 2000
2:40 p.m.

PROCEDINGS

(2:40 p.m.)

CHAIRMAN LEAVITT: Welcome to our
afternoon plenary session. Today we will speak of
higher education, and it is important in our global
economy as we as states begin making this very
important and complex transition.

As we discussed yesterday in our plenary
session, the new economy is being propelled by
growth, growth from smaller high-growth companies
that are commonly referred to as gazelles. Now these
are companies that are typically created and driven
by entrepreneurs.

Entrepreneurs are essentially the change
agents of this new economy. They are providing a
mechanism for reallocation of resources to the most
productive use.

To better understand the current state
policy environment that we are in and the environment
in which entrepreneurs will operate, the NGA Center
for Best Practices, with the support of the Kaufman
Center for Entrepreneurial Leadership, has created an

inventory of state policies and programs that will
support entrepreneurship. This report will be placed
at your table today.

I am pleased to announce that the NGA
Center, with a grant from the Kaufman Center, has
entered into an agreement to convene a policy academy
for six to eight States to assist them through an
intensive 18-month program of technical assistance in
creating and in changing their economic development
and education policies to encourage this
entrepreneurial spirit and activity and growth.
I would like to express appreciation on behalf of the Association to Kirk Muller, the President of the Kaufman Center, and who is also the Chairman of the National Commission on Entrepreneurship. We look forward to this partnership.

I would like to recognize for just a moment at the beginning our session the Governor of the Territory of American Samoa.

Governor, we are pleased for you to make--

I think you have some comments that you would like to make. You could make them up here, or you could make them from your seat if you would like to. We'll save you the walk.

You can just tap the button, or you can come around. It will give you a little exercise, then.

(Laughter.)

GOVERNOR SUNIA: This is my one chance to stand here. I am going to take it.

(Laughter.)

CHAIRMAN LEAVITT: For those of you who couldn't hear, he said this is his one chance to stand here and he is going to take it.

(Laughter.)

CHAIRMAN LEAVITT: Governor, we are delighted to have you here to occupy this podium.

GOVERNOR SUNIA: Thank you, Governor.
Mr. Chairman, I am going to make this as brief as I can. Lucky for you, I have forgotten to bring my tourist brochures, and so it will be very brief.

American Samoa, as you know, is one of the five territories of the United States. We are the southernmost boundary of the United States way down there in the South Pacific surrounded by all different independent nations.

In the year 1900 on April 17th the United States took over part of the Samoan Islands which has been known ever since as American Samoa.

It is a smaller part of the nation. The larger part is still independent and was called Western Samoa.

It is now called just plain Samoa.

American Samoa this April will celebrate the 100th year of its partnership with the United States as a territory. We are going to have a year-long celebration. I have sent letters to all of you inviting you to come.

Anybody that is anybody here, we are going to sink the island that one month, hopefully--I hope not. I hope it will still stay afloat after everybody comes but, in case you can't make it, or even if you make it, I have brought you--this came right out of the mint, it was waiting for me in
Washington—the medal commemorating that occasion.

You even have—I was surprised. They have a little certificate of authenticity there signed by me.

(Laughter.)

GOVERNOR SUNIA: I wasn't aware of that, but it just goes to--

(Laughter.)

GOVERNOR SUNIA: --it just goes to show that they do lift your signature every now and then and put it on things without your knowledge.

So, anyway, my staff will be distributing the medals to you. It has President McKinley on the face of the medal.

He was the President that accepted American Samoa from our Chiefs. What had happened was, in the age of imperialism when they were carving up the world into areas of influence, Germany, Great Britain, and the United States met over the fate of many of the Pacific islands.

The United States, of course, opted for this one with a great natural harbor, one of the best natural harbors in the world, for its Navy.

That is how we ended up in the United States family, and we have had two plebiscite ever
since. American Samoans consider themselves Americans, no less than New Yorkers and L.A.'s, and whatever. So, we have decided that this is our lot. There is not an American Samoan left that wasn't born under the American flag.

   We are very proud to be Americans, celebrating our 100th year this year, and if you can come we promise you one of the last remaining real cultural entities within the United States family.

   Thank you, Mr. Chairman, and I have had my 1st chance here. Maybe a second term I'll be here a little longer.

   (Laughter.)
   (Applause.)

CHAIRMAN LEAVITT: Thank you, Governor.

The territory of American Samoa and the other territories represented by this organization are valued members and we are pleased that you are here and able to occupy this podium.

Our session today deals again with the global economy and how we, as states, will be required to adapt and to change the way we organize ourselves and respond in order to maintain prosperity.

   One of the fundamental changes that will occur is that we will be a society that will be defined by bandwidth, speed, connectivity, and
Our session today is to speak of knowledge. For hundreds of years, people have gone to college and university campuses for the purpose of being able to receive knowledge. It is the place that we have stored it, the way we have enhanced it, and the place that we have chosen to pass it on to the next generation.

But something very fundamental is changing in our world, and that is that people now don't come to college campuses necessarily. Information goes where the people are and, as a result, it is fundamentally changing the way we view education, its delivery, and its measurement.

Over the course of the next decades to come, prosperity in our society will not be earned simply by educating a steady stream of new students or of new workers, and then sending them out into the work force to earn a living and to contribute to society.

The successful civilizations in the future will be those that are capable of raising the entire level of learning in their society and in their nation rapidly and repeatedly.

This is a fundamental change in the mission of higher education.

So today we will focus on the questions of:
How is it delivered?
And how is it measured?

Now to set this discussion up, I would like to tell you two brief stories.

The first story is a conversation I had with a major high-technology Chief Executive Officer who said to me:

My biggest problem is, I have a $10 billion company but if I miss one product cycle, I am dead. The stock market will punish me. My competitors will punish me. It will cost my employees a place to work. This is serious pressure, but I have to keep progressing every product cycle, and I am not receiving workers who are able to advance with the technologies of the day rapidly enough.

The second story:
I went to a small high school in my state in rural Utah, six or seven hours from the capitol. I met an English teacher who had caught the vision in his high school of what technology could do, not to replace good teaching, but to be a powerful tool in the hands of teachers.

He got some grant money that wasn't quite enough, and so, in order to wire their school, he found 12 enterprising, willing young high school students. As a summer project, they wired their high school, fiber from front door to back.
Then they got some computer equipment and again they could get the equipment but, they are seven hours, seven hours from the state capitol, at an early stage in networking, no one knew how to put it together.

He gathered the same 12 enterprising high school students together. They entered a major vendor's home study program and figured it out, and became factory-certified repair people for this equipment, installed it, and got it working.

Now this teacher began to catch the vision. A community college about 50 miles away invited him to begin teaching technology courses.

He is an English teacher, but he knows a lot now. He's figured it out. He's made it work. He finds that he likes it. He understands it. He wants to pursue it.

He decides he will get a Master's Degree. Applied at a major university. He was denied access because he had not taken the prerequisite courses in order to be admitted.

He went to see a counselor. The counselor and he concluded that, if he had taken every course he had taught he would in fact qualify.

We measure the wrong things.
We measure the progress, not the outcome.
The global economy will value competency.
It must also measure competency.

Today, we are going to hear from a panel of higher education experts who have, in their own way, contributed to this debate substantially and in a meaningful way.

I would first like to introduce Sir John Daniel. Sir John Daniel is the Vice Chancellor of the British Open University.

The Open University has been a pioneer in the development of distance learning. It is the most successful distance learning university in the United Kingdom.

The University reaches a large number of students--over 200,000 students--at costs of 50 percent below the average of the other United Kingdom universities and they offer high-quality courses.

The U.K. has a system of rating the quality of their courses, and they have routinely been rated among the top universities in the U.K., including some notable names and traditions.

