The meeting commenced, pursuant to notice on Sunday, February 24, 2002, in Washington, at 9:45 a.m., Governor John Engler, chairman, presiding.
GOVERNOR ENGLER: (Presiding) Good morning, governors, distinguished guests, ladies and gentlemen. Welcome to the First Plenary Session of the Winter Annual meeting of 2002.

I want to begin this morning by recognizing some new members, and I'm going to try to check and see -- I know some of them had some interviews and were being pulled in different directions. But we have actually four new governors who are attending their first session with us. One is a former Lieutenant Governor who when Tom Ridge was tapped by the President, moved up to the Governor's office. And the long-serving Lieutenant Governor of the state of Pennsylvania, Governor Mark Schweiker. I'm trying to look around here and see if I can spot Mark's seat. I'm not seeing it. But Mark will I'm sure be here.

From the two winners from November from the states of New Jersey and Virginia, Governor Jim McGreevey from New Jersey. I'm not seeing Jim
either. And Governor Mark Warner from the state of Virginia. So you get to be new and you get pulled in lots of directions.

But we do have from the Northern Mariana Islands, Governor Juan Babauta. Governor Babauta, it's nice to see you. Welcome. Glad to have you here.

(Applause.)

GOVERNOR ENGLER: We welcome you to the National Governors Association. We're excited to get to know you.

We also have some birthdays today. Kind of amazingly, we have three birthdays. And I thought we ought to start off the morning by recognizing that Governor Don Siegelman of Alabama, Governor George Ryan of Illinois and Governor Jane Swift of Massachusetts all are celebrating. They're the birthday people today.

(Applause.)

GOVERNOR ENGLER: So, Don, Happy Birthday.

And when you see them around, you know. And so with that preliminary business out of the way, I'd like to
call to Order the 2002 Winter Meeting of the National
Governors Association, and the first order of
business, I have a motion for the adopt of the rules
and procedures for the meeting.

    GOVERNOR HUCKABEE: So moved.

    GOVERNOR PATTON: Second.

    GOVERNOR ENGLER: I heard moved over there
by Governor, I don't know who it was, somebody over
in that direction, Governor Huckabee made the motion
and seconded by Governor Patton. All in favor say
aye.

    (Chorus of ayes.)

    GOVERNOR ENGLER: All opposed?

    (No response.)

    GOVERNOR ENGLER: The motion is passed.

Part of the rules, just to remind everyone, require
that any governor who wants to submit a new policy or
resolution for adoption at this meeting will need a
three-fourths vote to suspend the rules. Any
proposals need to be submitted in writing to Frank
Schafroth of the NGA staff by 5:00 p.m. tomorrow.
That's Monday, 5:00 p.m. tomorrow. Frank's right
back here. This is Frank right there. So that's where they go.

Now we'll move right into our business this morning. This is an issue that's of great importance to all of the governors and certainly in uncertain economic times, a state focus on economic competitiveness is very, very important. As governors, we spend an awful lot of time working on economic development and our ability to compete.

And I thought one of the things that ought to be on the agenda for the Governors Association this year was a focus on state leadership in the global economy. It's pretty clear that the economic leaders of America are the American states. I like to tell my congressional delegation that all of the jobs actually from Michigan are created back in the state, not here in Washington. And the competitiveness of our country actually depends collectively on competitive state economies.

So the question is, how do states become and remain competitive? And perhaps more importantly for us, what can governors do to provide economic
leadership while leaving the job of wealth creation
to the private section, to the entrepreneurs, the
investors, the business and corporate leadership of
America? And then finally, how can we as governors
ensure that competitiveness translates into economic
opportunity for all of our citizens?

One way we can do that of course is very
creative workforce strategies at the state level.
We're joined today by a group that I do want to
introduce because I'm very proud of the people from
Michigan who are here. But we have from across the
country state workforce directors and the chairs of
state workforce boards, and they're all here.
Juanita Pearman from Michigan is a past or current
chair of that organization, and they're all kind of
arrayed over there. So would the Economic
Development Workforce Directors, business chairs, all
of you just stand up. I want the governors to know
you're all here. Look at that gathering there.

(Applause.)

GOVERNOR ENGLER: So thank you for joining
us. Thank you for your public service. I thought it
was good that they could be with us this morning.

We've had a taskforce of governors, CEOs, leaders from labor and from academia working together on the issue of competitiveness. We have built a relationship with the U.S. Council on Competitiveness and so today's session really begins to explore and address some of these issues.

We're going to have two follow-up sessions, one right here tomorrow actually where we get into -- tomorrow morning in the Governors Forum on State Leadership and the Global Economy. And I hope that you can be part of that because we'll have some outstanding examples of leadership that's made a difference in different kinds of regions. We set this up so that every state would take something away from tomorrow's session. There's something that I think does apply to all of us because of the diversity of who's here tomorrow, the sizes of communities, the types of focus that they've had.

The second is our Regional Competitiveness Forums, and there are two of those, one in Denver that Governor Bill Owens will be hosting on the 4th
and the 5th of April, and one in Atlanta in June on
the 6th and the 7th, Governor Barnes will be hosting.
A paper outline our initiative and giving you
information on the forums has been put at each of
your desks.

The forums themselves, we get out into the
states, provide a follow-up opportunity and I think a
unique opportunity to work collaboratively on
economic development with some very skillful
practitioners and experts. And there will be a
Governors Roundtable discussion at the beginning of
each of those forums in Denver and in Atlanta. We
are inviting you to -- certainly we hope that you
could come in for part of those meetings and
participate in the Governors Roundtable and then
ensure that there's a team from your state.

And what we're looking for are the
workforce folks, the economic development people in
your state that really do the governor's bidding on
that issue, and then education leaders. We'll have
Phil Silos from the NGA staff has got more
information if you want that, if your chiefs or
anybody needs that here. We'll also be communicating that with you.

And we will, as I mentioned earlier, be doing these in partnership with the Council on Competitiveness and that really is an organization of some of the leading figures in this country from business, labor and the university world. And that organization has really been important I think for the country in terms of moving forward our understanding of how we remain competitive, what we have to do to become competitive to win in a global competition.

This morning somebody that has worked mostly with the council, he was co-founder of the Council on Competitiveness, is joining us, and that's Professor Michael Porter from Harvard. I have asked him to share the results of an initiative that is I think quite relevant to our jobs as governors. I think Mike Porter, more than any other thinker in the country today, has done work that really gets to the foundations of state economic competitiveness and how important the states are to America's global
It was two years and more actually ago that the Council on Competitiveness launched a major initiative. What they were seeking to understand are a couple of important points:

- The composition and performance of regional economies;
- How clusters of businesses develop and innovation arises;
- Why the clusters themselves are so critical to a region's economic future; and
- How states and regions then in turn can foster their development.

Professor Porter and his team from the Institute for Strategy and Competitiveness of the Harvard Business School actually took the lead and they've developed -- it is a one of a kind database. It is unique. And it maps business clusters in every region of the country. And with this tool, it helps to identify not only where clusters of innovation are located, but also how innovative and how strong they in fact are.
Five regions were studied in depth:

Atlanta, Pittsburgh, San Diego, the Research Triangle area, and Wichita. Consultants from the monitor group and its affiliate, On The Frontier, have been on the ground in each of these regions surveying and interviewing key leaders and integrating information into Dr. Porter's database. And the result of that, all kinds of analysis and implications have been generated. Over 1,000 direct one-on-one individuals with individuals in business, government, academia, nonprofits.

And this body of data which is really unique has been distilled now into a set of key lessons on regional and cluster development. That's what Professor Porter is here to discuss today. And so without further ado, it is my pleasure to present to you -- and he's not a stranger to this organization. Mike Porter has been here with the National Governors Association in the past. Several of the governors were with him earlier at a U.S. Council on Competitiveness gathering on a very similar topic.
But Michael Porter is a leading authority in the world I would say on competitive strategy, international competitiveness. He's found time to author 16 books, more than 75 articles. He is the Bishop William Lawrence University Professor based at Harvard Business School and only the fourth faculty member at Harvard Business School actually history to learn the distinction University Professor. And he's currently busy with his leadership of a new institute for strategy and competitiveness.

In the past he's served as a counselor on competitive strategy to many leading U.S. and international companies, a counselor to government.

