103rd ANNUAL MEETING

## OF THE

NATIONAL GOVERNORS ASSOCIATION

July 15, 2011

## Plenary Session

HIGHER EDUCATION: CATALYST FOR ECONOMIC CHANGE

GRAND BALLROOMS B AND C THE GRAND AMERICA HOTEL SALT LAKE CITY, UTAH

Reporter: Susette M. Snider, CRR, CSR, RPR Notary Public in and for the State of Utah

1	PARTICIPANTS:		
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3		Washington Governor Chris Gregoire, Chairman	
4		Utah Governor Gary R. Herbert	
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8	GUEST	SPEAKERS:	
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10		Susan Hockfield, Ph.D, President of Massachusetts Institute of Technology	
11		John Seely Brown, Ph.D., Visiting scholar and	
12		advisor to the Provost of the University of Southern California and Independent	
13		Co-Chairman of the Deloitte Center for the Edge	
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1 PROCEEDINGS 2 11:03 a.m. 3 GOVERNOR GREGOIRE: Good morning, 4 5 everyone. Oh, man. We'll try it one last time. б Good morning, everyone. 7 (The audience responded.) 8 GOVERNOR GREGOIRE: Good morning to the 9 governors. Good morning to our distinguished guests. The reason I'm--good morning as loud as 10 11 I can is because, if you recall, in February I had laryngitis and couldn't say a word. And I'm back. 12 13 It is now my honor to call to order the 14 103rd Annual Meeting of the National Governors Association. 15 16 We really do have a packed agenda for the 17 next two and a half days. Let me run through it. Following this morning's plenary session, 18 19 we will have a governors-only lunch and business 20 session. Later this afternoon we will convene the 21 first ever U.S.-China Governors Forum to explore 22 opportunities for cooperation and friendship between 23 our two countries. 24 Saturday's business agenda begins with a 25 stand-alone session of our Economic Development and

Commerce Committee. It will include a discussion 1 2 about international trade and investment's role in our domestic economic growth and job creation. We'll 3 4 then have a governors' lunch and business session 5 followed by the meetings of our other committees. б Sunday morning we will begin with a 7 governors-only breakfast and business session. Our 8 annual meeting will conclude on Sunday morning with a 9 plenary on global challenges facing America today and 10 the role that education plays in U.S. 11 competitiveness. 12 New York Times columnist and Pulitzer 13 Prize-Winning author Tom Friedman will join us for 14 that session. Rumor has it he has a new book out. 15 We may be given a little bit of insight. 16 So I look forward to seeing all of you at 17 these sessions. Now, if I can, with a little business, 18 19 begin by asking for a motion for the adoption of the 20 rules of procedure for the proceeding. (Motion was moved and seconded.) 21 22 GOVERNOR GREGOIRE: It's been moved and 23 seconded. 24 Part of the rules require that any 25 governor who wants to submit a new policy or

1 resolution for adoption at this meeting will need a 2 three-fourths vote to suspend the rules. 3 So any discussion? 4 (No response.) 5 GOVERNOR GREGOIRE: All those in favor б please signify by saying "aye." 7 (Collective "aye.") GOVERNOR GREGOIRE: All those opposed? 8 9 (No response.) 10 GOVERNOR GREGOIRE: The ayes have it. If you have any proposals, please get 11 12 those to David Quam by 5:00 p.m. tomorrow. 13 I'd now like to announce the appointment of the following governors to the nominating 14 15 committee for the 2011-2012 NGA Executive Committee: Governor [Dan] Malloy, Governor [Terry] Branstad, Governor 16 Herbert, Governor [Jay] Nixon; and Governor [Robert] McDonnell will 17 serve as 18 chair of the group. 19 We are also honored today to be joined by several distinguished guests. First we have members 20 21 from the Canadian Parliament with us today. 22 Would you please raise your hands so we can acknowledge you and thank you for attending our 23 24 NGA meeting? You are here often, and we appreciate

25 it. Thank you very much.

1 (Applause.) 2 GOVERNOR GREGOIRE: Last evening I had the opportunity to meet a delegation of Arab ambassadors 3 4 who have joined us again this year. 5 Would you please raise your hands so we б can acknowledge your hands and thank you for your 7 attendance as well? 8 Well, I don't see them. They were here 9 last night. Well, welcome. 10 And we have our delegation from China, and 11 we will proceed to our historic forum a little bit 12 later. 13 This past January the United States and 14 China signed a Memorandum of Understanding supporting the establishment of a U.S.-China Governors Forum. 15 16 As I mentioned earlier, this afternoon we will have 17 our first ever NGA and Chinese People's Association for Friendship With Foreign Countries co-convening 18 19 forum with four provincial governors. 20 Would you please, those members from the China delegation, raise your hands. And let us 21 22 welcome them to the great state of Utah. Thank you all for joining us. 23 24 (Applause.) 25 GOVERNOR GREGOIRE: I'd like to take a

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minute, if I could, to thank our hosts for this 1 2 year's meeting, Governor Gary Herbert and his wife Jeanette, who are hosting our National Governors 3 4 meeting in beautiful Salt Lake City. 5 Thank you, Gary. б Thank you, Jeanette. 7 (Applause.) GOVERNOR GREGOIRE: The movie went well, 8 9 yesterday was great, the weather's perfect--56 and 10 raining back home; so thank gosh I'm here--the view is perfect, the hotel is wonderful, and your 11 12 hospitality is second to none. 13 Gary, would you like to say a few words? 14 GOVERNOR HERBERT: Well, thank you. Yes. 15 I would like to just personally welcome 16 everybody. Thank you, Ma'am Chairman. We're 17 honored, delighted enthusiastically to welcome the National Governors Association to Utah. It's been a 18 19 long time since we've had this opportunity. Back in 20 1947 was the last time that Utah hosted the NGA. And I made kind of a little joke on this 21 22 when we met with the press about back then Alaska and 23 Hawaii were not members of the union. So there's been a change in those last 64 years, and we're happy 24 25 to acknowledge now the membership of Alaska and

1 Hawaii to the union. So we welcome everybody.

2 Let me just mention that we want to make sure that your time here is not only productive but 3 4 enjoyable. We have some activities outlined for you. 5 This evening we'll have a picnic in the б park, in a beautiful park up here just in our 7 Salt Lake Valley up by the university called Red Butte Gardens. There will be a lot of food, 8 9 opportunities to socialize, to network, and talk about 10 important issues as well as a country-western concert. So good food, good music and good company. 11 12 Tomorrow we'll have an opportunity to go 13 up to Olympic Park where we had a lot of the training that was done, where still our U.S. Ski Team and 14 15 others train up in Park City for the Olympics, and 16 where some of the venues took place up in Park City 17 at Olympic Stadium. You'll have an opportunity to see the 18

venue, and, for those who are the hardiest among us, the opportunity to ride down in a bobsled just like the Olympians did. So if you haven't signed up, now's an opportunity to sign up. It will be a thrill of your life. And it is safe, but it will take your breath away. And we've got east versus west competition, so we're going to keep a clock on it.

1 But you'll have drivers, and it will be a fun time. 2 We'll have some aerial acrobatics that 3 will take place there that I think will entertain you. And again, it will be a wonderful evening, and 4 5 we look forward to hosting you there tomorrow night. 6 Sunday morning we have a special concert 7 that's going to be performed by the Mormon Tabernacle Choir in their conference center. And just seeing 8 9 the building itself will be a delight. It holds 10 about 20,000-plus people. It's an architectural 11 wonder. But if you haven't had a chance to hear the 12 Tabernacle Choir in person or seen them, this will be 13 a treat that you'll remember -- 7:30 in the morning. It's a little earlier but an opportunity to have a 14 15 patriotic special concert performed just in behalf of 16 the governors. So I look forward to seeing you 17 there.

Last, but not least, I want to just 18 19 mention that in your rooms there is kind of a gift 20 basket, which is typical. And in that gift basket you'll see one of these little sculptures here of a 21 22 handcart family. Now, not everybody knows about the 23 handcarts, but here in Utah we treasure our pioneer heritage and history and particularly the handcart 24 25 people.

1	In our familykind of a personal			
2	notemy wife Jeanette, the first lady, has a			
3	great, greatabout six-greats-back grandmother,			
4	Mary Soar Taylor, ended up coming from England as she			
5	had joined the Mormon Church. Her husband had died.			
6	She came here as single mother with one child,			
7	William, and another child, Jesse, came on a ship,			
8	came across, came to New York and then met out in far			
9	west Missouri and gathered with the Mormons there as			
10	they then trekked here to the Salt Lake Valley in			
11	1856.			
12	Now, a lot had been here already back in			
13	1847, but they got a little bit of a late start.			
14	Again, it was an inexpensive way to come across the			
15	plains, pulling your handcart with just a few of your			
16	belongings there, but it was all foot traffic,			
17	pulling your merchandise and what you had of your			
18	belonging.			
19	And they had an early winter, and they got			
20	stuck in Governor [Matthew] Mead's area of Wyoming. The			
21	was about three feet deep, and they got stranded in a			
22	place now called Martin's Cove. She ended up			
23	havinga rescue came after there for about a			
24	couple of weeks. They the frostbite was terrific.			

snow

25 They had 600 in their company. Half of them perished

on the journey from far west Missouri to the
 Salt Lake Valley.

3 She came to the Salt Lake Valley, and in 4 her journal notes she talks about she hopes that her 5 posterity would remember the sacrifices she went б through in order to make a better life for them. 7 And I mention that because it's not just a Utah pioneer story, it really is a story of America. 8 9 All of you've got the same kind of stories that you 10 could tell of pioneers, people who have gone before who have settled your states and tried to find a way 11 12 for their posterity to have a better life.

13 And as I reflected upon that and the reason we've given this little token of our 14 15 appreciation to remind you about Utah, but to remind you about America, that we've had the opportunities 16 17 to, in fact, be pioneers ourselves as we kind of smooth out the path, break the way, and smooth out 18 19 some of the bumps for our posterity and those that 20 come behind.

21 And, Ma'am Chairman, I think that's what 22 the National Governors Association really is about. 23 We're trying to make things better. We have good 24 examples of our history, of those who have done it 25 for us, and we have a responsibility to do it for our 1 posterity and their posterity.

2 So take that as a token of our 3 appreciation and esteem for you and reminder of what 4 we stand for here in this good and great country. 5 So welcome to Utah. We're excited to host б you. We know it's going to be a fun time for all and 7 productive for our states. 8 GOVERNOR GREGOIRE: Governor Herbert, on 9 behalf of all of the governors and all of our guests 10 who are with us today, thanks to you and First 11 Lady Jeanette for your amazing hospitality. You're 12 making fun what for us is a weekend to get the 13 people's work done and enjoy each other's company at 14 the same time. 15 So, ladies and gentlemen, please give a 16 warm thank you to Governor Herbert and his wife 17 Jeanette. 18 (Applause.) 19 At our opening session, along with hearing 20 our amazing speakers on what we can do if we really do partner between higher education, business, we 21 22 also want to take an opportunity to recognize our 15-23 and 20-year corporate fellows. 24 But now let me first turn to the business 25 of today's session. I have come to believe that

education is the absolute key for us to put America back to work, to make every one of our individuals be able to provide for their families, the economic success of our country and our competitiveness around the globe.

6 So today's session is about higher 7 education and its role as a catalyst for economic 8 growth. Strengthening our economies means making 9 more of our residents and making sure that they have 10 the necessary skills so that they'll be able to 11 compete for jobs today and, more importantly, for 12 jobs tomorrow.

13 Many of us know, with our unemployment, our folks have lost jobs that won't be there when 14 15 we're out of the recession. Those jobs are gone. 16 They need new training; they need new skills. Even 17 with our 9 percent national unemployment rate, there are three million jobs that are open right now because in 18 19 many cases the shortage is the result of not having 20 the necessary education and training.

In today's very competitive environment, our economic development, our education, our training strategies must be one of the most important things that we can consider as governors. We must be clear that what our states need from our colleges and

universities is obvious and clear to them. We must 1 2 hold them accountable for the progress that we want 3 for taxpayers' money and for tuition by our students. 4 That means being able to answer for 5 taxpayers and for students and their families' б questions like, How well are our higher education 7 systems doing at educating students with certificates and degrees that employers actually need so that 8 9 they've got a job when they finish? How efficient 10 are our colleges and universities, and how much of a return do they provide on the investments made by 11 12 students and taxpayers? How do we make sure that our 13 students are learning what they need to be career ready? Even as we encourage them to graduate and 14 15 graduate faster, when they do, are they career ready? 16 So my initiative, as you know, as chair 17 for the NGA was Complete to Compete. The document that you have at your table; it is an effort on our 18 19 part to develop metrics to help us answer those very 20 questions, to use those metrics to make policy decisions as governors about the direction we want to 21 22 take higher education in our respective states. 23 We started on the work last July with the NGA Common Completion Metrics, and today I can report 24

we have 30 states, including my own state, that have

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committed to collecting and reporting on those metrics. This could not have happened without the work of our partners at Complete College America and the Lumina Foundation. And I want to thank them for their work in advancing this. This is the key for our competitiveness around the globe.

7 College completion is critical, but it's one part of a bigger picture. To help answer the 8 9 questions that I just mentioned to you, NGA has 10 brought together a group of experts and governor advisors to identify a small set of key metrics on 11 12 efficiency and effectiveness in higher education. 13 That report, as I mentioned, is before you. It's the result of their work. It recommends metrics that all 14 15 states can collect and report on higher education 16 accountability.

17 Perhaps more importantly, the report offers ideas and best practices for using these and 18 19 other performance metrics to create a high 20 performing, postsecondary system in every state across the nation. We have plenty of data about 21 22 higher education, but what we need to know now more than ever is the ability to use that data to improve 23 and reward performance in higher education. 24 25 The combination of completion and

efficiency and effectiveness sends a very clear
 message that we as governors are prepared to ask the
 tough questions about outcomes and return on
 investment to our colleges and universities.

5 So that's why I'm pleased to announce that б NGA will be sponsoring a policy academy on collecting 7 and using higher education performance measures. It will begin in October. The academy will provide 8 9 technical assistance and grants for up to eight 10 states interested in increasing efficiency and effectiveness in higher education systems in their 11 12 states and using those measures to make key policy 13 decisions as governors.

Your chiefs of staff and your education policy folks have been informed about this earlier this week. I want to encourage you, if you're interested, to follow up.

Helping our community colleges and our 18 19 four-year institutions achieve greater success in 20 graduating our students ready for the global economy is a paramount responsibility each of us must bear. 21 22 It is critical to the success of our economic future. 23 So with that in mind, today we are very fortunate to have two leaders who bring a wealth of 24 ideas and experience to this conversation. They are 25

going to share with us their perspectives about the
 role of higher education in the world that is
 unfolding and what that means for states and colleges
 and universities.

5 Susan Hockfield, thank you for being here. б Susan leads one of our world's premier 7 research universities, the Massachusetts Institute of Technology. In that role, she has been a tireless 8 9 advocate for innovation, encouraging collaboration 10 across schools, disciplines, and departments as a means of sparking the creativity for tomorrow. She 11 12 believes strongly in translating research into 13 practice, tech transfer, harnessing the university's collective knowledge to tackle some of our most 14 15 pressing challenges.

And in recent years MIT has worked to provide students and faculty with the practical tools and advice to help their entrepreneurial ventures succeed and contribute to economic clusters that are so important to local, state, and national economic growth.

Dr. Hockfield is a neurobiologist by training. She also believes that our institutions of higher education must apply their vast knowledge to the task of creating new models of teaching and

1 research that fit the demand of our global age. 2 Before assuming the presidency at MIT, she 3 served at Yale as a faculty member, dean, and provost. Most recently, just a few weeks ago, 4 5 President Hockfield was asked via our White House to б join with Dow Chemical CEO Andy Liveris in leading an 7 industry-university task force to aggressively 8 strengthen U.S. capabilities in advance manufacturing 9 from revamping workforce training to accelerating 10 cutting-edge manufacturing methods. 11 We look forward to your remarks, and we 12 thank you for being here. 13 We also have with us John Seely Brown. Thank you for being with us as well. 14 15 He's one of America's foremost experts 16 when it comes to technology and innovation. As chief 17 scientist for the Xerox Corporation and head of its Palo Alto research center for nearly two decades, 18 19 Dr. Brown helped to change the face of corporate 20 research. He's also an acclaimed writer, 21 22 co-authoring The Social Life of Information, which challenges some of the conventional wisdom and 23 mythology surrounding the role of information 24 25 technology in today's society and describes the

changing nature of education. It's in its second 1 2 printing and has been translated into nine languages. Today Dr. Brown has one foot in the 3 4 corporate world and one foot in the academic world. 5 He co-chairs the Deloitte Center for The Edge, which б conducts original research on new corporate growth. 7 He's also a visiting scholar and senior advisor to the provost at the University of Southern California. 8 9 In straddling both worlds, Dr. Brown can 10 share with us how firms large and small best benefit from university-industry partnerships and discuss the 11 12 implications of state policy and campus practice. 13 So we'll first hear from Dr. Hockfield and 14 then from Dr. Brown. Ladies and gentlemen, the head of the 15 16 Massachusetts Institute of Technology, Susan 17 Hockfield. 18 (Applause.) 19 DR. HOCKFIELD: Thank you, 20 Governor Gregoire, for your kind introduction and also for inviting me to speak with you and your 21 22 fellow governors this morning. 23 It's a great privilege and a joy to join you here in Governor Herbert's beautiful home state. 24 I was here a couple of months ago and had the 25

privilege of hearing the governor speak about the
 simply astonishing advances that this state has made
 in becoming really a start-up state for the nation.
 So congratulations, governor. Thank you
 for hosting this meeting.

б Now, in seeking a solution to America's 7 current economic quandary, it is, I would say, almost impossible to think of any group closer to the action 8 9 than you, the nation's governors. You carry an 10 extraordinary burden of leadership, both in 11 addressing the human suffering and budget impacts of 12 the lingering global downturn, but also in trying to 13 chart a course to a brighter economic future for your 14 states.

15 So I join you today with a profound sense 16 of responsibility as I want to share with you some 17 thoughts on how to revive America's innovation-based 18 economy.

19 Now, I took a look at some of your state 20 of the state presentations, and I found across the 21 country a sobering unity of concern. I always like 22 coherence, but this particular coherence is really 23 sobering.

24 For Maine's Governor [Paul] LePage, "Our budget

25 is a jobs bill."

Ohio	1	From Governor [John] Kasich, "The enemy in
	2	right now is joblessness."
070	3	Governor [Rick] Snyder said, "Michigan's job
one	4	is jobs."
	5	Governor [Brian] Sandoval declared that "the
key	-	
	6	is to get Nevada working again."
	7	From Governor [Robert] Bentley, "Our highest
	8	priority for Alabama is creating jobs."
	9	And Governor [Rick] Scott called the Florida
	10	legislature into emergency session because, as he put
	11	it, "For the 1.1 million Floridians out of work, it
	12	is an emergency."
	13	I also learned in the words of an NGA
	14	staffer that governors like to do things. Good news.
	15	So there's really just one question before
	16	us: What are we going to do together to restart
	17	America's job creation machine?
	18	Now, I believe the answer lies in
	19	retooling the engine that has driven wave after wave
	20	of economic growth after World War II. That's
	21	American's innovation system, and so today I want to
	22	provide what I hope will be a clear picture of how
	23	the innovation system works and outline what we can

- 24 do to make it work even better.
- 25 Of course, our innovation system comes to

1 life from the spark of scientific discovery and 2 invention, but the kind of innovation that drives real economic growth goes beyond a cool idea 3 4 and we hope better than the present. 5 What kind of innovations do I mean? Let б me just give you a short list. Real-time network 7 computing. These are radical advances that 8 transformed computers from what were essentially 9 overgrown calculators in the hands of scientists to 10 the communications infrastructure of our whole 11 society. 12 Or PET scans that allow doctors to 13 pinpoint malignant tumors without invasive 14 procedures. 15 Or lasers. Lasers not so long ago were 16 arcane scientific tools, instruments that no one 17 really knew what they'd be good for, and now we use them every day at checkout counters or in getting 18 19 your vision corrected or in burning CDs. 20 Or drug-eluting coronary stents, one of the several medical miracles that reduced death from 21 22 heart disease and stroke by 63 percent over the last 23 30 years. 24 Or the air traffic control technology that

most of us depended on to get to this meeting.

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1 Or GPS. Remember, that was a technology 2 that was invented to position nuclear missiles, and we now use it universally to find the way to the 3 4 hospital, to find a way to a job interview or even--I use it quite frequently--to find the nearest 5 б Starbucks. 7 Or eBooks. Now each of us probably 8 carries with us more books than we will ever have 9 time to read. Or even the big idea innovation by Google. 10 Today all of these routine tools are in 11 our hands, but each one represents a science-based 12 innovation that made a big impact in the marketplace 13 and in our daily lives. And all of these 14 life-changing innovations have something in common. 15 They grew out of advanced research conducted with 16 17 federal dollars at American universities, and they were translated into market-ready ideas by U.S. 18 19 entrepreneurs and companies that have made a dramatic 20 impact on our economy. 21 Now, that's the American innovation system at work. It's a direct descendent of the 22 23 investment-based research and development system the U.S. invented to develop the technologies -- including 24 radar and the atomic bomb--that won World War II. 25

1 In effect, Presidents Truman and then 2 Eisenhower, working with Congress and guided by visionary scientific advisors, recognized that the 3 4 strategy of investing in advanced scientific research 5 that had produced incredible war-winning results б could produce the technologies that would win in 7 peacetime too. So across the country from Texas to Michigan, California to Georgia, North Carolina to 8 9 Pennsylvania and Massachusetts, federal research 10 investments essentially reinvented American universities as powerhouses of modern scientific and 11 12 technological research. 13 The ideas that flowed out of academic labs helped deliver huge gains in productivity and 14 15 employment by fueling one innovation wave after 16 another. Electronic and semiconductors in the 1960s 17 and '70s, mainframe and minicomputers in the '70s and '80s, personal computing and the Internet in the 18 19 '90s, and the late 1990s, biotech. 20 Just as one example, the cumulative effect of the information technology wave in the '90s 21 22 produced one of the most successful periods in our recent economic history. From 1995 through 2000, the 23 U.S. sustained GDP growth of around 4.2 percent and 24 25 productivity gains of 3.5 percent. These are

1 actually stunning results in a mature economy. 2 And we saw real income growth for 3 everyone, not just those at the top. The IT wave was 4 transformative over the decade of the '90s. The U.S. 5 economy created 22 million net new jobs, about 2.2 б million jobs a year and, compared to our current 7 lackluster jobs growth, only underscores the importance of the innovation agenda today. 8 9 In fact, economists have shown that since 10 World War II more than half of U.S. economic growth can be attributed to technology; more than half, much 11 12 of that technology springing from federally funded, 13 advanced scientific research. 14 Now, not surprisingly, technology-based 15 companies often have a disproportionately positive 16 impact on their local economies. When they sell 17 products into the national and global markets, they draw money into the local economy from the outside, 18 19 unlike a new service company like a dry cleaner or a 20 restaurant. And those external markets also give technology-based firms the wherewithal to scale up. 21 22 That's the powerful engine of job creation. 23 Let me just give you one example from MIT, 24 of course. MIT alumni founded companies at an 25 astonishing rate, about 900 a year. But of all the

companies that they found--and they're pretty
evenly distributed between service-based and
technology-based--those based on technology account
for nearly 92 percent of the aggregate company
revenues and about 85 percent of all the jobs
created.

7 Technology companies simply pack a tremendous economic punch. What's more--and this 8 9 is, I think, really important for us to think about 10 today--economists with the Kauffman Foundation have determined that the companies that produce the most 11 12 new jobs are the new ones. Since 1980 nearly all net 13 job creation has come from companies less than five years old. 14

15 So if our innovation system has the kind 16 of power I assert, where is it now when we really 17 need it? And how do we crank it up to produce more new job-generating, economy-building companies? 18 19 So I'm happy to report that our innovation 20 system is alive and mostly well, but at the same time I believe there are a lot of things we can do to make 21 22 it more effective. So let me offer a quick case study, a little story that shows how the system works 23 at its best. The example, of course, happens to come 24 25 from MIT, but I am certain that each of you can tell

the same story unfolding at a research university in
 your state.

3 So as I go along through the story, I'm 4 going to draw out five underlying rules that I 5 believe we can build on to rev up America's 6 innovation economy.

Now, like many great American tales of
innovation, this one begins with a family that came
to the United States for our political freedom, for
our educational opportunities, and for our economic
possibilities.

12 So when he was six years old, Yet-Ming 13 Chiang arrived with his family in the United States 14 from Taiwan. By 16 he was a naturalized U.S. 15 citizen. He got into MIT, and with substantial 16 financial assistance he earned his bachelor's degree. 17 He chose to study material science. That's the study of the structure of metals, plastics, concrete and 18 19 how to improve them to make them stronger and 20 lighter, less expensive or less toxic. As an undergraduate student, he learned to 21 22 do frontline, hands-on research by working in an MIT professor's laboratory, and more than 85 percent of 23 MIT undergraduates have these experiences. They do 24 25 this kind of advanced research side by side with

1 faculty. In those experiences they're learning by 2 doing at the frontiers of human knowledge. So Rule One in my rule book is attract 3 4 brilliant strivers, and help them get all the 5 education and the hands-on experience that they can б handle. 7 Yet-Ming continued at MIT, and he earned a doctorate. And he joined our faculty in 1984. And 8 9 as a product of MIT's intensely entrepreneurial 10 culture, within a few years he had started his first 11 company, all the while continuing to teach and do 12 research at MIT. 13 So Rule Two is the scientists and 14 engineers can be great entrepreneurs, but an 15 entrepreneurial culture really helps them to 16 flourish. 17 In 2001, supported by a Basic Energy Sciences grant from the U.S. Department of Energy, 18 19 Yet-Ming made a fundamental breakthrough in how to 20 manipulate the structure of lithium ions at the nanoscale to improve the performance of batteries. 21 22 MIT's technology licensing office helped him get the 23 appropriate patents and also connected him with 24 veteran entrepreneurs in the MIT community who helped 25 guide the development of a new company.