He has served as the President of the University in the United Kingdom, in Canada, and also in the U.S. where they have started a subsidiary, the Open University of the United States.

He is the author of a book, MEGA-UNIVERSITIES AND THE KNOWLEDGE MEDIA. It is a great
pleasure to introduce to you Sir John Daniel.

(Applause.)

SIR JOHN DANIEL: Thank you very much, Governor.

I thought that in this conference on new technology it took a Brit to risk actually using some technology in a presentation.

So if you will bear with me while I get that just going, we should be all set.

(Pause.)

(Slide.)

Governor, fellow guests, ladies and gentlemen:

Thank you very much, Governor Leavitt, for

inviting me to this historic meeting. Ever since Governor Leavitt and I explored the synergies between the Western Governors University and the Open University, I have had a profound admiration for his commitment to the renewal of higher education.

Postsecondary education is now high on your agendas for strengthening your states, and I expect that, although you are rightly proud of your state's university system, you believe that new realities call for new approaches.

Your universities are challenged by the electronically enhanced global economy described so compellingly yesterday by the speakers we heard.

My title is Renewing Universities For The
New Economy. I say 'renewing,' because starting over again is clearly not an option. America already has the world's most extensive higher education and, while the creation of some new institutions such as the Western Governors University and I hope the United States Open University can help to promote change in the wider system, your overriding aim must be to target the intellectual firepower of the existing public, private, and for-profit institutions at the needs of the future.

I hope to illuminate your task through the experience of the Open University in the U.K. and the U.S..

(Slide.)

(Slide.)

Given that Anglo-American spin, I want to leave you with two quotes from the great Anglo-American statesman, Winston Churchill, who once said: "Sometimes doing your best is not enough. Sometimes you must do what is required."

(Slide.)

So what does the new economy require? I have to confess that in my first encounter with the old U.S. economy I helped to debase the coinage. That was in 1965 when with the freshly minted degree in Metallurgy from Oxford University in the one hand and a brand-new green card
in the other I arrived in New Haven, Connecticut, to help develop an alloy to replace silver in dimes and quarters. Those silver coins would have soon been worth more than their face value if melted down, which would have been the '60's equivalent of a good dot.com stock today. (Laughter.)

SIR JOHN DANIEL: So we had to find an alloy that looked like silver, behaved like silver in vending machines, but cost less than silver. You have in your pockets and purses coins of the sandwich alloy we developed, and I am proud that I played a minor role in helping the sandwich stick together. (Slide.)

I think there are three parallels between renewing our universities for the new economy and changing our coinage 30 years ago. First, we must reduce the costs of higher education. Second, we need graduates who can make the vending machine of the new economy work. (Slide.)
Third, just as we had to weld three strips of metal together to get something that looked and behaved like silver, renewing universities for the new economy combine several objectives. Two realities define the new agenda for postsecondary education: lifelong learning and technology.

Now we all talk about the era of lifelong learning and the term rolls easily from the lips of educators like myself.

(Slide.)

But surveys show it doesn't much appeal to many ordinary people because it sounds like a life sentence in an institution that they disliked, namely, school.

What does that tell us?

It tells us that, if people are to want to learn regularly throughout life, they need more from their initial education. The K-12 system must make kids enjoy learning and give them the solid foundation that creates the society of e-inclusion that Carly Fiorina spoke about yesterday.

(Slide.)

Then their first experience of college must give them a degree of flexibility and not the illusion of a degree for life.

Last week my wife and I became curious about the term "sophomore," so we looked it up and
found that Webster defined the word "sophomoric" as conceited and overconfident of knowledge but poorly informed and immature, which I suggest is a very good definition of what we don't want in the new economy.

(Slide.)

We need people who can ask good questions, not people full of answers and we need fast learners. So lifelong learning means strengthening initial education.

The second implication of lifelong learning is that higher education must become more accessible, diverse, and flexible.

(Slide.)

It means helping people learn what they want, when they want, and where they want. Today, large numbers of adults with work and family responsibilities need to move on from their community college degree or maybe finish the Master's they never completed.

For many such people, going to class is not an option, and they are a much bigger group than the 18- to 22-year-olds. Lifelong learning also means helping such people become independent learners. Just think of the impact on the economy if we all became ten percent more effective at acquiring new knowledge quickly by ourselves.

Third, lifelong learning means a new
The concept of quality. People want the assurance that what they learn will be up to date and will give them competencies that employers value.

In short, citizens are interested in the output of higher education for themselves. But as Governor Leavitt said so tellingly just now, most universities are still focused on inputs.

An undergraduate program is good if the entering freshmen have good high school grades, and a quality graduate program is one that recruits people with high grade point averages.

But in an era of lifelong learning, that misses the point. The only valid measures of quality are the outputs of the programs.

And fourth, because lifelong learning means more education and training, it must also mean cutting the costs of education for two reasons, I think.

(Slide.)

First by improving productivity IT is cutting the costs of almost everything, and that is why the new economy is giving us growth without inflation. And universities must join this trend to higher productivity and lower costs.

Second, as you know only too well, e-commerce threatens sales tax revenues.

So there are challenges ahead for government revenues. And if citizens have to bear
more of the costs of education and training
themselves, then their governments should at least
help them to get value for money.

The quality assurance role of the states

in this busy postsecondary market, with many new
providers is of course a speech in itself.

So, so much for lifelong learning whose
implications I summarize in this eternal and
eternally challenging triangle of access, quality,
and cost.

As Governors you have to balance the
tensions in that triangle almost daily in making
public policy. Yesterday it was called your "golden
straitjacket."

What we want of course is wider access,
better quality, and lower costs, which sounds
impossible but I bring you the good news that it is
deliverable.

(Slide.)

It is deliverable through technology,
which is the second key feature of the new economy.
Technology--information technology, in particular--is
central.

IT is the productivity motor that drives
the new economy forward. IT is changing the spatial
organization of society, where and how we live, and
the rapid development of IT continually challenges all citizens to change but also provides tools to help us adapt.  
(Slide.)
The tools of technology can be used on a large scale to renew higher education and to change the shape of this eternal triangle of access, cost, and quality and I give you the example of the Open University.  
(Slide.)
The Open University was a political creation. Indeed, most significant innovations in higher education have been driven by politicians whatever academics say. Here three politicians have four objectives. Prime Minister Harold Wilson wanted to increase access for working adults and to use technology for learning and teaching. Jennie Lee, the Minister who got the show on the road, wanted to prove that a technology-based university could be as good as the best.  
(Slide.)
And Margaret Thatcher, she of the "golden straitjacket," wanted to reduce the costs of higher education. Coincidentally, the launch of the Open University happened in the week of the first moon
landing in 1969.

Everything seemed possible and the University was given an ambitious mission: To be open as to people, open as to places, open as to methods, and open as to ideas.

(Slide.)

Fast forward 30 years to the launch of the United States Open University, which added two further goals for today's web-enhanced global economy: To be open as to time and open to the world.

So what has the Open University achieved and how? And I will tell the story in terms of the triangle of access, quality, and cost.

This year the OU has 170,000 students in degree credit courses including 1400 Doctoral and a Graduate school of 40,000.

(Slide.)

And then there are another 60,000 or so in continuing education and professional development, including 35,000 teachers learning to use IT in the classroom.

Who are all these people?

They are mostly working adults. They span the age range from the teens to the 90's, and they have a broader socioeconomic profile than most universities.

We have just admitted 50,000 new students,
and nearly 15,000 of them are on fee waivers or financial assistance.

Where are they? Most are in the U.K., but there are 30,000 students in the rest of the world, so openness to places, globalization, is very real for us.

But now what about quality?