In 1983 he was appointed by President Reagan to the President's Commission on Industrial Competitiveness, chaired its Strategy Committee. Sits on several corporate boards, community foundations. He's given up a Saturday with his family in Boston to be with us here today. And now, Michael, I would like to invite you to come to the podium and take over, and we'll be involving all the governors as he concludes his presentation, we will be opening it up. So, ladies
and gentlemen, Dr. Michael Porter.

(Applause.)

PROFESSOR PORTER: Well, thank you so much, Governor Engler and Governor Patton for first of all giving me so much time. I know that time among this group is very precious and I'm very, very honored to be here this morning to talk about in many respects the most fundamental subject facing any governor, which is how to create prosperity and a higher standard of living in your state.

I do want to thank not only Governors Engler and Patton for this agenda time, but I also want to acknowledge Governor Rowland from Connecticut who's here who I've been working with for a number of years on this same agenda. Governor Musgrove, who's here, who I've been working with. These efforts in Connecticut and Mississippi and also work that I've done in Massachusetts, really were some of the precursors to the project that we undertook that I'm going to speaking about this morning. And I want to thank you previous governors for being guinea pigs and educating me. Hopefully, there was a two-way
I'd also like to thank Council on Competitiveness, Duane Ackerman, Chuck Vest are leading this joint process with the National Governors Association. We're very excited about that. Michelle Lennihan from the Council's staff is here and has been very involved. I'd like to thank Monitor Group, the leading strategy consulting firm that's been really a major source of the analytical horsepower behind this project and also my team at Harvard, Danny Vasquez from Harvard is here, Jeff Brogan and Curt Dassel from the Monitor Group.

Now it's hard thing to hit you with the first thing on a Sunday morning, to really talk about economic development. And it may be not at the top of your mind right now. Most of you are probably struggling with budget issues, I suspect, trying to figure out how to make the numbers add up.

We are in a very meaningful cyclical downturn, and that creates all kinds of additional issues that all of you are struggling with. But what I've found in many of my works over the years is that
in periods like this, actually the biggest changes
and the biggest opportunities arise to really make
strategic adjustments and make strategic
redirections.

And so even though we've got a lot of
short-term issues to worry about that we're going to
get through, I think it's an extraordinarily
important time for all of you to be really focusing
on the long-term health of your economy. And that's
what we really set out to study over the last two-
and-a-half years in this very unique Council on
Competitiveness project.

I think we've done really an unprecedented
body of work that really tries to understand what
makes regional economies work. What makes them
prosperous, how do they get created, what's the role
of public policy in that process. And what I'd like
to do is share some of the highlights of that work
with you.

There's no way in this session that we're
going to be able to do justice to that work. We've
given you a number of tools that I hope will allow
you and your staffs to get more deeply into this work. First of all, we've given you a report with a blue spine on the spine which is the summary report of this national project. But we tried to go one step further and take a little bit of a risk here, and that is we've prepared a special analysis for you.

Each of you I hope will find something in front of you that looks like this. And it has the name of your state on it. What we have done is we have extracted from the unique data that's developed for this project some particular data on your state. And what I'd like to do is use this data on your state as a bit of a case study to talk through our findings and some of the very important implications of this study.

We've put together this data partly to whet your appetite. There is much more information in tremendous richness and granularity in a way that really has never been assembled before. We have here I think an opportunity to take regional economic strategy and competitiveness to the next level, to
make it more objective, to make it more rigorous.

And I think we've learned a lot about the process that I think can benefit all states.

So the hope is that this session will whet your appetite, that you will get your staffs involved in studying this learning which has come from the work of enormous numbers of people across the country and the five regions that Governor Engler mentioned. Hopefully you will dip into this data. This little teaser will get your staffs onto the Web site where this data is freely available to any region. You'll come and send representatives to the forums that are going to be held later this year where we can go into more nitty gritty kind of chalk talk about the real lessons here and how to go about doing this in your state and what kind of conclusions you can draw.

This is extraordinarily important because we simply have to keep our states moving forward in terms of economic vitality. I am convinced after 20 years of work on this that what really makes the U.S. unique and why the U.S. really is competitive is actually not the nation but the regions. It's the
fact that we have so many regions in this country who
take a lot of responsibility for their own economic
future. All of you are out there worrying about your
regions, and it's that regional vitality that I think
really drives American competitiveness more than any
other country in the world. We have much more
independent initiative at the state and the local
level.

Also it's the trade and competition among
our regions that in many ways is much more important
to the success of our economy than our international
trade. The international trade is relatively small
compared to the trade that occurs within this
country. And we have this unique economic machine I
think that benefits from that trade.

So let me try in a very short amount of
time to give you the essence of this, the work, what
we've learned, talk a little bit with you about your
particular state and ask you to look at a few pages
in this binder. Keep that binder out in front of you
because I'm going to ask you to look at number of
pages later on. And hopefully this will be again the
beginning of a process that we can continue over

time.

Now I guess the most basic question we

need to start with when we talk about economic at the

state and the regional level is what creates

prosperity? Why is a state prosperous? Why are some

states more prosperous than others? Why are some

regions within states more prosperous than others?

And the answer to that question is getting to be I

think very well understood.

Competitiveness and prosperity is

fundamentally a function of productivity, the ability

to productively use your resources. To generate a

lot of output for every hour of labor and for every

dollar of capital invested in your state. If you're

productive, you can pay yourself a lot. You'll earn

good returns on your capital. If you're not

productive, you're going to have to squeak by on

lower wages.

Productivity is competitiveness. If we're

taking actions that are making businesses in our

state more productive, able to produce more output,
valuable output per unit of labor and capital, we're going to be pushing our state in the right direction.

We know that productivity is not just efficiency. It's also about boosting the value of the products that your state can produce. Value goes up because of better quality, because of better features, because of better marketing, better brands, not just because of better technology per se. If you can boost the value, you can be boosting productivity. Just lowering the cost of doing business is no longer enough.

The idea that you can have a successful state economy by cutting wages and cutting taxes is a dead end. We know that in the modern global economy, there's lots of cheap labor in this world. There's no way that any of your states is ever going to be the lowest cost place to do business in the region and in the world. The way to create a prosperous state is to create a very productive state that can create a lot of value.

Now we know in order to do that, you've got to worry about innovative capacity. Because it's
innovative capacity that drives productivity forward, that allows new methods, new firms, new ways of doing things. And so one of the fundamental questions any state has to ask is what's the state of our innovative capacity?

Now in thinking about innovative capacity, we've got to understand that it's more than just science and technology. It also involves commercialization. You've got to get ideas unlocked and in the marketplace if you're going to be successful.

We also have to recognize that innovation occurs not just in the high tech sector. One of the biggest mistakes I see as I work with states is a focus only on the high tech sector. And I'll show you some data later that shows you that if you focus only on the high tech sector, you have no chance of building a really prosperous state.

You've got to realize that innovation can occur throughout the economy. There is no industry today that's low tech. Every field can employ advanced technology to do things much more
productively, all the way from tourism to textiles to semiconductors. We can't look narrowly at a few parts of our economy and try to build them up. We've go to build that innovative capacity throughout large swaths of the economy. We'll talk a little bit about how to do that later.

Now in building innovative capacity and in building a productive business environment, I think it's starting to become well known that this notion of clusters is fundamental. If we look at any state, any region within the state, we see that the economy is not evenly distributed across all the sectors. What we see is clusters, concentrations of economic activity in a particular field in a particular location.

This is California Wine up on the screen. Each of you is going to have your own mix of clusters in your state. What's a cluster? It's the producers of wine in this case, but it's also the growers of grapes. It's also the suppliers that provide the machinery, the grape stock, the corks, the bottles. It's also specialized educational institutions like
UC Davis and the winemaking degree programs in the various parts of the University of California. It's also specialized institutions like trade associations, specialized service providers, venture capital companies. A cluster is a whole array of institutions and entities and firms in a particular field in a particular location. And what we find is that clusters matter fundamentally for economic growth and prosperity. Why? Because when you have a cluster, it allows you to be more efficient that if you're trying to pull in stuff from all kinds of disparate locations. That's pretty obvious.