Within a year, with \$8.3 million in 1 2 venture capital, they launched a new start-up, and then the following year, thanks to another DOE grant 3 for small business innovative research, they hit on 4 5 another--and ultimately a far more important-breakthrough battery concept. 7

Rule Three is that growing new ideas takes 8 money from the right source at the right time. 9 Today, Professor Yet-Ming Chiang continues 10 his teaching and research at MIT. He's also the 11 co-founder of A123 Systems, a young, rapidly growing company that's helping to invent the future of 12 batteries for electric cars. With almost 400 issued 13 14 or pending patents and more than \$97 million in annual sales, A123 Systems is already manufacturing 15 millions of batteries a year for power tools, 16 aviation, motorbikes, Formula One race cars and most 17 recently the Fisker Karma hybrid electric car. I 18 19 think it just went on sale this month. 20 A123 batteries also power hybrid bus 21 fleets in New York City, Houston, San Francisco, 22 Seattle, and a bunch of other cities with 100 million 23 road miles to date, the largest lithium-ion vehicle effort in the world. 24 25

On the research side, A123 employs about

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1 250 people in Massachusetts close to MIT so they can 2 stay plugged into the clean tech innovation cluster 3 that includes an ambitious research community through our universities, educated workers, small and large 4 5 firms and related sectors and supportive state and б local government. Massachusetts is now home to about 7 400 clean tech companies, and about 44 of them are in my hometown of Cambridge. 8 9 Rule Four, innovation clusters are 10 powerful, and they get stronger as they grow. A123's manufacturing story is instructive 11 12 too. Now, important advances in conventional 13 lithium-ion battery technology emerged from federally funded research at a number of 14 15 universities, the University of Texas at Austin and 16 Cal Tech included. But even with these important 17 innovations in hand, the United States lost the market advantage because we allowed the manufacturing 18 19 to go abroad to Korea, China, and Japan. 20 And when A123 started up, they knew it was going to be really tough to enter electronics fields 21 22 that were dominated by those nations. So they hit on an unusual little niche in which they could develop 23 their advanced batteries: power tools for Black & 24 25 Decker. And then they used this niche to master

1 their technology and production, and they moved on to 2 making batteries for transportation. Their new and very sophisticated plant in 3 4 Livonia, Michigan, makes batteries for hybrid and 5 electric vehicles. It's the largest lithium-ion б battery factory in America. This advanced 7 manufacturing plant employs 800 Michigan workers, and about half of them were out of work before A123 came 8 9 to town. 10 So Rule Five--and this is really important--if we want to make U.S. jobs, we can't 11 12 just make ideas here; we have to make products here. 13 And that's the A123 story so far. But what can we learn from this? Well, my 14 15 view is that there's nothing wrong with the American 16 innovation system that we can't fix together, but we 17 need to recommit to each of its elements. So let me wrap up by reviewing these rules 18 19 one more time. Attract brilliant strivers and help 20 them get all the education and hands-on experience they can handle. To serve our homegrown brilliant 21 22 strivers, we have to dramatically improve science and engineering education, and we have to increase the 23 number of U.S. graduates in those fields. 24 25 You know, the United States now trails

1 16 nations in Europe and Asia in the proportion of 2 24-year-olds with bachelor's degrees in engineering and the natural sciences. What's more, between 1989 3 4 and 2003, the number of American science and 5 engineering Ph.D.s remained constant, constant, б absolutely flat, at about 26,600 a year. Over the 7 same period in the same fields, Ph.D.s awarded in 8 China shot up from 1,000 to 12,000. The trend speaks 9 for itself. 10 And I know the NGA is developing a range of ideas for making public higher education more 11 12 accessible and more relevant, and that's really 13 important. 14 MIT is contributing in a number of ways. 15 I just want to call out something we call 16 OpenCourseWare where we've put the material for 17 almost all of our courses, 2,000 courses, online, open to anyone in the world for free. We have a 18 19 special set of course materials called Highlights For 20 High School, and this is material designed for high school students and teachers. There's a particular 21 22 focus on that site on materials to help students and faculty acquire the information needed for the AP 23 24 courses.

25

We also have to capitalize on America's

1 ability to attract talent from all over the world. 2 This has been the secret of our success--or not 3 such a great secret, but it's been part of our 4 success for centuries. Forty percent of MIT's current 5 faculty were not born in the United States, and more б than half of Silicon Valley start-ups were launched 7 by people born outside the United States. 8 We should insist that Congress encourage 9 this dynamic by revamping the arcane immigration laws 10 for highly educated workers. We must make it simple for foreign students who earned advanced degrees here 11 12 to stay here to start companies and to create jobs. 13 Rule two. Scientists and engineers can make entrepreneurs, but an entrepreneurial culture 14 15 helps them flourish. Every research University, 16 public or private, can do more to build up its 17 entrepreneurial culture. You can encourage faculty and institutes to launch start-ups and build 18 19 curricula and mentor networks to teach them how. 20 We can license technology seamlessly and fast to get products into the marketplace. You can 21 22 run start-up computations to inspire, test drive and showcase entrepreneurial teams, and you can organize 23 alumni entrepreneurs to advise the fledgling ones. 24 25 They do it for free, and then they thank you for it.

1	This last idea may sound crazy, but at MIT
2	we have a number of these kinds of projects. One's
3	called The Venture Mentoring Service. It was started
4	and run by alumni volunteers. We invested less than
5	\$3 million in funding over 10 years. With that
б	money it's helped launch 142 ventures that have
7	raised \$850 million in external financing.
8	Our VMS has also helped more than 20 other
9	groups launch their own venture mentoring services
10	from the University of Miami and Mississippi State to
11	economic development agencies in St. Louis and
12	Chicago.
13	Rule three. Growing new ideas takes money
14	from the right source at the right time. From the
15	time of the venture capitalists, Governor Snyder can
16	tell us that there's surely a right time for VC money
17	to back a new idea.
18	But the truth is, if we want big,
19	breakthrough innovations to drive our economy, there
20	is simply no substitute for strong, sustained federal
21	funding for advanced early-stage research. It's that
22	kind of funding that generated the IT and biotech
23	innovation waves.
24	And new technology sectors right now on
25	the launch pad are poised to spur innovation waves

1 and the jobs that go with them: clean energy, 2 robotics, advanced materials, the convergence of life 3 science and engineering and biomedicine and beyond. 4 These innovation waves are simply hanging in the 5 balance. Will we let other nations lead them, or б will we seize their potential for America's workers? 7 If we let Congress take away research funding, we will lose out on the innovation waves and the jobs 8 9 that come with them. 10 Rule Four. Innovation clusters are powerful, and they get stronger as they grow. And 11 12 many of you have had this experience in your states. 13 And, fortunately, innovation clusters don't pop up 14 randomly. We actually make them happen, bringing 15 universities, businesses, and government together to 16 amplify the density and intensity of their research 17 communities. One example is North Carolina's Research 18 19 Triangle Park, and I compliment Governor [Bev] Purdue for 20 increasing and accelerating it. This brought together corporate, academic, and government leaders 21 22 to create something in the space between three 23 leading universities, filling it with technology companies that could benefit from university 24 25 research. Between 1970 and 2007, employment in the

1 region more than tripled.

2 Rule Five--much on our minds today. If we want to make U.S. jobs, we can't just make ideas 3 4 here; we have to make products here. 5 Unfortunately, no amount of innovation is б going to be enough if we ship all of our 7 manufacturing abroad. America remains the world's second largest manufacturer, but with so many nations 8 9 copying our very successful innovation model, we must 10 stake our bets on the kind of advanced manufacturing 11 the future demands. 12 As Governor Gregoire mentioned, the president recently asked me and Dow Chemical CEO Andy 13 Liveris to co-chair an industry-government task force 14 15 to accelerate America's progress in advanced 16 manufacturing. 17 At the six universities and eight companies who have now joined the steering committee, 18 19 there is a lot of enthusiasm, and frankly, already a 20 lot of great work on this new frontier. But the workers for this new era of advanced manufacturing 21 22 are going to come from the community colleges, the high schools and the engineering schools in your 23 states. So I invite you to join us in making this 24 25 new effort truly a national effort.

1 In the NGA report released today, you 2 outline ways to get America's companies working 3 closely with community colleges so our students will 4 be prepared for tomorrow's jobs, and I truly welcome 5 any other ideas you have for how we can use advanced б manufacturing to deliver the most value from our 7 innovation system. 8 So let me close with a reflection on some 9 of our cultural assumptions and with a call to you to 10 help change them. I was a member of a panel--recent panel--on innovation, and the moderator asked me why 11 12 any entrepreneur would go to college. And we all 13 know the legends of people who have been very successful as college dropouts. 14 15 Let me be clear. The innovations that 16 drive lasting economic growth emerge from the most 17 advanced science, mathematics and technology. A123 Systems' nanophosphate lithium-ion battery 18 19 technology, that draws on chemistry and engineering 20 that you just don't learn in high school. We need our brightest young women and men 21 22 to value advanced education and innovation as much as they love football and basketball. We need them to 23 understand that the smart phones and the video games 24 25 and the music players that they covet were invented

by real people just like them and that science and engineering can offer them the power to become not just the world's consumers and spectators but its makers and doers, the inventors and creators who will restore America's prosperity.

б So as we focus on the hard work ahead of 7 making higher education more affordable, of reforming 8 immigration, of leading the charge for 9 federally funded research, of building 10 entrepreneurial ecosystems and innovation clusters and of seizing the opportunities of advanced 11 12 manufacturing, I urge you to do something that I hope 13 is a little bit simpler also. Please, please celebrate your state's inventors and entrepreneurs. 14 15 Make them your students' heroes today because your 16 students can be the heroes who turn on the lights in 17 America's factories tomorrow.

18 Thank you very much for inviting me to19 join you today.

20 (Applause.)

21 GOVERNOR GREGOIRE: Dr. Hockfield, I can't 22 tell you how much we appreciate--and I know you're 23 busy and can spend just a brief amount of time with 24 us for questions and are back on the road again, but 25 it's just a delight to have you here. We're 1 fortunate to have you leading MIT, and I personally 2 can't tell you how much I thank you for the message 3 that--when you're the home of Microsoft, to say to 4 the people of Washington state, go get a college 5 education. Thank you very much.

6 With that, Dr. John Seely Brown, the other
7 side of the partnership, please join us. Thank you,
8 Dr. Brown.

DR. BROWN: Well, Susan, what else can I 9 10 say? What an inspiring talk that was. I have to tell you also that although I spend most of my time 11 12 on the West Coast, I can't help but always end up 13 walking through MIT campus, and the sense of the excitement on the campus, the entrepreneurial spirit 14 15 kind of constantly turns me on to what is really 16 possible in America. So I personally thank you. 17 I'm interested in this issue of innovation but also the changing game of innovation. I think 18 19 actually the game has changed quite a bit, and I 20 think it's worth spending a little bit of time thinking about that in terms of new methods, new 21 22 tools, new resources, and issues that take us beyond just issues of money. 23

24 So the first question you might ask is: 25 Sure, John. What's changing, and what does it mean

1 for higher education? What does it mean for

2 innovation? What does it mean for economic

3 development?

4 I have one simple chart that has driven a 5 bunch of us for over five years rethinking what this б might actually mean. We call it The Big Shift. If 7 you look at the last hundred years, during the 20th 8 century, basically changes happen in terms of what 9 you might call the S curve, long periods of 10 stability, brief moments of disturbance when big 11 changes happen and then 30, 40, 50, 60 years of 12 stability in which we reinvent work practices, social 13 practices, educational practices. And we knew how to play that game pretty well. 14

15 What's happened now is in the last 16 probably 10 years, we're moving to a different kind 17 of infrastructure that is driven by the digital laws of computation, accelerating as we speak, such that 18 19 now what we really find is we're having a world in 20 which we have constant disruption nearly every year. And the challenge is how do you actually start to 21 22 leverage that rather than fear that in terms of driving innovation? 23

24 So I see this thing as not going to slow 25 down at all for probably the next 30 or 40 years even 1 if Moore's Law slows down.

2 Let me say this personally. This curve on 3 the right, I could actually recapitulate the last 10 years of my life. And see those last three little 4 5 blips up there in the far right-hand corner? It took б me from classical computing, the client-server 7 architecture that Susan was talking about, into cloud computing, well known to several of the states here, 8 9 into graphic processing units that actually give us 10 the ability to do scientific computing at a fraction of the cost, and now into a form, a very limited 11 12 form, of quantum computing. 13

I've had to relearn almost everything I knew as a computer scientist and to understand how to build the backplanes, along with Amazon and Microsoft, of cloud computing. No sooner had I done that than I had to think about how to move these graphic processing units.

And most of us here that were trained in computer science know how to program things we call single-process threads. In the last year, the chips we've been producing now run 12,000 processes or threads simultaneously. Almost everything I knew before has to be reinvented, and so on and so forth. So we're moving to a different type of a world, and I think the catch to recognize is the half-life of our skills is shrinking. It used to be most of the skills you learned, around this table, starting with myself, you could plan to live with for 30 years. Now you may have to retool yourself in interesting ways probably every five years.

7 How do you now rethink talent development, talent development now along the notion of the arc of 8 9 life learning, not just single-shot learning? How do 10 we create resilience and a willingness in our students and in our industries in order to embrace 11 12 change, not flee from change? How do we move to a 13 world in which we are constantly driven by questing, asking the unusual questions, what if, what if, what 14 15 if? And how do we actually drive collaboration across disciplines and also between university and 16 17 industry?

And most important--and I'll come back to it in a minute--how do you create a new mind-set, a mind-set of openness and a mind-set of listening with humility? And I think, Susan, if we could create an ability to listen with humility, many of the problems that you and I face would actually start to change.

Those are the challenges.

25

1 And I think that an interesting example --2 I'm going back actually to North Carolina, actually 3 going down the road 30 miles or so, not from Research 4 Triangle, but the notion of North Carolina State University and their effort in the last 10 years or 5 so to reinvent the land grant college, the land grant б 7 university for the 21st century. 8 We all know that this country was built 9 around land grants, but somehow that has left our discourse. We don't talk about the reinvention of 10 11 land grants. And I think if you actually look at North Carolina State University, it's an interesting 12 13 case in study of a school and a government that set 14 out to say, can we reinvent the notions, the spirit of the land grant? 15 In North Carolina, as you know, the state, 16 17 built on the textile industry, has been decimated. Lo and behold, when I first walked onto your campus 18 19 and started hanging around the Centennial Campus--20 the Centennial Campus is a new area which not only 21 has departments, it has companies, it has NGOs, it 22 has government, all in the same campus operating 23 shoulder to shoulder--I discovered some of the most interesting nanotechnology in the country. What are 24 they doing? They're taking textiles and saying, What 25

happens if we actually think about fiber that you weave with being made out of nano material? Can we completely reinvent the entire textile industry around nano science?

5 And the answer is yes, that is happening. б It is leading to some amazing new technologies, 7 including actually building structural beams for cars 8 out of textiles, weaving aortas for our heart 9 capabilities out of these textiles and for some of us 10 in this room that engage in a lot of military work, 11 building some of the most amazing bulletproof fiber 12 you ever thought possible.

13 All this is happening, but what's particularly interesting to me is the spirit of 14 15 engagement and deep engagement where the professors, 16 the graduate students and the students think that 17 they can learn as much from the environment as the environment learns from them. We usually think of 18 19 stuff passing from the brains of universities into 20 the surrounding world. I think of it as a diode, to be a little bit of a geek engineer, stuff passes one 21 22 direction. Now maybe we'll be able to open up an 23 ocean of shifting from diodes to dialogue, constant learning. 24

25

In fact, I was very intrigued with this

1 operation, that they had outreach operations in every 2 single county of North Carolina that they are 3 learning as much back from in terms of the real 4 problems that's going the other way. And it's 5 amazing to see graduate students doing theses on б weaving together different industries--different 7 sub-aspects of the textile industry there, blah, blah, 8 blah. I could talk forever on that, but I'll move 9 along.

10 I think it's fair to say the coupling, 11 though, with universities in general from the 12 industrial base ain't always easy. And it's not 13 surprising. Innovation, after all, is about ROI. 14 But guess what? There are at least three kinds of 15 ROI we have to consider. One has to do, of course, 16 with return on investment. But there are two ROIs, 17 return on research of interest, and ROI in terms of results of importance. The government cares about 18 19 results of importance. Industry cares about return 20 on investment. The research turns on research of interest. 21

We have three different ROIs that could actually be brought together in kind of a magic way if we understood the different mind-sets that in the past have made this difficult. But now I think we're beginning to see ways to really bring it all together.

In fact, if you look at the way we've classically dealt with the university, basically industry deals with the licensing offices, et cetera, et cetera, at the top, and the licensing office is the representative of everything going on in the university to those of us outside the university. That actually is a fairly narrow pipe.

10 I want to argue that, in fact, that pipe 11 can be sometimes amplified by asking how do the kind 12 of roles of kind of leading-edge or early-stage 13 venture capital that have gut understandings of what 14 might be useful market probes, how much you 15 accelerate commercialization, how the knowledge 16 sphere that certain types of these venture 17 capitalists can bring to the game are actually a lot more aware than classical licensing offices, more 18 19 classical than the community development 20 organizations and the government, I might add, and so on and so forth. So I think we have to kind of 21 22 understand how do we kind of expand that knowledge sphere to couple in. 23

24 But why that's interesting is that, in 25 fact, the real game here--and when we see this

1 cracked, the results are amazing--is can you find 2 the sweet spots across all the different levels of 3 the university along with the sweet spots of all the 4 different levels of the industrial ecosystem so 5 researchers, research of interest, find a coupling to б a particular problem in industry--I can show you 7 examples at North Carolina State to do this--and so on and so forth. And so the real question is can 8 9 we find new ways to build connections at every level 10 in this game. 11 And, in fact, I want to go through one 12 quote. Thomas Friedman will be here, but he recently 13 brought those out. He calls it, and I actually call it, likewise. And I work with this guy, Curt 14 15 Carlson. 16 "In a world where so many people now have 17 access to education and cheap tools of innovation, innovation that happens from the 18 19 bottom up tends to be chaotic but smart. Innovation that happens from the top down tends 20 to be orderly but dumb." 21 22 The sweet spot for innovation is moving down, closer to the people, not up. All people 23 together are smarter than anyone alone in the sense 24 25 of open innovation. All people now have tools to

invent and collaborate and radically change this type
 of game, just a tiny example of what does it mean to
 be able to connect at all different levels of the
 university and all different levels of the industrial
 ecosystem.

б But the game is changing even more now. 7 Cloud computing has now come to the fore, and cloud 8 enables many start-ups today to not have to use their 9 early-stage lending to go out and buy massive numbers 10 of computers, which will be reduced to zero value in about three years. They've been able shift cap X at 11 12 the one time that money is most expensive, the 13 start-up phase, into saying, No. What can I just do in terms of operating expenses instead of capital 14 15 expense and actually with credit cards today start 16 companies.

17 And, in fact, I can take you to a set of companies that not only have been started with credit 18 19 cards but also actually turned a profit the first 20 year so they don't even need additional capital. Now, these are companies like different 21 22 variants of social networks, et cetera, et cetera. But this climate enables us to do a whole range of 23 things we couldn't think about doing before. 24 25 Now, most of you around this table all

1 know about the ways to use cloud for being able to do 2 things like social networks. The curious thing that 3 actually brings Susan and me together is that, in 4 fact, we use cloud computing today to do material 5 science.

б You've heard about the famous Silicon 7 Valley garages that do computing. Well, we now build Silicon Valley garages that do deep material science, 8 9 and we're doing it like being able to build amazingly 10 complex models, run them out to 1,000 to 10,000 11 computers simultaneously and take something that 12 usually would take me six months to do, get it done 13 in one day.

14 So the cost and speed of innovation is 15 changing once you know how to use these tools. But 16 you've got to better be able to think analytically, 17 You've got to be able to build the quantum models to 18 make this stuff work. But once you understand this, 19 the amplification from doing this is simply 20 astounding.

But I also want to mention what you don't talk about is that innovation turns as much on craft as it turns on deep science. Deep science is critical, but there's a spirit of tinkering that comes and surround typical craft that also makes a

1 big difference. They don't talk about tinkering much 2 these days, especially in the education world, but I 3 will tell you that most of the start-ups that I am a 4 part of, tinkering is a massive part. It doesn't 5 sound sophisticated, but it is. б And the question is how do we re-nurture 7 the spirit of tinkering in our kids today, be they 15 years old or be they 35 or 45 or 55 years old. 8 9 Something we should think about. 10 And, of course, what's happening today is we can now tinker with digital tools like we never 11 12 could before, and we can connect with other people 13 tinkering and start to share ideas in a cooperative spirit that was, again, kind of impossible before. 14 15 A simple example of tinkering brought to 16 us at not just the high school level, at the college 17 level, the junior college level, but all the way up the stack, so to speak, is something called Tech 18 19 Shop. Tech Shop is filled with digitally-controlled, 20 computer-controlled numerical tools to build almost anything. You can get access to these shops for 21 22 approximately a thousand dollars a year, often even less if you want to go in for a month at, like, a 23 hundred dollars a month. 24 25

And what you find in these tech shops,

1 which are now actually being franchised around the 2 country, the first three or four--actually, we're 3 just about to open one in Detroit--actually couples 4 into the gut intuitions and experiences of people 5 that aren't deeply trained in doctoral work in order б to get in there and to build things together and to 7 learn from each other. The amount of mentorship that goes on with things like Tech Shop is truly amazing. 8 9 If you have a chance, you ought to go visit one. 10 But likewise, Makers Faire, the attempt to bring back the honor of making things with your 11 12 hands, is happening. Makers Faire is now spreading. 13 The last one we had out on the West Coast had 175,000 people show up for it. Here are the kind of -- I can 14 15 pass these slides out later. Here are the different 16 cities that are now developing their own Makers Faire 17 in terms of driving this kind of tinkering. So let me kind of step back a moment and 18 19 say what's the bigger picture here, John? I think 20 one--and Susan did a great job of mentioning this--is things like the MIT OpenCourseWare. 21 22 And, Susan, what you didn't mention was you spearheaded changing this or adding to this the 23 AP program to get it into the high schools and some 24 25 of the community colleges.

1 So how do you take things that are already 2 happening, no huge expenses required, but wrap them up in ways that all the community colleges can use 3 4 them and so on and so forth. Look at OpenCourseWare. 5 Now there are multiple ones that are doing this, but б I think this is kind of a pioneering one to look at. 7 But I bring you knowledge about this, I want to call attention to this, for a different 8 9 reason, a personal reason. If you go back to that 10 big shift I told you about, I personally have to constantly rejuvenate my own understanding, and I 11 12 discovered, actually, the OpenCourseWare because I 13 needed a way to constantly refurbish my own skills. 14 And we never talk about things like this 15 as a way that people of our age--I'm probably older 16 than almost anybody here--but kind of constantly 17 are rebuilding, questing, finding new ways to look at the world. 18 19 And I don't think, Susan, you actually had 20 that in mind, you and Chuck, originally. But I tell you, this is a fantastic 21 22 scaffolding that costs, once it is done, virtually nothing if, in fact, you have a questing mind to 23 constantly pick those up. A number of entrepreneurs 24 25 that I know about in Silicon Valley, they constantly

1 refresh their own skills by looking at this. It's 2 interesting. This is a high-leveraged, low-cost 3 opportunity if we want to think about it. 4 But I'm also struck by another major 5 change that I delightfully see happening. It was б actually Steve Chu who called it to my attention, a 7 beautiful comment. We're talking about the research universities. He says: 8 "We seek solutions. We don't seek, dare I 9 10 say, just scientific papers anymore." 11 And I don't know how much of this is 12 covered in your report here, but I think it is a 13 critical difference to say if you're going after a 14 solution, you can't live in a silo. Almost all 15 problems today actually are social technical problems 16 that require many disciplines to work together and 17 many interactions with the outside world as well as the inside world. 18 19 And so the key notion here is how, by 20 going to the root of the problem, the fundamental work that Susan was talking about, creates boundary 21 22 objects that really do bring cross-disciplinary work 23 to the fore. If there's anything you can't do as a

25 research operation is tell five distant disciplines

24

president, as a dean, as a director of a major

to come together and start working together. That doesn't work. On the other hand, if the problem sucks people together because they're excited about the problem, you can't pull them apart. And we have to think more about pull, not push, as we move forward here.

7 Two last kind of comments, going back to the manufacturing issues that Susan really 8 9 brilliantly brought up, if we tend to not pay much 10 attention to process research--process research isn't as sexy as technology research, but many of our 11 12 technologies require major breakthroughs in order to 13 be able to build this stuff in a cost effective way--we will not return manufacturing excellence to 14 15 the country without appreciating the power of process 16 research. And process research also has a certain 17 kind of tinkering with it, so tinkering and process research come together. 18

And here is a kind of an example that seems strange. This is the new plant being built by General Motors. You might see--there aren't many people there, but there are people there. They're behind the scenes tinkering with the programs and capabilities of these robots.

25 And, curiously, I was hired by General

1 Motors some time ago to study Toyota. I went onto a 2 Toyota plant. And I got pulled onto the plant, and this tack group said, "Come, come, John. See what 3 4 we've done. I've got to show you my robot that we-the people on the assembly line--built themselves. 5 6 This is an assembly line where basically 7 everyone has a college degree, and they saw the opportunity to build what they needed in order to 8 9 become better at building what they wanted. And 10 there's a spirit there that I think we've got to 11 figure out how to restore if we really want to bring true manufacturing excellence. 12 And I want to just call attention to the 13 14 fact that we all want innovation ecosystems, but we tend to look at the tip of the iceberg, the sexy 15 stuff, the really technical stuff. You come to 16 17 Silicon Valley, and I'll take you to, you know, the Googles of the world, et cetera, et cetera, applied 18 19 material in one case. But you see that stuff above 20 the surface. 21 You know what really matters, at least as much, is the stuff below the surface, the 22 23 infrastructure of that economy. . In fact, I can't build a start-up today if I don't know how to 24 25 access design houses across the country or around the world, find foundries to try out certain ideas,
 always needing public relations, law firms,
 advertising. And in the biogame, you know, I now
 farm out how do I build fermentation bioreactors, by
 the way, on the East Coast in order to build these
 molecules.