Britain has a state-run quality assessment system, as Governor Leavitt said, that--a state-run quality assessment, I have to say, that alarms visiting American academics who worry lest it comes soon to a theater near them.

(Slide.)

I would admit that there may be some overkill, but British bureaucrats believe that nothing succeeds like excess.

(Laughter.)

SIR JOHN DANIEL: However, the system does allow us to make direct comparisons between campus universities and the Open University.

What do they show?

In research the Open University ranks in the top third of U.K. universities, and some of its research is world-leading.

One research team is going to put a lander on Mars to find out whether there is life there, and they keep asking me for more money so I keep my fingers crossed that their lander, Beagle II, doesn't
disappear into a deep hole like the last mission to Mars.

In teaching, the Open University ranks in the top 10 percent of U.K. universities. This is a list of the elite universities where most programs are rated as excellent and the OU is well up on the list.

(Slide.) Indeed, last year all the OU programs assessed received excellent ratings, including subjects that require lab work.

I was particularly proud of the result for General Engineering, where the Open University was the only English university to score full marks.

(Slide.) Oxford and Cambridge, who also have pretty good schools, got lower marks. So here is a university with a high-quality output but few restrictions on access.

To have broken that historic but insidious link between quality and exclusivity in higher education is the Open University's proudest achievement, and it is a transferable technology.

What about costs?

(Slide.) The big open universities around the world, which I have called the mega-universities,
have per student costs that are much lower than the campus universities in the same country. For the U.K., government figures show that the total cost of a Bachelor's Degree, counting expenditure from all sources, is about 50 percent less than the average cost on campus. These low costs are possible partly because most of the money goes directly into teaching and learning. I would estimate that the Open University has saved the U.K. government the capital costs of building about ten campuses.

So why has this happened? How has the Open University managed to reconfigure the eternal triangle? It does so by being a learning system with four key elements:

First, high-quality multimedia learning materials. Second, each student gets strong personal support. An associate faculty member is assigned to every 20 students and feels personally responsible for the progress of each. I enrolled as a student myself last year, and I did feel very well supported. Third, this huge learning system relies on
good logistics and administration. As we all found last year during America's first e-Christmas, successful e-services depend on getting the services right as well as getting the "e" right.

(Slide.)

Fourth, we are convinced that having OU faculty active in research helps to create the intellectual buzz that students find so attractive. And by being a learning system, the Open University has done more to institutionalize innovation than any university I know.

It was created in the television age but today with 90,000 students online from home, it is leading the academy into the age of e-learning.

In the short time since I began speaking--since this is evening in Britain--students will have exchanged around 4000 messages on the Net.

There is a stimulating traffic of ideas between the U.K. Open University and the U.S. Open University whose first students began their studies this month.

The U.S. OU is benefiting from courseware and ideas that work well in the rest of the world, and the U.K. OU is getting ideas for its own future from watching the U.S. OU launch into the America of the 21st century.

(Slide.)

So let me close with an example of Anglo-
American synergy related to one of your key challenges, namely, the improvement of the K-12 system.

The Open University is a learning system created by the teamwork of thousands of staff, which is not quite the same as Clark Kerr's famous definition of a university as a collection of academic entrepreneurs united by a common grievance over parking.

(Laughter.)

(Slide.)

And because the OU learning system delivers quality at scale, the U.K. government often asks for its help with national goals, notably in the K-12 school system.

(Slide.)

Two recent examples are:

First, the initial training of teachers in shortage areas;

And second, giving practicing teachers the skills to use IT in their classrooms.

(Slide.)

In the first example, the U.K. government discovered that there are significant numbers of good people with degrees in shortage subjects like mathematics and science who are doing other jobs in the work force but who would like to make a career switch into K-12 teaching if they could train for it.
part-time.

So we developed such a program, and it has been a great success and this year produced some five percent of all the U.K.'s new math and science secondary teachers as well as creating fruitful partnerships with the schools often in the cities where trainees do their practice teaching.

(Slide.)

This program has been adopted by Charlie Reid, the Chancellor of the California State University, as a model for the Cal-State Teach System, which is now allowing hundreds of California teachers with emergency permits to gain their full credentials.

If California shares the U.K. experience, these people will make excellent teachers and will stay in the professions.

In these K-12 programs scale is crucial because large numbers and high quality go together. And that is also true in our Learning Schools' Program, which is a government-supported partnership between the Open University and a major computer vendor to train working teachers in the schools to use computers effectively in the classroom.

We launched in November and already there are 35,000 teachers in the program and feedback is excellent.

(Slide.)
I know that both these areas of teacher training are of concern to you, and we would be pleased to share the know-how if any of you are interested in similar programs.

The U.S. Open University, which shares the Open University philosophy of service to public policy, even though it receives no public funds, is ready to help with your states' teacher education agenda through a public-private partnership.

(Slide.)

Dr. Richard Jarvis, the Chancellor of the U.S. Open University, who was formerly Chancellor of the university and community-college system in Nevada, is here with us today.

He can also tell you about a distance learning course on the art of political campaign management that we are offering with the American University of Washington, D.C., which may be just what is needed to help some people get elected in what promises to be an interesting campaign year.

(Slide.)

I said that I would quote Winston Churchill twice. What Winston Churchill also said was:

"America will always do the right thing
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SIR JOHN DANIEL: So I hope that my remarks and the experience of the Open University can help your states to do the right thing to renew your universities for the new economy.

It has been a privilege to address you.

CHAIRMAN LEAVITT: Thank you, Sir John.

Sir John, could you tell us--other Governors will want to ask you some questions--but I would like to get started by asking you to talk a little bit about the development of your materials.

How do you avoid just presenting bad old correspondence courses?

How are you achieving the kind of quality that you currently are demonstrating to those who evaluate you?

SIR JOHN DANIEL: Thank you, Governor. I think the key technology there is a soft technology. It is simply to develop courses in teams, because the great advantage of operating at the kind of scale we do is you can make very considerable investments in course development and still end up with the per capita cost that is very low.

So we put together teams--sometimes rather large teams--of academics, instructional designers, all sorts of people who will work for a period of up
to two years in order to develop a course that is not only at the cutting edge academically but is also, we believe, very good teaching material and very student-friendly. So that is really the key to that.

CHAIRMAN LEAVITT: Thank you. Are there questions from the Governors?

Governor Patton?

GOVERNOR PATTON: Do you use, in cooperation with other universities, courses provided by other universities which is common in the United States. The Southern Governors' group is doing that. We in Kentucky are putting together eight universities and providing courses to some. But we are providing courses from existing universities rather than just generating whole new courses.

How would you describe your operation?

SIR JOHN DANIEL: We are still doing that to a very limited extent, but I think it is going to grow now that more of the other universities are beginning to prepare good course materials but don't necessarily have the kind of delivery system that we have.

What we have always done is to make massive use of the faculty of other universities, both as our associate faculty and also as experts,
either in the television components of courses or to write particular written materials.

But I think you are beginning to see now a disappearance of the kind of not-invented-here syndrome which, up until quite recently, tended to limit the amount of course trading between institutions.

GOVERNOR PATTON: But the Open University,

does it grant credits in the name of the Open University? Does it grant degrees in the name of?

SIR JOHN DANIEL: Oh, yes, yes. We are a full degree awarding institution, yes.

CHAIRMAN LEAVITT: Governor King.

GOVERNOR KING: How do you actually deliver the courses? Is it Internet, ITV? Do you have a campus at all anywhere?

SIR JOHN DANIEL: We have a campus which is where the staff work, but I mean most students would never see that campus.

It is essentially a mixture of materials that go to the students by a variety of delivery mechanisms: the regular mail, the Internet. We do 20 hours a week broadcasting on television which of course picks up another audience.