If you have a cluster, it fosters innovation, because knowledge flows, ideas get created and circulate. Specialized skills are built. Specialized research knowhow is developed. A cluster is important because we find that new businesses get spun out of clusters. Once in a while we see a new business off by itself. But most of the time when we see new businesses we see them sprouting out of clusters where there was something already there.
The reason is that it's much easier to start a business when you're in a cluster than if you're sitting off by yourself. You can assemble the assets, you can assemble the capabilities early.

Now it's interesting to look at this case of California Wine. California is not the low cost place to grow wine. The land prices in California are the highest in the world for cultivation of grapes. California has not become a dominant player in the U.S. and a leading growing competitor in the world in wine because they have low costs of doing business. They've become a leader because they're the uniquely productive location for producing wine and because they're able to produce wine of very high quality.

Think of 20 years ago, Bartles & Jaymes.

(Laughter.)

PROFESSOR PORTER: Think of California wine today. Premium wine. The average price has been driven up over a 20 or 25-year period because that cluster has built incredible quality and branding and competitiveness. That's the process
that drives economic prosperity, and we'll talk a
little bit more about that later.

We've got to understand these clusters and
how they form and what we can do about them as we try
to develop our economies.

One final brief reference, and that is to
something we now call Institutions for Collaboration.
What we've found is that in the modern economy, the
kind of traditional institutions really are not only
what's at work. I mean there's business, there's
government, there's universities. But what we find
in all successful economies today is a whole bunch of
other institutions that are not exactly business,
they're not exactly government, they're not exactly
universities. They're various kinds of institutions
that link the various pieces of the economy.

This is an example of those institutions
on the screen here in San Diego, one of the regions
we study. And some of them are informal. They're
alumni network of universities. Some of them are
formal, like UCSD Connect, which is an organization
that links the University of California at San Diego
to business in a variety of ways through a variety of programs.

As we'll see later, these institutions take many forms, but they become precious assets in modern economic development and something we really need to think about as we create our own strategies.

Now what I thought I would do in going further here is to actually take you through the methodology, the approach that we used to look at a regional economy. And in the process of taking you through that approach, I will illustrate some of that process in your package in your own state with the data, and we'll draw some of the key implications.

What is that process?

Regional economic development starts with really measuring how well you're doing, because that tells you where it is that the issues might lie. We'll talk about that in a moment.

In order to go very far in the process, you've got to figure out what the right economic areas are to look at. And what we'll see is that those are rarely just the state. Indeed, the state
is not a very meaningful economic unit in most cases.

The state is a very important political unit. It's very important to you. But the economy doesn't work around the state borders. It works around a different logic. And you have to factor that into your thinking.

Number three, we will look at the composition of the economy of the state or the region, what's in it? How is the mix changing? How are the various pieces of it doing?

Number four, we need to look at the historical evolution of the economy. What's the path that the state or the region has taken? Where has it come from? What have been some of the key milestones? What does that tell us about issues for the future?

Next we look at the region's environment for competitiveness and innovation, kind of an assessment of where the region stands. Then we dig down and look at individual clusters within the region and look at how they're doing and what drives their competitiveness and how they've developed over
time.

We then look at how well the region is actually performing in terms of the process. What we've learned is that this economic development stuff can't be done just by the governor. And it can't be done in four years or even ten years in many cases. It's a multi-decade process. The successful regions have sustained energy for decades in some consistent directions, and how to organize that becomes a very interesting question. And what role you can play while you're the steward, while you're in the governor's chair, is a very interesting question, given that the process is going to take much longer than the longest sitting governor usually can expect to sit.

And finally, I'd like to wrap up the conversation with a few comments about implications for state governors. Now here we go. Let's look at some data. On page 7 in your package, what I've given you is a summary of the performance assessment that we would do for any regional economy to try to really understand how to start thinking about what
needs to be done in that region. Now hopefully
you've all found that page.

When you look at a region or a state, the
first thing we need to understand is that we can't
just measure one thing. We need to measure a number
of things. And we tend to divide those into two
categories. There's some measures of your current
economic performance: Employment growth, wages, wage
growth, productivity, exports. Those give you a kind
of sense of where you stand today. But we also find
it very important to measure the innovative output.
How well are you doing in innovative output? And
when you measure innovative output, there's the
upstream part of it, which is the invention part.
And we often measure that using patenting rates.

And then there's the more downstream part
of innovation, which is the commercialization part.
And what you see here as we look at things like new
establishments formed, fast growth firms, venture
capital investments, IPOs, and there are additional
measures, but this is kind of a digest that we put
together for this purpose.
Now as you look at your chart, what should you be looking for? Well, first of all, it's very important to make the distinction between growth and prosperity. Obviously one of the things that all governors are interested in is whether the economy is growing, whether jobs are growing. But what we find it's very important to look at not only how fast jobs are growing but whether the wages are growing. And we find that a lot of fast-growing regions, wages are not growing very fast. And of course when you have a fast-growing region, what do you get? Congestion, delays, environmental issues, pressure on the quality of life. And translating growth and employment into growth and wages is often an issue. So some of you may see that. You may be doing better in jobs than you are in wages. Governor Bush and I were talking about this earlier in the state of Florida.

When you look at wages, you've got to compare your wages to your cost of living. We don't have cost of living metrics on this slide because there are none available at the state level at least in this form that we could use it easily. We do have
cost of living measures available at metropolitan
area levels and that data is on our Web site.

You've got to make sure your wages look
good compared to your cost of living and look at that
balance. And so it's seeing the relationships
between these various measures, this starts to give
you insights into the issues your state is facing.

On the innovation side, again, how well
are you doing in patenting? Here we see -- and I
picked on Governor Engler. This is Michigan.

Michigan is doing pretty well on patenting in terms
of the rate of patenting per 10,000 employees, ranked
13 in the country, but they don't do quite as well on
the rate of growth impact. Again, there's a
relationship there. Why has the patenting growth
slowed down? Why are we lagging behind other states?

What's going on there?

We often see some states do pretty well
upstream but not so well in commercialization. This
was the case in San Diego. Tremendous patent engine,
not quite as good of an IPO engine or an engine of
fast growth. So what you're looking at here is to
try to get some insight into what's going well, what's not going well given these fundamental drivers of competitiveness.

Let me hasten to add that these data that we use exclude government, excludes farmworkers and purely self-employed individuals. We're looking really at the mainstream core of the economy here. And so the average wages here might look a little bit different than some of the numbers you get. We can easily reconcile them if you'd like us to.

Also the reason that we end our data in 1999 exists in this city. It's that the federal government hasn't spit out the data yet after 1999. So we're looking at the '90s basically. But for regional economic development, as you'll see later, it takes a long time. So the year-by-year thing is not nearly as important as the five year by five year comparisons.

Okay. So now let's turn to page 9 of your packet. Now since we put so much stress on innovation, what we've given you here is we've actually given you the top 50 patent generators in
your state. Now some of you may have known who these
top 50 patent generators are. What are some of the
things to look at here? Well, first of all, you're
going to see a number of companies, most of you, all
of you, and the question is, who are those companies?
What fields are they in? What insights does that
start to give us about where our innovation is taking
place?

Hopefully you also see, as we see on this
slide up on the screen, you see some universities.
We find that successful regions almost always have
universities that are players in the process of
creating and disseminating technology. You see here
Research Triangle had it's three universities were
actually number 4, 5 and 6 patent generators. And
there's a very tight horse race between those three
universities, a very spirited competition.

We also see in Research Triangle something
else to look for. Do you have other institutions
besides universities that are not companies that are
generating technology? In the case of Research
Triangle, we see that number 19, MCNC,
Microelectronic Center of North America. Again, the regions that are doing well have created institutions beyond simply the firms that are in the innovation game, and that's increasingly important because firms are more and more focused now. They're not doing basic research. They're applying technology. And we've got to make sure that we've got a very healthy infrastructure.

Some of you may see federal government institutions in your top patent generators. Those are often very, very important as they were in San Diego.

Now I've given you some of the basic thoughts about looking at your performance and trying to draw some conclusions from that performance, but this still has not addressed the fundamental question of what's the right region to look at. And here I'd ask you to turn back to page 4.

You know, what we find is that in thinking about regional economies, there are a number of different definitions of a regional economy that might be the best definition for you to work on.
There's clearly the state as a whole. But as I said earlier, the state may or may not be truly an economic region.

