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ADDRESS BY ROBERT MORGAN UNITED STATES SENATOR CONFERENCE ON LONG-TERM ECONOMY HARVARD GRADUATE SCHOOL OF DESIGN NOVEMBER 3, 1975

Thank you very much, Dean and ladies and gentlemen:

I appreciate very much the opportunity to come and participate in this program, although I think you should know I am not a professional in this field. Most of my life has been spent in the legal field, and up until I went to the Senate, my knowledge of public buildings and contracting and the like came from my experience for several years as Attorney

General of North Carolina.

So you can see that I am a little apprehensive this morning about what I am about to say to you, and I often wonder if my remarks will be as unbecoming as the remarks that a little girl made when she came to my home in North Carolina last Friday night, on Hallowe'en Eve. Kate and I were, of course, waiting for the children to come by with their trick-or-treat bags, and we had gotten together some apples and some oranges and polished them up, and we had them on a table near the door, waiting for the youngsters to come by. And sure enough, it wasn't very long before the doorbell rang, and I went to the door. There were a number of small children there, and amongst them was a very small little girl, three or four years old, just a living little doll.

Her mother had even dressed her as an angel. She had on a little white costume and a little halo over her head, but she held a big, brown paper bag which she held out in front of her. And without even thinking what I was doing, I just reached back and got me an apple and dropped it in that little girl's bag. When I did, she pulled it up to her and she looked down in it and she looked right straight back up at me, and she said, "You busted every damn cookie in my bag!" I hope you won't find my remarks today as unbecoming as her remarks were Friday night.

I told someone I've only been in the United States
Senate for nine or ten months now and I compared it to being
somewhat similar to a situation in which I have enrolled
in one of the greatest learning institutions in the world,
where there is a very small student body taught by some
of the world's greatest scholars. I've certainly found that
to be true, because while I have had some experience in the
legal field, I asked particularly not to go on the Judiciary
Committee. I have spent 25 years of my life in the law, and
I wanted to broaden my outlook a little. And some of those
of you here today have been among my teachers for the last
nine months as I tried to chair the Subcommittee on Buildings
and Grounds. I have learned a great deal and I am sure
that I have probably impeded the progress of the building
program of G.S.A. But at the same time I am very interested

in what we are trying to do.

I want to make some observations with you this morning, or to you, and I'll remind you again before I do that, as Attorney General, I was always picking a fight with someone. We were talking earlier at breakfast that the Milk Commission in North Carolina was my favorite target. They had an organization in which they were always able to fix prices and I was always suing them, and I usually lost. My staff said I had the best knack of going to the open meeting and making everybody mad as hell and then leaving them and letting them have to worry with it. So I'll try to make some provocative comments this morning, and then I'll get out of town before you have time to take me to task for them.

I want to congratulate the participants in this conference, for being willing to tackle a problem of this scale. Since I have been chairman of the Senate Subcommittee on buildings and grounds, and have myself begun to wrestle with the problem of economy in buildings and especially in public buildings, I have become aware of how vexed a question you have before you -- and, too, how important a question it is.

At the outset, as I have already done, I have to make it clear I am a layman in these matters. Our subcommittee

reviews proposals for huge and expensive federal building projects, and yet none of us on the subcommittee are experts. This is the inevitable result of democratic government, and I think it is by in large not a bad result. We have no axe to grind, and are not the partisans of one approach or another to the problem of providing the government with its physical plant needs. So if I can provide you any service here today, it will be to try to show you the reaction of an involved layman to the problems you face as professionals.

But I do serve, or at least attempt to serve, one interest. It is that of the taxpayer, and I want to serve him well. And I believe the time has come to serve him well by making sure his government is forthright and candid with him on the subject of what things really cost, not only now, but in the future. That is a hard thing to do. Take the example of New York City. The path of deficit financing was taken too long. Deficit financing is a means of avoiding the issue of the cost of government -- of postponing the taking of responsibility from one generation to the next.

But I have become convinced that each generation of Americans has the responsibility of stewardship. As stewards, we hold for a relatively short time the responsibility for institutions which must outlive us. We must not leave our land or its freedoms diminished, for these are not just our

own personal property, or ours to enjoy.

Today, we are the stewards of two things of particular importance to the participants in this conference. We are the stewards of our natural resources, including our energy supply, and we are the stewards of our nation's fiscal well-being. In both these areas, all across the nation, we are experiencing great difficulties. Yet I think there is a positive response -- the response of good stewards -- and this series of seminars is part of it.