But then each student has a local associate faculty member who will hold group meetings as that is possible by numbers and geography, and is also responsible really for the care and feeding of
industrial-scale operation in terms of producing learning materials but keeping students in quite small groups with close supervision when it comes to the way that they are supported.

CHAIRMAN LEAVITT: Governor Hodges and then Governor Hunt.

GOVERNOR HODGES: Yesterday in our discussion we talked about how a number of traditional businesses are creating their own dot.com enterprises because of the threat from Internet-based businesses.

I am curious about whether you are seeing a trend around the world of other universities feeling threatened by this and beginning to develop their own Internet-based universities.

SIR JOHN DANIEL: Yes, that is certainly happening. It is happening so quickly it is very difficult to get a real feel for it.

My impression is that so far a lot of Internet courses have been developed, but what they are primarily doing in most cases is to enrich the environment for basically the existing students.
I am not aware of people who have launched Internet courses and tapped into a large, new market, but clearly that will come.

We ourselves are beginning to ask whether in the age of the Net we need to be quite as restrictive as we are in only operating in places where we can have on-the-ground associate faculty who can look after people.

CHAIRMAN LEAVITT: Governor Hunt.

GOVERNOR HUNT: Sir John, are the associates really close by these learners physically, or are they centered somewhere and they just stay in touch with them?

SIR JOHN DANIEL: No. We try and have them close to the students. I mean, to give you the scale of it, we have about 7500 associate faculty spread all over the U.K. and Europe.

So if you are in say Aberdeen, Scotland, and you are taking a first-year course, chances are your tutor will be in Aberdeen.

If you are taking a third-year course in Laser Physics, chances are your tutor may be in Scotland but he is not likely to be in Aberdeen.

It is obviously a sort of geography, but there again the scale is very helpful because the more students you have the more you can provide services on the ground.

GOVERNOR HUNT: That is what I really
wanted to get at.

One of the great things you do say as an undergraduate is to develop judgment, and that comes at least in my experience in being engaged and hearing things and challenging and provoking and sorting all that through.

So they do get together at times and the students can experience some of this?

SIR JOHN DANIEL: Yes, they do. And in fact those sessions are aimed exclusively at that sort of interaction rather than being lectured out.

Now a lot of that moves very well onto the Net.

I said that students were exchanging thousands of messages sort of a minute, and that is partly because there are something like 7000 computer conferences going associated with courses where students can discuss.

This can be just as challenging as the face-to-face thing, although I wouldn't want to substitute that.

In fact our U.S. Board made it very clear to us when we came here that they wanted to keep that face-to-face element wherever possible.

CHAIRMAN LEAVITT: Governor Engler.

GOVERNOR ENGLER: Just a couple of questions.

Does the Open University own the content?
In other words, if we hire Professor X from the faculty, he has a contract with the Open University and then his work is, his intellectual--

SIR JOHN DANIEL: Yes.

GOVERNOR ENGLER: --property is yours, then?

SIR JOHN DANIEL: We have been very strict about that from the beginning. The copyright is vested in the Open University.

GOVERNOR ENGLER: Do you have a situation where the-- So, he may still be a full-time faculty member at another university but have developed a product and sold that to you almost like a consultant?

SIR JOHN DANIEL: Well they would very rarely do that sort of as an individual, but if he were pulled into a team say because he was an expert that we needed to do a television program on the work in his laboratory, he would cede all rights to the Open University. Because our experience is that even within your own sort of teaching system, but especially if you want to sell that material alone or use it elsewhere, you simply have to have the copyright. Otherwise, it is a complete nightmare tracing who owns bits of it.

GOVERNOR ENGLER: The students themselves, do you have dual enrolled students that maybe are attending, may be in residence on a university campus.
but also would take maybe a preliminary course or a
lower-level course on the Open University? Have you
got shopping based on price, yet?

SIR JOHN DANIEL: To a very limited extent

in the U.K., and that is because our academic year
doesn't coincide with the regular academic year so it
is quite difficult.

But in the two Canadian Open Universities
that I know of it is something like 30 or 40 percent
of the students are duly registered at the Open
University and at a campus.

GOVERNOR ENGLER: And the residential
campus at a university is recognizing those credits
in full?

SIR JOHN DANIEL: Oh, yes, absolutely.
No, both ways. I mean, we get a lot of students in
whose credit we recognize from other universities and
a lot of our students go on and finish elsewhere, and
that works absolutely fine.

CHAIRMAN LEAVITT: We are beginning to get
some momentum to this discussion, and I want to shift
it into overdrive by going to some panelists, but I
am going to ask Governor Graves if you would ask your
question, and then we will go to the next, and we'll
get this discussion going on a more broadly based
basis.
GOVERNOR GRAVES: I was going to ask Sir Daniel to give us more of a profile of the student body of this University.

SIR JOHN DANIEL: That is extraordinarily difficult, because almost any generalization is false, including this one.

They span the complete age range. Average age is probably about 36, 37 on entry and so about 42 on exit but we have kids in their teens, because we offer a service for the sort of child prodigies who have run out of what the schools can teach them. At last count I think we had 800 students over 80, so we go into the seniors as well.

They are exactly 50-50 male-female. They have a broader socioeconomic profile than the rest of the population.

Ethnic mix is about exactly on the overall British population.

Why are they doing it? About one third for directly career reasons, about one third to get that educational qualification they always felt they had in them, and about one third for purely, sort of, interest of learning.

But as they get into the program, they tend to change around and what started as leisure learning then becomes a career interest, and so forth.
CHAIRMAN LEAVITT: Thank you. I would like to move to a more open panel discussion, if we could.

We will include Sir John, as well, in this discussion, but I would like to introduce our three panelists.

Our first panelist is Samuel Smith. Dr. Smith is the President of Washington State University.

He has been credited with doing more for higher education in the state of Washington than any other single individual. Under his leadership, Washington State has become recognized as a North American leader in distance education.

Dr. Smith, we are pleased that you are here.

Our next panelist is Richard Florida. He is the H. John Heinz III Professor of Economic Development at the Carnegie Mellon University.

He is serving as a consultant and as an adviser to national, state, and regional agencies, and multinational corporations on issues related to public policy.

His current research examines the relationships between universities and industry.

Our final panelist is Robert Mendenhall, who is the President and CEO of Western Governors University.
Mr. Mendenhall has more than 20 years of experience in the development and the marketing, and the delivery, of technology-based education. Previously, he was the General Manager of IBM's K-12 Education Division, and prior to that he was an Executive Vice President with the Johnson Learning Corporation.

I would like to begin by asking a question to Richard Florida, if I could, regarding the corporate view of training, of education, and what corporations are doing.

First of all, I will ask the question: Are they seeing a deficiency? And second: What are they doing on their own to respond?

RICHARD FLORIDA: That is a great question. Thank you, Governor. Before I respond, I just wanted to say one thing. I want to recognize and applaud your support for higher education. Without your support, there wouldn't be a new economy, and I think we all need to recognize that.

What are companies doing? I think Carly Fiorina said something very interesting yesterday. She said the real factor of production in the new economy is highly skilled individuals, and business is going to go to where those highly skilled individuals are.
So the one thing we see is that business is making investment decisions around the places that are delivering high-quality higher education. There's two kinds of businesses, and you said it yourself, Governor Leavitt. There are big companies which can internalize a lot of this. When they find a deficiency, they can compensate for this, and they are establishing all kinds of wonderful training programs, and Motorola and other companies are the world leaders in that kind of thing.

But the smaller companies--the new enterprises--those gazelles that define the new economy--really can't do that. And if you meet folks who manage in these companies or work in these companies, they will say that is a very hard thing to do, to develop the kind of well-rounded individual that Sir John talked about who can plug into these companies and make it go.