7 That's the stuff that doesn't get talked about. It's not too visible. And I have to say that 8 9 in a company that I won't mention, but a start-up 10 that I'm a part of, we had to leave the United States in order to find the right kind of foundry to 11 12 experiment with building a new kind of transistor, 13 that we did not have the hidden infrastructure that we needed to try this out. 14

15 Now, that was not meant to be a generic 16 case. It was a particular case, not that 17 significant. But I'm just calling attention to the fact that it's the shadow stuff beneath the water 18 19 that often makes a huge difference in being able to 20 jump start a new type of a company fast to the market and spend the money where it really matters, in the 21 22 thinking, and not doing the things that none of us are world class at. You know, very few bios of 23 people I know really know how to run the fermentation 24 25 reactors, unless they build beer, that underlies some

1 of this stuff.

2 So I just think that we've got to kind of 3 be aware that there is stuff on top, but probably 80 4 to 90 percent of the stuff is below that I think you 5 folks, as governors, may want to pay some pretty 6 careful attention to.

7 And the last example that I wanted to bring you is there's a sense, as you can see, a 8 9 spirit of what I'm trying to say. There's a lot of 10 resources around. How much time do we spend 11 connecting them in order to do new things? We talk 12 about financial leverage all the time in this 13 country. We don't talk about capability leverage. 14 What are the capabilities we have that can be 15 leveraged together with the ability to wire things 16 together with cloud computing, Internet, blah, blah, 17 blah.

Well, here's a very simple example. This 18 19 is an amazing example. We're now duplicating it 20 three different ways in Chicago. It's kind of like how do you look at all the capabilities, like in 21 22 New York City, that you can build not only in-school programs, but much more importantly, after-school 23 programs. And how do you build a network that 24 25 connects all of these after-school capabilities, you

1 know, in terms of the museums, science museums,
2 history museums, public libraries, all this kind of
3 stuff together? Because if we really look at where
4 our kids spend their time, it's as much outside as
5 inside school.

6 We've just constructed in Chicago an 7 amazing public library room, a huge room, where these 8 kids are inventing new ways to write in terms of 9 digital media. The surprising thing, the room is 10 very, very digitally oriented, and yet more books, 11 you know, real books, not digital books, are being 12 checked out now than ever before.

13 And how do you start to say, this stuff is here? How do we honor it? How do we wire it 14 15 together? How do we kind of say, how do we leverage 16 these types of things, because if you can get kids to 17 do this, they already will have, by the time they get done, a questing disposition, preparing themselves 18 19 for an arc of life learning that honors the notion of 20 The Big Shift and saying I've got to constantly keep learning. And how does it become fun? 21 22 With that, thank you. (Applause.) 23 GOVERNOR GREGOIRE: So thank you, 24

25 Dr. Brown, very much. Insightful, challenging to

1 each of our respective governors, but we can't tell 2 you how much, really, we appreciate your being here 3 today. 4 We have time for some questions, so let me 5 turn to the governors for questions. 6 Governor [Pat] Quinn from the great state of 7 Illinois? 8 GOVERNOR OUINN: Well, we have an 9 innovation council in our state, and we also have 10 Groupon, which has grown from eight employees in 2008 11 to 6,000 today. And one of the heads of Groupon is 12 involved with our innovation council. What we've 13 done recently is try to put all our data sets from 14 the state of Illinois, all the information that we have about anything online, working with the city of 15 16 Chicago and Cook County as well; and the whole idea 17 is to try and inspire these folks on the grassroots level to innovate and create. And we've had some--18 you know, we just started this, but I think that 19 20 plays into your idea that this chaotic group of 21 tinkerers are the ones who are going to create the 22 bold changes. 23 But do you know anything about this data set initiative elsewhere or, you know, how we can 24 expand upon it?

25

DR. BROWN: Well, I mean, I think your 1 2 observation is dead center right. And, in fact, Groupon actually used the cloud computing for that 3 4 data set, to analyze that data set. 5 What we're finding more and more is the б ability to do data mining over data sets is almost 7 all where the return on investment really lies. If you can actually find the signals in the noise with 8 9 these data sets--and as you know, I mean, Groupon 10 in particular has some very clever ideas about how to 11 do that. 12 But it also says--and I don't know how 13 many of you know Groupon. I have to tell you--I'm 14 supposed to be an entrepreneur--when I first heard the business plan of Groupon, I thought they were 15 16 kidding me. I was, as usual, dead center wrong. It 17 actually turned out to be pretty damn interesting. And what I find so curious now is that--I mean, I 18 19 think it--did you say 12?--I think it was, like, 20 12 people started that company. GOVERNOR QUINN: Well, the person who 21 22 started it with the idea, he was a music major at 23 Northwestern. DR. BROWN: Right. 24 25 GOVERNOR QUINN: He went to public policy

school at the University of Chicago for three months,
 dropped out. His first idea kind of fizzled. He did
 have access to some capital, and the second idea
 exploded.

5 But what I'm really interested in is using б all this data, this information that government has 7 that's just sort of sitting there and rather than waiting for somebody to ask for it through Freedom of 8 9 Information, just putting it online. That's what 10 we're doing, all the information about the highway accidents and where potholes are and things like that 11 12 and a million other things. That's our whole goal, 13 to put all our data online and then try and encourage these, like you call them, data miners or tinkerers 14 15 to figure out innovations. That's what we're really 16 focused on.

17 MR. BROWN: And that's a beautiful example. You know, when you're touching on 18 19 something, it sometimes goes under the Government 20 2.0. You know, how do you build smarter governments, not bigger governments? How do you get people 21 22 actually, you know, Twittering in or SMS'ing in, information boards not happening, not being repaired 23 and so on as well? 24

But the amount of data--and I don't know

25

1 state government. I mean, you know, we know what's 2 sitting inside the federal government today--is astronomical. And the catch is how do we kind of 3 release more of that to this data mining to finish 4 5 the gems in there. I completely agree with the б spirit of what you're saying and the importance of 7 it. There are certain states that are doing that. 8 GOVERNOR GREGOIRE: Govern [Jack] Markell from 9 the state of Delaware. 10 GOVERNOR MARKELL: Thank you. I thought both presentations were great. 11 12 Dr. Hockfield mentioned A123 and then Fisker, for example, which has just started to hire in Delaware. 13 They're going to be building their next generation 14 15 car in our state next year. 16 I do wonder, particularly with respect to 17 John Seely Brown's comments, about the shrinking half-life of the skills. And Tom Friedman, who will 18 19 be with us on Sunday, had a column in the New York 20 Times just the other day entitled "The Start-Up is You" where he was essentially making a similar case, 21 22 that our kids really need to be focused on continually reinventing themselves because innovation 23 is just happening--you know, it's not the S curve 24 25 anymore; it's just happening all the time.

1 And I do wonder--to me, I mean, we can 2 do some of the structural things like build the ecosystems. One of your last lines mentioned the 3 4 banks and the design houses and all that. We can do 5 that. But so much of this seems to be to be cultural б and getting people to understand that the world has 7 changed so dramatically, not in the last 50 years but in the last five years, and until we get, you know, 8 9 the kids and their parents to understand that this 10 change is, you know, taking place and that it is accelerating on a daily, weekly, monthly basis, I'm 11 12 concerned that the -- so much of the acceleration, as 13 more of the innovation actually does go overseas --14 and I thought the point you made about making sure we get more of the -- allow more of the immigrants to 15 stay here after they get their education is spot on. 16 17 But I do--I wonder what it is that we can do collectively in terms of making sure that people 18 19 actually get it. 20 GOVERNOR GREGOIRE: Dr. Hockfield? 21 DR. HOCKFIELD: I'm entirely supportive of 22 your observation, and I think, you know, one of 23 the--you know, my exhortation to celebrate an interest in entrepreneurs, we have to celebrate the 24 heroes of tomorrow, not the heroes of yesterday. And 25

1 if we believe that the national heroes are simply the 2 athletic heroes or the heroes of yesterday's manufacturing, it's not going to move us forwards. 3 4 You know, in terms of what states do, we 5 just started something in Massachusetts called Mass б Challenge, and it's taking an MIT and spreading it 7 around the state. It's just a business plan competition. So there are ways to--you know, 8 people love competitions, and it really gets people 9 10 out and gets them competing. 11 But I want to comment on this sense of the 12 need to reinvent yourself and then the tools to do 13 that. John's comment about OpenCourseWare:. When OpenCourseWare was launched a decade ago, it was 14 15 designed for college and university professors. That 16 was the target, that we would provide the materials 17 for our courses so that when you want to start your course, you don't have to start from scratch, you can 18 19 use any of our materials. And it's all kind of cut 20 and paste. I think nothing has surprised us more--21 we get about 2 million, you know, business to content 22 23 a month, but nothing has surprised us more than that half of the users of OpenCourseWare are not students 24 25 or faculty; they're independent learners. And so

1	what I think is desperate housewives, they're
2	desperate for physics and linear algebra. And, you
3	know, the fact is it's a little bit clandestine
4	because who would say to their friends, Ha, I spent
5	the afternoon, you know, boning up on my electricity
б	and magnetism. You know, you're supposed to be doing
7	something else.
8	So I think as a nation, I think we need to
9	shift the focus on what we can consider to be
10	celebrated activities away from leisurewhat we
11	call currently leisure activities to activities that,
12	you know, rebuild each of our own abilities.
13	GOVERNOR GREGOIRE: Governor [Haley] Barbour
14	Mississippi.
15	GOVERNOR BARBOUR: Thank you, governor.
16	Thank you for getting these two great speakers, and I
17	want to thank you both.
18	I just have to make an observation that
19	both of you touched on. We areAmerica is in a
20	global battle for talent. I mean, the competition
21	for talent's unbelievable. And thank you,
22	
	Dr. Hockfield, for making the point thatI put it
23	Dr. Hockfield, for making the point thatI put it this way: Every foreign-born child in the United

from

25 or technology, we ought to staple a green card to

their diploma. And, otherwise, they'll go home to Mumbai and start a company that employees 800 people. If we let them stay, they would rather start one in Memphis that employees 800 people. So I appreciate your saying that.

And, Dr. Brown, the constant learning, I think one of the things that we governors or some governors are not as good as we ought to be, and Jack Markell touched on it. This applies to people who work on the assembly line too; it is not just the guy or girl who's going to get a Ph.D. that they have got to relearn and relearn.

13 And we need to understand that workforce training is not something you do once, that it has 14 15 to--for our companies to keep up and stay 16 competitive by becoming more productive, the 17 workforce--the workplace is changing all the time, and we need the people that work on those lines to 18 19 also have access to this continuous learning. 20 I thought both of y'all gave us a lot of really good thought. Thank you. 21 22

22 DR. BROWN: Let me just say one thing 23 building on your last comment. We also have to get 24 industry to recognize that talent development is not 25 just being sent back and being retrained. It's how

1 do we change the workscape itself so it becomes 2 constantly a learning scape. And I think that that 3 is a fancy, kind of fun word, but, I mean, we have to 4 take that much more seriously. You know, training is 5 not a nature or function, it is a way we design work. б And that's, I think, so key. 7 GOVERNOR GREGOIRE: Governor [Jay] Nixon, our last question, from the great state of Missouri. 8 9 GOVERNOR NIXON: Thank you. 10 Just very quickly, Dr. Hockfield, I mean, your point five of make products here, any 11 12 amplification of that for all of us? Because those 13 are solid jobs. I think all of us are in situations where we're feeling and sensing that we can do that, 14 15 that as companies approach us and talk to us, they're 16 talking about shorter supply lines because of the 17 cost of fuel. And the great thing about America is we are consumers, so it's not hard to get the product 18 19 to market. 20 I mean, we all have got examples, whether it's you talk about the -- you know -- to grow cotton 21 22 in southern Missouri or Mississippi or in Alabama and to send that across an ocean 12,000 miles to turn it 23 into a pair of jeans and bring those jeans back and 24 25 sell them right next door to that field is not

1 working long run for the cost of those types of 2 goods. But in the higher complexity goods also. But what advice do you have for us on that 3 4 make products here, your line five? 5 DR. HOCKFIELD: I could speak to it for an б hour. I am a professor, after all. But let me just 7 give you a couple of tidbits. I think the first thing I'd call out is 8 9 what John talked what, process innovation. You know, 10 it's easy to assume that it can be made cheaper elsewhere, and using old manufacturing technologies, 11 12 it probably can. But we have to be committed to 13 process innovation. You know, this new partnership, the Advanced Manufacturing Partnership that I'm 14 15 co-sharing with Andy Liveris, is designed exactly, you know, to see if we can accelerate that kind of 16 17 thinking.

You know, at MIT we recently launched a 18 19 study about 21<sup>st</sup>-century manufacturing. In the 1980s when the Japanese were eating our lunch, a group of 20 MIT faculty from the school of engineering and the 21 22 Sloan School of Management school and school of science got together to think about how to re-imagine 23 American manufacturing. We produced a book called 24 25 Made in America. We figure it's time to do something

like that again because, frankly, we don't have all
 the answers to your question.

But I'll tell you, so I've been out kind 3 4 of selling this idea of a new study called 5 "Production in the Innovation Economy," and about б half the people I talk to--not on my campus--. half 7 the people I talk to look at me and say, "Didn't you get the memo? America doesn't do manufacturing 8 9 anymore." Now, that's dead wrong. The other half 10 say, "Oh, this is the most important thing for the country." 11

But I think part of the goal of Advanced Manufacturing Partnership is simply to raise the visibility and get people thinking about it in a serious way.

16 To John's point, he uses an iceberg. I 17 use an hourglass as, you know, my image that the manufacturing itself, the advanced manufacturing and 18 19 the kind of new manufacturing technologies that are 20 being developed at MIT and on other campuses--you know--it's like that photograph he showed of the new 21 22 GM factory; it's kind of jobs-free. But that's the narrow waist of the hourglass. There's a gigantic 23 funnel of jobs and supplies that feed into that 24 25 narrow waist and then another giant array of jobs and activities that flow out of it. And when we give up
 the waist, you know, we give up the entire hourglass
 of, you know, jobs and materials.

And so a part of it is a national orientation. I think part of it is just thinking seriously about how to redesign processes so that they do become economic and valuable. And, you know, some of it's attitudinal and some of it's going to be policy and structural.

10 But there's no question in my mind that we've got to start thinking in a different way. Kind 11 12 of the era at the end of the 20th century was, oh, 13 we'll let them over there do that stuff because we can get the value if we simply have the great ideas. 14 15 Well, we all know that's not true, and we've got to 16 figure out how to manufacture in a new way, do 17 productivity in a new way.

And, also, to John's point about this 18 19 accelerating rate of change, we've got to figure out 20 how to accelerate the entire pipeline. From the genius inventions at the research universities across 21 22 the country, how do we get those into products. And John talked about a couple ways about how to do that 23 and get them into production and distributed around 24 25 the world more efficiently.

I think we can do it. It is an 1 2 innovation-based country, but if we don't focus on it, we'll never get there. So I think it's important 3 4 to raise the consciousness. 5 Thanks for the question. б GOVERNOR GREGOIRE: Is your question quick, Governor [John] Hickenlooper? 7 8 GOVERNOR HICKENLOOPER: My question is 9 really more of a comment. 10 Thank you to Ms. Hockfield, especially for 11 all the work we had. Ashish Pandey came out 12 three weeks ago, who is one of the entrepreneurs from 13 MIT, and kind of helped set up this competition to take business plans from young students and kind of 14 15 connect them to investors, which is really--what I 16 love about it--it's going out and trying to spread 17 that gospel. Here's an entrepreneur who's made a ton of money, very integral to MIT's success, and he's 18 19 trying to spread it around the country. So you 20 should all be calling and hanging out close to MIT. And the same thing with Governor [Pat] Quinn 21 22 over at Northwestern and the Kellogg Business School there, their innovation network. There are a bunch 23 of these organizations that are doing things that we 24 25 should all be paying attention to and copying them.

1 GOVERNOR GREGOIRE: Thank you. 2 So I think this has been thought provoking, challenging, but the tomorrow for the 3 4 United States has been clearly put before us by 5 Dr. Hockfield and Dr. Brown. б So on behalf of all of us at the National 7 Governors Association, thank you for coming to the great state of Utah, thank you for challenging us, 8 9 and thank you for offering to be our partners so we 10 can move our country forward. 11 (Applause.) 12 GOVERNOR GREGOIRE: Before we leave, I 13 have a couple of things I want to do. The first one is a bittersweet moment for the National Governors 14 15 Association as we say good-bye to a very important 16 colleague to each of us. 17 Governor Barbour, would you please come forward. 18 19 Today we're here to thank Governor Barbour 20 for his commitment to public service and his commitment to the National Governors Association. 21 22 In July of 2009, some of us were very honored to be hosted by Governor Barbour at our 23 annual meeting in Biloxi. He currently serves on 24 25 NGA's Executive Committee and our Finance Committee.

One of his, I think he would share with 1 2 you, greatest accomplishments is his leadership and 3 responding--and we all saw it. We watched across the country as he responded. And he rebuilt--and 4 5 we saw it when we were in Biloxi, those of us who б could attend--the coast of Mississippi in the face 7 of what was then one of the worst natural disasters in American history, the Hurricane Katrina. 8 9 Governor Barbour took the lead early to 10 help his fellow Mississippians to rebuild and to recover, to take what was a time when people were 11 12 down and out and say, we can rebuild, we will. And 13 he went out to the people of Mississippi and did just 14 that. 15 Under his leadership Mississippi increased 16 the largest increase in net new jobs since 1999 and 17 the largest increase in personal income since 1998. He also initiated the most comprehensive overhaul of 18 19 workforce training and development programs in the 20 state's history and increased funding by record levels for public education from K through 12, 21 22 through community colleges to the state's 23 universities. With that, on behalf of the National 24 25 Governors Association, I want to thank you,

Governor Barbour, for your dedication, for your 1 2 leadership. We are all proud, as I'm sure you are, of the legacy that you have left to the people of 3 4 Mississippi. We are also very thankful of the legacy 5 that you have left here. Your friendships that you б have will be forever with us. 7 We thank you on behalf of the National Governors Association for all that you have done for 8 9 us, all that you have been as a friend to us, and we 10 wish you the best in the future. Thank you and 11 congratulations. 12 (Applause.) 13 GOVERNOR BARBOUR: Thank you. Thank y'all. Don't forget what Mark Twain said about 14 politicians. He said, Don't applaud, it only 15 16 encourages them. 17 I will simply say, Chris, we would like to get you lined up to talk at my funeral. 18 19 Thank y'all. 20 GOVERNOR GREGOIRE: Thank you again. I don't know about the funeral part, but anyway, thank 21 22 you very much. 23 At each annual meeting we take this moment 24 not only to thank our corporate fellows for their 25 collective support but also to recognize those

1 companies that have maintained a sustained commitment 2 to governors in the work of the National Governors Association Center For Best Practices. 3 4 I'm now going to call on our vice chair, 5 Dave Heineman, to present the awards. 6 GOVERNOR HEINEMAN: Chris, thank you very 7 much, and, Haley, thank you for the shortest speech I've ever heard you give. 8 9 The NGA Corporate Fellows Program was 10 founded in 1988 and promotes the exchange of information between the private sector and governors 11 12 on emerging trends and factors affecting both 13 business and state government. The corporate fellows share their unique experiences, perspectives and 14 15 expertise with governors, as Chris mentioned, through 16 the NGA Center For Best Practices. We really do 17 appreciate their support. The Corporate Fellows Program is comprised 18 19 of more than a hundred of America's top companies, 20 and today we want to honor two companies for their years of membership. And as I call your name, I'd 21 22 ask you to come forward. 23 The first, one for 20 years of membership in the Corporate Fellows Program is General Motors, 24

25 and representing them today is Brian Russo.

1 (Applause.) 2 GOVERNOR HEINEMAN: The second company we want to honor today is for 15 years of membership in 3 the Corporate Fellows Program, Santa Fe Aventis. 4 5 Representing them is Jay Jennings. б (Applause.) 7 GOVERNOR GREGOIRE: So with that, we'll 8 adjourn our first plenary session. 9 And to our governors, we have a 10 governors-only session, some very important 11 information we want to talk about. I don't know where we're going. Where are we going? Eight? 12 Grand Ballroom A, governors, 1:00 p.m. 13 14 Thank you all very much, and again, thank you, Dr. Brown, thank you, Dr. Hockfield, for your 15 16 fine presentations. 17 (The proceedings adjourned at 12:36 p.m.) 18 19 20 21 22 23 24 25

1 REPORTER'S CERTIFICATE 2 3 STATE OF UTAH ) ) ss. COUNTY OF SALT LAKE 4 ) 5 I, Susette M. Snider, Registered б 7 Professional Reporter, Certified Realtime Reporter 8 and Notary Public in and for the State of Utah, do hereby certify: 9 10 11 That said proceedings were taken down by me in stenotype on July 15, 2011, at the place 12 13 therein named, and were transcribed by me, and that a 14 true and correct transcription of said proceedings is set forth in the preceding pages. 15 16 17 WITNESS MY HAND this 25th day of July, 18 2011. 19 20 21 22 23 24 25 Susette M. Snider, RPR, CRR

103rd ANNUAL MEETING

OF THE

NATIONAL GOVERNORS ASSOCIATION

July 15, 2011

U.S.-CHINA GOVERNORS FORUM

GRAND BALLROOMS B AND C THE GRAND AMERICA HOTEL SALT LAKE CITY, UTAH

Reporter: Susette M. Snider, CRR, CSR, RPR Notary Public in and for the State of Utah

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      PARTICIPANTS:
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            Governor [Chris] Gregoire of Washington;
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            Governor [Luis] Fortuño of Puerto Rico;
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 5
            Governor [Terry] Branstad of Iowa; and
            Governor [Jay] Nixon of Missouri.
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 8
      GUEST SPEAKERS:
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10
            Rita Jo Lewis, United States State Department
11
            Madam Li Xiaolin, Vice President of the Chinese
              People's Association for Friendship With
              Foreign Countries
12
13
            Ambassador Zhang Yesui
14
            Party Secretary Zhao Hongzhu, Governor of
              Zhejiang Province
15
            Governor Luo Huining, Qinghai Province
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            Governor Qin Guangrong, Yunnan Province
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            Governor Wang Sanyun, Anhui Province
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1 PROCEEDINGS 2 3:07 p.m. 3 4 GOVERNOR GREGOIRE: Ladies and gentlemen, Ambassador Zhang, Madam Li, governors, it is my 5 pleasure to officially open the U.S.-China Governors б 7 Forum. 8 During President Hu Jintao's visit to the 9 United States in January, Secretary of State Hillary 10 Rodham Clinton and Chinese Foreign Minister Yang 11 signed a Memorandum of Understanding supporting the 12 establishment of a U.S.-China Governors Forum. 13 Since then the National Governors 14 Association has partnered with Madam Li of the 15 Chinese People's Association for Friendship With 16 Foreign Countries to provide a forum in which 17 governors could discuss such issues of mutual concern as trade and investment, educational exchanges and 18 19 cooperation on energy and the environment. Those 20 efforts have culminated into this meeting today, a truly historic meeting, an opportunity for us to hear 21 22 from one another and exchange ideas as governors, 23 leaders, tasked with finding new opportunities and developing meaningful partnerships for the future. 24 We will hear brief presentations on each 25

1 of these topics by both U.S. and Chinese governors. 2 Then we will open the floor to discussion. 3 And now I'd like to turn the program over 4 to Madam Li. 5 MADAM LI: Governor Gregoire, governors of б the United States and governors of the Chinese 7 Provinces, distinguished guests, ladies and gentlemen, good afternoon. 8 9 First of all, on behalf of the Chinese 10 People's Association for Friendship With Foreign Countries, I would like to welcome you to the first 11 12 China-U.S. Governors Forum. 13 The U.S. National Governors Association, State Department, Utah government, Chinese Foreign 14 15 Ministry and Ministry of Commerce have worked hard 16 for this forum and provided active support. I'd like 17 to extend our heartfelt thanks to you all. GOVERNOR GREGOIRE: And now, if I could, 18 19 I'd like to call up two individuals for greetings 20 from President Obama and President Hu Jintao. I'd like to call up Rita Jo Lewis of the United States 21 22 State Department and Ambassador Zhang. 23 MS. LEWIS: On behalf of the President of the United States, he sends greetings to all of those 24 25 attending the National Governors Association 2011

1 Annual Meeting.

2 "A positive, constructive and cooperative relationship between the United States and China 3 is essential to the success of both countries in 4 5 the 21st century. Closer engagement at the б subnational level will build strategic trust and 7 create new opportunities for our companies and workers. Forums like the NGA Annual Meeting 8 9 help us achieve these important goals and 10 strengthen our bilateral relationship.

11 "Governors around the world share common 12 opportunities and challenges from job creation and people-to-people exchanges to the promotion 13 of clean energy and environmental protection. 14 15 Working together, we can find areas of mutual 16 cooperation that will draw our states, 17 territories and provinces closer together and help us build a brighter, more prosperous world 18 19 for future generations.

"I congratulate the NGA and the Chinese
People's Association for Friendship With Foreign
Countries on the launch of the first ever
United States-China Governors Forum and wish all
the best for a productive meeting.

25 "Barack Obama, President of the United

States."

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2 AMBASSADOR ZHANG: I have the honor to 3 read the message of congratulations from President Hu 4 Jintao to the Governors Forum. 5 I quote: б "Upon the opening of the first China-U.S. 7 Governors' Forum, I would like to extend my warm congratulations to delegates from both sides and 8 9 send best wishes to the people from various 10 sectors of both countries who have long cared for and supported the growth of China-U.S. 11 12 relations. 13 "Over the past 32 years since the establishment of diplomatic ties, our exchanges 14 15 and cooperation at the subnational level have 16 been a strong impetus to the growth of 17 China-U.S. relations. China and the U.S. now have 36 pairs of sister provinces-sister states 18 19 and 165 pairs of sister cities. 20 "Our exchanges and cooperation in trade, investment, energy, the environment, and other 21 22 fields, have been expanding and enjoying broad prospects. All this has not only contributed to 23 the local development and prosperity of the two 24 25 countries, but also boosted the growth of the

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overall China-U.S. relationship. 1 2 "I am confident that the success and continued development of the China-U.S. 3 4 Governors' Forum will build new bridges of 5 cooperation between the two countries at a б subnational level and serve as a new platform of 7 exchange for greater understanding and friendship between the two peoples, making 8 9 positive contribution to our joint efforts in 10 building a China-U.S. cooperative partnership based on mutual respect and mutual benefit. 11 "I wish the forum full success." 12 13 (Applause.) 14 GOVERNOR GREGOIRE: Well, we have much to talk about, so let's go ahead and get started. 15 16 Today we're going to focus on four major 17 themes: trade and investment, energy, environment, and education. Following our opening points, we'll 18 19 have a question-and-answer session with all of our 20 governors. I'd like to start with trade and 21 22 investment. 23 U.S. governors and Chinese provincial 24 leaders, as the chief executive officers of our 25 respective states, have a strong mutual interest in

1 harmonious bilateral economic relations. Our

2 economies have become interdependent.