There's something called economic areas. You see them listed on the left-hand side of your chart. These are economic regions determined by the Department of Commerce where research has shown there's a lot of linkages within that area.

And then the third opportunity or the third possibility would be metropolitan areas. And again, you see listed the metropolitan areas that affect your state.

This is an example from Ohio which shows you how complicated this is. Ohio has lots of metropolitan areas. It has six or seven economic areas that affect some part of Ohio. And these are areas that the Department of Commerce sees as economic regions.

Here's just some simple data. Of all the economic areas in the United States, only 77 of them are within one state. Ninety-five of the 172 economic areas in the United States cross state
borders. Metropolitan areas tend to be within one state, but some again cross state borders. And what this suggests is that when you think about developing a strategy for state, an economic strategy, you've got to make sure that you're essentially looking at the right set of economic areas.

Because what we'll see is that those economic areas are going to need different strategies. They're going to have different issues. And it may be that you actually have to do some cross-state economic development. I've seen very few examples of this. I do see governors across states meeting from time to time about various things, but most of the economic part of that is competing. But if an economic area crosses a border and it's really the same economic area and the firms think of it as the same economic area, then there's really a very important reason for governors to actually get together to think about how they can both improve that area as opposed to see it as kind of a contest.

We've just put together a very simple slide on Ohio that shows that within states we have
tremendous differences in economic prosperity and the need for obviously very different strategies. So I want to put a placeholder on this issue, thinking through how to orchestrate and organize your economic development strategy and how to really encompass the different true economic regions that affect you I think is one of the critical issues that I find few governors yet have really taken on.

Now if I could ask you to turn to page 11, we'll dig to the next level of understanding of a regional economy. What does a regional economy look like? Well, the regional economy consists of three things. Number one, it consists of a lot of local things. It turns out that two-thirds of all the jobs in an average regional economy are purely local fields, local industries, that are serving almost exclusively the local market. This was a very surprising finding to me.

What we see is as we look across the United States, as we look across regions, we see the same local industries in every region in roughly the same proportions. And what that tells us is states
don't really compete in these areas. These are purely serving the local market.

The second thing we see in a regional economy is we see what we call traded clusters. We see clusters in industries that are trading across regions. You know, aircraft manufacturers and semiconductor manufacturers and consulting firms are really trading across. But that's actually only one-third of the jobs in the average region.

And the third thing we see, although we don't see too much of it in the United States, is the natural resource dependent industries in clusters that are in a location because natural resources are there. And that's a relatively small piece now of the U.S. economy, but it would be a big piece of some foreign economies.

The local clusters are there. They're serving the local market. The traded clusters could be anywhere. And that's really the part of the economy that's competing with other countries and with other states.

Now if we look at the traded clusters,
what we see is although they're smaller in employment, they are immensely important to your economy. If you look down the list here, this is the national data on the big screen. On your list you'll see your state data. The traded clusters have an average wage in the United States of about $42,000 a year, whereas the local clusters have an average wage of about $26,000 a year.

The wage growth in the traded clusters is substantially higher. The productivity of the traded clusters is much higher. The patenting output of the traded clusters is much higher. So think of your economy as consisting of these three parts. The traded clusters are really the drivers. They can expand to a very large size because they're going to sell products and services all over the world in many cases.

The local clusters are really there to serve the traded clusters. And they also provide the personal services that people can buy if they're prosperous. And if the traded clusters go up in prosperity, then that tends to boost up the local
clusters. But we have to really, really focus on
those traded clusters to understand really where our
economy is going.

Now in looking at the traded clusters in
the economy, let me ask you now to turn to page 25.
What we've done here is we've said okay, looking at
the state economy as the unit of analysis, which
again may be too broad or may be too narrow in some
cases, but looking at the state, what's the array of
clusters in the state economy? And we've been able
for the first time to do that objectively and
statistically in a consistent way across all states
and all regions.

What you see here is the chart for
Kentucky, the same one that Governor Patton is now
looking at. And what we've done here on this
particular chart is we plotted the clusters, we
plotted their share of national employment on the
vertical axis, and on the horizontal axis, the change
in share of national employment. And the horizontal
line is the average share of national employment
represented by your state.
So Kentucky has an average share of national employment of 1.33 percent. Any cluster with more than that employment share in Kentucky is more strongly represented in Kentucky than, you know, would be the average. And what we see in Kentucky's case is actually a pretty nice looking chart with quite a few substantial clusters in the upper right-hand corner. Strong position, growing that position over the decade of the '90s.

Each of you is going to be looking at a different picture. This gives you kind of your portfolio, if you will. There turns out to be 41 clusters in the traded part of the economy. How do we know that? We built that statistically by looking at how the various industries co-locate. And I won't bore you with the methodology, but the Web site will have substantial additional data.

So each of you then has this kind of portfolio of clusters in your state. And this gives -- that first chart showed you a little bit of how they're doing, which ones are gaining, which ones are losing, which ones are strong, which ones are
relatively weak. If we go to page 17 now, and we're jumping around a bit because of time, if we go to page 17, we'll start to see, okay, where are the jobs coming from in your state? Now we have some other charts that you can look at later which talk to you about the total number of jobs by cluster. But page 17 gives you the job creation by cluster and the job loss by cluster. This happens to be the state of Idaho. And we can see, where in your state are the new jobs coming from? In the traded part of the economy. And where are the jobs being lost?

What are some of the key messages here?

Well, first of all, I find that many governors are surprised by this, but you probably won't be since you all are all very sophisticated. But many governors are surprised. They think that their growth is coming from IT. Many governors think that their growth is coming from biotech. And the answer is, it's not. Biotech is a very small employer. IT is a very small employer. The real generation of jobs usually is coming from business services, financial services, a variety of other clusters.
So this will give you some sense of where
the jobs are really coming from, where the jobs are
being lost. And again, depending on your state, this
is going to be a picture that disturbs you or a
picture that encourages you. And what this tells you
is that you can't just focus on the high tech
clusters. If you take aerospace, IT, biotech,
communications equipment, medical devices, the high
tech -- because if you add them all up, they
represent 2.5 percent of total state employment on
average. You could double your share in IT. You
could double your share in biotech, and it's not
going to make a really meaningful difference in your
overall state prosperity.

What we've learned is that to have a
prosperous state, you've got to raise the
sophistication across all the clusters, not just
think that you can push one or two buttons and that
will somehow magically make your state successful.
We've got to look broadly at that economy. We can't
leave out any part of it. All of it's important,
even the local part.
If you turn to page 21, what we'll do there is kind of break out your wage rates in your state. On the screen you see Colorado. What we do is we array the traded clusters in your state in order of the highest wage. And the bars are the size of the employment in that cluster in your state.

You can actually take a state wage and you can kind of parse it into the wages the state has in all the clusters in the state, and you can kind of understand where your wages are coming from. And what I often find when we see this chart is, we see, again, some surprises. Yes, in the Colorado chart IT is the highest wage cluster in Colorado, but it's really not very big in terms of affecting the average wages in Colorado. Financial services distribution and business services have a much bigger impact than what the IT wages are.

What we found is that there's two ways you can raise wages in a state. One is to shift your employment to higher wage clusters, and the other is to raise your average wage in all clusters relative to the national average. And what we find is that
only 10 percent of increasing wages in America come from shifting the mix. And 85 percent of increasing wages come from raising your wages relative to the average in each field in which you compete.

Again, that tells you, don't focus on just a few parts of your economy and think that's going to make everything work. Take a broad view, try to create innovative capacity throughout the economy. You know, textiles, whatever the fields you're in, boost the productivity, boost the innovative capacity, that's the way to win.

Now time is very short. How do regional economies evolve? We have some fascinating stories about this in the various reports that cover the individual regions, but this is an example of the timeline in Research Triangle. The kind of sobering message from this timeline and all the other timelines is that regional economies evolve slowly. Building a regional economy takes decades and decades.

The Research Triangle park was actually created in the mid-1950s. The first meaningful
corporate research activity in the Research Triangle area really didn't develop until 20 years later. And the real business generation in the Research Triangle Park didn't develop until 20 years after that.

So, again, when we're building regional strategies, we've got to have the right time constant. We've got to see this as an enduring process. No one governor will ever be in office long enough to see this through. That puts a tremendous stress on creating the right institutions, the right processes in the state. And we'll talk just a little bit about that later.