That's a very important area of partnership--how we partner the universities with these small, high-tech companies that not only give them the technical skills they need but the marketing and the managing, and the human resources skills that they need to be successful.

The bottom line is that there is a deficiency and there is a gap, and companies want
universities to do more, and universities need to do
more.

CHAIRMAN LEAVITT: Thank you. Next, to

Bob Mendenhall:

Bob, you are President and CEO of Western
Governors University, which is an enterprise many of
us have been involved in developing in a consortial
effort of 18 states. The focus, however, is on the
delivery of competency-based education and degrees.

would you give us some description of a
competency-based degree and how it fits into this new
global economy?

ROBERT MENDENHALL: Thank you.

Western Governors University was created
essentially from a blank piece of paper to look at
the new economy and new technology, and decide how
would we create a university setting if we were
starting from scratch, as opposed to changing an
existing entity.

There are several key components to it.
The key one is this competency-based learning.

Number one, we deliver virtual education.

That is most of what we deliver are Internet-based
courses. We made a decision early on not to create
our own courses but to utilize courses from
universities around the country, but also
corporations, from their internal corporate training
and commercial providers of content.

It is delivered at a distance, which makes
it very difficult, both using content from non-
university providers, and delivering at a distance
makes it very difficult to count seat hours or credit
hours.

Therefore, the manner of assessment of
learning is on outcomes, and what we do with
competency-based learning is we define a degree
initially with a team of industry and academic
experts who define what it means to be competent in a
particular degree area at a particular level--
Associates', Bachelor's, Master's Degree--and then we
work with a separate assessment counsel of
psychometrician testing and assessment experts to
define how we are going to measure those
competencies.

Clearly it is more than just objective
tests. It includes performance tests, portfolios,
and so on. But the requirement for a degree from
Western Governors University is to demonstrate those
competencies through the assessments.

If you demonstrate that you have the
competencies, you are awarded the certificate or
degree independent of how you got that knowledge--
whether it was on-the-job training, self study,
reading a book, taking a university course, or however you did that.

So, that is our model of competency-based education.

CHAIRMAN LEAVITT: Perhaps I could follow up with a question just to allow you to say something I would like you to say.

(Laughter.)

CHAIRMAN LEAVITT: Could you describe the teacher--the Master of Arts Degree that Western Governors is offering? This is a Master of Arts being offered to certified teachers.

ROBERT MENDENHALL: One of our degrees, we created a Master's Degree in Learning and Technology specifically for K-12 teachers to give them a basic Master's Degree in Education so it has the traditional domains of instructional design, measurement, and evaluation, and so on, but, in particular, an emphasis on using technology in the classroom.

The strength of this degree area is severalfold:

Number one, harking back to the story Governor Leavitt told at the beginning, we have teachers in our schools who have used technology successfully for many years. They don't have a degree in that area that says they are experts in technology but they have the expertise.
And so a competency-based degree allows them more quickly to demonstrate that competency and be credentialed for it.

Having said that, many of them do not have the pedagogical or research background that a Master's Degree in Education would have, and so it also allows them to go focus on those areas where they need additional skills and to take those courses to add to those skills.

Finally, one of the strengths of the program is we are teaching teachers to teach with technology by teaching them with technology. All of their courses are being delivered via the technology. I went for a Doctorate in Instructional Technology and never took a class with technology.

All of them were taught by a teacher and a blackboard. I think an education for teachers teaching with technology delivered via technology, is inherently a better education because we are practicing what we are instructing them to do.

Finally, we believe what one of the strengths of the program is is that we are collecting the best courses from major universities around the country which give these teachers different perspectives on education technology as opposed to a single perspective they might get at a particular university.
Dr. Smith, I have reported to you before a conversation I had with a colleague of Governor Hull's.

The President of Northern Arizona University and I were talking--Dr. Claire Lovett--one day and she told me as we talked about how we could use resources from various states to hook up in order to share resources, she said to me:

There are really only four barriers to that. There's tradition. There's turf. There's regulation. And bureaucracy. I thought that was a pretty good summary.

I am wondering if you could speak, as a person well experienced in working with traditional systems of higher education and state policies. Do state policies on regulating and funding postsecondary education and the credentialing of students need to change in order to enable this kind of learning?

SAMUEL SMITH: We only have an hour, an hour and a half--

(Laughter.)

SAMUEL SMITH: Let me very quickly give you a couple of examples. A simple answer to the
question is yes, there's a number of state policies
and a number of attitudes, I think, that would be
very helpful in moving into this new generation.

Let me give you an example. We have a
large number of students enrolled in distance
education programs.

It is easier for me to offer a Bachelor's
Degree in one of your states than it is to offer it
in my state.

If I do it in my state, I must go through
a higher-ed coordinating board. I must go through
all the formal clearances. I don't have to clear it
with anybody if I go into your state.

Right now, I have actually enrolled
students in 36 of your states and about 19 countries.
Right now, we have in the State of Washington--let me
do the reverse--we have over 90 accredited
universities offering degrees in the State of
Washington.

You can take degrees from Old Dominion

University in Washington and Virginia in-state
tuition rates lower than our in-state tuition rates.

Now I've got to be back in Washington
tomorrow because we are arguing a little bit over
whether we can deliver some courses in another part
of our state.

But as you go through this the whole
question comes up for example:
what do you do with in-state tuition and out-of-state tuition?

We've got students right now on our main campus that are taking courses with us, actively in place and site, who are also taking courses at the University of Idaho next door to us and taking courses over the Internet from any one of a number of other institutions.

Are they in-state students, or are they out-of-state students?

Yes, there's a whole series of policies. This is where, I think, right now one of the wonderful things that's happening right now with the new technology that we are working with is that we are doing away with state and national boundaries and we will be making available to every student all of the offerings that any of your institutions are willing to put online that we can work with.

CHAIRMAN LEAVITT: Thank you, Dr. Smith. May I suggest this may be one of the areas in which Governors working together to unlock these boundaries, or to unlock these barriers, could move substantially forward in all of our states.

Governor Hodges, your question.

GOVERNOR HODGES: A question really for any of the panelists. I was intrigued by the idea of giving a degree based on areas of competency, particularly in the technology.
It seems like one issue would be, with technology changing or an area of competency changing, how ten years from now whether that degree will be meaningful, and how a consumer or how a business, if they are looking at someone with a degree based on competency, can judge whether the person is still competent in that area. Just for any of the panelists.

ROBERT MENDENHALL: Since it is our degree, let me take the first stab at that. I think two approaches to it are significant. One is that we build this Program Council to define competencies. It doesn't disband. So the Program Council continues in place and modifies those competencies as needed, however often is needed. And because we are not developing our own courses, we are able to go out and find courses that map to those new competencies.

And so what we have created is a model that can be very responsive to a quickly changing dynamic industry.

GOVERNOR HODGES: But you don't retest if you are judged competent at some point in time? You're not retesting that person who was judged competent then?

ROBERT MENDENHALL: Someone who got the degree--

GOVERNOR HODGES: Right.
ROBERT MENDENHALL: --eight years ago.

Our expectation is--and we are only a year-and-a-half old in this thing--but our expectation would be that we would have add-on certifications for past graduates that could renew their competencies.

The other thing to note there which is interesting, particularly in the IT area what we have found is that the content from commercial providers is both more current, has a higher production value, and is lower cost than the courses offered from our universities because that is the one area that we have a flourishing training industry going of for-profit providers providing IT training to industry and to others.

What this model of competency-based education allows us to do for the first time is give academic credentials for learning, whether it comes out of a university or whether it comes from for-profit providers.

So it allows us to go find the very best content and use it and link it to academic credentials through our competency-based testing that otherwise simply wouldn't be available to
undergraduates trying to go through and get a degree in technology.