3 According to the U.S. Department of 4 Commerce data, China is the third largest U.S. export 5 market, second largest export market for U.S. б agricultural products and has been our fastest 7 growing market for a decade, with U.S. exports growing by more than 450 percent since 2000. 8 9 U.S. exporters have lost market share to competing 10 nations during the same period according to the 11 American Chamber of Commerce of Shanghai. 12 While the U.S. population retains its

13 position as the top consumer of the world's goods and services, a growing Chinese class of consumers that 14 15 offers U.S. export is exciting trade, and investment 16 opportunities have come about. Likewise, U.S. states 17 and territories stand ready to encourage and facilitate business investment in this country. 18 19 U.S. affiliates of foreign companies 20 employed 5.6 million people in 2010, supporting an annual payroll of \$408.5 billion with an average 21 22 salary per U.S. employee of about \$73,000, which is 23 33 percent higher than the average compensation for domestic-based companies. 24

Through ongoing dialogue and interaction,

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1 whether in large venues like this forum or more 2 intimate one-on-one discussions, we must strive to 3 develop mutually beneficial long-term relationships 4 between U.S. states and territories and Chinese 5 provinces through trade and investment opportunities. б The breadth of those opportunities should capture not 7 only business-to-business relationships but also travel, tourism, and cultural exchanges. Such 8 9 opportunities and exchanges facilitate relationship 10 building in trade and investment, which includes securing partners to help parties navigate 11 12 transactions.

13 Strong bilateral relationships among the U.S. and Chinese public and private sectors also help 14 15 us appreciate the richness we each bring, and it 16 would support a more predictable market environment 17 where access to capital is strong, work forces are skilled and educated, and regulatory and business 18 19 practices are transparent. A predictable market 20 environment improves depth and builds trust in our bilateral business relationships that provides mutual 21 22 benefits in today's globally interdependent economy. 23 With that, Madam Li? 24 MADAM LI: Thank you for the excellent

25 remarks by Governor Gregoire.

1 The Chinese delegation is headed by 2 Party Secretary Zhoa Hongzhu of Zhejiang Province, 3 and major members include Governor Wang Sanyun of 4 Anhui Province, Governor Qin Guangrong of Yunnan 5 Province, and Governor Luo Huining, governor of 6 Quinghai Province.

7 These four provinces are respectively 8 located in the southeastern coastal areas of China, 9 central China, and western China. They have their own 10 strengths and distinctive characteristics. To enable 11 the audience to have a better understanding of these 12 four provinces, they have made short films about 13 their own provinces.

14 For the first topic, trade and investment, 15 Governor Gregoire has made a brief introduction about this topic. For this topic the Chinese speaker is 16 17 Party Secretary Zhao Hongzhu, party secretary from Zhejiang Province. Before his remarks, please watch 18 19 a three-minute short film on Zhejiang Province. 20 (Film about Zhejiang Province presented by Party Secretary Zhao Hongzhu.) 21

22 (Applause.)

MADAM LI: Having seen this short film, I
believe you are very interested in this province.
Now we'd like to invite Party

1 Secretary Zhao Hongzhu to make some remarks. He will 2 speak on working hard to promote more balanced trade 3 relations and closer investment relationships. 4 PARTY SECRETARY ZHAO: Governor Gregoire, 5 chair of the NGA, Vice President Li Xiaolin, б Ambassador Zhang, governors of the United States, friends from the media, ladies and gentlemen, good 7 afternoon. 8 9 The Chinese delegation has come to 10 Salt Lake City, and we have stayed here for three days. In the past three days we have experienced 11 12 friendship and cooperation and the hospitality 13 accorded to us by the State of Utah and other states 14 in the United States. 15 Now the first China-U.S. Governors Forum 16 initiated by the leaders of the two countries is 17 being held in Salt Lake City as scheduled. First of all, please allow me to extend on behalf of the 18 19 Chinese delegation our heartfelt thanks for the 20 thoughtful arrangements and hospitality and warm congratulations on the opening of the forum. 21 22 The forum is one of the important achievements of President Hu Jintao's visit to the 23 United States last January, and it's also an 24 25 innovative step forward between China and the United

1 States in promoting subnational cooperation.

2 In our delegation, we have representatives 3 from Zhejiang, in the eastern coastal area of China, 4 and Anhui in central China, and Qinghai in western 5 China. We have the common aspiration that we can use б this opportunity to work together with our friends in 7 the United States for common development and promote greater progress in our cooperative partnerships 8 9 between the two countries. The four of us will 10 introduce you to our respective provinces, so I'd like to take this opportunity to brief you on trade 11 12 and investment of Zhejiang Province. 13 Zhejiang is located on the western coast

of the Pacific and southeastern coastal area of 14 15 China. Its land area takes up only 1.06 percent of 16 China's territory. It's one of the most developed 17 provinces where there is a dynamic and export-oriented economy. We have contributed more 18 19 than 7 percent of China's economic growth every year. 20 In 2010 our export amounted to 180.5 billion U.S. dollars, taking up 11.5 percent of mainland China's 21 22 export total. That means of all the exports made in 23 China, one-tenth comes from Zhejiang Province. 24 In terms of the business exchanges between 25 Zhejiang and the United States, I can describe it

with a Chinese idiom, that it's going on like a
 raging fire. The U.S. is the largest export nation
 of Zhejiang. It's also the third largest import
 source of Zhejiang.

5 Over the past 10 years since China joined б the WTO, Zhejiang's import and export trade with the 7 United States has increased by 6.9 times, an annual 8 increase of 21.4 percent. The U.S. is also an 9 important source of foreign investment to Zhejiang. 10 Twenty-three of the top 500 American enterprises have 11 invested in 32 enterprises in Zhejiang, and most of 12 these enterprises have become the major profit-makers 13 of the parent companies.

14 For instance, the well-known U.S.

15 pharmaceutical corporation Merck established an MSD

16 (Merck Sharpe & Dohme Ltd.,) Hangzhou in 1994. In 2010 its market turnover

17 exceeded 380 million U.S. dollars. In July 2010, it

18 opened a new plant in Hangzhou, and it's estimated

19 that by 2017 its output will reach 1.48 billion U.S.

dollars

And Zhejiang enterprises have also made investments in the United States. The U.S. has become the host of most of the outbound investing companies of Zhejiang. By April 2011, Zhejiang had 25 established a total of 710 enterprises and

1 institutions in the United States, taking up 2 15.01 percent of our enterprises investing abroad. 3 For instance, Wanxiang American 4 Corporation, which is very close to Chicago, has been 5 the most successful Chinese enterprise investing in б the United States. It has 28 subsidiaries in the 7 United States employing more than 5,000 people, and 8 its market turnover in 2010 exceeded 2 billion U.S. 9 dollars. 10 These companies and their staff with 11 vision and achievements are the forerunners, 12 demonstrators, and beneficiaries of business exchanges 13 between Zhejiang and the United States. They represent the business exchanges between Zhejiang and 14 15 the United States and fully demonstrate the 16 achievements made in the fast market economic growth 17 in China and interconnection between the two economies of China and the United States. 18 19 It also fully demonstrates the needs of 20 the two countries to work together to build a cooperative partnership based on mutual respect and 21 22 mutual benefit. It's also the agreement between 23 President Hu and President Obama. 24 With these achievements we have every 25 reason to believe as we work together to build a

1 cooperative, positive and comprehensive China-U.S. 2 relationship in the 21st century, Zhejiang business 3 exchange and investment cooperation with the U.S. 4 will embrace a prospect of closer, broader and more 5 fruitful development on a larger scale. б In May 2011 we had the third S&ED between 7 China and the United States where we signed a comprehensive framework agreement promoting strong, 8 9 sustainable and balanced growth and economic 10 cooperation between China and the United States. 11 This has been a new milestone in our economic 12 cooperation. 13 In recent years Zhejiang is promoting its traditional advantages, and we are also paying more 14 15 attention to developing the transformation of the 16 economic growth pattern. We pay more attention to 17 developing the maritime economy, biological industry, advanced equipment manufacturing, energy conservation, 18 19 and environmental protection industry, new energy and 20 new material and Internet of things and eBusiness. More and more Zhejiang enterprises are 21 22 working through merger, investment, and building overseas production bases to lay groundwork for 23 further multinational development. 24 25 Provinces and states, as the

1 administrative areas and economic units of our two 2 countries, have an indispensable role to play in promoting China-U.S. business exchanges and 3 4 cooperation. Zhejiang is ready to work together with 5 the United States for a bright future for our б business exchange and investment cooperation. We believe we should step up efforts in 7 the following areas: 8 9 First, let's work together to expand our 10 trade and promote more balanced China-U.S. trade relations. In this forum we have four topics. They 11 12 are very important topics. Through exchanges we have 13 reached consensus. But what matters most here is the implementation, and one of them is to promote 14 China-U.S. trade cooperation. 15 16 Zhejiang's external trade has been seeking 17 opportunities and development in global industrial relocation and restructuring. To share opportunities 18 19 and achieve win-win cooperation has been our ultimate 20 goal. Frankly speaking, now we are balancing our 21 22 trade with the United States, but we will take a holistic approach to promote further liberalization 23 of trade and investment, to lift restrictions on 24

exports and promote more balanced development of

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trade at the subnational level for the benefit of the
 people in our countries.

3 Second, let's work together to create a 4 more open and fair investment environment. The 5 subnational governments of our two countries should б work within our respective legal systems to provide 7 full national treatment to the enterprises of the other side and make our investment environment more 8 9 transparent and predictable and create a level 10 playing ground and favorable development environment. 11 Now, Zhejiang has already established 12 national level economic and trade cooperation zones 13 in Russia, Thailand, and Vietnam. We have already set up 4,654 enterprises and trade institutions in more 14 15 than 130 countries and regions. More than 16 1.5 million Zhejianese are doing business abroad. We 17 hope that we can have such similar cooperation with the United States. 18

To our pleasure, yesterday Zhejiang and the relevant states and enterprises have signed two intergovernmental cooperative documents and six cooperative projects between enterprises. In coming days we will visit our sister cities and sign another number of cooperative projects. It's estimated we will sign a total of 40 projects worth 4.2 billion U.S. dollars. This will be an important outcome of
 our visit.

Third, let's work together to further 3 4 substantiate China-U.S. cooperative partnerships in 5 terms of a new energy industry, high-speed rails, б smart grid, and education. China and the United 7 States have common interests and great potential of 8 cooperation. Our subnational governments should work 9 together to tap the potential in these areas to 10 innovate our cooperative patterns and lift the level 11 of cooperation to further substantiate our 12 cooperative partnership.

13 Fourth, let's work together to set up broader reach of friendship between the two peoples. 14 15 Economic exchange and cooperation is based on mutual 16 trust and friendship between the people. Expanding 17 our trade and investment cooperation is aimed not only at creating wealth and making profit, it's also 18 19 about enhancing mutual understanding and friendship 20 between our two peoples and promoting dialogue among cultures. I believe that's more important than 21 22 anything else.

I have stressed one point over and again on many occasions. We should have direct links in terms of logistics, information and transportation

between the two regions, but what's most important is
 that we should have these direct links between the
 hearts of people. With these links we can overcome
 any difficulties and solve problems.

5 We should use the opportunity to б strengthen trade and investment cooperation to 7 promote people-to-people exchanges, especially 8 exchanges between the youth, to win more public 9 support for the growth of China-U.S. relations. 10 Governors, colleagues, dear friends, the 11 U.S. has a saying: Make hay while the sun shines. 12 We should seize these valuable opportunities. Now 13 that we have these opportunities for development, we 14 have this hope for development, and we have this 15 blueprint of development; we have the confidence of 16 development.

17 Let's work together for the broader 18 prospects of China-U.S. subnational trade and 19 investment cooperation. I will be expecting our 20 friends of the United States by the West Lake in 21 Hangzhou, dear friends here in Hangzhou.

22 Thank you.

23 (Applause.)

24 GOVERNOR GREGOIRE: Mr. Secretary, thank25 you very much for your presentation and for the video

1 to introduce the province to us. We appreciate it 2 very much.

And if I might comment, I think the governors of the United States understand that with mutual respect, with cultural exchange, with student exchange, that gives us the opportunity to have the kind of economic development that you speak of. So thank you again for your presentation.

9 We'll now move on to energy, and from the 10 United States, Governor Fortuño from Puerto Rico will 11 make the presentation.

12 GOVERNOR FORTUÑO: Thank you, and it's 13 really a pleasure to be able to address this topic. 14 First of all, Madam Li, Governor Gregoire, 15 Ambassador Zhang Yesui, Secretary Zhao Hongzhu and 16 fellow Chinese and American governors, indeed, if we 17 want our economies to grow, energy is a major issue that we all have to address. It is important in our 18 19 lives and the livelihoods of our people in both 20 countries, and it's key on the agenda of both countries. 21

22 Our countries have the largest economies 23 in the world. We both have significant economic and 24 environmental interests in developing cleaner and 25 cheaper energy resources. Each of us is extremely

dependent on fossil fuels. One-half of U.S. 1 2 electricity is powered by coal. China relies on coal 3 for nearly three-fourths of its electricity. 4 In addition to coal, we rely on oil 5 predominantly from other countries. In 2009 China б became the second largest net oil importer in the 7 world. The United States is the largest. 8 Each of our countries and many of our 9 states and provinces have taken positive steps to 10 diversify energy resources in order to strengthen and grow our respective economies. That is true 11 12 certainly in the case of Puerto Rico, and I know is 13 the case of all of my fellow governors. We're implementing comprehensive energy reform to replace 14 15 excessive dependence on fossil fuels--in our case, on 16 oil--with cleaner, cheaper and safer alternatives, 17 including natural gas, solar, and wind energy. The need for energy reform and 18 19 diversification is acute, especially in the case of 20 islands like Hawaii and the U.S. Territories. In the case of Puerto Rico, 69 percent of our electricity 21 22 generation relies on oil, and that is certainly 23 unsustainable. And Hawaii and the U.S. Territories are not connected to the national energy grid, which 24 25 complicates matters even further, requiring

1 redundancy in our energy production.

Producing energy from imported oil is very expensive, and the price is unstable. It debilitates our respective economies, affects consumers and businesses alike, and it's a drag on the progress of our economic recovery. Thus, energy reform is a key component to long-term economic growth in both of our countries.

9 In the case of Puerto Rico, we have 10 implemented comprehensive energy policies which focus on renewable energy generation and natural gas. In 11 12 2010 we passed legislation setting up renewable 13 portfolio standards, as about half of the states have done so far. In our case it requires that 15 percent 14 15 of our energy be produced by renewable sources by 16 2020. We also created a green energy fund in which 17 the government can invest in small- and medium-scale energy efficiency and renewable projects to jump-18 start these markets and create jobs. 19

In addition, we're tackling our reliance on oil head-on by diversifying our fuel resources to include natural gas, which is abundant in our country. A key part in our diversification strategy includes building a natural gas pipeline to allow us to convert existing power plants to cleaner, cheaper

natural gas. Actually, that will also allow us to 1 2 lower by about two-thirds emissions into the environment, and our consumers will save about a 3 4 billion dollars a year. 5 We're also interested in developing a б market for electric vehicles and actually have signed 7 an MOU to incentivize the use of zero-emission 8 vehicles and to create the infrastructure necessary 9 to move this initiative forward. 10 At the federal level on the U.S. side, we enacted a renewable fuel standards back in 2005--11 12 that was done by Congress--which requires that 7.5 billion gallons of renewable fuel be blended into 13 the nation's gasoline supply by 2012. Just three 14 years ago we increased that amount to 36 million 15 gallons by 2022. 16 17 In March 2011 China issued a five-year plan which proposed to generate 11.4 percent of its 18 electricity from non-fossil fuel sources. While 19 there is not a U.S. nationwide renewable electricity 20 standard, 27 states, Puerto Rico, and the District of 21 Columbia have enacted RES, and four states have 22 23 enacted alternatives or clean energy standards. Working together our countries are making 24 25 great strides to diversify our energy supplies.

1 Through a joint \$150 billion investment, China and 2 the U.S. are collaborating on clean energy research 3 with the development and commercialization of clean 4 coal technology at the University of West Virginia, 5 clean vehicles at the University of Michigan, and б building efficiency at the Lawrence Berkeley National 7 Laboratory. 8 We are working together on electric 9 vehicle demonstration projects in Los Angeles and 10 Shanghai to share data and consumer preferences and jointly developing standards for charging blocks and 11 12 battery testing. 13 Just three years ago our countries established the 10-year framework to facilitate the 14 15 exchange of information and best practices in six key 16 electricity, water, air, transportation, areas: 17 forest and wetland conservation, and energy efficiency. The framework includes equal partnerships with 18 19 Chinese and American cities. That includes Denver, 20 Colorado, with Ford Motor Company partnering with the Chinese city of Changqing and Chang'an Motors in 21 22 focusing on implementation of electric and plug-in hybrid vehicles. 23

As governors we look forward to continuing these partnerships and forging new alliances between

1 our states and your provinces to enhance both of our countries' economic and energy security. 2 3 Thank you very much. 4 (Applause.) 5 GOVERNOR GREGOIRE: Thank you, б Governor Fortuño. 7 MADAM LI: Our second topic will be on the 8 development and cooperation in new energy. 9 Governor Fortuño has given us a very comprehensive 10 briefing on the new energy situation in the States. 11 Both China and the United States are the 12 biggest energy consumers and producers. Our two 13 countries are highly complementary in the field of 14 energy and enjoy broad prospects for cooperation. 15 Qinghai is a province rich in energy 16 resources. Now let's watch a video on Qinghai 17 Province. (Film about Qinghai Province presented by 18 19 Governor Luo Huining.) 20 (Applause.) 21 MADAM LI: I believe all of us are 22 impressed by Qinghai Province. 23 Now may I invite Governor Luo Huining to 24 make a presentation. 25 GOVERNOR LUO HUINING: Madam Li Xiaolin,

1 Vice President, Your Excellency, Ambassador Zhang 2 Yesui, governors from the United States, friends from the media, ladies and gentlemen, good afternoon. 3 4 It gives me great pleasure to come to 5 beautiful Salt Lake City today to join the other б governors from China and the United States and 7 discuss with you topics related to development and cooperation. 8

The financial crisis that broke out three 9 10 years ago is still exerting an impact on the world economy. Although Qinghai is located in the far 11 12 western part of China and is high on the plateau, it 13 also went through the hard time of the crisis. Yet crisis entails new opportunity. In history, each 14 15 economic crisis gave birth to new industries and a 16 revolution in science and technology.

17 Green economy and low carbon technology are leading the trend in this new round. Since the 18 19 outbreak of the crisis, the whole world is thinking 20 about what development model we should choose and how we should respond to the global climate challenge. 21 22 Qinghai is looking for a way to correctly seize this new trend of green development, bring out its 23 resource potential and change its way of economic 24 25 development.

1 It may not be known, but Qinghai is an 2 important eco-safety screen for China and the whole 3 world. It has a strategic implication of protecting 4 the safety of the eco-environment and tackling climate 5 change. It is our historic responsibility and a б strategic choice to pursue green economy, follow a 7 path of low-carbon development and contribute to 8 world sustainability and the well-being of billions 9 of people.

We have put our commitment to action and found an effective way to achieve green development by developing the circular economy. We have set up the Qaidam circular economic pilot zone on an area of 300,000 square kilometers. It is the largest such pilot zone in China approved by the Chinese government.

17 In the next five years, we will focus our 18 efforts on building industrial change of renewable 19 energy, salt lake chemical engineering, oil and gas 20 recycling, the comprehensive utilization of coal, 21 nonferrous deep processing and a biosector with 22 plateau features. 23 All of these will help us form an

24 industrial framework for a circular economy with 25 reasonable structure, unique advantages, intensive

use of resources and complete links. Our objective
 is to build the biggest industrial base for circular
 economy in China and achieve economic development,
 eco-safety and a better life for the people at the
 same time. This, of course, means strenuous efforts
 on our part.

7 Governor Fortuño has shared with us his insights into the utilization of new energy. New 8 9 energy is also a topic I'm going to talk about for 10 today. It is an important part of the underlying support for developing green economy in Qinghai. 11 12 In China, Qinghai is well equipped for 13 developing the new energy sector. On solar power, 14 Qinghai offers the best sunlight, land resources, 15 power grid, transport facility and photovoltaic 16 conditions in developing the PV sector in China. It 17 is one of the best areas for developing the PV sector. 18

At this time the network generates 50 megawatts. The figure will rapidly rise to 20 megawatts by the end of the year and is expected 21 200 megawatts by the end of the years and is expected 22 to reach 2,000 megawatts in five years and 10,000 23 megawatts by 2020. In Golmud, a western city of 24 Qinghai, a sun city is emerging as an important power 25 generation base of solar power in China.

1 On wind power Qinghai ranks the third in 2 China in its total resources. Its stored capacity can stand well above 12,000 megawatts. Stored 3 4 capacity of 150 megawatts is being built. In five 5 years 1,500 megawatts will be completed and will б reach 2,500 megawatts by 2010 [sic]. 7 Qinghai is rich in lithium carbonate of high quality. There are about 21 million tons of 8 9 recoverable lithium chloride, accounting for 10 90 percent of such resources in China and one-third in the world. At this time we're using advanced 11 12 technology to extract lithium from the salt lake and 13 have formed the basis for industrialization. 14 All of this provides us with key support 15 for developing lithium related to new energy, new 16 material, and a new energy vehicle. 17 The huge potential of the circular economy and the new energy sector in Qinghai offers both 18 19 development opportunities to Qinghai and cooperation 20 opportunities for us all. We're seeking cooperation and support to address the lack of technology, 21 22 talented people, and funding. 23 For example, we worked with the China Academy of Sciences to build Qinghai Solar Energy 24 25 Research and a demonstration base and cooperated with

1 Germany and Japan to develop PV projects.

2 Together with the State of Utah we set up a science in innovation coalition and a strategic 3 4 alliance of industrial technology innovation. I also 5 want to tell you that given our thoughtful б preparations over the past two days, our institutions 7 of higher learning, our companies and research 8 institutes have signed eight agreements with their 9 counterparts from the United States involving 18 10 projects, and most of the projects are located in the 11 state of Utah.

12 Of course, the platform for cooperation is 13 broad and open. We welcome more strategic cooperation partners, particularly American companies 14 15 with advanced technology, to Qinghai. We are 16 preparing for a seminar on the development of the PV 17 industry in Xi'ning this August. Here I wish to extend a very warm invitation to all friends who have 18 19 an interest in this sector.

20 We have noticed that in recent years the 21 U.S. government has put energy reform high on its 22 agenda and introduced a new energy plan which has 23 attracted wide attention. China also attaches great 24 importance to the new energy sector, and it works 25 hard to build a modern energy system that is secure,

1 stable, economical, and clean.

2 Before I came to the States, I took an 3 interview with Low Carbon Every Day, which is a 4 program of Qinghai provincial TV, and I learned from 5 them that the family of an American architect from California has lived in a self-designed solar-powered б 7 house for five years. Beautiful sunshine and 8 comfortable lives have given them much happiness and 9 are much desired by many. It tells us that new 10 energy is not only a plan pursued by the government, 11 but the expectation of the people. It is the common 12 choice by all. 13 Let us join hands to develop green energy and let the bright sunshine light up every corner of 14 15 the world so that together we will create more 16 opportunities for our common home, the earth, to 17 enjoy green development and for the generations after us to live in a better environment. I believe this 18 19 is the common pursuit of us all. 20 Thank you. (Applause.) 21 22 GOVERNOR GREGOIRE: Thank you, governor, and thank you as well for introducing us to your 23 province. 24

And with that our third topic is that of

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1 the environment, and I'm going to call on

2 Governor [Terry] Branstad from the great state of Iowa to 3 lead the discussion.

4 Governor.

5 GOVERNOR BRANSTAD: Thank you, б Governor Gregoire, and thank you to the Chinese 7 ambassador, the party general secretary, provincial 8 governors, Madam Li, all for joining us for 9 participation in this forum today. 10 Both the United States and China enjoy a 11 strong trading partnership in agriculture products 12 with China, and that being the United States' second 13 largest exporting market. Economic development, growth, and stability for our rural areas is important 14 15 to both countries, and key American exports to China 16 include corn, soy beans, cotton, barley, and bulk wood 17 products. We value products as safe and reliable

18 foods.

In addition, agriculture-related machinery and value-added manufactured products compose an important part of the trading relationship that we have, and China exports to the United States value-added wood products, fish and seafood, plywood, processed fruits and vegetables. And we're very appreciative of this very important partnership we 1 have in trade.

2 I've set a goal of increasing 3 significantly exports from our state, and I know the 4 President has a goal of over the next five years 5 increasing American exports by a hundred percent. I б recognize that both of our countries can benefit from 7 trade, and we should actively support international engagement. 8 9 Fast-moving advancements in 10 agriculture-related technologies are increasing crop yields and allowing the development of new 11 12 opportunities in biosciences. Many U.S. governors, 13 like their Chinese counterparts, are seeking ways to further energy development, and agriculture in rural 14 15 communities are key beneficiaries of this. 16 Thankfully, technology advances allow for 17 the production of biofuels and safe and reliable food. Per-acre productivity increases allow for 18 19 efficient production of traditional biofuels, and 20 cellulosic ethynol provides additional opportunities for the future. 21 22 I understand that China is very interested in the development of biofuels, and in the second 23 quarter of this fiscal year, there were six initial 24

25 public offerings for Chinese biofuel companies. We

need to remain committed to additional biofuels
 development in both of our countries to reduce this
 dependency on oil imports.