Now here's another regional evolution picture. We have some folks here from San Diego. They're probably tired of looking at this picture because I talk about it a lot. This essentially looks at how the San Diego economy has evolved. And I think there's some very important lessons here. San Diego economy really starts in 1910 when the earliest key things start to happen. It's a very wonderful climate, as we all know. It's on the ocean. Wonderful weather. Hospitality and tourism
cluster builds up there, kind of sand and surf. Then San Diego is able to attract the U.S. Navy, I think Teddy Roosevelt to base the Pacific Fleet in San Diego. That was not an accident. There was a long-term lobbying campaign to get that fleet based there. So what this tells us is that part of regional economic success is what you inherited, you know, the wonderful climate, the port, the harbor. Part of regional economic success has to do with purposeful action, leveraging, taking advantage of what you've inherited, what you've built over time.

The city fathers in San Diego, all fathers in those days, actually agreed to dredge the harbor, and that was part of the deal. So there was civic action. And what you see here is the kind of process by which one cluster led to another. What we find is that very rarely do you build a cluster from scratch. You build on assets that were already there.

You might see on San Diego on the upper right-hand side of this slide the sporting and leather goods cluster in San Diego. Now what that really is for you golfers is that's Big Berthas.
(Laughter.)

PROFESSOR PORTER: San Diego is the center of the universe in golf equipment, or at least it has been in recent decades. How did that happen? Well, it partly happened because of hospitality and tourism. La Costa, pro tournaments, a wonderful set of recreational and golf venues that any golfer would like to be near. But it also was the aerospace and vehicles and defense cluster which led to the building of capability in casting and advanced materials and titanium and all that sort of stuff. And when golf equipment went from wood and steel to composite and advanced materials, the cluster shifted from New England to San Diego.

But look at, I mean, what if you set out to do that from scratch? Impossible. You had to build the base. You had to build the skills. You had to build the capabilities. So again, we find that governors are prone to want to create something, you know, that doesn't exist. The favorite poster child today is life sciences and biotech. Every governor wants a biotech cluster. It's not going to
work that way. You've got to build the institutions and the skill base, and we'll come back to that example later.

Now I'm going to skip quickly, just given the time. Once we understand what clusters exist in the region, the regional economy as a whole, then the really next challenge is to assess the competitiveness and productivity environment and the innovation environment. And this simply is an example from the Research Triangle. There's a methodology for doing this that I won't bore you with today. But there's some systematic processes that one can use to really assess what are the elements of that innovation environment, where do we stand, how well are we doing? We can do that objectively. We can compare ourselves to other parts of the country.

And again, there's some key findings there. We've got a lot of survey data that you'll see, and we'd be happy to share the survey with you and you can use it in your own state to actually objectively poll your business community and your other communities. That helps you do that.
And once we understand the overall innovative capacity and competitive capacity of a regional economy, then we kind of dig down to clusters and look at individual clusters. And again, this is an example from Research Triangle of biotech pharmaceuticals. And data allows you to essentially say, okay, where in that cluster are we strong? Where in that cluster are we weak?

We now have objective data for every one of your clusters. We can tell you where do you rank nationally and along a variety of metrics. Again, we didn't put this in your package just because each state is different, and it would have been extraordinarily difficult to do that for all of you at once, but we'd be happy to help you, show you how to find this data on our Web site.

There are some survey findings that kind of give you some objective data. This I thought you'd all be interested in. This is the development of the biotech cluster in San Diego. Again, it's a picture -- I think we have to face the reality of what cluster development is like. That cluster
really got really its beginning in 1955 when Jonas Salk decided to set up an institute there. The folks in Pittsburgh were deeply unhappy about that. But he was on a trip and got entranced with the area, and boy, the city was right on it. They gave him the land. They zoned Torrey Pine Mesa as a research area. Jonas Salk gets established. That starts a domino effect with other research institutions around biopharmaceuticals.

Then in 1964, the University of California at San Diego was established. That was not an accident. It was a long process of getting that to happen. Then it wasn't until '78 that the first real indigenous company grew up. You see later in the '80s and '90s some institutions grow, then it starts becoming a self-generating process. This is typical of how clusters develop. If we looked at aircraft in Wichita or advanced materials in Pennsylvania, we'd see the same kind of a story.

What this tells you is you can't build this thing in two or three years. Look at how many research assets San Diego had to build before the
first real indigenous company popped up. It's a process that we have to be realistic about. The good news is we don't all need a biotech cluster. They're small. We can build on whatever we have in our regional economy and make it more advanced. There's a gigantic world out there that's clamoring for sophisticated goods, and there's tremendous export opportunities in virtually every cluster. And we need to get away from thinking that we can kind of quickly build a few clusters and that'll help us.

This shows you how an individual company often is very strategic in the cluster development process, in this case Hybertech in San Diego.

We also find that new opportunities often grow out of the intersections of old opportunities. Now remember Big Bertha. Big Bertha came out of the intersection of hospitality and tourism and aerospace. And if we kind of look for those opportunities you can often find them as we saw in our study.

Cluster development is partly serendipity. It's partly chance, partly good fortune. But cluster
development can be effected by purposeful action.

This is an example from Minneapolis in medical
devices. And what this example shows us is that in
modern international competition, the old boundaries
don't apply.

It used to be that government was
government, business was business, universities were
universities, and everybody went about their business
and they all had their clear roles and they were
separate roles. Today what we find is these roles
are inextricably intertwined. That the best cluster
development and regional economic development
processes involve really creative integrations of
business, government, universities and other
institutions. And again, you'll see many examples of
that in our research.

How do you create a strategy for your
state and regions within the state? Well, again, we
have a lot of examples in our work and hopefully you
and your staffs will dig into this. The first thing
I would say is that you do need a strategy. We found
that the most successful regions actually had a
conscious approach. It wasn't just kind of a bill here, a bill there responding to an economic downturn. There was a constant approach.

If you're going to create a strategy and apply it, you need to get organized. In Massachusetts, we created a Governors Council. There's a similar Governors Council in Connecticut. An organized process of bringing together the various constituencies over many, many years to tackle the agenda and get things to happen.

What we find is that in many regions you have these fundamental transition points. In the Research Triangle, for example, the Research Triangle model is just about finished. The idea that they could use those three universities as really the core to attract a whole new kind of economy, that was a great idea. It was a phenomenally great idea. But now 40 years later, they need the next idea. And so one of the things you have to do as any governor is to kind of understand okay, where are the limits of the past approach that we've been taking? Do we need to jump to the next level? And again, many of the
states I work in have to address those issues.

The transition points are often very hard to overcome because there's so much momentum around whatever it is that you've been doing that it's very hard to get people onto a different model.

Finally, just a few implications for state governments. Number one, you know, although cluster development is really fundamental to building innovative capacity and competitiveness at the state level, it's something that I hope all of you will, if you haven't already pursued this approach, will start to think about pursuing it.

It's not only important for stimulating new business, but it's very important for business recruitment. We find that it's not very successful any more to go out big game hunting with subsidies. The kind of companies you're going to get in your state if you're competing in low wages and low taxes are not the companies you really want. The way to get companies to come in is to build them around clusters, to go out and recruit for clusters, not just across the board. To really understand where
you're offering more than just the low cost of doing
business or a nice place to live. Where you're
building assets that you can use to sell. And
companies now want to be part of these clusters.

Ironically, after 9/11, clusters are going
to get more important, because people don't want to
ship and have to deal with logistics across countries
and thousands of miles. Yes, I think in New York and
Washington people are not going to want to have all
their eggs in that basket anymore, perhaps at least
for the next little while. But in general in the
economy I think what we're going to find is the value
of proximity, logistical simplicity is going up, not
going down.

States increasingly are playing a role in
science and technology, which is very important. It
used to be left to the federal government. State
universities have enormous impacts on economic
vitality, having strong research capability in those
universities. That's something that all of you I
think need to worry about, making sure that your
campuses and branches of the state university are
properly focused on the economies in which they're based. All those become critical issues.

Having a state economic strategy that actually focuses on regions, not just the state as a whole, very important issue. Relatively few states doing that. And of course, benchmarking progress.