Part of the positive response to the difficulties we have experienced is a change for the better in the progress of ideas in this nation. Just as it is now realized that ecological events have consequences, it is coming to be realized that economic events have consequences -- as is being painfully pointed out down in New York, this very day. In the construction marketplace, it is being realized that a building is not an isolated event. A building is not just a thing in space. It is also an event in time. Its economic life far exceeds its being built. And in sad point of fact, the economic consequences of a building may outlast the building itself. In other words, we are no doubt still paying for buildings in this country which have already been torn down.

The question is, for those of us here today, what

should be done about it? This is no small question. You will do well to take some small steps toward answering it, here at the conference. If I may contribute, it will be by outlining the experience I have had as a layman who must make decisions for the taxpayer.

How do we get a handle on the real costs of a building, over a long period of time? What is to be the economic system of relationships which we will establish by deciding to build one way and not another?

To begin with, we have the concept of "life-cycle costing," not a new concept, but one which is newly in vogue, forced on us by the rise in energy costs, for the most part. I think this is really a step in the right direction. We can easily understand that when you look at a building as having certain costs beyond its construction, you take that step in the right direction.

The first thing we discover that the operating costs of a building simply overwhelm the costs of its construction. Fine. But the problem is, all the cost relationships involved can change. Right now, of instance, we know that energy costs are running neck-and-neck with financing costs -- a situation unheard of several years ago. And as some of us were talking earlier this morning, energy, up until just a few years ago, was seldom a problem when you were building

public buildings, expecially. And when you project these things over a 40 or 50-year period, even slight changes in such things as energy prices can and will make a very great difference. So, what is that going to mean to us now, when we have a decision to make as to which heating, ventilating, and air conditioning system to use, and what to io about insulation?

We have a choice, shall we say, of using more or less insulation. We can put so much insulation into the walls that we can hardly afford to build the building. If we use less, and energy prices go up, have we still made the right decision? I fear we are put in the position of gazing into a crystal ball on the one hand, and making very hard decisions on the other.

I must say my own recent experience with having to make a dsicision on the basis of complicated relationships, and with a considerable degree of uncertainly, was not altogether a happy one, for me.

We on the public works committee recently had to pass on the General Service Administration's proposal to build two enormously expensive buildings in Baltimore, for the use of the Social Security Administration. This project taught me just how hard it is, even for those of us who really care about the long-term economies of buildings, to come

to any decision we can live with or sleep with. I had to vote against the proposal, despite the threat that inflation would make delay prohibitive. Other members of the committee were not willing to take that risk, or may not have seen the risk, and the prospectus was approved.

But I was very disturbed by what was proposed, and I think it is very pertinent to the task you have at hand over the next few days. The G.S.A. was proposing to use its so-called "integrated buildings systems" approach in the Baltimore buildings. This would be the second time out for the systems approach, the first application being, as I am sure you are aware, in three other Social Security buildings, in Philadelphia, Chicago, and Richmond, California.

As it was explained to those of us on the committee, there is supposedly a problem when you choose building components "off the shelf," so to speak, from many contractors. The components would be, it was said, "in aggression with each other," which I took to mean they would be at cross purposes with each other, as to providing long-term economic benefits. To get around this, the idea was to declare "performance specifications" in lieu of design specifications, and let the contractor design a system of components which would be the most economical over the long haul.

There was another assumption involved in all this which I imagine you will be discussing in the next two or three days in your seminars. This was the notion that only a really big corporation would be able to do the innovating required, and that therefore the first three of these multimillion-dollar buildings ought to be let as a single contract, to make the deal attractive enough to big operators -- in this case, Owens-Corning. The construction industry, I have been told -- about once too often -- is "fragmented," and therefore cannot respond to the problem as fast as is needed.

Another element of the package, as used in the three cities buildings, and proposed for the Baltimore project, is of interest here. The products designed in accordance with the performance specifications would have to do their jobs over specified periods of time. And, moreover, the contractor was to be given a nine-year maintenance contract. Whether these approaches actually will mean greater long-term economies in the three initial Social Security buildings, we cannot yet say. This was to be an experiment, and the results are not yet in.

Why did I vote against using this approach at Baltimore, even though I was very concerned that we buy something for the taxpayers which would be very economical over the long haul? This might be instructive to those of you who are

involved with engineering buildings for buyers in the marketplace.