4 In addition, both of our countries have 5 growing energy and energy security needs. My state, б the state of Iowa, has recognized that wind energy is 7 very important to our rural communities as well as being a renewable, low-cost energy source. Iowa 8 9 currently has the second largest installed capacity 10 for wind generation in the United States. We're 11 second only to Texas, but Texas is a much bigger 12 state.

13 I understand there's been tremendous14 growth in China as well.

15 In fact, I think, Party Secretary, in your 16 province, when you showed the film, it showed some of 17 those wind turbines. So we see that's also something 18 that's an exciting change that's taking place in your 19 country. If you fly across the state of Iowa, you'll 20 see a lot of those as well.

21 With China and the United States combining 22 to use 40 percent of the world's energy and being 23 overly dependent or reliant on imports for fuel 24 needs, biofuels and wind energy are mutually 25 important and beneficial areas for cooperation between our two countries, and we look forward to
 additional cooperation.

I'm very interested in working with the 3 4 Chinese leaders to further advance both biofuels and 5 wind energy and to harness those technologies to б produce low cost energy that is also environmentally 7 beneficial for both of our countries and for our economies. By working together, we can help improve 8 9 the standard of living for people that live on the 10 land in rural communities.

11 And we have also overcome the 12 challenges -- in addition to that, we've had our 13 individual challenges with natural disasters, disasters that often impact people that live in rural 14 15 communities. Floodwaters have caused widespread 16 damage in both the United States and China. However, 17 both countries can continue to work together to build more resilient communities and avoid some of these 18 19 disasters in the future.

I encourage continued partnerships through a variety of avenues, including sister states. We established our first sister state on my first visit to China in 1984 with the Hebei province, with Governor Zhang Zhu Guang, and I have fond memories of that trip. We came from Beijing to Sichuan by rail

and were met with a band, and they presented my wife 1 2 with a bouquet of flowers. And the friendship has existed ever since. We've had many, many wonderful 3 4 exchanges over the years, and our lieutenant governor 5 just visited the province in June along with 6 other locations in China. 7 Of course, in 1984 I was a young governor, 8 and I sought to develop cultural and economic 9 partnerships. 10 I continue to be excited about the 11 progress that's been made, the dramatic change and improvements in the lifestyle for the people of China 12 13 that's occurred since that time. 14 American governors continue to explore 15 opportunities to promote, and we are very 16 appreciative of the opportunity to sell our soy beans 17 and corn in your marketplace. It's made a big difference to the farmers in our state and the 18 19 partnership with companies like Pioneer Hybrid 20 International and with you in developing corn varieties that meet the needs of China and the Chinese farmers 21 22 and agriculturalists. 23 I look forward to working with my fellow 24 American governors and with you, the Chinese

provincial governors and the Chinese leaders, to find

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1 additional avenues for partnership. 2 Thank you very much. 3 (Applause.) 4 MADAM LI: Our third topic is 5 environmental protection and cooperation. б Governor Branstad of Iowa has made an excellent 7 speech. 8 The Chinese government has attached great 9 importance to environmental protection. 10 Yunnan is located in southwestern China 11 with beautiful scenery and unique folk traditions. Now let's first watch the short firm of Yunnan 12 13 province. 14 (Film about Yunnan Province presented by 15 Governor Qin Guangrong.) (Applause.) 16 17 MADAM LI: Having watched the film, I believe you've fallen in love with this place. 18 19 Now I'd like to invite Qin Guangrong, 20 governor of Yunnan Province, to make some remarks. 21 GOVERNOR QIN: Governor Gregoire, chairman 22 of the NGA, Vice President Li Xiaolin, 23 Ambassador Zhang Yesui, Special Representative Lewis, 24 ladies and gentlemen, dear friends, we have just 25 heard the exciting speech made by the governor of

1 Iowa. The state has made good use of the local 2 resources to promote environmental protection. 3 You are an experienced governor in the 4 United States. I had the opportunity to sit beside 5 you and your wife during dinner last night. You left б me with a deep impression of your outstanding 7 leadership and excellent wife. 8 Ladies and gentlemen and dear friends, in 9 1933 a book was a big hit in the world. It was 10 written by James Hilton, a British writer. It's called Lost Horizon. He described an eternal city 11 12 in the mountainous area in western China. It's 13 called Shangri-La. People there enjoyed peace, prosperity, harmony and immortality. Since then 14 15 Shangri-La has represented things that are beautiful 16 and eternal. 17 In 1997 a group consisting of geologists, cultural scientists and tourists discovered through 18 19 studies that Shangri-La is located in Yunnan 20 Province, China. This has once again attracted the attention of the world. 21 22 As a representative of Yunnan Province, I'm privileged to take part in this forum and to 23 follow up the speech made by the governor of Iowa. 24 25 I'd like to take this opportunity to explore with you

the common challenges facing mankind in terms of
 eco-safety, environmental protection and resource
 conservation.

4 The ecosystem has contributed to the 5 magical attraction of Shangri-La and the beauty of б Yunnan. In keeping with the fine tradition of people 7 in Yunnan, we have worked with grateful hearts and a sense of responsibility to protect the environment. 8 9 In recent years in particular, we have 10 stepped up our efforts in environmental protection. First, we have launched the protection project called 11 12 Colorful Yunnan to raise awareness of our people 13 about environmental protection and encourage social participation in this effort. 14

Second, in northwest and southwest Yunnan in an area of 180,000 square kilometers, we have introduced an action plan to protect biodiversity. That means we protect one-third of Chinese species and one-tenth of the world species.

20 Third, we have introduced key programs to 21 protect lakes and river systems and restore the river 22 systems to their natural state.

Fourth, we have worked hard to build sewage treatment plants. After 2012, in all other areas we will have sewage treatment and garbage 1 disposal facilities.

2 Fifth, in energy and resource 3 conservation, the energy consumption per unit of GDP, 4 the emission of  $CO_2$  and  $SO_2$  have been reduced by a 5 large margin compared with five years ago. We have б achieved a goal by the Chinese government for Yunnan ahead of schedule. 7 8 Sixth, we have set the goal of building 9 forestry land and carrying out a reforestation 10 campaign to increase the forest coverage from 11 53 percent to 60 percent. 12 We are clearly aware all these actions are 13 of great significance to Yunnan, to China, and to the world at large. Even if it means less material 14 15 covered, we will stick to this important cause. 16 Global warming and overconsumption of 17 resources has sounded the alarm to the growth pattern of the world. We should pay more attention to 18 19 environmental protection and ecosystem development and take more concrete measures to protect the 20 harmony of nature. 21 22 I'd like to make the proposals as follows: 23 First, we build the relationship between man and nature. More industrialization has further 24 25 estranged us from nature. We pay less and less

1 attention to nature. Actually, nature is so profound 2 and rich that the knowledge of man is very limited. 3 We should get closer to nature, hold nature in awe, and promote harmony between man and nature. 4 5 Second, we should make sound environment б an important force for development. We should 7 integrate the eco-development with economic growth and turn the environment into a productive force and 8 9 develop industrial system brand names and market 10 network of green economy for the benefit of people who have worked to protect our environment. 11 12 Third, we should change our lifestyle. 13 The pursuit of material and waste has made us take too much from nature. This has posed a grave threat 14 15 to the eco-environment. An important link in our efforts to protect the environment is to lead an 16 17 economical and simple life. We should save every drop of water, save electricity, oil and paper. We 18 19 should develop the culture of conservation and an 20 environment friendly lifestyle. Fourth, we should improve the mechanisms 21 22 of environmental protection on the basis of common

23 but differentiated responsibilities. We should set 24 up a global environmental protection system and 25 coordinate our efforts in this area. Developing

1 countries should have more support and assistance 2 from the developed ones in the process of 3 environmental protection. 4 Thank you. 5 (Applause.) б GOVERNOR GREGOIRE: Well, governor, thank 7 you for your comments. Thank you for introducing us to Yunnan Province, its history, culture and beauty. 8 9 Thank you for your expression of your environmental 10 ethic and our mutual commitment to environmental protection. We look forward to working with you. 11 12 Now, our last substantive area is one 13 that's very important to all of us, and that's education. On behalf of the governors of the United 14 15 States, we have Governor Jay Nixon, who is chair of 16 our education committee, from the great state of 17 Missouri. GOVERNOR NIXON: Thank you. 18 19 It is certainly an honor and pleasure to 20 join with everyone in this historic occasion as we move forward to accelerate the relationships on many 21 22 levels with our neighbors and growing friends. 23 As leaders in our states and provinces, we know that educated citizens represent the backbone of 24 25 a strong and prosperous economy. In the United

States our fundamental objective is to ensure that
 all of our students receive a world-class education,
 graduate from high school, and are prepared for
 college and careers.

5 The primary responsibility for education 6 in the United States rests with governors and states. 7 Each year states spend approximately \$425 billion on 8 elementary, secondary, and higher education, which 9 constitutes the largest category of state 10 expenditures. Total U.S. spending on education 11 comprises 5.5 percent of GDP.

12 Collectively, through the National 13 Governors Association, governors have embarked on two recent groundbreaking initiatives. First, 43 states 14 15 and territories have adopted state-developed common 16 education standards that define what our elementary 17 and secondary school students are expected to learn. We are setting the bar high for the future 18 19 generations. These standards focus on the knowledge 20 and skills that our young people need for success now and in the future. 21 22 Second, Governor Gregoire is leading governors in an initiative to dramatically increase 23

24 college completion and productivity, and her25 leadership is having significant effects in states

1 across the United States.

2 Governors also recognize that as our two 3 countries' economies become more interdependent, 4 strengthened exchanges of knowledge, culture, and 5 students between our countries will be a vital б component in our collective success in a modern 7 global economy. 8 As we know, our relationship isn't just 9 about exchanges between leaders of our governments 10 like the ones we have today. It is also about relationships between our people, between our 11 12 business leaders and our scientists, our educators 13 and particularly our young people. 14 Today the highest number of exchange 15 students in the United States are from China, and 16 more Americans are now studying in China than in any 17 other foreign country. These exchanges are critical. The more 18 19 our people learn to cooperate and collaborate, the 20 more that China and the United States will have the cultural understanding and language skills to 21 22 underpin effective diplomacy and foreign policy that 23 will enable us to find solutions to many global challenges. 24

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In my state, international students rose

1 18 percent in 2010. That's six times the national 2 average increase. And China is our number one 3 country of exchanging students between our two 4 countries. We thank you for your continued 5 confidence and investment, and we expect to continue б to grow bilaterally in that growing enterprise. 7 To this end, the United States and China are cooperating closely to achieve the goals of the 8 9 initiative agreed to by President Obama and 10 President Hu to increase dramatically the number, the 11 diversity of the composition of American students 12 studying in China as a means to enhance our 13 people-to-people ties between our two nations. 14 By reaching across borders, across the 15 world, we can share knowledge and research, generate 16 promising and growing partnerships and leverage the 17 power of innovation to create jobs and expand opportunity to make sure that our children, not just 18 19 us, are winners in this changing, growing, global 20 economy. Thank you for being with us today. 21 22 (Applause.) 23 MADAM LI: Our last topic is young people 24 and youth exchange. Governor Nixon had given a very 25 good presentation. People-to-people exchange is a

1 new highlight in China-U.S. relations this year, and 2 it is one of the three pillars underpinning China-U.S. relations in a new era. 3 4 The Anhui province is a place that has 5 cradled many talented Chinese people. Now let's б watch a video on Anhui province. 7 (Film about Anhui Province presented by Governor Wang San Yun.) 8 9 (Applause.) 10 MADAM LI: Now let's invite Governor Wan San Yun to make his presentation. 11 12 GOVERNOR WAN: Honorable Governor 13 Gregoire, Vice President Li Xiaolin, Ambassador Zhang Yesui, governors, ladies and gentlemen, dear friends, 14 15 education concerns the destiny of a nation. Young 16 people are the hope of a nation and the future of the 17 world. I can see that education and youth exchange have always been a lively topic of the National 18 19 Governors Association, and here I wish to thank the 20 forum for giving me this very good opportunity to discuss with you this topic on young people and 21 22 education. 23 Anhui is located in the eastern part of China. It covers an area of 140,000 square 24 25 kilometers, and is a part of the most dynamic Yangtze River Delta economic development zones. And among
 the more than 30 provinces in China, Anhui is one of
 the most dynamic provinces, and its economy has been
 growing at above 10 percent for 10 consecutive
 years.

6 President Obama once rightly said that 7 education is the economic issue of our time. 8 Education has played an important role in our 9 economic development. We have 12 million students in 10 school and more than 2,000 institutions of higher 11 learning.

12 Looking ahead into the future, I feel a 13 very heavy task on my shoulders. Education not only concerns the destiny of the country but also concerns 14 15 each and every one of the people. Our goal is to 16 ensure equal opportunity to education for all our 17 children and to build a lifelong learning tradition here in China. Anhui is the first province to make 18 19 compulsory education universal and ensure that all 20 students from both rural and urban areas have equal opportunities for education. 21

And now it is pushing forward pilot projects in education to reasonably allocate our resources in education and to give equal access to education to all our kids.

1 Ladies and gentlemen, education must be an 2 open and inclusive process, and we need to reinforce 3 each other in great interactions. 4 About a hundred years ago young people 5 such as Zhan Tianyou came to study in the United б States, becoming the frontrunners in a new form of China-U.S. exchange. 7 8 In the new era with globalization and application of IT, we are increasingly 9 10 interconnected. Education has become one of the pillars. Anhui's 20 institutions of higher learning 11 12 have exchanged activities with universities from 13 Maryland and Ohio. It has more than 10 universities such as Harvard and Yale and is carrying out 14 15 exchanges with a number of American universities. 16 And quite a number of young people from 17 Harvard and Yale are studying the Chinese language and culture in Anhui. There are a number of young 18 19 people and American teachers teaching school at 20 universities in Anhui. All these present a very good foundation 21 22 for our future cooperation, and we have every reason to believe that as we build cooperative partnerships 23 between our two countries, the education cooperation 24 25 between our two countries holds even greater promise.

1 We would like to work with you to create 2 an even brighter future. I would expect the 3 following: 4 One is that we will deepen cooperation in 5 higher learning and make such cooperation an engine б in our venerable relationship. We need to expand the 7 exchanges between the teachers and the students and 8 cultivate more talented people in certain professions, and we need to create equal 9 10 opportunities for young people. 11 And the 100,000-strong initiative 12 is being implemented. We will work hard to encourage 13 more American students to come to study in Anhui and 14 provide them with scholarships. 15 And second, I think innovation cooperation 16 should become an important part of our educational 17 cooperation. We need to seize the trend of innovation in science and technology. Anhui has 18 19 always taken innovation as a priority. We will 20 strengthen our cooperation in new energy, new material, new energy vehicles and based on the 21 22 protection of IPR, we're ready to strengthen our 23 corporation with the United States. 24 In terms of quantitative research, we 25 expect to expand our cooperation with the United

States in setting up a center, a research center, in
 Guangdong.

And third, I believe the governments at the subnational level need to play a very active role in educational exchanges. We need to take the lead to form new platforms for educational cooperation and the exchange of young people and work for new steps and bigger steps, and our governors can be very important players in this process.

Ladies and gentlemen, education helps us better understand each other. We sincerely hope that more American students and teachers will come to China to experience the Chinese culture and the Oriental civilization.

15 As I conclude my remarks, I wish this 16 forum full success. I also wish to say that the 17 Yellow Mountains is a very famous cultural heritage site. It is a geological garden. It is a well-known 18 19 place, and there is a welcoming tree that welcomes 20 all the guests coming to the mountain. It has defied tough times and weather, and it tells the whole world 21 22 that the Chinese people are real friends ready to 23 embrace the world and ready to welcome all friends from afar. 24

Anhui welcomes you.

1 (Applause.) 2 GOVERNOR GREGOIRE: Governor, thank you for introducing us to Anhui Province. 3 4 Thank you for your commitment to the 5 education of our children in both countries. That 6 is our future. President Hu Jintao came to visit the 7 state of Washington. As a result of his visit there, 8 9 we have started a school dedicated to the language 10 and the culture of China, and it's one of the most 11 popular schools in Washington state. 12 So thank you, and thank you to my fellow 13 governors. Mr. Secretary, Governors of China, thank 14 you each for your presentations. We are out of time, but I don't want to 15 16 take away from the opportunity, so Madam Li and I 17 have agreed to limit the questions to two. I am 18 sorry. 19 So we'll rotate from one side to the 20 other. And if we could keep the questions short -or let me say this: The answers short and the 21 22 questions shorter, meaning no more than two to three 23 minutes, because we would like to have the opportunity to have questions. 24 So I will ask first if a U.S. governor has 25

a question they'd like to pose to Mr. Secretary or
 one of the governors.

3 Our host from the great state of Utah,4 Governor [Gary] Herbert.

5 GOVERNOR HERBERT: Well, thank you. And б it's been very enjoyable, and I think informative for 7 all of us to hear the comments and the presentations. 8 My question is very simply this: We talk 9 about we want to have better relationships with each 10 other to foster economic opportunity, and I just want to ask the question: What is the obstacle that you 11 12 see or the challenges that are going to get in the 13 way of us accomplishing that? 14 GOVERNOR GREGOIRE: Mr. Secretary?

15 PARTY SECRETARY ZHAO: Governor, you have 16 raised a very good question. The exchanges between 17 us are based on a very broad basis. Many examples 18 were given by the previous speakers, and we value 19 these exchanges and cooperation.

But have we encountered problems or challenges? I will have to say that even in a family there is some displeasures or some friction, but as long as we properly handle them, we will properly resolve. As I said, if we have better communication and a better understanding, we will be able to 1 address these differences.

2 And in terms of trade, the topic I was 3 talking about, in trade we may face something particularly difficult, for example, the barriers, 4 5 trade barriers, or can we remove some of the barriers б so that trade is done more easily. 7 What does America need? What can we produce for the Americans? We can look at all these 8 9 demand and supply and will address this demand and 10 supply. You can tell us what you need, and we can 11 tell you what we want. 12 So I think these exchanges are very 13 helpful for our cooperation at the subnational level, and that's why I believe it's important that we need 14 15 to make our policies open and transparent and advance 16 our cooperation in a wide range of areas. 17 GOVERNOR GREGOIRE: I will ask if one of our colleagues from China has a question they'd like 18 19 to ask of the governors of the United States. 20 GOVERNOR QIN: I have a question on education. Actually, the institutions of higher 21 22 learning have two tasks. One is to cultivate talent, 23 and the other is to do research and development. 24 And after the students graduate from 25 universities, they will come into the industrial

1 sector, and the government has done a lot in 2 assisting them. But how can we better translate the 3 research results into real productivity? I don't 4 know whether or not the United States has a similar 5 problem. What is your experience? And we are very б interested to learn from you. 7 GOVERNOR GREGOIRE: Do you want to take it, Jay? 8 9 GOVERNOR NIXON: It is a constant 10 challenge for all of us. We have a number of methods in which we are trying to join up education, jobs, 11 12 research and business. 13 Two of those, one is our community college system, which is designed to have worker training 14 15 directly contacting the jobs that are there, so the 16 people that employ people come to those schools, say 17 what they need as far as workers. We customize that training right to them so that the workers are 18 19 literally working that job before they are joining 20 the business. On the research side, what we're trying to 21 22 do is begin to get a series of innovation centers 23 where research and then turning that into a business model touch each other. And all of us in some way or 24 another have incubation centers on our universities 25

1 which tie directly the thought processes and the 2 ideas to more capital for business ventures. 3 But to say that we have this problem 4 completely solved would be to overstate where we are. 5 It is something that all of us spend a great deal of б time trying to do much better. 7 GOVERNOR GREGOIRE: Governor, I have to join with my colleague, Governor Nixon, and say this 8 9 is a mutual issue for us. In my state we have one of 10 the largest numbers of start-up companies in the 11 United States. That's a nice reputation to have. 12 You don't want to know how many fail. 13 But we foster it because we believe only if you continue to push for start-up in cooperation 14 15 with your research institution are you going to have 16 the opportunity to create the companies of tomorrow. 17 So we struggle with it. We struggle with not only how do you start it up, but how do you make 18 19 them flourish and grow and be successful. 20 So thank you. Last question from American governors? 21 22 Governor [Neil] Abercrombie, aloha--23 GOVERNOR ABERCROMBIE: Aloha. GOVERNOR GREGOIRE: -- from the great 24 25 state of Hawaii.

1 GOVERNOR ABERCROMBIE: Thank you. 2 Not a question, just a quick comment as a 3 follow-up to Governor Herbert's question. Two words, "visa waivers." I mean it, visa waivers. 4 5 I am very grateful to our guests for their б courtesy and the polite and reflective way in which 7 they answered that question, but it's up to us. This 8 is visa waivers. If we have visa waivers, everything 9 opens up. Trade, conversation, education, 10 environmental exchange, investment, it all comes. 11 Visa waivers. It's up to us to make this reaction to 12 the courtesy and the openness of our Chinese friends, 13 and if we do that, I think you'll see everything 14 opens up. Visa waivers. 15 GOVERNOR GREGOIRE: Thank you, governor. 16 Do we have any--do we have a second 17 question from a U.S. governor? (No response.) 18 19 GOVERNOR GREGOIRE: I'll ask a question. 20 I've done trade missions to China. I most recently did one last fall, the largest trade mission in the 21 22 history of my state. I have some measure of what I 23 consider to be success, whether we've been able to sign an agreement like the 20 that you signed 24 25 yesterday, agreements not just with business, but

1 with higher education institutions.

2 From your perspective, what would you like 3 to see in a trade mission from an American governor 4 to your province or to your country? 5 GOVERNOR LUO: Governor Gregoire has б raised a very practical question. We do want greater 7 cooperation with the United States. We hope that 8 more American delegations will come to China, in 9 particular to the western part of China, to the 10 western provinces, and we also hope that you will 11 bring more investment and funds to our provinces. 12 GOVERNOR GREGOIRE: A question from our 13 Chinese colleagues? 14 Governor Luo, you have a question, as I understand it? 15 16 GOVERNOR LUO: We all know that the United 17 States is one of the first countries to formulate a PV policy, and then it launched a one million roofs 18 19 initiative. China is immensely interested in 20 developing the PV sector, so I really want to know what measures you have taken to push forward the 21 22 development of this sector. 23 GOVERNOR GREGOIRE: Please, Governor [Martin] O'Malley. 24 25 GOVERNOR O'Malley: A couple of the things

1 that we've done in Maryland are, number one, to have 2 a renewal portfolio standard of 20 percent by '22, 3 and that contains within it certain requirements that 4 the utility companies buy an increasingly larger 5 portion of their energy from renewable sources. And б within that we have a carve-out for solar. And 7 that's probably the most important thing that we have done is to create that -- that predictability, if you 8 9 will--and that carve-out within the renewable 10 portfolio standard that is now starting to inspire larger photovoltaic installations. 11 12 As far as the broader question of advance

manufacturing and how we inspire that here in our country, we--I mean, that's an issue that we are all wrestling with right now. But on the demand side, we believe that the renewable portfolio standard and that carve-out for solar is a solid way that we've been able to see that industry take off a bit in our state.

20 GOVERNOR GREGOIRE: Governor Fortuño? 21 GOVERNOR FORTUÑO: If I may add to what 22 Governor O'Malley has just said, in the case of 23 Puerto Rico, for the production we have extremely 24 attractive tax incentives. And we are part of the 25 United States market, so whatever you produce in

1 Puerto Rico can be sold, you know, within the U.S. 2 So that's something we're doing, and it's, again, 3 extremely attractive tax incentives for the 4 production of photovoltaic and other technologies. 5 In terms of the actual installation of б this technology, in our case, to jump start it we 7 created the Green Energy Fund, and actually, the Green Energy Fund, what it does is that we assist 8 9 private sector investors that wish to develop wind 10 and solar energy alternatives. We assist them, and they have to compete for the amount of money that is 11 12 in that fund. Every year there is a competition. 13 You do it online. We just closed the last one. Next year there will be a new one. 14 15 GOVERNOR GREGROIRE: Well, thank you. 16 Again, thank you to all of our participants, all of 17 those who have come to join us today. It's been a wonderfully good exchange. It's an historic event. 18 19 Yesterday with the 20 agreements signed was an 20 historical event. This has been productive, and I want to 21 22 thank all of our participants. 23 I also would like, if I could, to spend a moment and just say thank you to some special folks 24 25 who have made this first ever and historic forum

1 possible. That includes our host governor, 2 Governor Herbert, from the great state of Utah. Thank you, Governor Herbert. 3 4 (Applause.) 5 GOVERNOR GREGOIRE: Rita Jo Lewis from the б U.S. State Department, Rita Jo, thank you for all 7 you've done. 8 (Applause.) 9 GOVERNOR GREGOIRE: The Chinese Embassy 10 and Ambassador Zhang, thank you very much. 11 (Applause.) 12 GOVERNOR GREGOIRE: Madam Li, 13 Mr. Secretary, governors from China, our fellow 14 governors from the great United States, thank you all 15 for all your participation. 16 And, of course, a big thank you to the NGA 17 staff, without whom this would not have been possible, as usual. Thank you all very much for all 18 19 you did. 20 (Applause.) 21 GOVERNOR GREGOIRE: So let me just say 22 we've got a lot of work to do. Let's make hay while 23 the sun shines, as the secretary put it. 24 (The proceedings concluded at 4:46 p.m.) 25

1 REPORTER'S HEARING CERTIFICATE 2 3 STATE OF UTAH ) ) ss. COUNTY OF SALT LAKE 4 ) 5 I, Susette M. Snider, Registered б 7 Professional Reporter, Certified Realtime Reporter 8 and Notary Public in and for the State of Utah, do hereby certify: 9 10 11 That said proceedings were taken down by me in stenotype on July 15, 2011, at the place 12 13 therein named, and were transcribed by me, and that a 14 true and correct transcription of said proceedings is set forth in the preceding pages. 15 16 17 WITNESS MY HAND this 25th day of July, 18 2011. 19 20 21 22 23 24 25 Susette M. Snider, RPR, CRR

103rd ANNUAL MEETING

## OF THE

NATIONAL GOVERNORS ASSOCIATION

July 17, 2011

## Plenary Session

## ADVANCING COMPETITIVENESS

GRAND BALLROOMS B AND C THE GRAND AMERICA HOTEL SALT LAKE CITY, UTAH

Reporter: Susette M. Snider, CRR, CSR, RPR Notary Public in and for the State of Utah

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      PARTICIPANTS:
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            Governor [Chris] Gregoire of Washington;
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            Governor [Gary] Herbert of Utah; and
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            Governor [Dave] Heineman of Nebraska.
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      GUEST SPEAKERS:
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            Thomas L. Friedman, New York Times columnist,
11
              author
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1 PROCEEDINGS 2 11:37 a.m. 3 4 GOVERNOR GREGOIRE: Good afternoon, 5 everyone. Did you all have a great time last night at the Olympic Park? б 7 (Applause.) GOVERNOR GREGOIRE: And I've got to tell 8 9 you, governor, for those of us that could go to the 10 America's choir this morning, that was just--I can't--patriotic, just wonderful. Thank you very 11 12 much. 13 (Applause.) GOVERNOR GREGOIRE: Well, to everyone, 14 welcome to the closing plenary of the 2011 National 15 16 Governors Association Annual Meeting. 17 At this session we're going to be really very much educated, if you will, about the globe and 18 what's going on in the world and particularly what it 19 20 means for the United States, by our amazing writer from The New York Times, Tom Friedman. He's going to 21 talk with us about advancing America's 22 23 competitiveness. 24 There's no question as governors we have challenges across the world. Our U.S. teenagers rank 25

25th in math, 17th in science, 14th in reading. This
 movement is not confined to our K through 12
 education. Over the last two decades, the United
 States has fallen from first to 12th in the number
 of Americans that complete their postsecondary
 degrees.