Well, very, very difficult for me to capture the richness of this in just this short amount of time, but I simply want to say that hopefully this has given you a taste of what we have now started to learn. It's given you a taste of the kind of data that we now have available that you can you use to compare yourself, and not just your state but any economic area within your state. You can have the same data, you can look at the same kind of metrics.

We've also tried to provide a methodology, an approach that your own team can use, guidelines for how to engage the private sector, guidelines for how to get engagement on the cluster level. Hopefully now this will give you some ammunition that you can take back to your state and apply and
hopefully it will give some of you some encouragement
for things you're already doing, because I know there
are some terrific efforts already underway.

So with that, Governor Engler and Governor
Patton, thank you for the forum, and we'll open it up
for discussion. Thank you.

(Applause.)
GOVERNOR ENGLER: We can probably take about 25 minutes to open this up if there are questions. I'll just throw it open and promptly, since we've got Professor Porter here, I'll just sit down. He can field the questions. Signal who's got the first one, I'll hand this off, if there's a comment or remark that anyone wants to make on this topic.

It's always hard to get the first one.

Down here. Governor McGreevey, we welcomed you earlier, Governor, in absentia, but welcome to your first meeting.

GOVERNOR McGREEVEY: Thank you very much. Hopefully, I'll come back in full capacity.

Professor, considering the budgetary straightjackets many of confront, if you had to make a strategic investment toward advancing a cluster, would it be toward investing say in developing increased research capacity in terms of universities, per se, or would it be towards transferring that intellectual capital toward commercialization. If you had to make one targeted investment, or putting
it in the university marketplace, or are we investing in the commercialization of those ideas that are developed in the University to make them pragmatically applicable to the marketplace?

PROFESSOR PORTER: Governor, that's an excellent question. First of all, I want to give all of you perhaps some comfort here about this whole initiative. This does not have to be hugely capital intensive. I find that actually restructuring and repositioning some of the stuff that you're all already doing can have a tremendous impact. I think it's now becoming well known that the job training process can be substantially leveraged if you can realign it in clusters, if you can start to get your job training organizations and boards focused on clusters interacting with clusters, you can get more leverage out of those job training dollars with your university money that you're already spending.

We find, in our surveys and research that a lot of universities don't really do a good job yet of maximizing the commercialization of what they already have. And for every good technology transfer
office we find in universities, we find at least one
or two more mediocre ones.

I think the first thing I would be doing
in a time like this would be let's make sure that we
reallocate and let more leverage out of what we're
already spending, not necessarily think that we have
to spend tons more. We did find that the K through
12 education is fundamental and really is high on the
agenda of many regions and critical to successful
regions. We found that physical infrastructure
issues are important. One of the biggest problems
facing San Diego is they can't get a new airport
built, believe it or not, and that is a huge
constraint. It may be that some of your big ticket
infrastructure things are going to be perceived as on
the critical path.

I believe that if you can find a way to
allocate some additional resources, depending on your
individual situation, I'd say infrastructure might be
an area where new resources might be necessary. Also
putting a little bit more capital into the research
infrastructure in the university system, those would
be two areas where I think the need for new capital is probably the greatest in the typical state. But don't necessarily go into this thinking about this is a big dollar effort. I think this is, as much as anything else, it's kind of a new way of thinking about economic development and the new way of thinking I think opens up new opportunities. You can get the private sector to do a lot of this if you see that they're fundamental and need to take a leadership role, and I know many of you already believe that.

GOVERNOR ENGLER: Michael, what significance do you attach to availability of high speed internet services, broad band capacity? Will that become a limiter pretty soon in some of the areas if that's not available, or will there be a competitive advantage to be gained?

PROFESSOR PORTER: It's very important and fundamental and came up a lot in our research. Having said that, we didn't find too many areas where that seemed to be a constraint now. Having said that, I think each of you has to convince yourself
that you have a trajectory and you're working with
your providers to have enough of that capacity
available. The place where the capacity is often not
available is actually not in the urban metropolitan
areas but in the more outlying rural areas and that's
often a real problem. That may require some policy
intervention because, you know, today to be efficient
you really need to be tapped into that
infrastructure.

GOVERNOR ENGLER: Governor Keating?

GOVERNOR KEATING: Michael, how do you
avoid what I will affectionately call the Bulgarian
model? How do you avoid perhaps energizing a fading
cluster or creating a cluster to manufacture buggy
whips that soon will be irrelevant? It seems to me,
instead of picking winners and losers, we ought to do
what we can to highly educate the work force, reduce
artificial barriers to growth, taxes, like we did,
pass right to work, things like that, to unleash an
economy. How do you avoid central planning, let me
say that, as they sit down and discuss and debate the
cluster concept?
PROFESSOR PORTER: Good question. First of all, the broad-based policy things that you mentioned improving the physical infrastructure logistical system, whatever other legislation you need to make business more efficient in the state needs to be done. Many states have actually done quite a bit on that and have pushed that agenda quite a long way. I'm sure all of you have things on your to do list there. But at some point, those things no longer are the constraint to productivity.

What we find is that that's where the cluster part comes in. Again, be absolutely clear about what we're saying here. I said I think four or five times in the course of my presentation, which was much shorter than I usually have for a class at Harvard, I was really disciplined today. I said three or four times, don't pick clusters, don't pick them; all clusters are good. Allow every cluster in your state of meaningful proportions to organize and see if it can enhance its productivity and competitiveness. Are all of them going to grow? Of course not. But what we find is that even if your
clusters don't grow, you can still raise their
prosperity.

Let's take an example of Massachusetts.

We have a textile cluster in Massachusetts. It's not
hugely big, it's tens of thousands of jobs, but we
have a textile cluster that used to be much bigger.
It shrunk over time but the average wage has gone up
and up and up because it's gotten more and more
focused on high technology segments of the market,
advanced fabrics and fiber and stuff like that. So
what I believe is very important to state economic
development efforts is don't disenfranchise anybody.
Any part of the economy can play, any part of the
economy can raise its level of skill.

Let's even take hospitality and tourism.
You know, hospitality and tourism is an area that's
relatively low wage in many states but think about
the challenge of how do you raise the average amount
the visitor spends in your state. The way to raise
the average amount they spend is to have better
hotels, better attractions, a better experience, so
even in a low wage cluster, like hospitality and
tourism, you can upgrade it, you can enhance its
contribution to your prosperity. Don't pick.
Government's not the one who's deciding which cluster
is going to get help and which cluster is not. The
government's going to organize itself to try to
enhance and support cluster development really across
the board.

Then what's going to happen is the market
forces are going to determine the outcomes. I think
the notion that there's a choice between laissez
faire and central planning is too stark. I think we
understand that government has inevitable roles in
the economy; in education, in science and technology,
in infrastructure, and it's finding that sweet spot
in between laissez faire and central planning that I
think is the key in this modern competition that
we're dealing with now. Today's competition is about
ideas, it's about knowledge, it's about building
technology, and those are all areas where there has
to be these interesting collaborations between
universities, government, business and other
institutions, but that's an excellent question.
We don't want to be like Bulgaria, I can
tell you that.

GOVERNOR ENGLER: Governor Kemptthorne?

GOVERNOR KEMPTHORNE: Thank you, Mr. Chairman.

Dr. Porter, to bring some follow-up, I believe you met with us about three years ago, and at that time you pointed out to us the tremendous shortage engineers that were projected throughout the United States. This year we had micro technology in Idaho just opened a new research development facility, a $200 million facility, another $100 million of equipment that they're putting in there. The CEO, Steve Appleton, made the point at this dedication to the educators that were there to the University presidents, please ensure that you have engineering graduates because we need them. It has been ten years since they build an R&D facility at their plant. If you fast forward ten years that those engineers they will need, those are children in the sixth grade today. So it underscores what you're saying about K through 12. So we've gone
to the private sector and we've had these very candid
discussions with them and asked them if they would in
fact partner with us. And so you have the Micron
Technologies and the Hewlett-Packards and others that
are there that are going to join us in a venture that
will be a math academy. It's not for the students,
it's for the teachers in grades 5, 6, 7 and 8 that
teach math.