In the first place, I was not convinced the systems approach had produced very much innovation. It may well have, but I was not convinced of the fact. It appeared to me that the products resulting from the process could have been matched by conventional construction techniques, and that the only new items we were getting was a combination lighting and sprinkler system, in which cooled sprinkler water was to cool the fixtures. Is this good long-term economy? I don't know the answer.

In the second place, I objected to the assumption that only a huge corporation could produce the necessary innovation. It seemed to me that we were putting so many eggs in one basket, and putting such a huge project out for bids, that we would discriminate against relatively smaller contractors, who might be quite efficient, but unable to win the financing battle. I recognize the argument for the supposed abilities of big corporations to do research -- we see it frequently enough in the advertising on our television sets, usually on behalf of big corporations, and especially the recent advertising of Exxon comes to mind. I can't quite understand when they advertise how we control all gold, uranium, and oil at the same time. I often wonder if they aren't inviting litigation. But notwithstanding the fact

that we think of the big corporation as being in a better position to be more innovative, I cannot help but think that the electric light, and the airplane, and the automobile -- the very items which got these big corporations started -- were invented in laboratories not much better than barns. In any case, the figures on the project did not convince me that it was going to be any cheaper to build in the first place, the long-term economies themselves being rather unpredictable.

In the third place, it seemed to me a little absurd for the proponents of the systems approach to argue for all these long-term economies, and pay lip-service to life-cycle costing, and then to propose to build the Baltimore project by purchase contract -- in other words by issuing bonds. The federal government is supposed to operate by direct appropriation, and after the end of this fiscal year, the purchase contract method will no longer be used, unless additional legislation is passed, which I don't think will be.

The Baltimore project will cost, according to the prospectus, \$161 million -- to build the largest project ever to come before the Senate Public Works Committee. But because of this deficit financing of capital improvements, the real cost, with financing, will be just under \$420 million. Is this long-term economy? In my own mind, I don't think so.

What I am trying to say, in all this, is that there is going to be many a slip between the computer model of optimized long-term economies, and what actually gets sold in the marketplace. I agree that life-cycle costing looks like a very good way to go. But I am disturbed when a consulting engineer tells me and my committee he can make his life-cycle cost figures come out about any way he wants. That concerns me very much, and I hope it will concern the participants in the seminar.

In closing, let me be so bold as to share with you some of my thoughts on this matter. Where are we now, with regard to long-term economy?

First of all, it seems to me that because of changes in the price of energy and products and labor, and changes in the volatility of those prices, we are not quite sure where the point of diminishing returns is, anymore. But it is still out there somewhere -- the law of diminishing returns has not been repealed. Therefore, I think we will do well to keep our patience in a time of change. This means several things for us, of course.

It is not the case -- necessarily -- that a higher initial cost means a lower operating cost, automatically.

We might be embarassed, later, to have found we have been chasing an ever-smaller increase in energy efficiency with ever-larger increases in cost.

It is not the case that we need to experiment with huge federal projects the size of five Social Security buildings. There is a need for innovation, to be sure, but in my opinion you stand a better chance of minimizing risk if you experiment with small projects and stay intelligently conventional on big •nes. As far as I can tell, the free market is responding, slowly, to demands for change and greater efficiency. Judging from our experience so far, the federal government's impatient desire to buy progress has not been altogether worthwhile.

It is the case that we need reasonable methods and premises to work with, especially in the area of government procurement. In life-cycle costing, it is all too easy for the proliferation of numbers to produce a shell-game so elaborate not even the most conscientious public servant can check on it.

But it is not the case, finally, that we need to foster monopolistic tendencies in the construction industry by thinking only a General Motors of building can solve our problems. I am an old attorney general, one who was active in antitrust enforcement, and when I hear someone say the construction industry is "fragmented," I want

to reply, "Great! Tell me some more good news!" Monopolies to me are not necessarily innovative. As a matter of fact, I think they are less innovative. Monopolies do not necessarily have to be more efficient and economical, but less so.

It is the case, I believe, that we can achieve substantial cost savings by using existing buildings where possible. I was pleased to co-sponsor S. 865, Senator Buckley's bill to permit the government to use existing structures, where at all feasible. Some of you here testified before our committee on that matter, and Peter Lawrence submitted a very fine written statement and some very fine testimony. It is my hope this will serve the purposes not only of promoting economies in government (and Peter gave some very fine examples in his testimony, by the way, where this is being done), but also to serve the purposes of historical preservation, at the same time providing the government with its space requirements that it needs at reasonable cost.