CHAIRMAN LEAVITT: Thank you. Dr. Smith?

SAMUEL SMITH: One of the big advances of the distance education program, for example many of our university-based programs--traditional programs, and I'll take Dentistry, Optometry, Engineering--are really for all practical purposes competency-based because you have to take an examination and certification going out.

But with the distance education we can then go back over a year, two years, three years, and actually update their training. And so long as they can stay in touch with us, we can get to them whether we are doing it through Western Governors University or through our own auspices.

CHAIRMAN LEAVITT: I would like to ask Richard Florida, do you find a higher value currently being placed among corporate--in the corporate world on the degree or the competency?

Are you seeing any appetite developed in the corporate world for this competency-based measurement?

RICHARD FLORIDA: That's a very, very hard question to answer. I think in most experiments with your competency-based learning or non-degrees or new degrees that what happens is that students tend to
find that they get rewarded for having more traditional degrees when they go into the labor market.

Companies may say one thing about what they want, but then when it comes to making that choice, they often go for the degree from the best institution that they can get it.

I am not saying that is the right thing to do, but we are finding that evidence both statistically and anecdotally.

CHAIRMAN LEAVITT: And will likely continue that way for a time.

Let's go to Governor Hunt who has a question.

GOVERNOR HUNT: Well first I want to say how excited I am to see competency-based approaches in higher education, something we are doing very rapidly in K-12, as you know.

Just about every state will shortly require a demonstration of competency for high school graduation.

I don't sense that this has happened to a great extent yet. Am I right about that in higher education?

ROBERT MENDENHALL: To my knowledge, we are the only institution offering competency-based degrees.

As Dr. Smith said, there are competency
elements in certain other programs, but in terms of actually basing the program on we're not going to count credit hours and we don't care where you learn the knowledge, just demonstrate your competencies, I think we are the only institution doing that academically.

Where it has emerged and where I think industry has accepted it is in the--particularly in IT in the certification programs.

I remember Ray Norda standing up four or five years ago--the former CEO of Novell--and saying:

You know, I have one certification program that I offer. I have a hundred thousand students, and their starting salary is about $50,000 a year. Which of your university presidents have a program like that? And he sat down.

We now have the MCSE from Microsoft, and Cisco has one, and Sun has one, and so these industry certifications are taking on great economic value, because they are training a specific skill and then certifying that that skill exists.

What we are trying to do in competency-based education is expand beyond the job skill to what we would consider a traditional education, which has more of the general education and quantitative and language skills that you would consider in a normal degree.

SAMUEL SMITH: If I can jump in here for a
second, we are just finishing our fifth report right now from the Kellogg Commission on the Future of State Universities and Land Grant Colleges.

As you go through the process—and I don't think I am being too hard on my colleagues—but competency-based degrees are not very popular within traditional universities. Is that a nice way of phrasing it?

I don't use the word "disdain," but I in going through the process, one of the important aspects of the Western Governors University is that it is putting competency-based programs and degrees as a change agent out there to work with.

We have gotten more response out of what I would call the traditional universities over the last two to three years by watching Western Governors University, saying: Well, if they are doing this, maybe we'd better watch it. And they'd better.

CHAIRMAN LEAVITT: Thank you.

GOVERNOR ENGLER: If I could have some sense of how big this program is, how many different courses do you offer through the Western Governors University?

ROBERT MENDENHALL: We currently offer about 900 courses from about 45 to 50 different
institutions.

GOVERNOR ENGLER: And how many students, then--

ROBERT MENDENHALL: We just brought out our first five degrees last summer, and we have just over 200 students.

we are adding about 30 or 40 a month, so it's brand new.

GOVERNOR ENGLER: Two hundred students for 900 courses. Is that right.

ROBERT MENDENHALL: Yes, the courses--

They don't take all those courses. We have essentially built a catalog of a lot of courses that will support future degrees that we have.

what we have done here is that we map the competencies that we have defined to these courses, and many of these courses would not map to our current degrees and to our current competencies. We have more courses.

We also have individuals coming to take courses through Western Governors University that are not our degree-seeking students.

GOVERNOR ENGLER: But unlike the Open University, they would have to be enrolled at Washington State first?

ROBERT MENDENHALL: No, they enroll through Western Governors University.
GOVERNOR ENGLER: Is there a Western Governors University degree?

ROBERT MENDENHALL: Yes.

GOVERNOR ENGLER: That is separate and apart from a Washington State degree or Idaho degree, or something like that?

ROBERT MENDENHALL: Right. The degrees are from Western Governors University.

GOVERNOR ENGLER: Then, you've got a curriculum committee that determines in order to grant who would receive a degree, have to hit these courses? Is that how it works?

ROBERT MENDENHALL: No, see, it is not course-based or credit-based. We had a Program Council at the beginning that defined what it meant to be competent for a degree and we have developed assessments to measure those competencies.

And the student has to pass those assessments and demonstrate their competencies through the assessments for a degree.

We don't care if they take one course, no courses, or a hundred courses. They've still got to demonstrate their competency for a degree.

GOVERNOR ENGLER: I don't want to take too much time, but I am just curious. Then to the next step, to go to graduate school at Washington State, will you put that, if somebody's gotten a Western Governors degree and they now want to go on for their
Master's Degree, you'll treat them the same as you treat somebody who's got their undergraduate degree from the University of Washington or the University of Oregon, or someplace?

SAMUEL SMITH: We won't get into a discussion about comparisons between, you know, traditional rivals, so we will go out of state.

Whether we would accept it the same as a school from Michigan or Michigan State or University of Michigan, if you get a--at this point we are talking about the AA Degree and the Master's Degree--and the simple answer to the question is yes.

Now going through it, let me come back with these courses that are being offered here. As you go through the process, for example at our institution we have about 4000 students enrolled that are not on any campus anywhere. They are taking these courses for credit for our degrees.

Now these courses are also mapped to the WGU degree. So also a student going through, if they do take one of our courses to meet a competency, they also can get credit with us.

GOVERNOR ENGLER: So maybe I didn't ask the right question. How many other students are taking some of these 900 courses that are enrolled at Washington State or Idaho State and not in residence? I mean, how many course-takers do you have?
ROBERT MENDENHALL: We have several hundred other students that are not WGU students, that are taking courses through our catalog. Most of those, probably most of those are enrolled at other universities. Some are not enrolled anywhere and they're just taking courses for their own advancement or for their own learning.

CHAIRMAN LEAVITT: Sam, final comment.

SAMUEL SMITH: Really, the Western Governors is very much like a start-up company, and going through it right now, it's trying some different things to see what works. It has a flexibility right now to look at some of the questions you are talking about.

CHAIRMAN LEAVITT: Governor King, and then we will go to the next.

GOVERNOR KING: A question for Mr. Smith and also Sir John Daniel. To what extent are state regulations of higher education a barrier to these Internet, ITV, distance learning? Is it a problem, or is it a non-issue, and is this something the Governors should be addressing themselves to as to try to generate uniform regulations, or is it not a barrier at all as you try to establish yourself here and generate students here?

SAMUEL SMITH: That is going to vary from
state to state. My first request, if anything, is please do not give us any regulations. That would be my first request.

GOVERNOR KING: I am talking about are there ones we need to get rid of?

SAMUEL SMITH: Okay, going through it, I will just talk about Washington for a second, and, by the way, it is one of the more progressive states. But in going through the whole process, at one point we used to have geographic service areas where if we wanted to offer a course not on one of our campuses we couldn't offer one in areas where there was another university.

We also must demonstrate certain numbers of students before we can offer a course within the state.

We must go through a series of regulatory examinations as far as potential employment of these students, whether we have the funding level going through.