During that one-week course at a
university, at the dormitories that are not in use at
that time, the private sector and the department of
education will spend the week bringing those math
teachers up to date as to what is happening out there
in the world, what is the excitement of the new
technology and with that hopefully the infusion of
those teachers back in their classrooms with state of
the art latest technology but also an affirmation of
how critically important those teachers are to us.
So it shows you you've planted a seed and we've been
pursuing that and finding ways to partner with the
private sector.

I guess the thing is if you have any
comment on that. And the other question I have is, as I look at these charts, and you point out employment growth per year, average wages, etc., I would just suggest when you do look at average wages that you incorporate cost of living for the area because I know from firsthand experience when we moved back to the Washington, D.C. area for a period of time to live it was three times the cost of living in Idaho. So if you simply look at the average wage, it can be misleading.

PROFESSOR PORTER: Absolutely. I did I think briefly mention that really the wage versus the costs of living is in some sense the acid test of prosperity. It's not just the wage. The great catastrophe of Japan was very high wages and extraordinary costs of living. The average Japanese had to pay grossly too much for just about everything he or she bought. That point is extremely well taken. We actually, in our regional reports, do have cost of living metrics but for purposes of the state level report, we were not able to pull that off for today's session. But you're absolutely right on
I would say a couple of things. First of all, you might be interested to know, Governor, that the Boise economic area is the highest patenting economic area per 10,000 inhabitants in America. So that's a great tribute to what you're doing. Now, to be absolutely fair, Governor Engler has a huge number of people living in his state, so it's a little harder to get the per-inhabitant number up but it's an extraordinary thing happening in the Boise economic area and the micro story I think is just a sign that if they are willing to put that major facility there, something's going right, so congratulations on that.

The whole human resource side of the equation is really extraordinarily important. The statistics on engineering graduates in America are still not materially better. On average we still have really a problem. I suspect that many of you governors need to put this issue on your radar screen. Is your university resources, are you generating enough scientists and technologists to
support a higher sophistication economy? In many cases the answer is no. So I believe I just would reiterate that from everything we saw, we found that availability of labor is rarely what separates really successful regions from unsuccessful regions. It's really the availability of the highly skilled, highly trained labor. There's many charts in the reports about that. That's an extremely good question and one hopefully that all of you can keep working on.

GOVERNOR ENGLER: A follow up.

GOVERNOR KEMPTHORNE: Mr. Chairman, thank you.

Dr. Porter, I appreciate the recognition of the Boise area and its patents and I think Idaho's number one rank. It's a wonderful setting for the NGA annual meeting this July.

(Laughter.)

PROFESSOR PORTER: Maybe I could get invited to that one.

GOVERNOR KEMPTHORNE: We would love to have you.

If I could just follow up on the
engineering statistics, I believe last year in the United States, 164,000 engineering graduates were hired in the industry. Of that amount, 64,000 were U.S. citizens, and I believe the others were international with their visas. I just wonder how long you can remain competitive and number one in the world if the farm team's not providing you the players that you need.

I think it again underscores that when you ask people around the world, where would you like to send your children to higher education, the number one choice is still the United States. But if K through 12 is not staying apace of that, how long can you stay number one?

PROFESSOR PORTER: Absolutely correct.

What we're finding is that these foreign students who are coming here have now wonderful opportunities back home, so they're going back to India, they're going back to Taiwan, they're going back to their country, so our retention rate has fallen. If you look at the kind of disproportionate, low movement of American kids into these fields, you see that a big chunk of
that can be explained by the very, very low incidence 
of women and minorities in these fields, again, 
compared in absolute terms and also compared to other 
countries. So we think that a critical part of the 
equation here would be to unlock and get more women 
and minorities moving into these fields, but it does 
start with K through 12. Because if young people 
think that they're not going to be able to hack it in 
engineering, then we're kind of stalled.

I think the human resource, engineering, 
scientific and technical manpower issue is I think 
one of those four or five things that if I were 
speaking to President Bush here, you know, this is 
really top of the national agenda.

GOVERNOR ENGLER: Governor Bob Holden.

GOVERNOR HOLDEN: Dr. Porter, you talked 
about the regions. We all come from a state. Are 
there any regions in this country that have done more 
effective jobs in minimizing those state differences 
to have a regional economy and what have they done to 
built those bridges?

PROFESSOR PORTER: Governor, I know a lot
of areas that have not done a good job, which I'm not

going to discuss today. I haven't studied this

question and I think it's a natural follow-on

question from what we've discovered here. But I
don't have good examples to point to. I once did

some work in Chattanooga area and Chattanooga is

fascinating because there's a number of states right

near Chattanooga. We actually got quite a

participation of economic development folks on the

state level from multiple states in that process

which I think was very healthy. We've also done some

work in the Kansas City area and of course you have

Kansas and Missouri and some good collaborations. I

think this is still a relatively kind of under-
captured opportunity and frankly I think we're going

to have to break down some of our ways of thinking

about how we organize ourself. For most states,
you're going to have to have some processes going on

within your state and you're going to have to empower

regional groups within your state to kind of take the

ball and run with it and look in their regions.

And for many of you, there's going to have
to be some cross-state coordinated area work that is
going to need to be done, so I think kind of laying
that out, and kind of creating some new partnerships
and collaborations is going to be very important. I
will commit to you that if I ever get invited back,
I'll talk about that issue because it's something we
really want to study and I'm sure my team is taking
notice of that as we speak.

GOVERNOR ENGLER: Governor Babauta?

GOVERNOR BABAUTA: Dr. Porter, my question
is in the area of health manpower, specifically in
the area of nursing. There's a critical shortage of
nursing care in this country in the states, and where
I come from in the Northern Mariana Islands, we find
ourselves losing nurses to the mainland U.S. after
having passed the NPLEX because of the critical
shortage of nursing here.

What is it that is causing the shortage of
nursing in the mainland U.S., and how can we build on
that labor force so that we have an ample supply of
nursing so that the Northern Mariana Islands don't
lose the nurse to the mainland U.S. and it just seems
like it is sucking the nurses that we end up training
in the Northern Marianas to the mainland and it
should be the other way around. Is it because of
labor? Is it wages? Is it the nature of the job?
Or what is causing the problem?

PROFESSOR PORTER: That's a very good
question. Before I answer it, I just do want to
apologize to you, Governor, and Governor Turnbull and
Governor Calderon. We didn't have data to actually
prepare these books for you, but we'd be happy to
talk to you and I've already talked to Governor
Calderon about perhaps applying some of the same
thinking to your regions. So I want to apologize for
really not having these books for everybody. The
nursing issue is not perhaps an issue that I'm the
particular expert on, and haven't studied it. But
from what I do know, and I have worked in health
care, basically it's a situation where I think we're
in the middle of a transition and the traditional
role of nursing, of a nurse and the traditional pay
structure for nurses is kind of breaking down and is
no longer sufficient to attract enough of the
skilled, talented people that are required in that
field.

I think there's a process now going on. You're seeing that nurses' salaries are rising
dramatically. Nurses' roles are getting redefined, and I suspect that over some time frame now, we'll
start to see an easing of the shortage but for the next few years I think it's going to be a shortage
and, you know, we have this undeniable growth in older folks who are going to need more health care.
So this is a very pressing issue.

I think at the state level, making sure that you're training enough nurses, making sure that
you have adequate seats in your degree training programs is very importantly, and hopefully we can
get the heat off of you and get the flow moving in the other direction because it is a very pressing issue.

GOVERNOR ENGLER: Thank you very much, Michael Porter for an excellent presentation.

(Applause.)

GOVERNOR ENGLER: Just to again reiterate
the meetings that we have upcoming in Denver and
Atlanta, because that is an opportunity. I know some
of you have already committed teams of folks from
your respective states, but I do think that will give
about a day. Those are set up to be kind of compact,
those meetings, but hopefully for your respective
state teams a chance to do this a little more in
depth.

On of the reasons we thought this might be
useful also this year, the National Governors
Association, there are so many gubernatorial
elections in 2002, and so much of this needs to be
carried on by in-coming governors as well, so we
thought building a little database, a little capacity
here, could be very, very helpful. At this point, we
are to convene a meeting of the NGA Executive
Committee. Certainly all governors are welcome to
participate. Only the members of the Executive
Committee get to vote. I don't think we've got
anything that's going to be very controversial today.
But the first order of business of the Executive
Committee would be a motion and a second to approve
the minutes of the December 12th, 2001 Executive Committee meeting.