7 For the first time in history, the U.S. is faced with a generation of young adults that's 8 projected to have a lower educational attainment than 9 10 their parents. So it comes as no surprise that according to Gallup only 44 percent of Americans 11 believe that it's likely that today's youth will have 12 a better life than the parents, the lowest rate since 13 14 the poll began in 1983.

As a nation we have opened the doors to higher education for millions of Americans. I think our higher education system really is second to none, but unfortunately, too few of our students that began higher education ultimately obtained a certificate or a degree, and too few of them lead to a good paying job and a career.

22 Without more students completing high 23 quality certificates and degrees, our ability to 24 out-innovate, out-produce other nations is in severe 25 jeopardy.

1 We all know that education is the primary 2 driver of economic growth. It is our supply of skilled labor that remains flat, and the economic 3 4 engine that drove us to prominence in the 20th 5 century may once again stall. So we must redouble our efforts to invest in the human capital, the б infrastructure of America that has defined America's 7 8 standing in the world for the past 70 years. 9 Fortunately, it is my pleasure today to 10 welcome back Tom Friedman, one of our nation's 11 foremost thinkers, to talk about global competition 12 and the challenges and the opportunities that lie ahead for our United States. 13 Tom has written for The New York Times for 14 30 years and in that time has published five 15 best-selling books. He's received numerous awards 16 17 for his reporting and commentary, including the National Press Club's Lifetime Achievement Award. 18 19 He's joined us for several occasions in 20 the past to offer his insight and his opinion on the hot topics of today, domestically and 21 22 internationally. And so it is with great pleasure 23 that here, in the great state of Utah, we get to turn once again for the insights of our friend, Tom 24 Friedman, for his perspective on how America can 25

1 recapture its position as a global competitor of 2 innovation and economic leadership in the world. 3 Tom, thank you. 4 (Applause.) MR. FRIEDMAN: Thank you very much. 5 Governor, thank you. б 7 It's a treat to be back here for the governors conference and to be back in Utah. This is 8 9 a great audience. 10 One of the things I love about this meeting is I look around, and I see all these great 11 12 governors here, some of whom I've had the pleasure of knowing. And it doesn't say "Democrat" or 13 "Republican" under anybody's name. And it's in that 14 spirit I come here. I hope I give both sides a 15 16 little indigestion and a little support in what I'm 17 about to say. What we're going to do is I'm going to 18 talk for about 30, 40 minutes, and we'd open it for a 19 20 dialogue, is what the governor suggested. 21 And what I'm going to do today is actually give you a sneak preview of my new book. It's a book 22 23 that I've written with a dear friend and long-time collaborator, Professor Michael Mandelbaum of Johns 24 Hopkins University. I've got an early copy of the 25

1 book. It's not out until September, but it is 2 certainly on the topic of today. The book is called That Used to Be Us: How America Fell Behind in the 3 World it Invented and How We Can Find Our Way Back. 4 5 Now, every time Michael and I tell people б about our book, they invariably ask: Does it have a happy ending? Does it have a happy ending? And what 7 we tell them all is that it does have a happy ending. 8 What we can't tell you is whether it's fiction or 9 10 nonfiction. That is going to depend on us. 11 Now, you might wonder why two foreign policy guys--as I said, Michael teaches foreign 12 13 policy at Johns Hopkins; I'm a foreign affairs 14 columnist for The New York Times -- ended up writing a book about America today. And the answer is very 15 simple. Over the last 20 years Michael and I talk 16 17 almost every day about foreign policy, but over the last couple of years we started to notice something. 18 19 We would start talking about America and the world, 20 and we'd end up just talking about America. And we 21 really realized that what that was telling us was 22 that America, its fate, future and vitality, really 23 is the biggest foreign policy issue in the world and that we really couldn't think intelligently about 24 25 American foreign policy unless we were thinking

1 creatively and anew about the sources of our strength 2 and vitality.

3 I will be honest with you. It is our view 4 that the American dream is now in play. The American dream is now in play. This dream that every 5 generation can expect to live better than its parents б 7 is now in peril. And that is so important because we 8 have taken that American dream so much for granted 9 that we forget it is the source, the vital source of 10 our domestic stability. What has enabled us to hold 11 this country together, to invite in so many immigrants, to unify 50 states is this idea of a 12 13 growing economy where everyone can expect to live 14 better than their parents.

And that American dream is vital to our 15 status in the world. People forget we provide the 16 17 world so much global governance, whether it is 18 maintaining global institutions or protecting the sea 19 lanes of global commerce. I don't mind saying this 20 at all. America is the tent pole that holds up the 21 world, and if that tent pole buckles or fractures, 22 your kids won't just grow up in a different America, 23 they will grow up in a very different world. So this thing we call America, this is a 24 precious jewel, and we really need to get back to

25

1 polishing it.

2 And with that introduction, I'd like to just share with you the first few paragraphs of the 3 4 book. The first chapter is called "If You See Something, Say Something." Of course, you all know 5 б that's the homeland security motto, but we're now applying it to the country as a whole. 7 8 "This is a book about America that begins in China. In September 2010, I attended the 9 10 World Economic Forum's summer conference in 11 Tianjin, China. Five years earlier, getting to Tianjin involved a three-and-a-half-hour car 12 ride from Beijing to a polluted Chinese version 13 14 of Detroit. But things have changed. "Now to get to Tianjin, you head to the 15 Beijing South Railway Station, an ultramodern 16 17 flying saucer of a building with glass walls and an oval roof covered with 3,246 solar panels. 18 19 You buy a ticket from an electronic kiosk 20 offering choices in Chinese and English and board a world-class high-speed train that goes 21 22 right to another roomy modern train station in 23 downtown Tianjin. Said to be the fastest in the 24 world when it began operating in 2008, the Chinese bullet train covers 115 kilometers, 25

1 72 miles, in 29 minutes.

-	/2 miles, in 25 millaces.
2	"The conference itself took place at
3	Tianjin Meijian Convention and Exhibition
4	Center, a massive, beautifully appointed
5	structure, the likes of which exists in few
б	American cities. As if the convention center
7	wasn't impressive enough, the conference
8	co-sponsors in Tianjin gave some facts and
9	figures about it.
10	"They noted that it contained a total
11	floor area of 230,000 square meters and that the
12	construction of the Meijian Convention Center
13	started on September 15, 2009 and was completed
14	in May 2010. Reading that line, I started
15	counting on my fingers, September, October,
16	November, December, January eight months.
17	"Returning home to Maryland, where I
18	lived, from that trip, I was describing that
19	Tianjin complex and how quickly it was built to
20	Michael, my co-author, and his wife, Anne. And
21	at one point Anne interrupted and said: 'Excuse
22	me, Tom. Have you been to our subway stop
23	lately?' We all live in Bethesda and often use
24	the Washington Metrorail Subway to get to work
25	in downtown Washington.

1 "I had been at the Bethesda station and 2 knew exactly what Anne was talking about: The two short escalators had been under repair for 3 4 nearly six months. While the one being fixed was closed, the other had to be shut off and 5 converted into a two-way staircase. At rush б 7 hour, this was creating a huge mess. Everyone 8 trying to get on or off the platform had to squeeze single file up one locked-down 9 10 escalator. It sometimes took 10 minutes just 11 to get out of the station. 12 "A sign on the closed escalator said the repairs were part of a massive modernization 13 14 documentation project. What was taking this modernization so long? We investigated. 15 "Cathy Asato, a spokeswoman for the 16 17 Washington Metropolitan Transit Authority, had told the Maryland Community News that 'The 18 repairs were scheduled to take about six months 19 20 and are on schedule. Mechanics need 10 to 12 weeks to fix each one, ' she said. 21 22 A simple comparison made a startling 23 point: It took China's Teda Construction Group 32 weeks to build a world-class convention 24 center from the ground up, including giant 25

escalators in every corner, and it was taking
 the Washington Metro crew 24 weeks to repair two
 tiny escalators with 21 steps each.

We searched a little further and found a
local news radio station that interviewed the
Metro interim manager. He said, 'We're behind
the curve, it's true, so we have to catch up . . .
just this last week smoke began pouring out of
the escalators at the DuPont Circle Station
during rush hour.'

"On November 14th, The Washington Post ran 11 a letter to the editor from Mark Thompson. He 12 13 said, 'As someone who's ridden Metro for more 14 than 30 years, I can think of an easier way to assess the health of the escalators. For 15 decades they ran silently and efficiently, but 16 17 over the past several years when the escalators are running, aging or ill-fitting parts have 18 19 generated horrific noises that sound to me like 20 a Tyrannosaurus Rex trapped in a tar pit screeching its dying screams.' 21

22 "The quote we found most disturbing,
23 though, came from Maryland Community News about
24 the long lines at rush hour. 'My impression,
25 standing on line, is people have sort of gotten

1	used t	to it,'	Benjamin	Ross,	who	lives	in
2	Bethes	sda, wr	ote in.				

"People have sort of gotten used to it. 3 Instead, that sense of resignation, that sense 4 that, well, this is just how things are in 5 б America today, that sense that America's best days are behind it and China's best days are 7 8 ahead of it have become the subject of water-cooler, dinner party and grocery line and 9 10 classroom conversations all across America 11 today.

So do we buy the idea, increasingly 12 popular in some circles, that Britain owned the 13  $19^{\rm th}$  century, America owned the  $20^{\rm th}$  century and 14 China will inevitably own the 21st century? No, 15 we do not buy that, and we have written this 16 17 book to explain why no American, young or old, should resign himself or herself to that view. 18 The two of us are not pessimists when it comes 19 20 to America and its future. We are optimists, but we are frustrated optimists. That is my 21 22 mode today. I am an optimist, but I am a 23 frustrated optimist.

24 "The title of this first chapter, 'If You
25 See Something, Say Something,' that is the

1 mantra of the Department of Homeland Security and plays over and over on loudspeakers in 2 airports and railroad stations around the 3 4 country. Well, we have seen and heard 5 something, and millions of Americans have too. б What we have seen is not a suspicious package left under a stairwell. What we have seen is 7 8 hiding in plain sight. We've seen something 9 that poses a greater threat to our national 10 security and well-being than al-Qaeda ever will. 11 We've seen a country with enormous potential falling into the worst sort of decline, a slow 12 13 decline, just slow enough for us not to drop 14 everything and pull together for collective action to fix what needs fixing. 15 "This book is our way of saying something 16 17 about what is wrong, why things have gone wrong and what we can and must do to make them right." 18 19 Now, our view is that America today faces 20 four great challenges. One is adapting to the IT revolution, second is adapting to globalization, the 21 22 third is all the issues around entitlements and 23 deficits, and the fourth is energy and climate. I don't have time today to go into all four, so I'm 24 going to focus on the first two, adapting to the 25

1 globalization revolution and the IT revolution, which 2 is really one subject because they merge, the IT revolution and globalization, and they create what I 3 4 call the flat world. So what I'm really talking 5 about is adapting to the flattening of the world. б Now, some of you know the last time I was 7 here, I think, was to talk about The World is Flat. I wrote that book in 2004. I thought it was at the 8 9 cutting edge. If you pick up The World is Flat, 10 First Edition, and look in the index under "F," you will discover that Facebook isn't in it. So when I 11 wrote The World is Flat, Facebook basically didn't 12 exist, Twitter was a sound, the cloud was in the sky, 13 14 4G was a parking place, applications were what you sent to college, LinkedIn was a prison, and Skype, 15 for most people, was a typo. 16 17 Let me repeat that, if you didn't get it, okay? When I declared the world was flat, Facebook 18 19 basically didn't exist, Twitter was a sound, the 20 cloud was in the sky, 4G was a parking place, 21 applications were what you sent to college, LinkedIn 22 was a prison, and, for most people, Skype was a typo. 23 All of that has happened in just the last six years. And what that has done, the only way I can 24 describe it in my own language, it's taken us into 25

1 FlatWorld 2.0. The world isn't just connected now, 2 it is hyper-connected. And I would argue that is really the biggest thing going on in the world today. 3 4 And you can see this through a lot of different news stories. As I said, when I wrote The World is Flat, 5 I basically said, Hey, we've connected Boston and б 7 Bangalore in India, the capital of outsourcing there. I said, "The world is flat." Since 2004 we've 8 9 connected Boston, Bangalore and Sirisi. 10 You say, Well, where's Sirisi? Sirisi's a city 90 miles to the interior with 90,000 people with 11 more and more people. India's adding 18 million cell 12 phones a month, okay? 18 million cell phones a 13 14 month, okay, are now part of this flat world. Or think about the Middle East, a part of 15 the world I've spent a lot of time following. When I 16 said the world was flat, we've connected Detroit and 17 Damascus. Well, now we've connected Detroit, 18 19 Damascus and Deraa. You say, Well, where is Deraa? 20 Deraa is the dusty, Syrian border town on the 21 Syrian-Jordanian border where the revolution there 22 began. 23 Now, think about this: Syria has banned every international news organization. They've 24

25 banned the BBC, CNN, Fox, The New York Times and

1 Al-Jazeera, yet every night you've been seeing news 2 footage coming out of Deraa. And if you look at the bottom of your screen, you know where that's from? 3 4 It says it's from SNN, Shaam News Network. Shaam is 5 Arabic for Syria. Some people have gotten together a б website overnight -- I would bet the governors around 7 this table in their wallets have enough money right 8 now to start Shaam News Network--and they have been pumping out video and flip-cam footage from Deraa 9 10 through Shaam News Network. That's how flat the 11 world has become.

12 On October 30, 2010, an Indian newspaper, 13 Hindustan Times, ran a small item--I happened to be 14 there at the time--that caught my eye. It reported that a Nepali telecommunications firm had just 15 started providing 3G mobile network service at the 16 17 Summit at Mount Everest, the world's tallest mountain. The story noted that it will "allow thousands of 18 19 climbers and trekkers who throng the regions every 20 year access to high-speed Internet and video calls 21 using their mobile phones."

Following up this story, the BBC observed that it was a far cry from the days in 1953 when Edmund Hillary first climbed the Everest summit, "using runners to carry messages from his expedition

to the nearest telegraph office." You can imagine the phone calls being made: Hi, Mom. You'll never guess where I'm calling from.

4 Like that story? The same month--the same 5 month--a small item showed up in the business pages. 6 It reported that Applied Materials in the Silicon 7 Valley-headquartered company that make the machines 8 that make thin film solar panels had just opened the 9 world's largest commercial research and development 10 center, privately funded, in Xian, China.

11 Initially Applied Materials sought applicants for 260 scientists and technologists in 12 Xian. Howard Clabo, a company spokesman, said that 13 14 Xian received 26,000 Chinese applications and hired 330 people, 31 percent with master's or Ph.D. 15 degrees. "Roughly 50 percent of the solar panels in 16 17 the world were made in China last year," said Clabo. "We need to be where the customers are." 18

19 One last news story. My mother-in-law was 20 formerly chairman of the board of Grinnell College. 21 Governor [Terry] Branstad knows it well. Here's an item 22 *The New York Times* carried about Grinnell College, a 23 wonderful liberal arts college of 1600 students in 24 the middle of Iowa. This year nearly one out of 25 every 10 students who applied to Grinnell College in

that

Iowa were from China. Grinnell is a small liberal
 arts college, 1600 students. Half of Grinnell's
 applicants from China had a perfect score of 800 on
 their SATs.

5 So what is all of this telling us? It's 6 telling us that the world, as I say, is flatter than 7 ever, and when the world gets this flat, what it 8 means is that the whole global curve is being raised 9 because employers in all your states now have that 10 much easier access to software, robotics, and talent 11 anywhere in the world.

12 I know, I know, I know. You've heard this 13 joke before. You've heard this joke before. That's 14 what they said about Japan in the '80s. We've heard this joke before. They said Japan was going to 15 steamroll us, and lo and behold, we steamrolled them. 16 17 Well, this is a little different joke. You see, Japan threatened two American industries in 18 19 one American town. The town was Detroit, and the 20 industries were consumer electronics and autos. Globalization, as typified by China, challenges every 21 22 American town, every American job and every American 23 industry directly or indirectly. This is a different joke. You haven't heard this one before. 24 25 Now, as I said, what's basically happening

1 is the whole global curve is being raised. And I 2 came across this blog post. I thought it really captured what this means for the job market. We're 3 4 going to first talk about the job market and then what it means for education. 5 6 It's by John Jazwiec. I may be 7 mispronouncing his name. It's on his blog. He actually attached it to a column of mine in the 8 9 comments where I saw it. And he's headed a variety 10 of technology companies and startups, including RedPrairie and FiveCubits. He also teaches MBA 11 12 courses. He explained the kind of world and its implication for jobs that I'm describing on his blog 13 14 this way: "I am in the business of killing jobs. I 15 kill jobs in three ways. I kill jobs when I 16 17 sell, I kill jobs by killing competitors, and I kill jobs by focusing on internal productivity. 18 19 All of the companies I've been CEO of, through 20 best-in-practice services and software, eliminate jobs. They eliminate jobs by 21 22 automation, outsourcing and efficiencies of 23 process. The marketing is clear: Less workers, 24 more consistent output. "I reckon in the last decade I've 25

1 eliminated over a hundred thousand jobs in the 2 worldwide economy from the software and services my companies sell. So there, I've said it. I 3 4 am a serial job killer. 5 "Any job that can be eliminated through technology or cheaper labor is, by definition, б not coming back. The worker can come back. 7 8 They most often come back by being underemployed. Others, though, upgrade their 9 10 skills and return to previous levels of 11 compensation. But as a whole, the productivity gains over the last 20 years have changed 12 13 the landscape of what is a sustainable job." 14 So what, then, is a sustainable job in such a hyper-connected, hyper-flat world? Here's how 15 16 he answers: 17 "The best way I can articulate what is a sustainable job is to tell you as a job 18 killer--that's me--a stainable job is a job 19 20 I can't kill. A stainable job is a job I can't kill. And I can't kill creative people. There 21 22 is no productivity solution or outsourcing that 23 I can sell to eliminate a creative person. I can't kill unique value creators. A unique 24 value creator is, well, unique. They might be 25

1 someone with a relationship with a client. They 2 might be someone who is a great salesman or saleswoman. They might be someone who has spent 3 4 so much time mastering a market or subject that no one else can match." 5 What he's telling you I think is critical б 7 to the employment picture. I call it The Great 8 Inflexion. This hyper-flattening of the world 9 happened to coincide with our great depression, and 10 what that great depression is doing is driving these 11 productivity tools faster than ever. Oh, there's no question we need more demand for all these other 12 things, but don't lose sight of this trend. This is 13 14 hugely important. And so what we did--and the thing you 15 16 have to understand about this trend--let me say 17 just one other thing--is that it applies to everybody. It applies to everybody. I know you're 18 19 thinking out there, Oh, easy for you to say, 20 Mr. New York Times Columnist. You're not going to be outsourced. Well, let me tell you about my life. 21 22 I inherited James Reston's office in the 23 Washington Bureau of The New York Times. Now, those of you who are old enough to know, James Reston was 24 one of our great columnists in the '60s and '70s. 25

1 What an honor. I inherited James Reston's office. I 2 will bet if he were here we could ask him--3 unfortunately he's passed away. But I would bet that Mr. Reston used to wake up back in the '60s and ask 4 5 himself on any given morning, I wonder what my seven б competitors are going to write today. I wonder what 7 Litman's going to write today. I wonder what Alsop's 8 going to write. I wonder what Mary McGrory is going to write. I do the same thing. I wake up every 9 morning and say, I wonder what my 70 million 10 11 competitors are going to write today! 12 I wrote about Greece this morning. Our 13 stringer in Greece e-mailed me already this morning what the Greek bloggers are saying about it, and if I 14 can't add value, if I can't tell those Greek bloggers 15 16 something new or fresh about their country, then who 17 needs me? So none of us, none of us, is going to be 18 immune to this process. What's basically going on, to put it in 19 20 the language of labor economists, is called 21 skills-biased polarization. What that basically means is that those people who do non-routine work, 22 23 journalists, dentists, doctors, physicists, computer scientists, governors, those of us who do non-routine 24

25 work, this flat world works for us better than ever.

1 Those who do routine work in the middle are getting 2 crushed basically by anything that can be automated, outsourced, or digitized. Those who do non-routine 3 4 low-skilled work, the butcher, the baker, the 5 candlestick maker, you know, they're going to be okay, but their wages will depend on local б 7

circumstances.

8 So basically we're blowing a hole faster 9 and bigger than ever in the labor market, and if you 10 don't have those non-routine skills, you are going to 11 be under more pressure than ever. But I want to 12 stress, it applies to everybody.

13 I started thinking about this back in 2008 14 at the height of the recession. I was having dinner with our best friends in Washington. My wife's best 15 friend's husband, Jeff, runs a big Washington, D.C., 16 law firm. I said, Jeff, What is the subprime crisis? 17 What does it mean for a law firm? 18 19 He said, Oh, we're laying off people.

20 I said, That's interesting. Who gets laid off first in a law firm? Is it last in, first out? 21 22 He said, No, not anymore. Basically he 23 said, Who gets laid off is--when we were in the middle of the credit bubble and there was a lot of 24 25 work, the people we could take that work to, hand it

to those lawyers, and they did it very, very fine and handed it back. But some of them are gone. The people we're keeping are those who said, "You know, Jeff, we could actually do that old work in a new way," or, "We can do new work in a new way if we take advantage of this new world."

7 What is that about? We have a chapter in 8 the book called "Help Wanted" because we felt you 9 can't actually talk about education unless you talk 10 to employers and say, "Actually, what are you guys 11 looking for? What are you gals looking for in an 12 employee today?"

And here's what we found. We took four 13 14 categories. We had high-end white collar like Jeff, we had low-end white collar, an outsourcing firm in 15 16 India; we had blue collar, Ellen Kullman, the head of 17 DuPont; and we had green collar, the U.S. Army. The U.S. Army is the biggest employer and one of the 18 19 biggest educators in the country. And you know what 20 all four said? They gave us the same answer: "We're 21 looking for people who have critical reasoning and 22 technical skills in order to get the interview, in 23 order to get an interview, because now we want something else. We don't want just people who can do 24 25 the math and the critical reasoning. We want people

who can adapt, invent, and reinvent the job along the way because the labor--the global market is moving so fast, if I don't have workers who are touching the product and can't adapt and reinvent it faster, I've got a real problem."

I like the way Ellen Kullman of DuPont
said it. She said, "We want every worker today,
starting with the line worker, to be present, to be
paying attention, because that worker may have an
insight that can drive enormous productivity or new
products."

My favorite interview of that chapter was 12 13 with Gen. Martin Dempsey. If you follow the news, 14 he just became the chairman of the Joint Chiefs of Staff, but when we interviewed him, he was actually 15 head of the Army's Education Corps. And he told a 16 17 remarkable story. General Dempsey was our commander who took Baghdad from Saddam Hussein in 2003. He 18 19 later went on to be CENTCOM commander.

And I believe it was five years later--I'd have to consult the book--he told us this story: As CENTCOM commander, temporary CENTCOM commander, he was visiting an outpost in the far reaches of Afghanistan. He sat down to interview the captain there. And at the end of the interview, he

1 realized that that captain and in that isolated 2 outpost in Afghanistan, because of this hyper-connectivity, had access to more intelligence 3 4 and more firepower than Martin Dempsey when he took Baghdad from Saddam Hussein. And that's driven his 5 whole transformation of the army education system. б 7 Now at boot camp, half the time they just 8 give every new recruit an iPhone--it's the new 9 thing--you download the app, and you teach the 10 class. Because when you've got a commander in the 11 outposts of Afghanistan who has more firepower and 12 access to intelligence than you did when you 13 commanded the troops that took Baghdad, that 14 commander has to be trained to invent, reinvent and adapt so much more than anyone 10, 15 or 20 years 15 ago. That's happening throughout the labor market. 16 17 What does that mean for education? What it means is that we have two educational challenges 18 19 today. We need more education and we need better 20 education. By "more education"--and this is a challenge 21 I know all of you face--we need to bring the bottom 22 up to our average and we need to do it really fast. 23 But at the same time we need to bring our average so much higher, to the global average. 24

25

Do not compare your students to the school

down the street because they're not competing for
 that place in Grinnell anymore with the school down
 the street. They're competing with the students from
 Shanghai PS-21 which this year won the top place in
 the world PISA tests.