Now we are in one of the more progressive states. We have states in this country--and I am not sure in Maine, I don't know--but I know in some states you cannot offer a course off of your main campuses unless you have some sort of permission.
So what I would look at is anything that would inhibit the market from making the decision as to whether a course could be taken in your area.

CHAIRMAN LEAVITT: Sir John?

SIR JOHN DANIEL: Yes, we have had the interesting experience of coming and setting up a sister institution which is going to be an American institution accredited in the states, and so on.

But, we naively thought that America is one country and very quickly discovered it wasn't.

(Laughter.)

SIR JOHN DANIEL: I mean, all I would really implore you is to at least be clear about what each state means by operating higher education in that state, because that is not a straightforward question.

Obviously, if you build a campus, that is presumably operating higher education, but, if you just have occasional tutorial meetings at an airport or in a hotel, does that count?

If you are going in entirely on the Net, does that count, because I think it is important to get this right.

Because in some ways by being too restrictive and defining any gathering of people as something needing a license, you may actually be diminishing the quality of the learning experience, going back to a question that was asked earlier about
the value of the face-to-face meeting.

So it is quite bewildering if you start
from scratch and as I say naively think that America
is one country and here we go, and very quickly
discover that you've got to be careful, because we
have been very strict about going in through the
front door and making sure that what we were doing
was absolutely on the up-and-up, as it were.

GOVERNOR KING: Mr. Chairman, I never
thought we would be talking about NEXUS in connection
with higher education, but that certainly sounded
like what he was saying.

CHAIRMAN LEAVITT: It is very much an

issue. In fact, I am aware of a situation where one
state governing board issued a cease-and-desist order
against another university that was offering
curriculum in their state without being licensed.
So I mean this is very much an issue as we
move into this.

Governor Patton, and then Governor
Kempthorne, and then we are going to our Vice
Chairman for some discussion about an exciting
initiative that he plans to undertake next year.

GOVERNOR PATTON: Is Western Governors
Association University degree accredited by a
regional accrediting agency, like in the southeast we
have the Southern Association of Colleges and
Schools?
ROBERT MENDENHALL: We are in the process of being accredited. Actually, because we cut across 19 states, four of the regional accrediting organizations have combined into an interregional accrediting organization.

There are three steps to it. We just had our visit for candidacy accreditation a couple of weeks ago.

Full accreditation is granted only after you have graduates, so we are still a year or two away from that until we have graduates, but we are in the process of being regionally accredited.

CHAIRMAN LEAVITT: With not one but four, and that is a real exciting experience. Really great.

Governor?

GOVERNOR KEMPTHORNE: Mr. Chairman, you remember last year we had a Harvard economist who was forecasting that the United States would experience a shortage of about 800,000 engineers in the future.

My question to the panel is--and, too, Mr. Chairman, I think you referenced with postsecondary--how are we doing in providing the type of graduates that the work force is requiring?

CHAIRMAN LEAVITT: Richard Florida, would you--

GOVERNOR KEMPTHORNE: But before--here's the question:
How you doing in K through 12 in providing

those young students who will then ultimately go to
postsecondary, is there a continuum or is there a
problem between K through 12 and then postsecondary?

RICHARD FLORIDA: Let me tackle the first
part of the question and the second part. I think
that is really the critical question you asked, Governor, is:

How do we provide--what Carly Fiorina
said, and it is important to remember these
words--highly skilled individuals? Those are those
engineers and scientists.

And the part of the equation that we
haven't heard enough about today is how do we produce
those kinds of people, particularly in the new
economy?

In that sense, higher education is the key
investment you can make. Higher education is the
most important investment that Governors can make
because universities are the places to generate those
folks.

So talent, if you want to build a new
economy you've got to have the talent, and the states

that have that talent around the university are going
to win.
To do that, you have to do research. So the missing component that we haven't talked enough about is what kind of research can go in these universities that would attract the talent. But it is not enough just to have the talent, because a lot of states create the talent and then the talent goes away.

Now for the Nation it is good enough to have the talent; we can even import it. But from the perspective of a state, you have to create the talent and then you have to do what it takes to put that talent to work in your particular state to build that state's economy. That is something Massachusetts and California have done really well.

We in Pennsylvania have generated a lot of talent and we are working on how to try to keep it there. Now that goes back to your first point. One place you start to lose talent from your state is 12th grade. There are two critical decision points made. One is at 12th grade, and one is after receipt of the BA or the BS.

And states need to think very long and hard in how they link--how you link your higher education strategy, not only get the person to 12th grade, but to try to keep them at 12th grade, and how do you try to keep them after graduation. And that has to do with your economic development.
CHAIRMAN LEAVITT: Thank you. Good discussion.

To Sam and Richard and Bob, thank you.

To Sir John, we deeply appreciate you making the trip across the Atlantic, and the trips across the continent we appreciate each of you making.

I would like now to turn to our Vice Chairman, Governor Glendenning, for some comments on this particular topic.

I know he plans to focus on this during his chairmanship next year.

CO-CHAIRMAN GLEN DENNIN G: Mr. Chairman, thank you very much, and let me just thank you for again continuing our discussion of education at all levels.

There's not one of us around here who doesn't understanding the importance of this, and it also serves as a link to what we will be doing next year, I think, as one of our two major areas when we'll be working together both on the major environmental issue of sprawl and all the innovative work that is going on across the country in this, as well as the issue of higher education.

I do want to first commend Sir John Daniel and the entire panel for being here and for your insights to this, as well.
I will tell you by way of some summary of what is going on here that I have seen the very debate, the very questions that were asked very personally, because of the great experience that happened in terms of my career.

Before becoming Governor, I was a college Professor, and I went through the very traditional approach. I got my AA Degree. I got my BA Degree.

I got my MA Degree. I got my Ph.D., and the Master's and the Ph.D., I did the dissertation and I went through the comps and everything else.

Then I became Governor and one of the things that happened was someone came into me from a proprietary college, some of which you know because they have campuses now across that nation--Strayer College, which primarily does applied business technology--and they said:

Why can't we open offices in Maryland?
After all, we are incorporated in Maryland and have been for over 60 years.
I said: You mean, you have no offices here?
They said: No.
So I asked our Maryland Commission for Higher Education why not.
They said: Well, we have this procedure, and you have to demonstrate a need, and we have determined a couple of times that
there's not necessarily a need for this type of activity.

So, I went back, and I thought about it a little bit, and I said:

Well, wait a minute. Why don't we just let the market determine the need, because, after all this is a for-profit educational institution, and as I understand it they had campuses at the time in about 30 different states.

So I went back and I asked the Higher Education Commission again the same question:

Well, why don't we just do it that way?

They said: You can't. The regulations don't permit it.

I said: Well, why don't we change the regulations?

They said: Well, you really can't do that because the regulations are pursuant to the law which said a campus expansion must designate a need.

So I said: Okay. I said: Let me review this law. I had my legal advisor do so. The law was adopted very properly in 1928 and clearly established how we were going to expand our higher education system throughout the state.
We did by the way change that law and the regulations and I am pleased that the Strayer College now has several campuses doing very well and we have had other proprietary schools, even like the Phoenix University, and so on, all now coming into the state and also doing very well.

I think what has happened is there will be constantly, at least in the foreseeable future, a need for very traditional degrees.

People will want individuals who go through or individuals will want to go through a very traditional approach.

But I also think that what is happening is much of the market is changing, and there will also be a need for individuals with skills just based on competence, and all you want to know is that this person is in fact certified and trained and ready to go in this area.

I think as Governors one of our big challenges is going to be to continue the quality of higher education in very traditional fields, very traditional institutions. At the same time, however, permit and encourage and even stimulate a whole series of out-of-the-box alternative methods of learning and then simply permit choices from two directions.