In conclusion, I want to offer you a challence. The greatest need we have in this case is quality input. To get it, we need to get on with the inevitable shake-down which follows economic change, and regain, once again, a firm sense

of our constraints and possibilities.

As the Dean mentioned, tomorrow, we will begin hearings on three bills having to do with innovative approaches to producing energy for buildings, including solar energy. I intend to keep an open mind, and to look at each proposal on its merits. But I also intend to be careful, and not to rush into bad policy. If you will do your part here at Harvard in these next three days, maybe we can help find a way, in the long run. We need to do the nation this great service. I am optimistic that we can.

The bills that we will be considering tomorrow and the next three days probably and definitely are right far-reaching bills. I am sure that most of you are familiar with them. One is introduced by the chairman of the full committee, Senator Randolph, and others, and that's Senate Bill 2845, which directs the administrator of General Services -- after consulting with the entire alphabet: FEA, HEW, DOD, VA, and Bureau of Standards and others -- to publish energy conservation and management guidelines within one year, for use in the design, construction, and renovation and operation of buildings for which these agencies are responsible. It looks toward making these standards mandatory. This bill carries an appropriation of seven and a half million dollars. One of them does. I'm not sure that one has a price tag, and that may be the one that doesn't have a price tag -- oh,

it does.

Then Senator Tunney from California has introduced a bill that provides that the administrator of the Federal Energy Administration, consulting with the director of the National Bureau of Standards, shall establish procedures for identifying existing buildings as candidates for retrofitting with energy conservation installations. There are many other provisions, but an interesting thing about this bill: it carries a price tag of \$300 million.

Then there's another bill introduced by Senator Gary Hart of Colorado and Senator Phil Hart of Michigan and others, which directs the administrator of General Services and the Secretary of Defense, in consultation with each other, to develop and publish efficient energy guidelines assuring that the most effective and efficient energy conservation measures are incorporated into the design, construction, renovation, and operation of federal and federally assisted buildings, and there are many other provisions. But it omits any specific cost analysis.

So these are some of the things we will be looking at in the future, and I will be engaged again in the learning process, and in doing so we solicit your help and your assistance.

If I could close by making one suggestion that I made this morning at breakfast while we were talking. question came up as to whether or not mail to a Congressman is of any assistance. I want you to know that emphatically it is. I want to tell you how you can make it helpful and be of assistance. We get in my little office in North Carolina about two thousand letters a week. Now they fall generally into three categories. The first is the group that I call the hate mail. It comes from a group of people that I generally think of as being like an officer described my law partner one time many years ago. He was a district attorney, and he had one of the meanest, most rasping voices I ever heard. And one day one of the state troopers said to him, "Mr. Taylor, you are the most even-tempered man I have ever seen. You stay mad as hell all the time." And this group of letters that I put in the first group comes generally from people who are just disgruntled with government And I frankly confess to you that I don't read those letters. I started off trying to read them, but you know you get to the office in the early morning, and you feel good, and you ve got a busy day ahead of you, and you read one of those letters and you feel grouchy all day.

The second type of letter that we get are those in response to a letter-writing campaign -- professional associations, you know. Write your congressman or your senator to support bill so-and-so, and so-and-such. The

Consumer Protection Agency was a good one. And we soon spot those letters because they all have the same language. In that particular one, it was, "this will add another layer of bureaucracy to the many layers already existing." You know. We've had over 20,000 letters in my office alone on gun control. These letters are all important, so when you get a request from your association, if you agree with it, write. We tally those letters. The congressman doesn't necessarily see them, because there's not that much substance to them.

But the third kind of letters are those that are helpful, and which we solicit. Those are the letters from people like you who have had worlds of experience in your given field. And you see that there's a prospectus before the Buildings and Grounds Committee to build a certain building in a given place in a certain way, and from your years of experience, you have many good, valid ideas, that you can sit down, and in ten minutes or 30 minutes dictate a meaningful letter to me or to your senator or congressman. That would be a great deal of help to him. It would be far more meaningful and instructive than I could gather from the Library of Congress with my entire legislative research staff in two or three weeks. You see, you live with the problem. So we earnestly solicit these kinds

of letters. So as we go forward with these hearings, remember we are laymen, we're dealing with a profession in which we don't have all the answers, and we're looking for answers. So feel free to let us have the benefit of your advice and your experience.

Thank you very much for allowing me to be here.