6 We need to bring the bottom to the 7 average, and we need to bring the average so much 8 higher because, friends, in this hyper-connected 9 world, average is officially over. Average is over. 10 Woody Allen's dictum that "90 percent of life is 11 showing up" is no longer true. Just showing up for 12 work will not cut it anymore. Just being average won't cut it anymore. 13

American's economic future increasingly will depend on how well we're able to get our whole country to resemble Garrison Keillor's fictional Lake Wobegon, "where all the women are strong, all the men are good-looking, and all the children are above average." Average is over.

In a world where so many machines and available foreign workers can now do average or better, the curve everyone is being graded on is moving up. What was average work will not return average wages anymore, let alone above-average wages. The old saying, "If all you ever do is all you've

1 ever done, all you've ever get is all you've ever 2 got," that also is no longer applicable. If all you 3 ever do is all you've ever done, all you'll ever get 4 is less than you ever got, given this 5 hyper-connection of the world. 6 What that means is everyone has got to 7 find their extra, their own unique value proposition.

Whatever your extra is, everyone needs to find it and 8 use it to become a creative lawyer, a creative 9 10 columnist, a creative factory worker, a creative 11 governor, a creative service worker. Everyone every day is going to have to justify their value-added. 12 For some it will be inventing a new product or 13 14 service and reinventing an old product or service. For others it will be reinventing yourself to do an 15 even routine task in a new or better way. 16

17 How many of us have had an elderly parent in a nursing home, come to the nursing home, and boy, 18 19 there was that one healthcare worker who didn't just 20 take care of Mom and Dad but engaged them in a way 21 that really brightened their day. That person found 22 their extra. And I'll tell you the first thing we do 23 when we see that at the nursing home, we say, We want that person to work with Mom and Dad, and by the way, 24 we'll pay more for that. Everyone's got some extra 25

1 to find.

25

starter-uppers.

And that's really, it seems to us, where education is going to have to go. I hate to say this, but so many Americans are being educated not for \$40-an-hour jobs but \$12-an-hour jobs. They may think they're being educated for \$40-an-hour jobs; they are not.

8 And the whole creative component of 9 education has got to be on the rise. We have to 10 become a nation of starter-uppers. Whether it's 11 starting up yourself, starting a new community 12 organization, starting a new company, starting a new 13 website, we have got to become a nation of 14 starter-uppers because productivity is just going to be constantly shrinking the workforces. 15

16 The days that you all could hope that 17 Intel would come to your state with a factory of 20,000 people, those days are over. Now you need 18 19 20,000 people starting jobs for 5 people, for 10 20 people, for 20 people. And that's what everyone's 21 got to go thinking about: How do I start something 22 and make people's lives more comfortable, more 23 secure, more healthy, more educated, more fun, more entertained. We have to be a nation of 24

1 The last thing I'll just say about this, 2 the right attitude, it seems to me, for educators today, all of us--and you all indirectly are 3 4 educators -- is to teach our kids not just reading, 5 writing, and arithmetic but to get them to think like new immigrants, like artisans and like a waitress. б 7 Let me explain. 8 What does it mean to think like an 9 immigrant? It means approaching the world with the 10 view that nothing is owed to you, nothing is or will 11 be given, that you have to make it on your own. There is no "legacy" slot waiting for you at Harvard 12 13 or the family firm or anywhere else. You have to go

14 out and earn or create your place in the world, and 15 you have to pay very close attention to the world in 16 which you're living.

17 As with all immigrants throughout history, all Americans now find themselves in new and in many 18 19 ways unfamiliar circumstances in this hyper-connected 20 world. In important ways this hyper-connected world 21 in the 20th century, we are all new immigrants, and 22 that's how you have to approach education and the job 23 market, with that same kind of internal drive and fortitude. 24

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25 Secondly--this is from
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1 Professor Lawrence Katz at Harvard, labor economist. 2 He says everyone should also think like an artisan. "Artisan" was the term used before the advent of mass 3 4 manufacturing to describe people who made things or provided services with a distinctive touch and flair 5 б in which they took personal pride, whether it was a 7 saddle or a pair of shoes or a piece of jewelry. The 8 shoemaker, the doctor, the dressmaker, they were all artisans. Artisans give a personal touch to whatever 9 10 they did. They often carved their own initials into 11 what they did it was such a personal touch. 12 That's a really good mind-set for whatever 13 job you're doing. Would you want to put your 14 initials on it? Think like an artisan. Finally, it wouldn't hurt for all of us at 15 16 times to think like a waiter or waitress. In late 17 August of 2010 I was back in my hometown of Minneapolis, having breakfast with my best friend, 18 19 Ken Greer, at the Perkins Pancake House on 20 Highway 100. Ken ordered three buttermilk pancakes 21 and fruit. I ordered three pancakes and scrambled 22 eggs. When the waitress came back with our breakfast 23 plates, she put them down in front of each of us. But when she puts Ken 's plate down, she simply said, 24 "I gave you extra fruit." We gave her a 50-percent 25

tip for that. That waitress, God bless her, she didn't control much in her work environment, but she controlled the fruit ladle. And it was her little way of doing something extra.

5 In many ways, we all need to think like 6 that waitress and ask what is it about how I do my 7 job that is going to differentiate me? More than 8 ever now we're all waiters and waitresses trying to 9 do that something extra that a machine, a computer, a 10 robot, a foreign worker or just an average person 11 cannot or will not do.

Getting everyone to unlock, unleash, 12 13 discover, and expand their extra to become creative 14 lawyers, doctors or journalists, that is our educational challenge in this hyper-connected world. 15 16 I like the way Mark Rosenberg, the 17 president of Florida International University, which has 42,000 students, once put it to us. He said, 18 19 "It's imperative that we become much better at 20 educating students not just to take good jobs but to create good jobs." That is really good advice 21 22 because in today's world, you will not--we were 23 lucky. We're all roughly the same generation. We got to find our job when we got out of college. Our 24 25 kids will increasingly have to create their job when

they get out of college, and the sooner and faster
 and more effectively we train them to do that, the
 better.

4 You know, we're really going into a different world. The world I grew up in was the 5 world of developed and developing countries. That's б 7 over. That's so round world. In the flat world 8 there are just going to be two kind of countries, in my view. I call them HIEs and LIEs, high 9 10 imagination-enabling countries and low-imagination enabling countries. That's going to be the real 11 12 differentiator.

You see, if I've just got this, if I've 13 14 just got the spark of an idea now, I can actually go to Delta in Taiwan. They'll design this. I can skip 15 over to Hangzhou, and Alibaba will find me a cheap 16 manufacturer for this. Jump over to amazon.com. 17 They'll do my fulfillment and deliver and provide me 18 19 my cloud services. Freelancer.com will do me my logo 20 and I'm sure find me an accountant as well. They're 21 all commodities except this, and having more people 22 in our society who are doing this in every way in 23 their lives, that's what it's about. We have to be the world's HHIE, hyper-high imagination-enabling 24 country, because that's where the cutting edge of 25

1 jobs is going to be.

2 Let me close with just a few concluding points. You'll notice that what I've tried to do 3 4 here today was talk about America and its challenges by starting where I think the conversation should 5 start: What world are we living in? б 7 To me it's so sad to listen to the 8 national debate today, which is all about I cut you a 9 trillion. I cut you a one trillion. I see your 10 trillion. I raise you a trillion. In what world? 11 You can row without a plan. But if you cut without a 12 plan, watch out. You may hit an artery. You may 13 sever a bone. We do have to cut. That's a big part of our book. We have to cut, we have to raise 14 revenue, and we have to invest. But let's start the 15 conversation with what world we're in, not who can 16 17 throw the biggest number on the table and be the most stubborn about saving something or cutting something. 18 19 It's an idiotic debate we're having, and it is 20 unworthy of our country right now and the 21 responsibility that we have to the future. And this is a whole 'nother theme in the 22 23 book which we don't have time to talk about. We didn't get here by accident, and you didn't get where 24 you are and I didn't get where I am on my own. Yes, 25

1 I know there's a lot of people out there that say. 2 I've got this. Keep the government out of my life. You didn't get here on your own. You got here as a 3 4 product of the greatest public-private partnership in the history of the world. That's how you got here. 5 б And this we call in our book America's 7 formula for success. And it has five parts. We educate our people up to and beyond whatever the 8 9 level of technology is, starting with universal 10 primary, universal high school then postsecondary 11 education. 12 We invite in the world's immigrants, those 13 with low skills who provide energy and those with high skills, the world's first round intellectual 14 draft choices where they go to Silicon Valley and 15 start 30 to 40 percent of the new companies every 16 17 year. We build the best infrastructure, roads, 18 19 ports, bandwidth. We have the best rules, the 20 smartest rules and not too many rules, hopefully, to 21 incentivize risk taking and capital formation and to 22 preserve the rule of law and the sanctity of markets. 23 And lastly, we have government-funded

24 research that pushes out the boundaries of biology 25 and physics and chemistry so our venture capitalists

1 can come and pick the flowers and start new

2 companies.

You look at our history. Those five
things, education, infrastructure, immigration, the
right rules for capital formulation and
government-funded research, they have propelled us
going back to Hamilton.

Think about Lincoln in the middle of the 8 9 Civil War. What does he do? He passes the Morrill 10 Act and creates the land grant universities in all 11 your states. He builds the national railroad, connecting the Atlantic with the Pacific. He passes 12 the Homestead Act. He starts the National Academy of 13 Sciences. Teddy Roosevelt, Eisenhower, these were 14 all great builders of our formula for success. 15 16 Governors, I'm sorry to tell you, but you look at all five indices of our formula for success 17 today: Education, boop; immigration, boop; 18 19 infrastructure, boop; rules for capital 20 formulation--how'd you like that subprime 21 crisis?--boop; government-funded research, boop. 22 All five pillars of our formula for success are today 23 eroding and in peril.

24 This is the greatest public-private25 partnership. This is the real source of our

strength. That's what our debate should be about.
What do we cut, because we have to cut. We've made
promises that we can't keep. Where can we raise
revenue, because we need to reinvent, reinvigorate,
renew, and refresh this formula for success for the
21st century. That to me is what the discussion
should be about.

8 Let me end by saying this. I began by 9 saying that Michael and I were optimists but 10 frustrated optimists. You've heard me now for 30, 11 40 minutes. You are entitled to ask, we get the 12 frustration, but where from the optimism?

Well, I'll tell you. The short answer is that we stand on our heads a lot, because if you look at this country upside down, it's easy to be an optimist about America if you just stand on your head because the country looks so much better and is so much more inspiring when viewed from the bottom up rather than from the top down.

20 When you look at the country that way, 21 what you see is the greatest generation has not died. 22 America's great strength, the thing that makes me an 23 optimist--and it's the penultimate chapter of this 24 book--is that, thank God, this country is still full 25 of people who just didn't get the word. Thank God.

1 They didn't get the word that we're supposed to be 2 depressed or in a recession or unloved by the rest of the world. They didn't get the word that new 3 4 immigrants are supposed to wait their turn, college 5 dropouts are supposed to flip hamburgers and people of color are supposed to go to the back of the bus. б 7 Instead, they just do it, whatever it is, for all our 8 ailments as a country and a society. 9 We are still the most open in the world

10 where individuals with the spark of an idea, the 11 gumption to protest or the passion to succeed can 12 still get up and walk out the door and chase a 13 rainbow, lead a crusade, start a school or open a 14 business. "Show me an obstacle, and I'll show you an 15 opportunity" is still the model, thank God, of all 16 these Americans who just didn't get the word.

17 So Rosa Parks just got on the bus and took her seat. So new immigrants just went out and 18 19 started 30 to 40 percent of the new companies in 20 Silicon Valley. So college dropouts named Steve Jobs, Michael Dell, Bill Gates, and Mark Zuckerberg just got 21 22 up and created four of the biggest companies in the 23 world. So when all seemed lost in Iraq, the U.S. military chose to surge, not retreat because, one of 24 the officers involved told me, one of my all-time 25

favorite quotes, "Tom, we're just too dumb to quit." 1 2 Thank God, this country is still full of people who didn't get the word and are too dumb to 3 4 quit. But we owe them something. If I were to draw 5 a picture of America today, it would be a picture of the space shuttle taking off, that last space б shuttle. You know that picture, all that thrust 7 coming from below? That's all those people down 8 9 there who didn't get the word. 10 Our country's still full of that energy, 11 but right now our booster rocket, Washington, D.C., is cracked and leaking, and the pilots in the cockpit 12 13 are fighting over the flight plan. And as a result, 14 we cannot achieve escape velocity, escape velocity we need to bring the American dream to the next 15 generation. 16 17 That booster rocket, that's our five-part formula for success. And we need to cut, and we need 18 19 to raise revenue because we need to reinvest in that 20 formula, in that booster rocket for all those people too dumb to quit. That is all part of our past. 21 22 To repeat the title of our book That Used 23 to Be Us, and because that used to be us, it can be again. That is why today the history books we need 24 to read are our own, and the country we really need 25

1 to rediscover is America. 2 Thank you very much. 3 (Applause.) 4 GOVERNOR GREGOIRE: Well, Tom, thank you 5 very, very much. That was awakening and inspiring at the same time. б MR. FRIEDMAN: You hadn't had your coffee 7 8 yet? 9 GOVERNOR GREGOIRE: Yeah. You got it. You got it. 10 So we've got time for a dialogue now, so I 11 turn to my fellow governors. 12 13 You and I had a great conversation before 14 we began. You just flew in from Greece. We had Mark Zandi in a governors-only yesterday talking about the 15 16 implications of what's happening in Europe to the 17 U.S. economy, and I know you just wrote on it this morning. Would you mind sharing a little bit of your 18 19 insight with us and your view on what's happening and 20 the impact on America? MR. FRIEDMAN: Well, I was in Greece for a 21 22 few days last week, and, you know, Greece is a 23 cautionary tale of many things. The thing you really realize about Greece is that in many ways it's just a 24 petro state, only its oil was in Brussels. Its oil 25

1 came from the EU. And basically since 1981, since 2 Greece has been in the European Union, it's been getting subsidies for infrastructure and education to 3 4 bring up southern Europe to the level of Germany. 5 And basically they have squandered and misspent those resources. It's really just an oil state. б 7 And we have to be careful that we're not 8 an oil state too, only our oil state is the fact that we can print dollars and we're the reserve currency. 9 10 And, you know, if there's one thing I left 11 Greece, you know, realizing, it's something my friend Dov Seidman, who wrote the book How that makes the 12 13 point what's really happened in the last six years is 14 we've gone from connected to interconnected to interdependent. It's all happened really fast. 15 16 So Greeks woke up one morning, and they 17 were being told you're not just connected to 18 Germany; you have to be Germans. You have to be 19 Germans now. You have to pay taxes like Germans. 20 You have to work German hours, take German vacations. Forget this Mediterranean gig. You are Germans. 21 22 Okay? And right now you're seeing Greeks rebelling 23 because it's a lot easier to borrow money, you know, for 30 days than it is to become a German, especially 24 25 if you're in Greece.

1 And I don't know how this story's going to 2 end there, but what it's really about--it's about values. What happened, see, when we all become not 3 4 just interconnected but interdependent, we all around 5 this table are indirectly affected by what happens in Greece and whether Greeks become Germans, because if б 7 Greeks default and it brings down German and French 8 banks--remember those things called collateralized debt obligations, CDOs, better known as derivatives, 9 10 that all those people were betting on in America 11 about your house and your house and your house? Well, 12 those same people have been betting on those banks, and what we have no idea is if those banks go under, 13 what billions or trillions of dollars of derivatives 14 that will trigger and which banks in America or hedge 15 16 funds are vulnerable. 17 So we're all sitting here, and we're a long way from Greece. But whether Greeks become 18 19 Germans really is going to touch us. It's a values 20 issue. 21 And this is unfortunately, I think, one of 22 the shifts we've had in our own country in the last 23 30 years. We've gone from the values of the greatest generation, which I would call sustainable values, 24

values that sustain -- some I learned from my friend,

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1 Dov Seidman. We've gone from sustainable values to 2 situational values, do whatever the situation allows. Oh, the situation allows me to give you a mortgage. 3 4 And you make only \$15,000 and you're trying to buy an \$800,000 home, and all I ask you is can you fog up a 5 knife? If the system allows me to do that, I will do б it. Sustainable values would tell you you shouldn't. 7 8 We've had a shift in this country. We 9 need to get back to sustainable values, not 10 situational values. That's our challenge. For the Greeks it's the same one, but it's much more 11 12 immediate. 13 Please. 14 GOVERNOR HEINEMAN: Tom, you talked a lot about education. You said more education, better 15 education, raise the overall average, bottom to 16 17 average and the average is so much higher. We all deal with K-12 systems, the same school day, same 18 19 year, the same school books we had a hundred years 20 ago. How do we make our K-12 systems more efficient 21 and more productive? MR. FRIEDMAN: Well, I know you've had a 22 23 lot of people talk to you about this, and I know you wrestle with this a lot. I'm married to a 24 schoolteacher, a first-grade reading teacher in 25

1 Montgomery County. My daughter did teach for America 2 in the D.C. school system. So we talk about this a 3 lot in our house, and we have a chapter on it in the 4 book.

5 And the chapter, I'll just read the first 6 paragraph because it's right on your point, governor. 7 The chapter begins like this. The chapter's actually 8 called "Homework Times 2 Equals the American Dream."

9 "Hillary Clinton never asked us for career
10 advice. Had she done so, we would have told her
11 this: When President Barack Obama came to you
12 and offered you the job of secretary of state,
13 you should have said, 'No, thank you, sir. I
14 prefer to hold the top national security job.'

" 'Mr. President, it would have been 15 wonderful to have been secretary of state during 16 17 the Cold War when the job was crucial. True, some things haven't changed. Now, as in the 18 past, the secretary of state spends all his or 19 20 her time talking to and negotiating with other governments. Now, as in the past, success 21 22 depends far less on his or her eloquence than on 23 how much leverage the secretary brings to the table. Now, as in the past, that depends first 24 and foremost on America's economic vigor. 25

"'Today, however, more than ever our 1 national security depends on the quality of our 2 educational system. That is why I don't want to 3 be secretary of state, Mr. President. Instead, 4 I want to be at the head of national security 5 policy. I want to be secretary of education.'" б 7 That is the key issue. And how we do it, 8 it seems to me--we've got a whole section on this. 9 We talk about two approaches. 10 What all these problems have in common-and this is one of the underlying themes of the 11 book--is that whether you're talking about 12 13 education or whether you're talking about the deficit or talking about energy and climate, every one of 14 these problems only has a collective solution. 15 16 Unless we act collectively, we cannot address any of the problems our country faces today. 17 18 And that's why we're stymied right now. There's going to be no Democrat solution, no 19 20 Republican solution. There's only going to be a 21 hybrid, collective solution to these problems. 22 Now, I've been around educators too much 23 to not be humbled by how difficult this is, and so I can't tell you whether we need bigger classrooms or 24 smaller classrooms, more teacher's assistants or 25

1 fewer, more Charter Schools or fewer.

2 But here's what we argue in the chapter: We all need to be part of the solution. We made two 3 4 points. The first is this: You give me a community with the right neighbors, neighbors who are ready to 5 invest in their public schools even if their kids б aren't in them because they know if they don't invest 7 8 in those, they may be investing in bigger prisons; you give me parents who ask their kids every day, 9 10 take an interest in their education and set the highest standards for them; you give me politicians 11 who are out in the world learning what are the 12 13 highest, best practices out there and coming home and 14 not trying to lower their state standards but raise them, not try to lower the basket but to raise it --15 and let's not exempt kids--you give me students who 16 17 come to school ready to learn, not to send 40,000 18 texts a month, and I'll give you better teachers. I'll make my worst teachers better, and I'll make 19 20 every one of my better teachers better. 21 I saw one of the worst movies I've ever seen this year. It's called "Race to Nowhere." 22 23 Some of you may have seen it. It's about how our kids are too stressed out. Johnny's too stressed 24 out, Susie's--you know, she's got to go from 25

Facebook to the school play to SAT prep to--you
 know, it's time on Facebook again. Kids are
 stressed.

No, no, no. You don't know what stressed
is. Stressed is not understanding the thick Chinese
accent of your kid's first boss. That would be
stress. Not-enough-Facebook-time does not qualify as
stress in my world.

9 Now, we alluded to teachers, and we 10 profiled a teacher reform program in the great state 11 of Colorado, which we think has been one on the 12 cutting edge. There is no question there's way too much data today. that makes clear that the greatest 13 14 leverage change that a classroom can have is a highly effective teacher, that a highly effective teacher 15 can take a student who's three years behind and catch 16 17 them up, and a bad teacher can take a kid who's on 18 grade level and put them three years behind.

19 The question is: How do we partner--and 20 this has got to be partnership--with teachers? And 21 the teacher's unions have got to do their part; it 22 seems to me governors have got to do their part to 23 put in place a valuation system so that we are able 24 to both weed out those ineffective teachers or 25 retrain those that can be retrained and truly reward

our excellent teachers on the basis of real standards
 that teachers feel is fair.

And I know a lot of your states have been exploring, examining this. I'm impressed with what Colorado was able to do. They were able to get the AFT, the American Federation of Teachers, to go along with it. The NEA didn't. I think Governor Hickenlooper can confirm this.

9 But it seems to me when you find a way to 10 get teachers to buy in to an evaluation system--in Washington, D.C., thanks to Michelle Rhee and her 11 program, yesterday's front page of The Washington 12 Post came out with the ratings of teachers, and they 13 14 fired 206 teachers that for two years in a row were not rated effective. That's something that they're 15 doing in partnership with the union. 16

17 So it seems to me it's a combination of working with teachers to find ways to evaluate 18 19 because--you know, when you're married to a 20 teacher, you know one thing: The biggest education 21 philanthropists in America are teachers. Oh, there's 22 nobody who's given more money out of their pocket, 23 more hours of their time for free than a teacher, and if you're married to one, you know that. And so I'm 24 25 very uncomfortable when people say it's all the

1 teacher's fault.

and

2	You know, it always remindswe're trying
3	to do to teachers what we did to our soldiers in
4	Iraq. We basically said, "We're going to fight a war
5	in Iraq, and one percent of Americans are going to
б	carry the burden. And the rest of us we're
7	outsourcing it to you. The rest of us, we're just
8	going to go along with our lives."
9	And so what we've been trying to say, yes,
10	teachers are critical, they're vital, they're the key
11	leverage agent, but we all have to be in on this
12	game. Parents, neighbors, business, politicians, and
13	kids themselves need to be aware of what world
14	they're growing up in.
15	GOVERNOR GREGOIRE: Governor [Haley] Barbour
16	then Governor [Neil] Abercrombie.
17	GOVERNOR BARBOUR: Tom, thanks for coming
18	back.
19	MR. FRIEDMAN: A pleasure. Great to be
20	here.
21	GOVERNOR BARBOUR: I was pleasedyou know,
22	as a Republican governor, I may be surprised to say I
23	agree with The New York Times' columnist.
24	MR. FRIEDMAN: Is this on C-SPAN? Could
25	you get a close-up and freeze frame on

1 Governor Barbour? Thank you.

2 GOVERNOR BARBOUR: When you said values are the biggest thing, sustainable values -- and the 3 4 first two subjects you talked about in the Q and A 5 have just brought this to my mind. One is we spend more on education, state, federal, and local, per б 7 child than any other country in the world, and a huge 8 percentage of our kids drop out. 9 MR. FRIEDMAN: Yep. 10 GOVERNOR BARBOUR: And I think that goes back to values. 11 12 MR. FRIEDMAN: Yep. 13 GOVERNOR BARBOUR: The other thing that 14 concerns me--and I think it is very related to what you were talking about--when I became governor of 15 16 Mississippi, I was concerned our state had such a low 17 labor participation rate. That is the percentage of adults who either have a job or are trying to get a 18 19 job. And I'm proud we've increased it some. But 20 nationally it's fallen. 21 MR. FRIEDMAN: Yep. 22 GOVERNOR BARBOUR: Are these two things 23 evidence of we've got to deal with values before we can really be successful? 24 MR. FRIEDMAN: You know, it's certainly 25

1 evident to me, and that's why we devoted a whole 2 chapter in the book to this subject--the chapter's called "Devaluation"--you know, because we really 3 4 think it's central to our crisis, that the passing of 5 the, you know, greatest generation to the baby boomer--you know, our parents--I think of my б 7 parents in particular. Born in The Depression. My 8 mom was in the Navy, served in World War II, and then 9 the Cold War. And whether it was Democrats or 10 Republicans, they were tempered by those things. 11 That was a generation that had met a black swan, you know, several times. And it tempered them, and it 12 did lead them, I think, to gravitate to more 13 14 sustainable values, to do things that sustained. And I do believe with the passing of that 15 16 generation we've lost something, and we need to get 17 back to it. And I don't have a magic wand because to me it's something that has to come from teachers, 18 19 from parents, from political leaders, and from 20 spiritual leaders. It's not anything you or I can 21 legislate. We can only do it by example. 22 But, you know, I talk the talk of 23 globalization and technology, but I'm just a faker. I don't walk the walk. I got in a lot of trouble 24 recently because I said that I've actually never been 25

1 on Facebook, I've never done Twitter, and I've never 2 smoked a cigarette, and I'm hoping to die being able to say all three, okay? But I'm sure I will--you 3 4 know, The New York Times maintains a Facebook and a 5 Twitter thing, but it's nothing I do. And the reason--it goes back to, you б 7 know--remember when modems first came out? Because 8 there's a sense that technology is going to solve 9 everything. You know what I mean? And the Internet 10 will make you smart, but it won't make you smarter -it will make you smarter--excuse me--but it won't 11 make you smart. The Internet will extend your reach, 12 but it will never tell you what to say to your 13 14 neighbor across the fence, you know. 15 All the good stuff in life, the important 16 stuff, it actually has--you can't download it, 17 you've got to upload it the old-fashioned way, 18 church, synagogue, temple, mosque, school, teacher, community, which is why when modems first came out I 19 20 first started thinking about this. I wrote that I 21 wish that every--and this would certainly apply to Twitter as well--every modem sold in America came 22 23 with a warning from the surgeon general: Judgment not included. 24

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And so we've kind of ceded so much to the

technology--you know what mean?--that we have to 1 2 get back. But I don't pretend I have the magic cure 3 because it isn't going to be one thing. We all have 4 to be leaders in this; you in your state, me in my 5 family, our President from the national level, community leaders. But the first thing is to be б 7 aware of it, that something kind of happened here. 8 You know, we contrast in our book in the 9 "Values" chapter two hearings that were held in 10 Congress I don't remember how many months apart. But the first was the five baseball sluggers, sitting, as 11 they were described, bicep to bicep, 12 13 being grilled about steroids in baseball; and then I 14 think it was about two years later, the five biggest American bankers, sitting briefcase to briefcase, 15 16 being grilled about subprime mortgages and 17 derivatives. And in both cases what happened is we were 18 19 hitting home runs using steroids. These guys on 20 Wall Street, they were hitting home runs using 21 steroids, and these guys in baseball were hitting home runs using steroids. And so to me it was 22 23 symptomatic of that. And so I don't have the answer. What we 24

hope to do in this book, Michael and I, is at least

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1 kick off the debate to say that's got to be part of 2 it. 3 Thanks for your question. 4 GOVERNOR GREGOIRE: : I think this may be 5 our last question. б Governor Abercrombie? 7 GOVERNOR ABERCROMBIE: Thank you. 8 Mr. Friedman, I find myself almost stating 9 with regret when you mentioned the phrase said to you 10 by a military officer in Iraq, Thank goodness we were too dumb to quit, because I was thinking that--I 11 was hoping that there might--the emphasis might 12 have been we should have been smart enough not to get 13 14 started. . And what I mean by that is that there may be a sixth element that I--and maybe the book 15 16 focuses on it, but this has to do with the whole 17 issue of cutting and spending and everything else. MR. FRIEDMAN: Right. 18 GOVERNOR ABERCROMBIE: And the sixth one 19 20 is that we are not Imperial Rome, and what I mean by 21 that is as soon as this meeting is over, the 22 governors are going to meet to deal with the question 23 of dual status command for the Northern Command and the adjutants general across the country with regard 24 to the relationship of the National Guard to the U.S. 25

1 military and the Pentagon.