One is simply going to be the student. What do they want to do?
Two will be the market employment decisionmakers. Who do they want? And what do they want in terms of background and degrees?

Now with that we are trying to make some other changes in Maryland, and this will be part of the discussion for us starting with the summer meeting, as well, but how do we both encourage these type of approaches but also have significant expansion in traditional campuses, as well?

One of the things that we realize—and I don't think there is a Governor here that doesn't understand this—and that is with the knowledge-based economy, how well we do in continuing lifelong education and higher education is going to determine not only the competitiveness of a state—and, indeed, collectively, the whole Nation—but it is also going to determine what avenues of opportunity for individuals to meet their potential are available.

We just laid out a challenge to our state system of higher education and we said we would make a very significant expansion of resources available, but what we wanted to do was to answer three questions:

What specifically and measurably was their vision of excellence?
And what were they actually trying to do?
How would they achieve this vision in a
13 measurable way so we could see real progress?
14 How much would it cost?
15 Now by the way, most campuses were eager
16 to answer the last question first. You know, if you
17 give us another $15 million here and $200 million
18 there, we are going to do well.
19 But we are holding them to this. As a
20 result of the starting of answering questions, we
21 announced a budget in which we are adding $1.2
22 billion in campus construction.

We have increased the operating funds by
14 percent this year alone, but in each case it only
15 goes to those campus centers where they have laid out
16 this plan of what they are going to do in terms of
17 expansion.
18 I would note, in working with our
19 businesses, but it would surprise me if it wasn't
20 true for every single state, when I go to businesses
21 today and talk about their growth, their expansion,
22 their future, the single most important question we
23 run into is--issue is the lack of qualified, trained,
24 or degreed personnel.
25 It doesn't make any difference
26 whether it is Northrup Grumman, which is
27 headquartered in Maryland, or whether it is a small
28 company that I visited recently who was
29 complaining that they couldn't get computer software
30 engineers and that they were ready to expand in a
So I think that that is the challenge that is facing us. This panel in fact is a lead-in to the fact--and I appreciate the transition--that we will be working together next year, as I say, both on the environmental issue but also on higher education, improving the quality of traditional higher education as well as figuring out how we integrate this with the changes that are going on in terms of what we have heard from this panel, and numerous other changes happening, as well.

I might indicate lastly that I will be going to Germany this summer for the celebration of the University of Maryland's 50th anniversary of what they call University College. This is an off-campus center, but historically there have been other locations, and they just hired a new Dean. Much to my surprise, they paid the new Dean $280,000, and so I asked someone--I should say they hired a new President, because it is a separate campus--I asked them:

I said: How is it possible that we are paying for what I viewed as an off-campus-type coordinating center $280,000?

They said: Well, we have to redefine our entire mission. It will no longer be a series of
kind of overseas and other state physical locations. What we anticipate is, by the end of this decade, there may not even be a campus, and they have about 150,000 students in this now, and that we could have two to three times as many students but without having a single campus.

They said: To some extent, you are going there for the 50th anniversary, but it may also be about the end of this type of traditional teaching.

I think all of us are seeing this in our states, and it is an exciting opportunity, and I look forward to working with everyone next year and, as we start to pull together the summer program, would welcome input and suggestions on different topics that we ought to be covering here.

Thank you very much.

CHAIRMAN LEAVITT: Thank you, Governor.

The time of this session has expired, but I would like to extend it long enough for two brief comments.

One, I understand, Governor Patton, you would like to comment on the national assessment of adult literacy.

I would like to recognize the Governor of North Carolina to talk some on the Center for Public Policy in Higher Education.
GOVERNOR PATTON: Thank you, Mr. Chairman.

It has been a very good discussion about how we can provide our adults with a postsecondary education.

But I want to go to the other end of the spectrum and talk about adult basic education.

You know, the idea that a huge number of our fellow Americans have deficient literacy skills seems unimaginable to most people in leadership positions in this country.

But it is true.

It is like a disease that infects virtually every dimension of life. It saps the energy and capability of our people and the nation's economy. It feeds unemployment, fattens the welfare rolls, and helps fill our prisons.

Despite landmark reforms in public schools throughout America, too many of our citizens continue to drop out of school.

Research has proven that children of parents who are unemployed and haven't completed high school are five times more likely to drop out of school themselves. Progress is needed across the Nation to address this problem.

No one state has a monopoly on the tragedy. It is a national problem that will widen the gap between our lowest-income citizens and our more affluent citizens.
The social, economic, and political costs of the growing disparity between the "haves" and the "have-nots" are just not acceptable.

In 1992, the National Center for Education Statistics conducted a national assessment of adult literacy in 13 states.

The results were shocking. The assessment showed that some 40 percent of the population of the United States that participated was either functionally illiterate or had literacy skills at levels one or two, which means that they are reading below the 9th-grade level.

Even though Kentucky wasn't one of the original participating states, they were, the states that did participate were representative of the nation so I'd say the results reflect the situation of the entire country.

Realizing that we in Kentucky needed to know where we stood on this subject relative to the rest of the Nation, we teamed up with the education testing service and administered the 1992 assessment instrument statewide in Kentucky in 1995.

The results of our tests showed that we were just about in the middle of the pack. We weren't a whole lot worse off or a whole lot better off than the rest of the Nation.

The fact is the whole Nation was in much worse shape than I would have imagined.
The National Center for Education Statistics will conduct a second assessment of adult literacy in 2002. Nearly 30 states have already indicated an interest in participating, and there is plenty of time left to sign up.

We expect more to do so, and let me tell you this time Kentucky will be included in the original testing, and we are going to take advantage of it.

If we are going to be successful in addressing the problems of illiteracy in this Nation, we have to develop strategies to energize our people and gain the commitment of the Nation's political, education, business, and civic leaders. No national strategy will succeed unless it engages leaders in every state, every county, and every community across America.

We must identify the needs and develop programs and services appropriate for each community's unique circumstances.

In my state of Kentucky, we have started a statewide public relations program to help our people understand the value of an education. We want our people to understand that education pays. This is an ongoing public relations campaign to help Kentuckians better appreciate the
value of an education.

My State is among those with the greatest percentage of adults over 25 without a high school diploma or a GED.

Needless to say, a significant portion of these people need their literacy skills improved.

I appointed a task force to look at the whole system of adult education and literacy during the past year and a half.

We have had a thorough and complete review of adult education in Kentucky. We have examined and restructured elementary and postsecondary education but not adult education.

In fact, I am not aware of any other state that has looked at its system of adult education in the complete and thorough way that Kentucky reviewed our system during 1998 and 1999.

As a result of the task force's findings, my executive budget now before the General Assembly recommends doubling the state's appropriation for adult education.

I am told that this is the most significant percentage increase in funding that any state has ever made to improve adult
We must make our people more aware of how illiteracy can affect their entire society and drag us all down. I believe this can best be accomplished by having our individual states participate in the national assessment of adult literacy in 2002.

Once we identify the severity of the problem, we as Governors and education advocates must assure that sufficient resources are available in our state to effectively address the problem.

Let me again remind you that this brochure is on your table in front of you, and it details how your state can participate in the 2002 assessment. Representatives from the American Institute for Research are here to answer any questions that you may have.

I just wanted to bring this test to the attention of the Nation's Governors and urge all of the States to participate in 2002.

Thank you, Mr. Chairman.

CHAIRMAN LEAVITT: Thank you, Governor.

This concludes this session. The message is:

Value education. New ways of delivering it. New ways of measuring it.

We will adjourn until tomorrow at our
plenary session.

(Whereupon, at 4:10 p.m., Monday, February 28, 2000, the meeting was adjourned, to reconvene on Tuesday, February 29, 2000, at 9:30 a.m.)