    VOICES: So moved.

    GOVERNOR ENGLER: Moved by Governor Patton and supported. All in favor, say aye.

    (Chorus of ayes.)

    GOVERNOR ENGLER: Opposed?

    (No response.)

    GOVERNOR ENGLER: That motion is approved.

    Now approval of the Executive Committee policy proposals. We've got first an amendment in the form of a substitute to the EC-1 State Grant Programs. A motion and a second on that.

    Moved again by Patton, supported. It's moved and supported. I'm just reaching for the document here. Everybody has this in front of them. These are all in the purple policy. If you've had an opportunity to review them, we'll just move through them rather quickly. I'm not going to go, unless there is discussion that people want to raise with a motion and a second, and seeing no discussion, all in favor say aye.
(Chorus of ayes.)

GOVERNOR ENGLER: Opposed?

(No response.)

GOVERNOR ENGLER: The ayes have it. That policy is adopted.

Next are amendments to Executive Committee Number #4 the Public Pay and Pension Plans Policy.

Again, a motion and a second would be in order.

Moved again by Governor Patton and supported by somebody, I heard a second out there. So any discussion?

(No response.)

GOVERNOR ENGLER: Seeing none, we'll call the vote on that one. All in favor say aye.

(Chorus of ayes.)

GOVERNOR ENGLER: Opposed, no?

(No response.)

GOVERNOR ENGLER: The ayes have it.

Third, amendments to Executive Policy Number 9, a federal tax policy. A motion would be in order. Moved by Patton, and supported. All in favor -- any discussion on that one?
GOVERNOR ENGLER: All in favor say aye.

(Chorus of ayes.)

GOVERNOR ENGLER: Opposed, no.

(No response.)

GOVERNOR ENGLER: That is approved as well.

Fourth, a new policy position. I know we'll have some comments because we're calling a new policy position on representation in Congress for the U.S. citizens of the Northern Mariana Islands. Governor, let me first have a motion on the policy to get it formally in front of us.

GOVERNOR PATTON: So moved.

GOVERNOR ENGLER: Moved by Governor Patton and supported. On that policy position, Governor, would you like to make a couple of comments?

GOVERNOR BABAUTA: Thank you, Mr. Chairman. First, I want to thank the Executive Committee for agreeing to place this proposed policy position on today's Executive Committee business agenda. This policy supports the proposition that
Congress support and adopt legislation providing a delegate or representative in the United States House of Representatives for the people of the Commonwealth of the Northern Mariana Islands. The Commonwealth of the Northern Mariana Islands is the only part of the United States having a permanent population with no representation in the Congress. Since 1790, Congress has given representation to over 30 non-state areas in the nation. The most recent, Hawaii and Alaska, but there were states that were once territories and those who are seated here at the table could appreciate where we're coming from on this today. Only five of the non-state areas have representation in the Congress; American Samoa, Washington, D.C., Guam, Puerto Rico, and the Virgin Islands, with the sole exception of the Commonwealth of the Northern Mariana Islands.

And so in keeping with the American tradition of participatory democracy, and basic fairness, this policy, if adopted by the National Governors Association, urges the Congress to enact legislation to provide the people of the Northern
Mariana Islands with representation that U.S. territories have historically been granted, and that is a delegate in the United States House of Representatives. Thank you.

GOVERNOR ENGLER: Thank you very much.

Governor Kempthorne?

GOVERNOR KEMPTHORNE: Mr. Chairman I would just ask a confirmation that this is to represent the citizens of the Mariana Islands. This is as a non-voting member.

GOVERNOR ENGLER: That's right. It's called a delegate actually.

GOVERNOR BABAUTA: That is correct in the same manner in which the delegate from the District of Columbia is representing the District in the Congress.

GOVERNOR ENGLER: Okay, good qualification.

Governor Turnbull?

GOVERNOR TURNBULL: The U.S. Virgin Islands would like to support this measure. It's only fair that all American citizens everywhere be
represented in our Congress. As in the Virgin Islands, we have a non-voting delegate for the time being, at least. But I think the Northern Marianas should be given equal representation with the other territories of the United States.

GOVERNOR ENGLER: Very good. Seeing no more discussion, all those in favor of the resolution will say aye.

(Chorus of ayes.)

GOVERNOR ENGLER: Those opposed?

(No response.)

GOVERNOR ENGLER: Congratulations, Governor. Your first meeting and already a resolution being adopted, so the folks back home can be proud of that.

(Laughter.)

GOVERNOR ENGLER: Finally in front of us is a resolution on homeland security. Again, a motion and a second would be in order. Moved and supported by Governor Musgrove. Any comments on that? That again has been in front of everyone so seeing none, all in favor will say aye.
(Chorus of ayes.)

GOVERNOR ENGLER: Opposed?

(No response.)

GOVERNOR ENGLER: The Homeland Security Resolution is approved.

Now let me call on Governor Patton who is going to do something that's very important. He's going to talk about money in a year when money is tight, so we will talk about the value of what we're all doing here.

Governor Patton?

GOVERNOR PATTON: Thank you, Mr. Chairman.

The NGA and the Center for Best Practices are midway through the 2002 fiscal year. The December 2001 financial statement shows that operating funds revenues are slightly under budget at 47 percent, and that expenses are under budget at 46 percent due to staffing vacancies and timing differences on subgrants. NGA and Center endowments have experienced declines in net market value for the past six months but they performed well against benchmark indexes. NGA does expect that operating funds will
be at a break even point by the end of the fiscal year at the end of June, so I think everything is about on target, Mr. Chairman.

GOVERNOR ENGLER: Thank you, Mr. Chairman. A good report displaying prudence, caution on the part of the Governors Association and careful management of the resources contributed by the dues-paying members of this Association. All taxpayers of America know that they're funding for the National Governors Association is yielding benefits far beyond what had originally been imagined. So thank you for the excellent report.

A couple of announcements. As we bring this session to a close, we're actually going to finish a moment or two early. Governors only luncheon and work sessions starts at noon, so it's about a 30-minute break here for people to make phone calls or to attend interviews or whatever. Salon One, it's right on this level.

The topic is Medicaid. We've got a special report that is being presented and an excellent discussion intended. Also relative to the
topic of welfare, on Tuesday afternoon, we have a
roundtable that's been scheduled for some time up on
Capitol Hill. That was scheduled to start at 2:00
o'clock. We're going to push that back to 2:30,
same room, same cast of characters, and what we're
going to do at that roundtable is to have an
opportunity. Secretary Tommy Thompson will join us.
Leading members of the House and Senate bipartisan
gathering to talk about welfare initiatives. It
actually takes on a bit more prominence than it was
intended to have because originally we had not
expected that there would be announcements on
welfare, and I think we're expecting some now, maybe
even that afternoon. So we'll be talking in a very
serious way about some of the President's initiatives
and some of the Governors agenda on that topic.
Committee sessions are this afternoon at
2:30 in the assigned rooms that are at this level, so
that gives us an ample period of time at noon to talk
about our sort of most pressing fiscal problem, the
Medicaid situation in America.

Tonight the governors are on their own to
provide transportation to the White House for the evening's even with the President and Mrs. Bush.

Now on Monday, we're going over there for our meeting. As you know, this year this will be an afternoon meeting, so buses are going to leave for that from the J.W. Marriott, this hotel, at 1:40 p.m. sharp. That's on the Pennsylvania Avenue entrance out in front. That's where we're going to start.

Finally, just a reminder. The deadline for submission in writing of new policies under suspension of the rules is 5:00 o'clock Monday. Without inviting you to bring forward a lot of policies, just reminding you that you have that in mind that that's the deadline, so if you miss it, it's been mentioned twice now.

Governor Musgrove?

GOVERNOR MUSGROVE: Thank you, Mr. Chairman. In support of the resolution on the Northern Mariana Islands, I would request that the minutes reflect that it was a unanimous vote, as I believe it was, and I think that would support it further.
GOVERNOR ENGLER: I'll be happy to make sure that that is so duly recorded and transmitted to the leaders of the Congress.

Any other comments or questions?

(No response.)

GOVERNOR ENGLER: If not, this morning's session stands adjourned. See you at noon.

(Whereupon, at 11:25 a.m., the morning session of the National Governors Association meeting was adjourned.)