2 One of the reasons that we have a one percent dealing with Iraq or Afghanistan is we no 3 4 longer have the draft. . We have a draft by default. It's the National Guard. . And this is a benchmark, if 5 you will, for my question or maybe my observation б 7 that I'd like you to comment on. 8 MR. FRIEDMAN: Yeah, please. 9 GOVERNOR ABERCROMBIE: If we don't come to 10 grips with the question of whether or not we're going 11 to act as an Imperial Rome, kind of providing a military element to whatever takes place in the world 12 13 and that we are the point of that spear, I don't 14 think we can come to grips with some of the rest of those elements that were central to your thesis or 15 your multiple theses today. 16 17 And this is not a Republican or a Democrat situation, as you mentioned, because this deployment 18 of the National Guard and what that means in terms of 19 20 our Imperial role, if you will, goes back to President Clinton and Kosovo, and you can go all 21 through Iraq and Afghanistan. 22 23 So my basic observation is I don't think we've ever had a discussion in the nation--and I 24 say that as a former member of the Armed Services 25

Committee who made this complaint, if you will, over and over again--what is the object of what we're doing with these massive deployments all around the world almost at a moment's notice? Is that the role we're going to assume, and what are the implications of it?

7 Unless we come to grips with that, unless 8 we have a conversation--we've never had a conversation in a presidential election about it, 9 10 this deployment by default. . We have employers right 11 now who are saying, "Do we have to get used to hiring 12 people who are in the National Guard who are going to go away for 12 months, 18 months at a time?" What 13 does all that mean? 14 So my bottom line observation is should 15 16 there be a sixth element? We are not Imperial Rome, 17 or if we are, then what does that mean? MR. FRIEDMAN: Well, it's a great 18 question, governor, and we address it a little in 19 20 this book. 21 And, you know, for me this is--I wrestle 22 with this a lot. . I supported the Iraq War for 23 democracy reasons. It had nothing to do with WMD. I didn't think there was any WMD there. I supported it 24 25 for the reasons the Arab Spring is happening.

1	But I would be the first to admit whatever
2	happens in Iraq, we overpaid for it, okay? It's well
3	over a trillion dollars by whatever accounting you
4	want. We overpaid for it. I only hope we overpaid
5	for something that will prove to be transformational
6	so that the men and women who paid the real price for
7	that will be able to look back and take pride in what
8	they participated in.
9	So I'll tell you how I think about these
10	issues today if this is of any help, because I've
11	thought about this and agonized over it a lot. So I
12	started my career in Beirut and then Jerusalem and
13	came to America and covered Washington and whatnot,
14	so I've had a lot of experience in that part of the
15	world.
16 17	And what I've realized in recent years and Anbar, the uprising in Anbar, really drove it
18	homeis when the Middle East put a smile on my
19	face? That's what I asked myself one day. Well,
20	let's see. There was when Anwar Sadat went to
21	Jerusalem. That put a smile on my face. When
22	Israelis and Palestinians met in Oslo, that put a
23	smile on my face. When Iraqis decided they were
24	going to take on al-Qaeda in Anbar Province, that put
25	a smile on my face. The Arab uprising in Tunisia put

a smile on my face. The uprising in Egypt--God, I
 got to be there in Tahrir Square--put a big smile
 on my face.

4 Isn't that interesting. All the things 5 that put a smile on my face from the Middle East started with them, and we had nothing to do with it. б We didn't even know Anwar Sadat was going to go to 7 8 Jerusalem. We didn't know for a year Israelis and Palestinians were meeting in Oslo. Yes, the surge 9 10 coincided with the Anbar uprising, and that's great. 11 And that's the point. And that's what I've come to 12 here. We can be a great multiplier, but only if they want to own it. That's been my feeling. 13

14 And when people want to own something, whether it's your kids, our citizens, or people abroad 15 you're trying to help, you can't ask them to do it. 16 17 They will always do much more than you will ever ask of them. As I've said ad nauseam, you know, there's 18 19 an old dictum, and I'm really a believer in this: In 20 the history of the world, in the history of all 21 mankind, no one has ever washed a rented car. In the 22 history of all mankind, no one has ever washed a 23 rented car, and no one's ever washed a rented country or rented neighborhood. 24

And that's where I come from, which is why

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1 I'd like to massively reduce our presence in 2 Afghanistan. What bothers me about Afghanistan is I 3 don't see anybody who wants to own what we want to 4 own. And that's why I wrote we can succeed in 5 Afghanistan if three things happen: Pakistan becomes a different country, Karzai becomes a different man б 7 and Obama succeeds in doing exactly what he says he's 8 not doing, nation building in Afghanistan. 9 So when I look at that, I just say, 10 where's the ownership? People say the Marines have cleared out. There is no town in Afghanistan that 11 our Marines can't take, but is there any town in 12 13 Afghanistan that Afghans can hold? And so I'm 14 looking for the ownership. And what gives me still hope--underline that three times--of a decent 15 outcome in Iraq is I see Iraqis struggling their way 16 17 to that kind of ownership. And I'm glad for that. That's good for them and good for the region. 18 GOVERNOR ABERCROMBIE: But we don't want 19 20 to get back bogged down in individual circumstances. 21 MR. FRIEDMAN: Right. Exactly. 22 The question still remains, are we 23 going--I picked Imperial Rome, I'm trying to draw a parallel but not an analogy. The point still remains 24 we have to decide whether or not we're going to have 25

1 a worldwide military presence in the sense of actual 2 interference or trying to own political situations by military means, because that viscerally affects 3 4 everything you've spoken about today. 5 MR. FRIEDMAN: And I agree there's going to be trade-offs, and we're going to have to face up б to that. There's just no question about it. 7 8 I go back to where I started. We're this 9 tent pole that holds up the world. I'm not sure how 10 comfortable I'd be in Hawaii if China was patrolling the sea lanes of the Pacific and not, you know, our 11 12 fleet as well. 13 So the question is going to be one of 14 balance, but there's one thing which your question raises, and I can tell you absolutely for sure: We're 15 headed for a period of trade-offs, okay? We cannot 16 17 simply jump in everywhere that we want. And what I was trying to give you is if I have to have 18 19 trade-offs, then the ones I'm looking for where I 20 would consider participating are ones where people 21 are taking ownership and I can be the force 22 multiplier. That's where I've really come to. 23 GOVERNOR ABERCROMBIE: I think we're on 24 the same page. 25 MR. FRIEDMAN: Thanks very much.

1 Thank you all very much. I really 2 appreciate it. Thank you. 3 (Applause.) 4 GOVERNOR GREGOIRE: Well, Tom, you never 5 disappoint. I have to say that. Thank you for the б kind of glimpse on your book. Is it okay if we ask 7 that we get the first copies of the book? MR. FRIEDMAN: You will, every one of 8 9 them. 10 GOVERNOR GREGOIR: Okay. I didn't want to 11 over-ask for anything. 12 Insightful. Inspiring. Thank you. And we look forward, I hope, to having you come back and 13 14 see us again sometime. 15 MR. FRIEDMAN: Anytime. Anytime. GOVERNOR GREGOIR: You always inspire. 16 MR. FREIDMAN: Well, I appreciate that. 17 Thanks so much. 18 19 GOVERNOR GREGOIRE: Thank you very, very 20 much. 21 I just need your patience while we go 22 through some work for the organization. It's a 23 little hard to get to this after the amazing remarks that Tom has just given us, but we do need to do some 24 business on behalf of the National Governors 25

1 Association.

2 We do have some policy positions that we need to take a look at. They were originally sent to 3 4 y'all on the 1st of July. The packet in front of you 5 reflects those adopted by the standing committees. You know we have a new set of ideas about moving б 7 forward with policies, and Governor Heineman is going to lead us on that new endeavor. Those that you have 8 9 before you require a two-thirds of the vote of those 10 present.

11 This new policy, I think, is going to take 12 the organization in a good direction because most of 13 the policies we will consider today are only going to 14 be extended for six months. So that is the news that 15 we really want to rethink, redo our policies 16 consistent with our little conversation we had in the 17 governors-only meeting the other day.

So to expedite matters, I'm going to ask Governor Heineman if you would be willing to move for the passage of all pending committees policies en bloc.
GOVERNOR HEINEMAN: I move adoption en bloc.

24 (The motion was moved and seconded.)
25 GOVERNOR GREGOIRE: It's been moved and

1 seconded that we accept them en bloc. Any 2 discussion? 3 (No response.) 4 GOVERNOR GREGOIRE: All those in favor 5 please signify by saying "aye." б (Collective "aye.") 7 GOVERNOR GREGOIRE: Those opposed to? 8 (No response.) 9 GOVERNOR GREGOIRE: Thank you, 10 Governor Heineman. Governor Herbert, is Jeanette here? Yes, 11 she is. The first lady of the great state of Utah, 12 on behalf of the National Governors Association, you 13 14 have done just an amazing job. Your hospitality has been second to none. We've had fun. We've gotten a 15 chance to get to know each other better. We've 16 17 gotten good work accomplished. It could not have happened--let me just say Mike and I were talking 18 19 this morning about how we really didn't appreciate 20 all that the great state of Utah has to offer. We 21 didn't get to experience it. We're coming back. We 22 love the unbelievably cheap rates to golf, your 23 national parks and what we've seen. So thanks to the both of you for a 24 25 terrific job well down.

1 (Applause.) 2 GOVERNOR HERBERT: Christine, it's been our distinct honor and privilege to host the National 3 4 Governors Association and all of you. We hope you 5 take a little bit of Utah back with you and have some б fond memories. 7 Jeanette and her team have done remarkably good things. And I don't know if Bruce Hoffman and 8 9 some of our Host Committee are here, but please have 10 the volunteers and the Host Committee, if they're 11 here, stand up, and give them a round of applause. 12 They've done a lot of the heavy work. 13 (Applause.) GOVERNOR HERBERT: Thank you. 14 GOVERNOR GREGOIRE: Again, governor, to 15 16 your staff, to the volunteers, to -- to the security, 17 to everybody, to the hotel, they've been terrific as well. Everybody has made our stay just really 18 19 wonderful. Thank you and thank you for your 20 tremendous leadership. 21 And next year we're going to go to the 22 great--commonwealth--excuse me--the 23 Commonwealth of Virginia, so, Governor [Robert] McDonnell, 24 you give us a little glimpse of what we might--oh, 25 we're going to wear a hat here. Okay.

can

1 GOVERNOR MCDONNELL: Well, good afternoon. 2 And what a treat to be selected by the NGA Executive Committee to host the 2012 annual meeting 3 4 in Williamsburg, Virginia. Chris, I really 5 appreciate the confidence that you've placed in us. б And it's been 57 years, so it's about time to be back 7 in Virginia. But we do have big shoes to fill. Gary 8 and Jeanette, just a terrific job. What a great 9 10 weekend. I can guarantee I will not be doing backflips like Governor Herbert, though, in Williamsburg. 11 Do you want to make your disclosures? 12 13 But we're looking forward very much to having you in Williamsburg, the old colonial capital. 14 We want to be able to make you feel great about 15 16 America again as Tom told us some of the challenges 17 we face. Certainly the origins that our founders 18 planted on the shores of Jamestown and Williamsburg four centuries ago were a marvelous history of the 19 20 American dream, and we want you to be there and to be 21 able to learn the lessons again of Madison and Henry and Jefferson and Mason and the other founders that 22 23 planted the great principles of freedom that we all cherish on both sides of the aisle. We want you to 24 walk in the footsteps of the founders. 25

1 Williamsburg, Virginia, as you know, was 2 the colonial capital. Democracy was planted in April of 1607 in Jamestown. But after three fires at the 3 4 state capitol, it was finally in 1704 moved to Williamsburg, Virginia, where it remained until the 5 1780s when it moved to the current capitol now in б 7 Richmond. 8 But great things happened at that 9 Williamsburg capitol over the years, including the swearing in of Thomas Jefferson and Patrick Henry, 10 the first two governors of Virginia. So I've got a 11 great job following in that tremendous footsteps. 12 There's still about 88 buildings that date 13 14 back to the 18th century that are still alive and

16 Colonial Williamsburg Foundation. And we're going to 17 have some tremendous things that we're going to show 18 you.

well and maintained by the Jamestown, Yorktown,

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25

Now, Virginia's been called the mother of presidents, eight, more than any other state, the cradle of democracy for all the reasons that I just mentioned. Most recently it's been called the Silicon Dominion or The Best Place in America to Do Business. Thank you, CNBC, for that rating.

So we want to show you the new and the old

1 Virginia. You're going to get to see a lot of great 2 things in that area. We're going to have a dinner at the colonial capitol that is now some 300 years old. 3 4 We'll have fireworks over the old Governor's Palace, 5 and you'll see that capitol where the oldest continuously legislating body in the free world, the б 7 Virginia General Assembly, began meeting in the 1700s. It dates back to 1619. And I hope you'll get 8 a great sense of the foundations of our nation of 9 10 which we are all so proud to carry on as governors 11 today.

12 You also get to go to Busch Gardens, so 13 bring your families. Come early, bring your wallets, 14 and we're going to show you a great time in Virginia. I hope you got a chance to see some of our booth 15 16 where you've seen everything from our great Virginia 17 wine. As Chris reminded us California's for jug wine. Napa Valley is for auto parts, not for wine. 18 19 So thank you for that. And we're going to show you 20 some of the other things that have made Virginia a 21 great state. We have more veterans than any other 22 state in America, the second highest concentration of 23 technology workers in all of America, and you're going to get a little dose of all that. 24

25 So we're really looking forward to

1 welcoming you and your families. Those of you that 2 are in the audience, since we're the most business-friendly state, bring your businesses and 3 4 keep them there when you come next year. 5 And I'll close with this: The founders of America were the same founders of Virginia. б 7 Tom, you talk about the need for 8 sustainable values, and I happened to grow up just a mile from Mount Vernon. My favorite president, of 9 10 course, was our first commander-in-chief, George Washington. In his first inaugural address, he said 11 something that I quote quite often. He said that: 12 "The propitious smiles of heaven can never 13 14 be expected on a nation that disregards the eternals rules of order and right which heaven 15 itself has ordained." 16 17 I think that's good advice for America today, good advice for governors, and I hope you'll 18 19 be able to come to Williamsburg where you'll be able 20 to walk in those footsteps of Washington and 21 Jefferson and the other patriots that made this a 22 great country. 23 So we'll welcome you to Williamsburg next year. Thanks. 24 25

1	(Applause.)
2	GOVERNOR GREGOIRE: Well, we are very much
3	looking forward to it, and thank you very much for
4	your willingness to host us. It's going to be great,
5	and I'm looking forward to some great wine, by the
6	way.
7	It has been my honor to serve as chair of
8	our National Governors Association. It has been a
9	challenging year for all of us as governors. We
10	welcomed in 29 new members. That is an historic
11	event. But in the process we've all gotten to know
12	each other, and I think at the end of the day, as a

9 challenging year for all of us as governors. We 10 welcomed in 29 new members. That is an historic 11 event. But in the process we've all gotten to know 12 each other, and I think at the end of the day, as a 13 result of our meeting here, we know what we stand 14 for, we know what we can do, we know what we've 15 collectively done best, and so I just tell you what a 16 pleasure and honor it has been for me to serve as 17 chair.

I've got some thank-you's, if I could, and 18 I'll do it as quickly as I can. I'd be remiss 19 20 because you don't often get to see what I get to see. 21 I have to tell you, I think we're blessed to have the 22 staff of the National Governors Association. Our new 23 executive, Dan Crippen, had come in, hit the ground running. He is a great leader. He is going to do a 24 fantastic job. It has been my pleasure to work with 25

1 him. So, Dan, thank you.

2 To David Quam, our legislative director and his entire team; they have been wonderful through 3 4 the year. 5 To John Thomasian, the director of our Center for Best Practices, and his team, thanks to б each and every one of you and to Jodi Omear, the 7 communications director. They are all absolutely the 8 best, in my opinion. 9 10 Would you please give them a round of 11 applause. 12 (Applause.) GOVERNOR GREGOIRE: Executive committees 13 14 don't often work hard. Sometimes it's by name only. This one did, and so I'd like to thank all the 15 members of the Executive Committee, Governor 16 17 Heineman, of course, Governors [Jack] Markell, [Mitch] Daniels, 18 [Deval] Patrick, [Mark] Dayton, Barbour, [Chris] Christie, [Mary] Fallin. Thank 19 you all for working on the Executive Committee. 20 The Complete to Compete Task Force, 21 Governors Heineman, Hickenlooper, Daniels, [Bev] Purdue, 22 [Bill] Haslam, thanks to each one of you. I think this initiative is a perfect dovetail to what you're going 23 to hear about in just a minute, what Governor Heineman 24

25 is going to talk about.

1 To the chairs and vice chairs of our 2 committees: thanks to each of you for what you've done. You have led the way in some very important 3 4 policy issues for us to move forward in a very bipartisan way. I want to thank you. 5 б If you can indulge me for just a brief 7 moment, you know, it's not easy to be the First Mike of the State of Washington. It's not easy in an 8 9 organization of all women to lead the 29 new members 10 of the first spouses group. My husband stepped up to it. He promised me it wouldn't be every beer parlor 11 in America that they would visit. He did it right, 12 he did a great job. 13 My Mike husband, Mike Gregoire, thank you 14 for all you did. 15 16 (Applause.) 17 GOVERNOR GREGOIRE: And my personal staff, whom I think all of your staff know very well, who 18 19 has worked absolutely tirelessly with your staff, the 20 National Governors Association staff, he's the best 21 in my opinion, Mark Group. 22 Thank you, Mark, thank you for all you do. 23 In just a minute I'm going to have Governor McDonnell tell us the results of the 24 committee on--Nominating Committee for our new 25

1 organization.

2 I've saved my comments 'til now about my 3 colleague Dave Heineman. We really didn't know each 4 other 'til we went to Colorado Springs to welcome all the new governors. From the moment I met him and his 5 б wonderful wife, it has been the definition of 7 partnership. Absolutely bipartisan. He has stood with me at every juncture. Every decision we've made 8 9 together. That's not always happened in this 10 organization. He is going to be great a leader of 11 this organization, and I can tell you, my friends who are Democrats, my friends who are Republicans, this 12 is exactly the kind of leader this organization needs 13 14 as we go into yet another challenging year for the governors of this great nation. 15 16 So, Dave, to you and to your wonderful 17 wife, thank you for all you've done for Mike and me over the last year. 18 19 (Applause.) 20 GOVERNOR GREGOIRE: So, now, 21 Governor McDonnell, if you would please report on the Nominations Committee. 22 23 GOVERNOR MCDONNELL: Thank you, 24 Governor Gregoire. 25 As chair of the Nominations Committee,

1 it's my pleasure to nominate the following governors 2 to serve in the leadership of the National Governors Association for 2011 through 2012: Governor Patrick 3 4 of Massachusetts, Governor Daniels of Indiana, 5 Governor Dayton of Minnesota, Governor Christie of б New Jersey, Governor Hickenlooper of Colorado, 7 Governor Fallin of Oklahoma, Governor Gregoire of 8 Washington and, as vice chair, Governor Jack Markell 9 of Delaware and, as the next chairman of the NGA, Governor Dave Heineman of Nebraska. 10 So I move that those nominations be 11 12 considered en bloc. (The motion was moved and seconded.) 13 GOVERNOR GREGOIRE: It's been moved and 14 seconded that the nominees for the Executive 15 Committee and chair and advice chair of the 16 17 organization as set forward by the committee. Any further discussion? 18 19 (No response.) 20 GOVERNOR GREGOIRE: All those in favor, 21 please signify by saying "aye." (Collective "aye.") 22 23 GOVERNOR GREGOIRE: Those opposed? 24 (No response.) 25 GOVERNOR GREGOIRE: To you,

Governor Markell, thank you for stepping up to
 leadership.

To you, governor, congratulations, job
well done. I look forward to your great leadership
over the course of the next near. Thank you, Dave.
GOVERNOR HEINEMAN: Chris, thank you very
much.

I don't know what else to say given what 8 9 she already said. We really didn't know each other 10 very well. It's been a partnership. We've worked 11 together. We've talked many times on the telephone, Sally and I have thoroughly enjoyed our relationship 12 with Chris Gregoire and First Mike. He is a terrific 13 individual. He came all the way out to Omaha for the 14 spouses' meeting. 15

But mostly I want to share with you what a superb role model Chris has been for our organization and for anyone who wants to be the chair of a national organization with varied interests. She listened to all of us. She worked with all of us. And we've been able to strengthen the NGA because of her leadership.

And it is a special honor to--whoop-to present this plaque to you. And, again, we are so proud of you and what you've done for our

1 organization.

2 (Applause.) 3 GOVERNOR HEINEMAN: You know, Chris 4 mentioned we couldn't do it without our spouses, so I'd like my wife to come forward and First Mike. 5 б We'd like to make a personal presentation to the 7 Gregoires. It's been a great personal and 8 professional relationship, and we just want to present this personal gift to both of you for all 9 10 you've done. GOVERNOR GREGOIRE: Thank you. 11 12 (Applause.) GOVERNOR HEINEMAN: I was just telling the 13 14 First Mike, you know, when he was going to come to Omaha, I thought it would be a good idea if we would 15 play golf, and I was told by the first lady of 16 17 Nebraska that that would not be a good idea for the two of you to go play golf while the rest of them 18 19 were engaged in the spouses' meeting. So we weren't 20 able to do that. And we are going to do it yet this 21 fall because, once again, as I've told many of you, 22 the University of Washington is going to play 23 Nebraska again in football, so we hope you'll both come, and we hope you'll let us win that game. 24 Now, as we move toward, I'm very excited 25

1 to continue the work that Chris and I started 2 together, I look forward to working with our new vice chair, Governor Jack Markell. For those of you who 3 4 don't know, Jack and I served together as state treasurers. We're friends, we know each other, and 5 we're committed to enhancing the role, the influence б 7 and the importance of the NGA. 8 Now, the rest of this speech was about 9 30 minutes in length, but being a good Nebraskan with 10 a lot of common sense, I've condensed it to about 11 three minutes. For all the tough and difficult issues 12 13 that states face today -- and we just heard this -boosting economic growth remains our most important 14 and our most challenging one. Economic growth is key 15 16 to our success as governors. That's why my 17 initiative will be Growing State Economies. 18 This initiative will provide governors and other state policy makers with a set of policy 19 20 options that have been shown to foster business 21 growth. A major emphasis will be on understanding how a small business becomes a fast-growing firm and 22 23 what policies support that transformation. 24 High-growth businesses are one of the driving forces of the modern global economy. As 25

governors look to best strategies to strengthen
economic performance, we must emphasize policies that
help the private sector grow, creating new job
opportunities for our citizens, and that's what this
initiative is going to be all about.

б The key thing I think I want to tell you 7 today is that we want to be able to share, by the 8 time we reach Virginia next year, a set of policies and ideas that will help each and every governor as 9 10 they foster economic growth in their individual 11 states. Not every one will apply to every state. In 12 order to do that, we are going to host four summits across America: One in Hartford, Connecticut; one in 13 14 Nashville, Tennessee; one in Seattle, Washington; and the final one in Omaha, Nebraska. 15

And we want to bring all that information together from governors, from real business leaders, from academic research into a private- into a white paper next year that we can share with all of you as we figure out how to continue to grow our state economies.

This initiative will help us identify the best strategies to strengthen state economic performance and signal to our citizens that we understand job creation, prosperity and economic

competitiveness are our top priorities today and going forward. I look forward to working with each of you on this initiative. Both Chris and I and all of us want to thank you for your involvement in the NGA. б Again, to the Herberts, thank you for a wonderful conference. I think we all thoroughly enjoyed this. We are adjourned. (The proceedings adjourned at 1:14 p.m.) 

1 REPORTER'S HEARING CERTIFICATE 2 3 STATE OF UTAH ) ) ss. COUNTY OF SALT LAKE 4 ) 5 б I, Susette M. Snider, Registered 7 Professional Reporter, Certified Realtime Reporter and Notary Public in and for the State of Utah, do 8 9 hereby certify: 10 11 That said proceedings were taken down by 12 me in stenotype on July 15, 2011, at the place 13 therein named, and were transcribed by me, and that a true and correct transcription of said proceedings is 14 set forth in the preceding pages. 15 16 17 WITNESS MY HAND this 25th day of July, 2010. 18 19 20 21 22 23 24 Susette M. Snider, RPR, CRR 25